Martin

Catalog | **Power Transmission**





Limited Warranty and Additional Terms & Conditions

LIMITED WARRANTY

Revised September 16, 2021

Subject to the limitation expressed in subsequent paragraphs, Martin Sprocket & Gear, Inc. and Martin Sprocket & Gear Canada Inc., and Martin Sprocket & Gear de Mexico, S.A. de C.V., make the following warranties: We warrant that each of our products of manufacture will be free from defects in material and workmanship under normal use, and service and stored, installed and maintained properly for twelve months from the date of delivery to the original user. We will correct any such defects in material or workmanship by repair or replacement of the product F.O.B. our plant. Tools will carry the following lifetime warranty: If a Martin tool fails to satisfactorily perform its designated use, it may be returned to the Martin distributor from which such tool was purchased and will be repaired or replaced without cost.

THE FOREGOING WARRANTIES ARE EXPRESSLY IN LIEU OF ANY AND ALL REPRESENTATIONS, WARRANTIES AND CONDITIONS EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WHETHER ARISING FROM STATUTE, COMMON LAW, CUSTOM, OR OTHERWISE. THE REMEDY OF REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT OR TOOL SET FORTH IN THE FOREGOING WARRANTIES SHALL BE THE EXCLUSIVE REMEDY AVAILABLE TO ANY PERSON.

Charges for correcting defects will not be allowed, nor can we accept goods returned to us for repair or replacement, unless we are previously notified of the defect in writing and the return or correction is authorized by us in writing. All warranty claims alleging defects of materials or workmanship must be submitted in writing within thirty days of the discovery of a defect or such claim shall be considered waived. (This paragraph is subject to the provisions of the Consumer Protection laws of Mexico.)

The foregoing warranties shall not apply to any products or tools which have been subjected to misuse, neglect or accident, or have been altered or tampered with, or have been used beyond their normal useful or expected life, or which have had corrective work done thereon without our written consent. WE SHALL NOT BE LIABLE FOR ANY LOSS, INJURY, EXPENSE, OR DAMAGE, WHETHER DIRECT, CONSEQUENTIAL, INCIDENTAL, OR OTHERWISE, RESULTING FROM THE USE OF OUR PRODUCTS OR TOOLS OR CAUSED BY ANY DEFECT, FAILURE, OR MALFUNCTION OF ANY PRODUCT OR TOOL, WHETHER A CLAIM FOR SUCH DAMAGES IS BASED UPON WARRANTY, CONTRACT, NEGLIGENCE, OR OTHERWISE. Equipment manufactured by others, and included in our proposal, is not warranted in any way by us but carries only the manufacturer's warranty, if any. No person has the authority to bind us to any representation or warranty other than the foregoing limited warranties as disclaimed.

Sale of Martin products and tools shall be governed by the laws of the State of Texas and of the United States of America. The provisions of the United Nations Convention on Contracts for the International Sale of Goods or any local statute declaring it to have the force of law in the jurisdiction of one of the parties shall not apply to products or tools supplied hereunder.

"YOU ARE HEREBY NOTIFIED THAT ANY ADDITIONAL OR DIFFERENT TERMS FROM THOSE CONTAINED IN THIS LIMITED WARRANTY ARE OBJECTIONABLE. NO ADDITIONS OR CHANGES ARE BINDING ON MARTIN UNLESS THEY ARE IN WRITING AND SIGNED BY AN AUTHORIZED OFFICER."

NOTE: All past due invoices shall be payable to Martin Sprocket & Gear, Inc., at P.O. Box 91588, Arlington, Tarrant County, Texas 76015-0088. All past due invoices of Martin Sprocket & Gear Canada Inc., shall be payable at 896 Meyerside Drive, Mississauga, Ontario, Canada L5T 1R9. All past due Invoices of Martin Sprocket & Gear de Mexico, S.A. de C.V., shall be payable at Km. 52 Carretera, Naucalpan-Toluca, Calle 3 Mz.7 Lt. 11, Parque Industrial, Toluca 2000, Toluca, Edo. de Mexico, C.P. 50200. Reasonable attorneys' fees will be added if collection is forced.

ADDITIONAL TERMS & CONDITIONS APPLICABLE TO ORDERS OF MARTIN STOCK PARTS

TAXES: Any sales, use, consumption, or other similar tax applicable to the sale, purchase, or use of any Product is not included in quoted price and shall be paid by the Purchaser.

RETURNED PRODUCT: When it is desired to return Product for credit or exchange, it is necessary that permission in writing first be obtained from the nearest Martin Sprocket & Gear sales office.

SHIPMENTS: If Seller is not able to meet Purchaser's shipment requirements and/or expected dates of shipment, Seller will not accept liability for delays beyond Seller's control, nor will Seller accept cancellations unless a settlement has been agreed upon between all parties.

FREIGHT ALLOWANCE: Freight allowances are shown on the different product discount sheets. In cases where a Purchaser's specified routing of any Order is more costly than the routing selected by Seller, the excess charges will be added to the net amount of the invoice. Weights shown in supplier's publications are approximate, and may not be used to determine qualifications for freight allowance.

CASH DISCOUNT: Unless modified in the Order or Invoice, payment shall be: A 1% cash discount will be allowed on invoices paid net 15 days. All invoices are due in 30 days. Cash discount does not apply to other charges such as freight, postage, or delivery charges.

PUBLISHED DIMENSIONAL DATA: Due to changes in engineering and manufacturing processes and procedures, it becomes necessary, from time to time, to make alterations to products. Such alterations may not be reflected in supplier's publications. Therefore, if dimensions, specifications or appearances represented by pictures or drawings or tables are critical in their applications, please consult the factory for clarification or certified drawings.

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Made-To-Order Specialty Products



SPLIT S820 SPROCKET



TAPER BUSHED ADJUSTABLE HUB



SPECIAL BEARING HOUSING



Martin semi-steel 800 series conveyor sprockets are available for all your flat top chain needs.



The most complete line of idler sprockets.



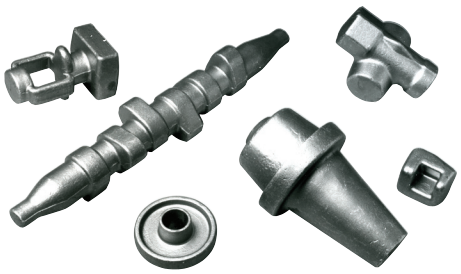
Casting



Milled and Injection Mold Plastics

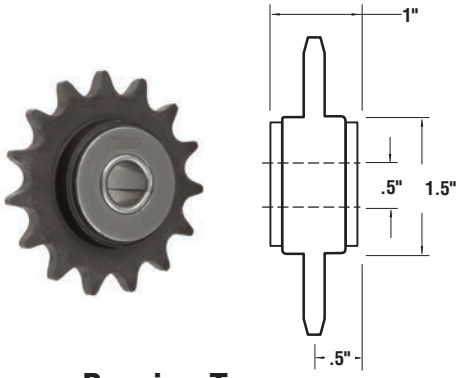


Sintered Metal



Forging

Bronze Bushed Type

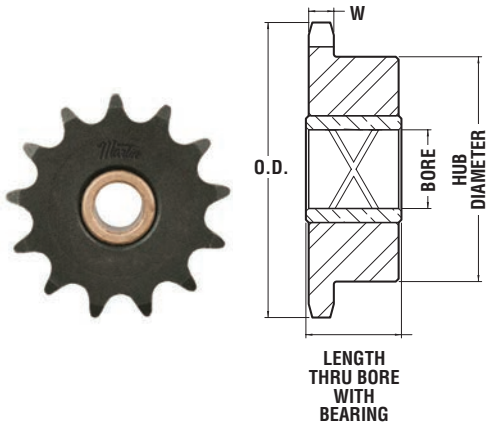


Bronze Bushed Idler Sprocket

No. Teeth	Catalog Number	Chain Size	O.D	Stock Bore	LTB without Bearing	Wt. Lbs.
20	31E20	35	2.6	.5	.75	.46
15	41E15	41-40	2.65	.5	.75	.5
15	51E15	50	3.32	.5	.75	.7
14	61E14	60-60H	3.74	.5	.75	.92

Above idlers have oil impregnated sintered bronze bearings and are mounted on steel journals. Idler RPM to 2500. Radial load rating to 50 pounds.

Bronze Bearing Type



Bronze Bearing Idler Sprocket

No. Teeth	Catalog Number	Bearing Type	Chain Size	O.D	Stock Bore	LTB without Bearing	LTB with Bearing	W	Hub Dia.	Wt. Lbs.
5	35BR15 1/2	Bronze	35	1.99	.5	.75	.94	.168	1.35	.30
21	35BR21 7/8	Bronze	35	2.71	.875	.88	1.06	.168	2	.75
13	41BR13 1/2	Bronze	41	2.33	.5	.88	.94	.227	1.56	.50
19	41BR19 7/8	Bronze	41	3.29	.875	1	1.06	.227	2.5	1
13	40BR13 1/2	Bronze	40	2.33	.5	.88	.94	.284	1.56	.50
19	40BR19 7/8	Bronze	40	3.29	.875	1	1.06	.284	2.5	1.25
13	50BR13 1/2	Bronze	50	2.91	.5	.88	.94	.343	1.87	.90
17	50BR17 7/8	Bronze	50	3.72	.875	1	1.06	.343	2.62	1.50
15	60BR15 7/8	Bronze	60	3.98	.875	1	1.06	.459	2.62	1.75
17	60BR17 1 1/8	Bronze	60	4.46	1.125	1.25	1.56	.459	3.25	2.75
15	80BR15 1 1/8	Bronze	80	5.3	1.125	1.50	1.56	.575	3.5	4.25

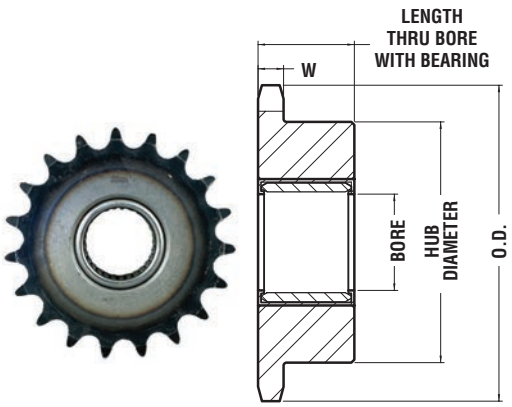
.875" & 1.125" bore have double loop grease groove.

Radial Load Capacity in Pounds at Various Speeds Needle Bearings

Idler Size	RPM					
	100	500	1000	1500	2000	2500
.5 Bore	1021	630	512	453	416	389
1 Bore	2751	1698	1379	1221	1120	1048
1.5 Bore	6306	3891	3160	2798	2567	–

Ratings shown above are based on an average bearing life of 2500 hours.

Needle Bearing Type



Needle Bearing Idler Sprocket

No. Teeth	Catalog Number	Bearing Type	Chain Size	O.D	Stock Bore	LTB without Bearing	LTB with Bearing	W	Hub Dia.	Wt. Lbs.
19	25NB19H 1/2	Needle	25	1.65	.5	.75	.75	.11	1.22	.1
13	35NB13H 1/2	Needle	35	1.75	.5	.75	.75	.168	1.18	.2
19	35NB19H 1	Needle	35	2.47	1	1	1	.168	1.84	.5
19	41NB19H 1	Needle	41	3.29	1	1	1	.227	2.5	1
19	40NB19H 1	Needle	40	3.29	1	1	1	.284	2.5	1.1
17	50NB17H 1	Needle	50	3.72	1	1	1	.343	2.25	1.3
17	60NB17H 1	Needle	60	4.46	1	1	1	.459	3	2.6
13	80NB13H 1	Needle	80	4.66	1	1.25	1.25	.575	2.63	2.9
11	100NB11H 1 1/2	Needle	100	5.01	1.5	1.88	1.88	.692	3.56	3.6
11	120NB11H 1 1/2	Needle	120	6.01	1.5	2.13	2.13	.924	3.56	7
11	140NB11H 1 1/2	Needle	140	7.01	1.5	2.25	2.25	.924	4.25	1.9
9	160NB9H 1 1/2	Needle	160	6.7	1.5	2.25	2.25	1.156	3.63	9.6

Idler Sprockets

Ball Bearing Idler Sprocket – Hardened Teeth

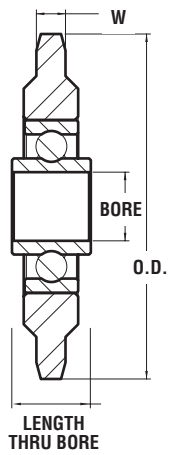
No. Teeth	Discontinued Part Number	Catalog Number	Bearing Type	Chain Size	O.D	Stock Bore	LTB Without Bearing	LTB With Bearing	W	Wt. Lbs.
20		25BB20 3/8 *	Ball	25	1.73	.394	.11	.35	.11	.1
19		35BB19H 3/8	Ball	35	2.47	.394	.38	.38	.168	.35
19		35BB19H 1/2	Ball	35	2.47	.51	.48	.72	.168	.35
20	35BB20H	35BB20H 5/8	Ball	35	2.59	.638	.48	.72	.168	.38
18		41BB18H 1/2	Ball	41	3.14	.51	.48	.72	.227	.51
18		41BB18H 5/8	Ball	41	3.14	.638	.48	.72	.227	.51
17	40BB17H	40BB17H 5/8	Ball	40	2.97	.638	.48	.72	.284	.52
18		40BB18H 1/2	Ball	40	3.14	.51	.48	.72	.284	.53
18	40BB18H	40BB18H 5/8	Ball	40	3.14	.638	.48	.72	.284	.53
25		40BB25H 5/8	Ball	40	4.26	.638	.48	.72	.284	.9
35		40BB35H 5/8	Ball	40	5.86	.638	.48	.72	.284	1.77
48		40BB48H 5/8	Ball	40	7.93	.638	.22	.72	.284	3.37
15	50BB15H	50BB15H 5/8	Ball	50	3.32	.638	.48	.72	.343	.75
17		50BB17H 1/2	Ball	50	3.72	.51	.48	.72	.343	.78
17	50BB17H	50BB17H 5/8	Ball	50	3.72	.638	.48	.72	.343	.78
25		50BB25H 3/4	Ball	50	5.32	.75	.59	.61	.343	1.66
39		50BB39H 3/4	Ball	50	8.12	.75	.32	.61	.343	4.09
12		60BB12H 5/8	Ball	60	3.25	.638	.48	.72	.459	.72
13	60BB13H	60BB13H 5/8	Ball	60	3.49	.638	.48	.72	.459	.76
15		60BB15H 1/2	Ball	60	3.98	.51	.48	.72	.459	1.06
15	60BB15H	60BB15H 5/8	Ball	60	3.98	.638	.48	.72	.459	1.06
17		60BB17H 5/8	Ball	60	4.46	.638	.48	.72	.459	1.1
12	80BB12H	80BB12H 3/4	Ball	80	4.33	.75	.59	.61	.575	1.5

Note: .394 Stock Bore is +.000 .0003; .510 Stock Bore is +.005 .000; .638 Stock Bore is +.005 .000; .750 Stock Bore is +.005 .000. Discontinued Part Numbers will be replaced with Catalog Number when existing inventory is exhausted.

* Unhardened Teeth

Ball Bearing Type





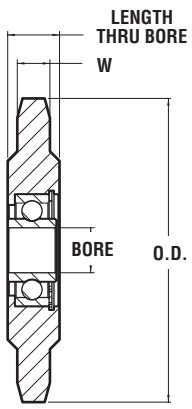
Ball Bearing Idler Sprockets – Non Metallic Teeth

No. Teeth	Catalog Number	Bearing Type	Chain Size	O.D	Stock Bore	LTB Without Bearing	LTB With Bearing	W	Wt. Lbs.
17	40BB17NM 1/2	Ball	40	2.97	.510	0.72	.72	.284	.24
18	40BB18NM 5/8	Ball	40	3.14	.638	0.72	.72	.284	.23
17	50BB17NM 1/2	Ball	50	3.72	.510	0.72	.72	.343	.29
18	50BB18NM 5/8	Ball	50	3.92	.638	0.72	.72	.343	.29
15	60BB15NM 1/2	Ball	60	3.98	.510	0.72	.72	.459	.32
16	60BB16NM 5/8	Ball	60	4.22	.638	0.72	.72	.459	.33
12	80BB12NM 3/4	Ball	80	4.33	.750	0.96	.61	.575	.44

Note: .510 Stock Bore is +.005 .000; .638 Stock Bore Is +.005 .000;
.750 Stock Bore Is +.005 .000

Non-Metallic Teeth Ball Bearing Type

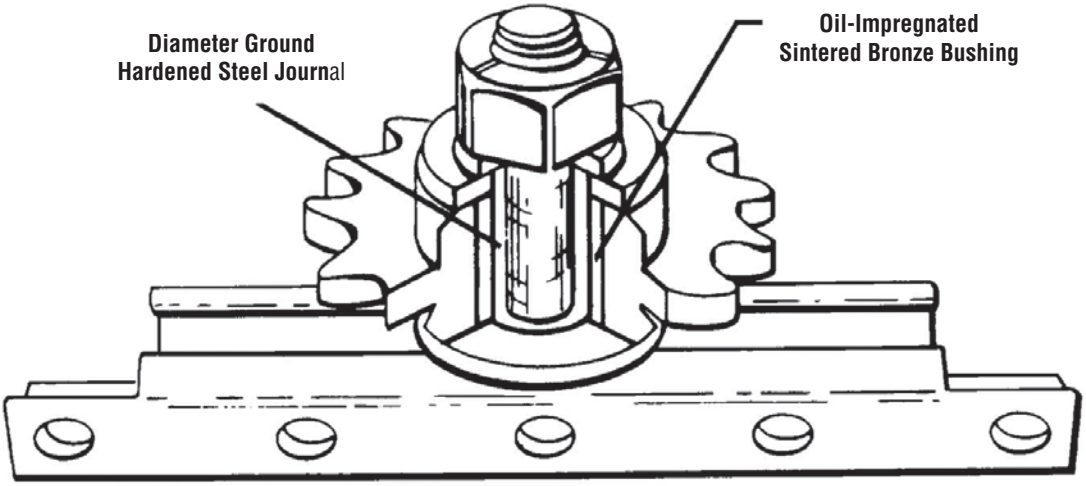




Radial Load Capacity in Pounds at Various Speeds Ball Bearings

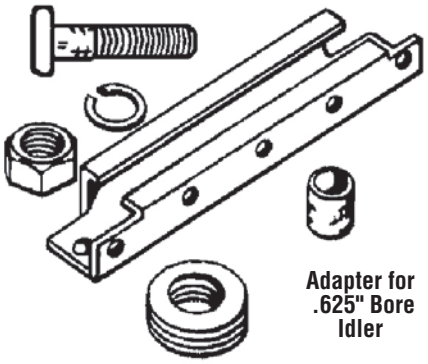
Idler Size	RPM					
	100	500	1000	1500	2000	2500
.375" Bore	620	363	288	252	229	212
.5" & .625" Bore	800	460	360	320	290	270
.75" Bore	1290	755	600	523	478	440

Ratings shown above are based on an average bearing life of 2500 hours.

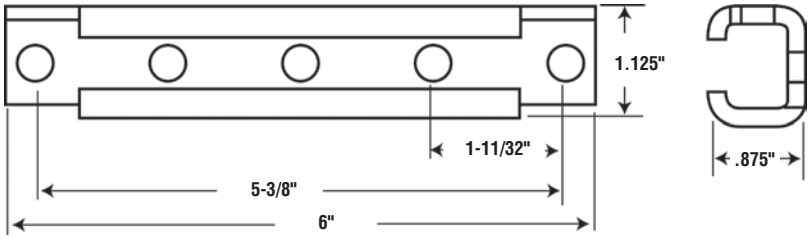


Chain Tightener
(Less Idler Sprocket)

No. E-5006



Adapter for
.625" Bore
Idler



Attachment Bolts Not
Furnished

Attachments Holes
for 5/16" Bolts

Martin Chain Tighteners are economical to use, provide everything needed for a quick, easy installation, save time and money, there is no need to design, procure or custom make and assemble separate parts, accommodate mounting in several different positions, can be parallel or at 90° to the mounting surface, can be used as cantilever or attached each end.

Features of Martin Idlers

Smooth-running, oil-impregnated, sintered bronze, extra-duty bearing press-fitted in sprocket. Steel journal case hardened, for maximum resistance to wear, diameter ground surface for free running under load.

Steel sprockets used in Martin Idlers, are accurately machined (not stamped) the same as sprockets normally supplied for power transmission use.

Martin Series 800 Conveyor Sprockets Manufactured From High Quality Semi-Steel



815 Solid Face With Guide Ring Holes For Straight Running Chains

QRS® SPLIT



PAT. # 4,964,842

Split 81.62520 Solid And Grooved Face With Guide Ring Holes Steel And Thermoplastic



820 Grooved Face For Straight Running Chain



821 Heavy Duty For Wide Hinged Chain Straight Running



880 And 882 Single Duty For Side Flex Chains



881 For Side Flex Chain

815, 820, and 881 sprockets are all double duty. Sprockets with an odd number of teeth are recommended to reduce wear since a given tooth engages the chain every other revolution. Sprockets with 19, 21, 23, and 25 teeth are preferred. Sprockets with even number of teeth should be advanced one tooth periodically to attain even wear.

Martin QRS® Split Sprocket

Series 81.62520 Split Sprockets For Flat Top Conveyor Chains

Split sprockets manufactured from steel and thermoplastic material stocked in 21, 23, 25, and 27 tooth sizes

Martin's **Q**uick **R**eplacement **S**plit sprocket eliminates the time-consuming and costly dismounting of shafts and pillow blocks to remove worn sprockets — all that's required is a wrench

"QRS" split thermoplastic sprocket advantages:

Lightweight

Service temperature to 300°F

Toughness - Excellent resistance to oils, grease, soaps, and detergents, outstanding abrasion and impact resistance

Available with solid and grooved face and furnished with rust resistant plated steel bolts and nuts

Split (plated carbon steel and stainless) guide rings available, if necessary, for easy assembly



Proudly made in U.S.A.

PAT. # 4,964,842

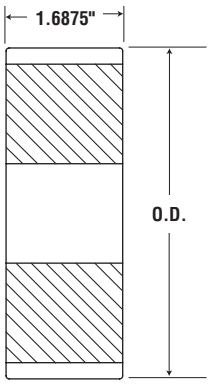
Call your Martin Distributor

Split Steel and Thermoplastic Stock Bore

Series 815 Sprockets — Split Steel

Catalog Number	No. Teeth		Pitch Diameter †	Outside Diameter †	Bore †		Weight ††
	Actual	Effective			Stock	Maximum	
QRS815A21	21	10.5	5.089 (129.26)	5.12 (130.0)	.75 (19.1)	1.5 (38.1)	5.0 (2.27)
QRS815A23	23	11.5	5.560 (141.22)	5.59 (142.0)	.75 (19.1)	1.5 (38.1)	5.6 (2.54)
QRS815A25	25	12.5	6.032 (153.21)	6.07 (154.2)	.75 (19.1)	1.5 (38.1)	6.6 (3.0)
QRS815A27	27	13.5	6.504 (165.20)	6.56 (166.6)	.75 (19.1)	1.5 (38.1)	7.8 (3.54)

Supplied with 5/16 -18 standard setscrew @ 90° to split.
† Inches (mm)
†† Lbs (kg)



Solid Face

Series 815 Sprockets — Split Thermoplastic

Catalog Number	No. Teeth		Pitch Diameter †	Outside Diameter †	Bore †		Weight ††
	Actual	Effective			Stock	Maximum	
QRS815A21P	21	10.5	5.089 (129.26)	5.12 (130.0)	.75 (19.1)	1.5 (38.1)	.94 (.43)
QRS815A23P	23	11.5	5.560 (141.22)	5.59 (142.0)	.75 (19.1)	1.5 (38.1)	1.00 (.45)
QRS815A25P	25	12.5	6.032 (153.21)	6.07 (154.2)	.75 (19.1)	1.5 (38.1)	1.10 (.50)
QRS815A27P	27	13.5	6.504 (165.20)	6.56 (166.6)	.75 (19.1)	1.5 (38.1)	1.25 (.57)

Thermoplastic temperature operating range –20°F to +300°F

Supplied with 5/16 -18 standard setscrew @ 90° to split.
† Inches (mm)
†† Lbs (kg)



Series 820 Sprockets — Split Steel

Catalog Number	No. Teeth		Pitch Diameter †	Outside Diameter †	Bore †		Weight ††
	Actual	Effective			Stock	Maximum	
QRS820A21	21	10.5	5.089 (129.26)	5.12 (130.0)	.75 (19.1)	1.5 (38.1)	5.0 (2.27)
QRS820A23	23	11.5	5.560 (141.22)	5.59 (142.0)	.75 (19.1)	1.5 (38.1)	5.6 (2.54)
QRS820A25	25	12.5	6.032 (153.21)	6.07 (154.2)	.75 (19.1)	1.5 (38.1)	6.6 (3.0)
QRS820A27	27	13.5	6.504 (165.20)	6.56 (166.6)	.75 (19.1)	1.5 (38.1)	7.8 (3.54)

Supplied with 5/16-18 standard setscrew @ 90° to split.
† Inches (mm)
†† Lbs (kg)



PAT. # 4,964,842

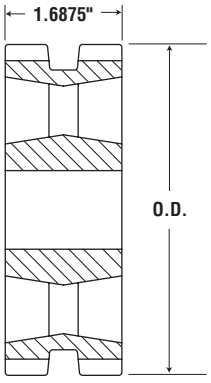
Series 820 Sprockets — Split Thermoplastic

Catalog Number	No. Teeth		Pitch Diameter †	Outside Diameter †	Bore †		Weight ††
	Actual	Effective			Stock	Maximum	
QRS820A21P	21	10.5	5.089 (129.26)	5.12 (130.0)	.75 (19.1)	1.5 (38.1)	.94 (.43)
QRS820A23P	23	11.5	5.560 (141.22)	5.59 (142.0)	.75 (19.1)	1.5 (38.1)	1.00 (.45)
QRS820A25P	25	12.5	6.032 (153.21)	6.07 (154.2)	.75 (19.1)	1.5 (38.1)	1.10 (.50)
QRS820A27P	27	13.5	6.504 (165.20)	6.56 (166.6)	.75 (19.1)	1.5 (38.1)	1.25 (.57)

Thermoplastic temperature operating range –20°F to +300°F

Supplied with 5/16 -18 standard setscrew @ 90° to split.
† Inches (mm)
†† Lbs (kg)

For Guide Ring Specifications See page A-12.



Grooved Face

Series 821 Sprockets — Semi-Steel — Stock Bore

Catalog Number	No. Teeth		Pitch Diameter †	Outside Diameter †	Bore †		Weight ††
	Actual	Effective			Stock	Maximum	
821A21	21	10.5	5.089 (129.26)	5.12 (130.0)	1 (25.4)	1.75 (44.5)	6.7 (3.0)
821A23	23	11.5	5.560 (141.22)	5.59 (142.0)	1 (25.4)	1.75 (44.5)	7 (3.2)
821A25	25	12.5	6.032 (153.21)	6.07 (154.2)	1 (25.4)	1.75 (44.5)	7.3 (3.3)
821A27	27	13.5	6.504 (165.20)	6.56 (166.6)	1 (25.4)	1.75 (44.5)	7.6 (3.4)
821A29	29	14.5	6.978 (177.24)	7.05 (179.1)	1 (25.4)	1.75 (44.5)	8.0 (3.6)



† Inches (mm)
†† Lbs (kg)
821 Series also runs with 815 H chain.

Series 880 Sprockets — Semi-Steel — Stock Bore

Catalog Number	No. Teeth		Pitch Diameter †	Outside Diameter †	Bore †		Weight ††
	Actual	Effective			Stock	Maximum	
880C9 •	9	9	4.386 (111.40)	4.33 (110.0)	.75 (19.1)	1.75 (44.5)	2.8 (1.3)
880C10	10	10	4.854 (123.29)	4.82 (122.4)	.75 (19.1)	1.75 (44.5)	3.2 (1.4)
880C11	11	11	5.324 (135.22)	5.31 (134.9)	.75 (19.1)	1.75 (44.5)	3.4 (1.5)
880C12	12	12	5.796 (147.22)	5.80 (147.3)	.75 (19.1)	1.75 (44.5)	3.6 (1.6)
880C15	15	15	7.215 (182.26)	7.26 (184.4)	.75 (19.1)	1.75 (44.5)	4.2 (1.9)



• Block Body – Other sizes are arm body.
† Inches (mm)
†† Lbs (kg)

Series 881 Sprockets — Semi-Steel — Stock Bore

Catalog Number	No. Teeth		Pitch Diameter †	Outside Diameter †	Bore †		Weight ††
	Actual	Effective			Stock	Maximum	
881C21	21	10.5	5.089 (129.26)	5.120 (130.05)	.75 (19.1)	1.75 (44.5)	4.2 (1.9)
881C23	23	11.5	5.560 (141.22)	5.590 (141.99)	.75 (19.1)	1.75 (44.5)	4.6 (2.1)
881C25	25	12.5	6.032 (153.21)	6.070 (154.18)	.75 (19.1)	1.75 (44.5)	5.0 (2.3)



† Inches (mm)
†† Lbs (kg)

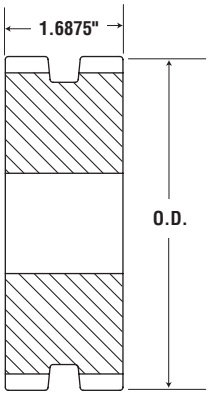
800 Series
Conveyor Sprockets

Series 820 Sprockets — Semi-Steel — Stock Bore

Catalog Number	No. Teeth		Pitch Diameter †	Outside Diameter †	Bore †		Weight ††
	Actual	Effective			Stock	Maximum	
820A13B •	13	6.5	3.228 (81.99)	3.11 (79.0)	.75 (19.1)	1.25 (31.8)	2.4 (1.1)
820A15B •	15	7.5	3.688 (93.68)	3.63 (92.2)	.75 (19.1)	1.25 (31.8)	3.6 (1.6)
820A17B •	17	8.5	4.153 (105.49)	4.12 (104.7)	.75 (19.1)	1.6875 (42.9)	4.7 (2.1)
820A19	19	9.5	4.620 (117.35)	4.61 (117.1)	.75 (19.1)	1.25 (31.8)	3.1 (1.5)
820A20	20	10	4.854 (123.29)	4.86 (123.4)	.75 (19.1)	1.25 (31.8)	3.8 (1.7)
820A21	21	10.5	5.089 (129.26)	5.12 (130.0)	.75 (19.1)	1.75 (44.5)	4.6 (2.1)
820A21B •	21	10.5	5.089 (129.26)	5.12 (130.0)	.75 (19.1)	2.5 (63.5)	7.1 (3.3)
820A22	22	11	5.324 (135.23)	5.35 (135.9)	.75 (19.1)	1.75 (44.5)	4.2 (1.9)
820A23	23	11.5	5.560 (141.22)	5.59 (142.0)	.75 (19.1)	1.75 (44.5)	5.3 (2.4)
820A24	24	12	5.796 (147.22)	5.83 (148.1)	.75 (19.1)	1.75 (44.5)	4.4 (2.0)
820A25	25	12.5	6.032 (153.21)	6.07 (154.2)	.75 (19.1)	2 (50.8)	5.6 (2.4)
820A25B •	25	12.5	6.032 (153.21)	6.07 (154.2)	.75 (19.1)	3-3/16 (81.0)	9.6 (4.4)
820A27	27	13.5	6.504 (165.20)	6.56 (166.6)	.75 (19.1)	2 (50.8)	6.5 (2.8)
820A29	29	14.5	6.978 (177.24)	7.05 (179.1)	.75 (19.1)	2 (50.8)	6.8 (3.1)
820A31	31	15.5	7.452 (189.28)	7.53 (191.3)	.75 (19.1)	2 (50.8)	6.9 (3.1)
820A41	41	20.5	9.826 (249.58)	9.93 (252.2)	.75 (19.1)	2.5 (64)	16.00 (7.1)

• Block Body — Other sizes are arm body.
† Inches (mm)
†† Lbs (kg)
Max. bore shown is with Standard Keyway and Setscrew.
820 Series stocked grooved. (Guide ring holes in 21, 23, 25, and 27 tooth sizes can be provided upon request).



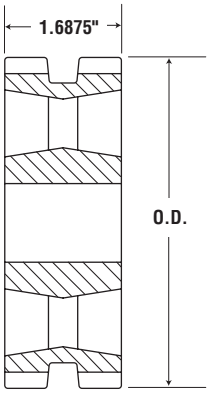


Steel

Series 820 Sprockets — Semi-Steel — Bored-to-Size

Catalog Number	Inch/Metric Stock Finished Bores With Standard Keyway and Setscrew				
820BS19		1" (25.4)			
820BS21		1" (25.4)			
820BS23	.875" (22.2)	1" (25.4)	1.125" (28.6)	1.187" (30.2)	1.25" (31.8)
820BS25		1" (25.4)		1.187" (30.2)	1.25" (31.8)
820BS27		1" (25.4)			

Stock grooved without guide ring holes. All arm body.



Cast

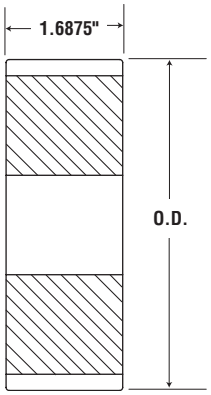
800 Series Conveyor Sprockets

Series 815 Sprockets — Semi-Steel — Stock Bore

Catalog Number	No. Teeth		Pitch Diameter †	Outside Diameter †	Bore †		Weight ††
	Actual	Effective			Stock	Maximum	
815A13B •	13	6.5	3.228 (81.99)	3.11 (79.0)	.75 (19.1)	1.25 (31.8)	2.4 (1.1)
815A15B •	15	7.5	3.688 (93.68)	3.63 (92.2)	.75 (19.1)	1.25 (31.8)	3.6 (1.6)
815A17B •	17	8.5	4.153 (105.49)	4.12 (104.7)	.75 (19.1)	111/16 (42.9)	4.7 (2.1)
815A19	19	9.5	4.620 (117.35)	4.61 (117.1)	.75 (19.1)	1.25 (31.8)	3.1 (1.5)
815A20	20	10	4.854 (123.29)	4.86 (123.4)	.75 (19.1)	1.25 (31.8)	3.8 (1.7)
815A21	21	10.5	5.089 (129.26)	5.12 (130.0)	.75 (19.1)	1.75 (44.5)	4.6 (2.1)
815A21B •	21	10.5	5.089 (129.26)	5.12 (130.0)	.75 (19.1)	2.5 (63.5)	7.1 (3.3)
815A22	22	11	5.324 (135.23)	5.35 (135.9)	.75 (19.1)	1.75 (44.5)	4.2 (1.9)
815A23	23	11.5	5.560 (141.22)	5.59 (142.0)	.75 (19.1)	1.75 (44.5)	5.3 (2.4)
815A24	24	12	5.796 (147.22)	5.83 (148.1)	.75 (19.1)	1.75 (44.5)	4.4 (2.0)
815A25	25	12.5	6.032 (153.21)	6.07 (154.2)	.75 (19.1)	2 (50.8)	5.6 (2.4)
815A25B •	25	12.5	6.032 (153.21)	6.07 (154.2)	.75 (19.1)	3-3/16 (81.0)	9.6 (4.4)
815A27	27	13.5	6.504 (165.20)	6.56 (166.6)	.75 (19.1)	2 (50.8)	6.5 (2.8)
815A29	29	14.5	6.978 (177.24)	7.05 (179.1)	.75 (19.1)	2 (50.8)	6.8 (3.1)
815A31	31	15.5	7.452 (189.28)	7.53 (191.3)	.75 (19.1)	2 (50.8)	6.9 (3.1)
815A41	41	20.5	9.826 (249.58)	9.93 (252.2)	.75 (19.1)	2.5 (64)	16.00 (7.1)

• Block Body — Other sizes are arm body.
† Inches (mm)
†† Lbs (kg)
Max. bore shown is with Standard Keyway and Setscrew.
815 Series stocked not grooved, with guide ring holes.



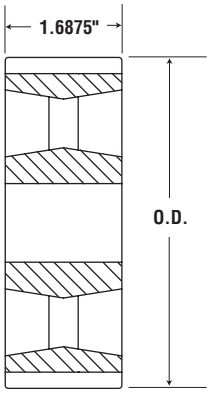


Steel

Series 815 Sprockets — Semi-Steel — Bored-to-Size

Catalog Number	Inch/Metric Stock Finished Bores With Standard Keyway and Setscrew				
815BS19		1" (25.4)			
815BS21		1" (25.4)			
815BS23	.875" (22.2)	1" (25.4)	1.125" (28.6)	1.187" (30.2)	1.25" (31.8)
815BS25		1" (25.4)		1.187" (30.2)	1.25" (31.8)
815BS27		1" (25.4)			

Stock grooved without guide ring holes. All arm body.



Cast

Series 800
Conveyor Sprockets

Series 822 Sprockets — Stock Bore

Catalog Number	No. Teeth		Pitch Diameter †	Outside Diameter †	Bore †		Weight ††
	Actual	Effective			Stock	Maximum	
882C9	9	9	4.386 (111.40)	4.430 (112.5)	.75 (19.1)	1.75 (44.5)	3.8 (1.8)
882C10	10	10	4.854 (123.29)	4.920 (125.0)	.75 (19.1)	1.75 (44.5)	4.2 (1.9)
882C11	11	11	5.325 (135.25)	5.410 (137.40)	.75 (19.1)	1.75 (44.5)	4.4 (2.1)
882C12 •	12	12	5.796 (147.21)	5.90 (149.90)	.75 (19.1)	1.75 (44.5)	4.6 (2.2)

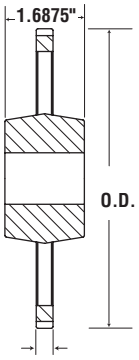
• Arm Body — Other sizes are block body.
† Inches (mm)
†† Lbs (kg)



815 Guide Rings — Steel and Stainless Steel

Catalog Number ★	O.D.†	Thick †	Weight †† Per Set
GR15-16	3.62	1/16	.23
GR15-16SS	(91.9)	(1.6)	(.10)
GR17-18	4.11	1/16	.26
GR17-18SS	(104.4)	(1.6)	(.120)
GR19-20	4.58	1/8	.37
GR19-20SS	(116.3)	(3.2)	(.17)
GR21-22	5.09	1/8	.44
GR21-22SS	(129.3)	(3.2)	(.20)
GR23-24	5.56	1/8	.46
GR23-24SS	(141.2)	(3.2)	(.21)
GR25-26	6.04	1/8	.47
GR25-26SS	(153.4)	(3.2)	(.21)
GR27-28	6.53	1/8	.53
GR27-28SS	(165.9)	(3.2)	(.24)
GR29-30	7.02	1/8	.56
GR29-30SS	(178.3)	(3.2)	(.25)
GR31-32	7.50	1/8	.67
GR31-32SS	(190.5)	(3.2)	(.30)
GR41-42	9.89	1/8	.92
GR41-42SS	(251.2)	(3.2)	(.42)

★ Carbon Steel
Stainless Steel
† Inches (mm)
†† Lbs (kg)



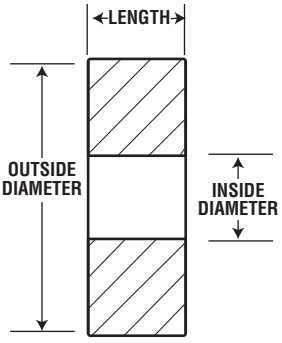
Semi-Finished Weld-On Hubs

Stock Semi-Finished Weld-On Hubs

Catalog Number	Dimensions			Approx. Wt. Lbs.
	Outside Diameter	Length	Inside Diameter	
225-28-19	2.25	.875	.594	.9
225-28-23	2.25	.875	.719	.9
225-32-00	2.25	1	—	1.1
250-30-00	2.5	.938	—	1.3
250-40-00	2.5	1.25	—	1.7
300-25-19	3	.719	.594	1.2
300-30-23	3	.938	.719	1.6
300-30-30	3	.938	.938	1.6
300-32-00	3	1	—	2.0
300-38-00	3	1.187	—	2.4
300-40-30	3	1.25	.938	2.3
325-25-19	3.25	.719	.594	1.8
325-30-23	3.25	.938	.719	2.1
350-30-00	3.5	.938	—	2.6
350-34-00	3.5	1.063	—	2.9
350-38-00	3.5	1.187	—	3.2
356-28-23	3.563	.875	.719	2.4
356-28-30	3.563	.875	.938	2.3
356-31-23	3.563	.969	.719	2.6
375-30-00	3.75	.938	—	2.9
375-30-30	3.75	.938	.938	2.8
375-45-30	3.75	1.406	.938	4.1
400-26-00	4	.813	—	2.9
400-26-23	4	.813	.719	2.8
400-26-30	4	.813	.938	2.7
400-31-30	4	.989	.938	3.3
400-32-23	4	1	.719	3.5
400-36-00	4	1.125	—	3.5
400-48-30	4	1.5	.938	5.1
425-26-00	4.25	.813	—	3.3
425-26-30	4.25	.813	.938	3.1
425-30-30	4.25	.938	.938	3.6
425-38-30	4.25	1.187	.938	4.5
425-42-40	4.25	1.313	1.25	4.8
425-45-30	4.25	1.406	.938	5.4
425-50-40	4.25	1.563	1.25	5.7
450-34-00	4.5	1.063	—	4.8
450-36-40	4.5	1.125	1.25	4.7
450-44-40	4.5	1.375	1.25	5.7
450-44-48	4.5	1.375	1.5	5.7
450-48-48	4.5	1.5	1.5	6.0
475-12-40	4.75	.375	1.25	1.8
475-22-30	4.75	.688	.938	3.3
475-22-40	4.75	.688	1.25	3.3
475-26-40	4.75	.813	1.25	4.0
475-30-30	4.75	.938	.938	4.5
475-36-00	4.75	1.125	—	5.7
475-36-30	4.75	1.125	.938	5.5
475-44-48	4.75	1.375	1.5	6.2
475-48-38	4.75	1.5	1.187	7.0
475-48-40	4.75	1.5	1.25	7.0
475-50-00	4.75	1.563	—	7.8
475-50-40	4.75	1.563	1.25	7.8
475-54-00	4.75	1.688	—	8.5
500-42-40	5	1.313	1.25	6.8
500-50-00	5	1.563	—	8.7
500-50-40	5	1.563	1.25	8.7
500-58-40	5	1.813	1.25	9.5
500-58-48	5	1.813	1.5	9.4
525-24-32	5.25	.75	1	4.4
525-34-00	5.25	1.063	—	6.5
525-36-40	5.25	1.125	1.25	6.5
525-42-00	5.25	1.313	—	8.1
525-48-40	5.25	1.5	1.25	8.7
525-48-48	5.25	1.5	1.5	8.7
525-62-32	5.25	1.938	1	11.5
525-72-32	5.25	2.25	1	13.3
550-34-00	5.5	1.063	—	7.2
550-44-40	5.5	1.375	1.25	8.6
550-44-48	5.5	1.375	1.5	8.6

Catalog Number	Dimensions			Approx. Wt. Lbs.
	Outside Diameter	Length	Inside Diameter	
550-48-40	5.5	1.5	1.25	9.3
550-48-48	5.5	1.5	1.5	9.3
550-58-40	5.5	1.813	1.25	11.6
550-58-48	5.5	1.813	1.5	11.6
550-64-48	5.5	2	1.5	12.5
575-24-32	5.75	.75	1	5.4
575-32-00	5.75	1	—	7.4
575-42-00	5.75	1.313	—	9.7
575-42-48	5.75	1.313	1.5	9.7
575-44-36	5.75	1.375	1.125	10.9
575-52-00	5.75	1.625	—	12.0
575-52-48	5.75	1.625	1.5	12.0
575-72-32	5.75	2.25	1	16.1
600-41-48	6	1.281	1.5	9.6
600-46-48	6	1.438	1.5	10.8
600-52-48	6	1.625	1.5	12.2
600-58-48	6	1.813	1.5	13.6
600-62-00	6	1.938	—	15.5
600-62-40	6	1.938	1.25	15.5
600-62-48	6	1.938	1.5	15.5
600-68-48	6	2.125	1.5	16.0
600-80-48	6	2.5	1.5	18.8
625-16-40	6.25	.5	1.25	4.4
625-16-48	6.25	.5	1.5	4.4
625-24-32	6.25	.75	1	6.4
625-24-40	6.25	.75	1.25	6.4
625-24-48	6.25	.75	1.5	6.4
625-28-48	6.25	.875	1.5	7.2
625-30-48	6.25	.938	1.5	8.1
625-32-40	6.25	1	1.25	8.3
625-34-48	6.25	1.063	1.5	9.3
625-38-40	6.25	1.187	1.25	10.0
625-38-48	6.25	1.187	1.5	9.7
625-48-48	6.25	1.5	1.5	12.3
625-52-48	6.25	1.625	1.5	13.3
625-68-48	6.25	2.125	1.5	17.4
625-80-32	6.25	2.5	1	21.1
650-44-00	6.5	1.375	—	12.9
650-44-48	6.5	1.375	1.5	12.9
650-52-48	6.5	1.625	1.5	14.5
650-72-48	6.5	2.25	1.5	20.0
650-96-48	6.5	3	1.5	26.7
675-36-40	6.75	1.125	1.25	11.0
675-38-48	6.75	1.187	1.5	11.4
675-44-48	6.75	1.375	1.5	13.3
675-61-48	6.75	1.906	1.5	19.4
675-72-48	6.75	2.25	1.5	21.7
675-94-40	6.75	2.938	1.25	28.3
700-24-48	7	.75	1.5	8.2
700-26-48	7	.813	1.5	8.9
700-28-48	7	.875	1.5	8.9
700-30-48	7	.938	1.5	9.2
700-32-48	7	1	1.5	9.8
700-36-48	7	1.125	1.5	12.3
700-38-48	7	1.187	1.5	13.0
700-44-48	7	1.375	1.5	14.3
700-52-48	7	1.625	1.5	16.9
700-58-48	7	1.813	1.5	18.9
700-61-48	7	1.906	1.5	19.8
700-62-48	7	1.938	1.5	21.1
700-68-48	7	2.125	1.5	22.1
700-112-48	7	3.5	1.5	36.4
725-36-40	7.25	1.125	1.25	12.8
725-94-40	7.25	2.938	1.25	33.3
750-24-48	7.5	.75	1.5	9.0
750-44-48	7.5	1.375	1.5	16.5
750-50-48	7.5	1.563	1.5	18.8
750-58-48	7.5	1.813	1.5	21.8
750-66-48	7.5	2.063	1.5	24.8
750-68-48	7.5	2.125	1.5	25.5

Catalog Number	Dimensions			Approx. Wt. Lbs.
	Outside Diameter	Length	Inside Diameter	
750-70-48	7.5	2.188	1.5	26.3
750-72-48	7.5	2.25	1.5	27.0
750-74-48	7.5	2.313	1.5	28.0
750-84-48	7.5	2.625	1.5	31.5
750-94-48	7.5	2.938	1.5	35.0
775-36-48	7.75	1.125	1.5	23.0
775-58-48	7.75	1.813	1.5	25.0
775-66-48	7.75	2.063	1.5	26.0
775-74-48	7.75	2.313	1.5	31.0
775-94-48	7.75	2.938	1.5	36.0
800-54-48	8	1.688	1.5	23.2
800-62-48	8	1.938	1.5	26.6
800-72-48	8	2.25	1.5	30.9
800-78-48	8	2.438	1.5	33.5
800-112-48	8	3.5	1.5	48.1
850-50-48	8.5	1.563	1.5	24.3
850-52-48	8.5	1.625	1.5	24.3
850-72-48	8.5	2.25	1.5	35.0
850-84-48	8.5	2.625	1.5	40.8
850-124-48	8.5	3.875	1.5	50.0
900-58-48	9	1.813	1.5	32.0
900-60-48	9	1.875	1.5	32.9
900-72-48	9	2.25	1.5	39.4
900-112-48	9	3.5	1.5	61.3
950-52-188	9.5	1.625	5.875	20.2
950-54-48	9.5	1.688	1.5	33.1
950-60-188	9.5	1.875	5.875	23.3
950-60-48	9.5	1.875	1.5	36.8
950-66-48	9.5	2.063	1.5	40.4
950-70-188	9.5	2.219	5.875	27.5
950-70-48	9.5	2.188	1.5	44.0
950-74-188	9.5	2.313	5.875	28.7
950-74-48	9.5	2.313	1.5	45.3
950-78-188	9.5	2.438	5.875	30.3
950-78-48	9.5	2.438	1.5	49.0
950-80-48	9.5	2.5	1.5	49.0
950-82-188	9.5	2.563	5.875	31.8
950-82-48	9.5	2.563	1.5	50.2
950-86-188	9.5	2.689	5.875	33.4
950-86-48	9.5	2.689	1.5	54.0
950-88-48	9.5	2.75	1.5	53.9
950-96-48	9.5	3	1.5	58.7
100-80-48	10	2.5	1.5	54.4
100-100-48	10	3.125	1.5	68.0
100-116-48	10	3.625	1.5	78.8
100-124-48	10	3.875	1.5	84.3
105-56-200	10.5	1.75	6.25	27.8
105-58-200	10.5	1.813	6.25	28.7
105-100-200	10.5	3.125	6.25	49.6
105-106-200	10.5	3.313	6.25	52.5
110-128-48	11	4	1.5	105.7



Custom Capabilities
Forgings

Martin Tool and Forge, located in Fort Worth, Texas, has been a leading supplier of quality American forged products since 1917. Martin forgings are well regarded for quality, innovation, reliability & cost savings.

Know how garnered over many decades provides unsurpassed benefit for the industrial user of custom forgings. This includes all phases in the forging process - die design and engineering, forging, coining, heat treating, and polishing.

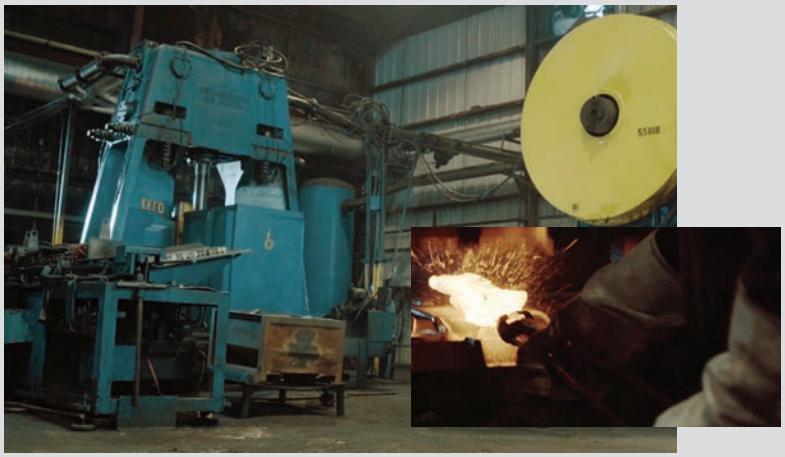
Hammers ranging in size from 1,000 to 5,000 pounds and presses ranging from 1,600 ton to2,500 ton produce finished parts from a few ounces to 50 pounds. Various alloys, considerable capacity, and secondary machining capability enable Martin to deliver near 100% density requirements in a cost effective manner.

Manufacturing Capabilities

Martin utilizes **closed impression die forging** where two dies containing the impression of the shape are brought together deforming the metal. Martin provides two types of closed impression die forgings: **Hammer Forgings** and **Press Forgings.**

Hammer Forging

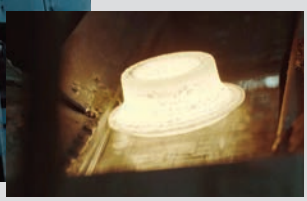
Forging on a hammer is carried out in a succession of die impressions using repeated blows. Hammer forging can work to nearer net shape with smaller forging allowance, therefore on high cost or difficult to machine alloys there can be significant advantages in the Hammer Forging process. Hammer forgings can usually produce larger and heavier parts than press forgings.





Press Forging

The stock is usually hit only once in each die impression. Increased deformation and control achieved through press forging will give the material better consistency of properties.



Custom Capabilities
Forgings

Material Capabilities

Hammers

Up to 20" length

Carbon Steel	.25 to 45 lb
Alloy Steel	.25 to 45 lb
Stainless Steel	.15 to 25 lb

Presses

Up to 12" diameter or 14" length

Carbon Steel	1.5 to 40 lb
Alloy Steel	1.5 to 40 lb
Stainless Steel	1.5 to 20 lb



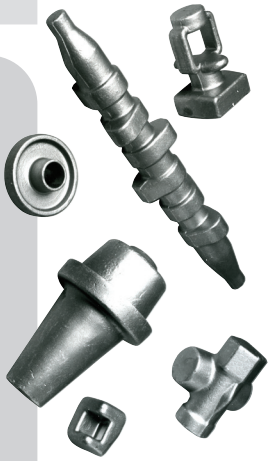
Secondary Operations

Other metalworking and inspection processes complement the forging of carbon, alloy and stainless steel components and parts.

- Heat Treatment
- CNC Machining, Broaching
- Magnetic Particle Inspection
- Liquid Penetrant Inspection
- Grinding, Polishing
- Cleaning
- Plating or Coating
- Coining

Benefits

- **High impact strength and structural integrity**
- Extremely **high consistency** of material and dimensions of parts
- **Higher strength to weight ratios** reduce both weight and size when close fit or weight issues are a factor
- Forging can produce **complex shapes** that otherwise may require multiple manufacturing processes
- Forged parts are **compatible with most secondary operations** such as heat treating, machining and fabrication
- In many cases **one forged part can be created where multiple parts were originally used**, reducing labor cost
- Martin's dedication to quality and service, is second to none





Watch the Forge & Foundry Video

Scan QR code or visit: http://bit.ly/Forge-Foundry

Case Study:

Application: Counter weight on unit handling equipment

Problem: Parts were being milled in-house from purchased burned plate. Process was expensive, but low volumes had prevented consideration of alternate methods of manufacture.

Solution: Instead of utilizing their expensive CNC milling equipment on relatively low-tech parts, Martin designed a simple die for a forged part, which worked well for medium quantity production runs. When compared to sourcing costs, production time, and scrap, the forged part was less expensive than the milled part. The real savings has resulted from the enhanced utilization of the CNC milling equipment for other, more profitable work

Custom Capabilities
Sintered Metal

Sintered Metal

Sintered metal is an excellent choice for a wide variety of products especially those with irregular shapes that would be difficult to manufacture using conventional methods.

Commonly associated with large quantity runs of fairly simple products, the sintered metal process also effectively addresses small quantities for many complex and multi-level parts where intricate machining or milling was required. Smooth surface finishes, self-lubrication, and tolerance repeatability are just a few of the attributes resulting from this technology. Using a wide range of alloys, Martin produces custom sintered parts for many industries and applications.

Advantages

- Superior resistance and performance
- Uniform tolerances
- High density
- Extremely smooth surface finish
- Self-lubricating
- 12% less weight than Steel

Manufacturing

Martin Sintered Steel presses average 750 tons, and can press up to 2000 tons.

Presses delivering more than 880 tons of pressure form parts from bronze, iron, copper, manganese, etc.







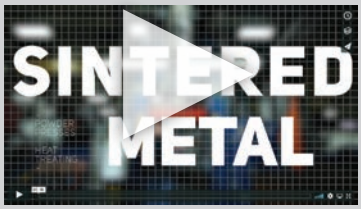


Case Study:

Application: Timing plate on an agricultural implement

Problem: Production of parts required several steps and the use of several outside sources. All these factors led to inconsistent tolerances, difficulty in coordination of lead times, scrapped parts and production interruptions.

Solution: Martin reviewed sample parts and prints. Martin met with OEM engineering and service personnel to better understand the application. The Martin sintered component reduced the total cost of each part by an average of 54%, slashed acquisition costs and allowed for deliveries using staged release dates



Watch the Sintered Metal Video

Scan QR code or visit:
http://bit.ly/SinteredMetal

Custom Capabilities
Foundry & Injection Molded Plastics

Foundry

Operating its own foundry enables Martin to provide its customers with quality assurance, quick lead times, and application engineering assistance on cast and ductile iron parts.

With an upper range of 96" in diameter and 10,000 pounds, our own pattern shop, and streamlined access to secondary machining, Martin's comprehensive capabilities serve a broad spectrum of industrial uses.



Case Study:

Application: Conveyor

Problem: Redesign of equipment required flywheel and synchronous drive to be used in more compact area. The two separate components had clearance problems.

Solution: Martin designed a one piece casting which allowed machining of a duplex drive to fit in tight area. Equipment is more compact, one final part rather than two saves costs, and installation time is reduced



Watch the Forge & Foundry Video

Scan QR code or visit: http://bit.ly/Forge-Foundry

Injection Molded Plastics

Since the inception of our line of injection molded plastic components, Martin has emerged as a leading supplier of cost effective non-metallic products.

A combination of polymers are used to achieve desired wear, corrosion resistance, and color characteristics. Injection molded plastic is also advantageous in non-sparking and sanitary applications.

While the final form of most components is achieved directly from the press, Martin is able to perform secondary machining on molded parts if necessary.



Case Study:

Application: Packaging equipment

Problem: A sticky product required cleaning with a caustic solution which led to corrosion based fatigue of a threaded collar. In addition, high maintenance costs in the field were encountered due to difficulty of replacing the seized collar.

Solution: A Martin manufactured part made of glass filled nylon was produced. The Martin part withstood constant exposure to the caustic solution and prevented the seizing of threads which provided a longer part life. Unit price was reduced by approximately 34%, warranty claims dropped significantly and the user logo stamped on the part aided in capturing replacement part sales

Custom Capabilities
Milled Plastics

Milled Plastics

Whether it is a simple alteration, rebore, or a product requiring secondary operations such as drilling, tapping, or inserts, Martin's trained and dedicated staff are standing ready to tackle your most demanding request.

Our CNC machines are able to mill a variety of plastic and non-metallic materials from 1/16" to over 8" thick, with diameters from 2" to 60" in a variety of unique shapes.

Additionally, secondary operations may be completed in-house when projects require both non-metallic and metallic components to complete one unit.

Martin manufactures parts from a variety materials including Nylon, UHMW, Acetal and more. They can be solid construction or multiple pieces requiring secondary operations. One part or 1,000, count on Martin to provide you with quick turnaround times on all your Made-to-Order plastic parts.

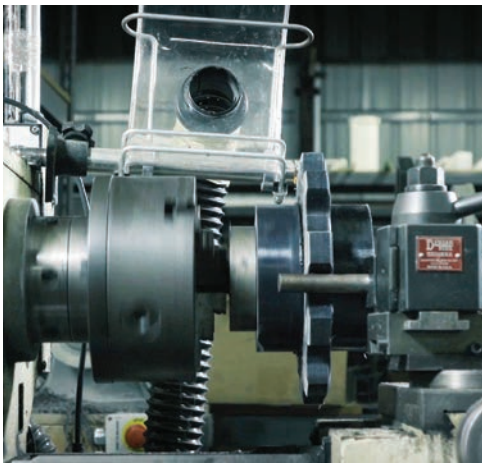


Case Study:

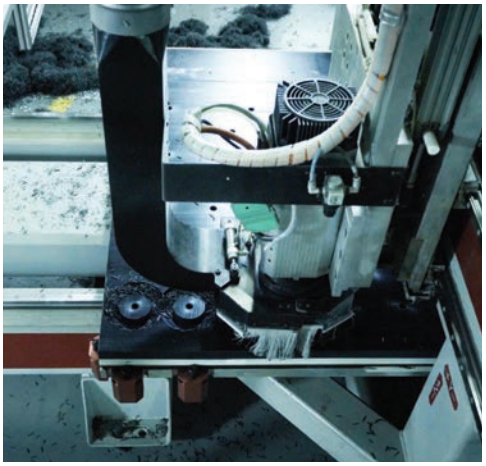
Application: Split bearing block made of UHMW found on the ends of an agitator that stirs a chemical treating solution in a beef processing plant. Thus the components are continuously submerged into a corrosive liquid

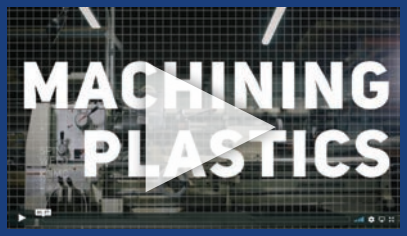
Problem: This agitator is an integral part of the streamlined processing at this facility, therefore it is necessary to have components readily on hand and available to keep it up and running. However, this customer was struggling to get the split bearing blocks from their current supplier in a timely manner.

Solution: Realizing an opportunity to service this end user, Martin was able to provide a quality component with a quick delivery at a lower price than the previous supplier. These split block bearings are used in many different industries and applications



Spin weld parts up to 12½" Diameter.





Watch the Machining Plastics Video

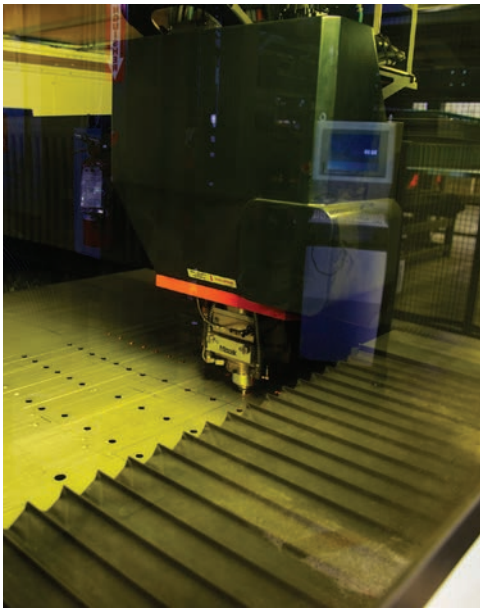
Scan QR code or visit: http://bit.ly/MilledPlastics

Custom Capabilities
Laser Cutter & Waterjet

Laser Cutter

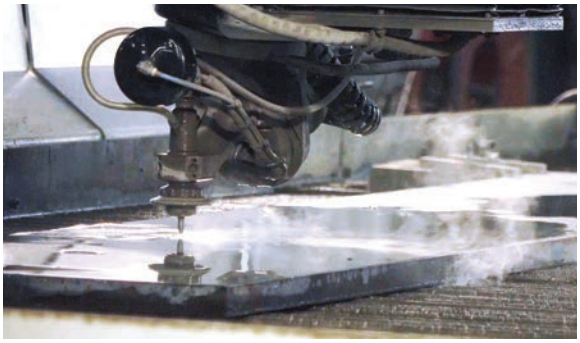
Martin has two laser cutting tables in their material handling division. These lasers are self loading and unloading, which means that once set up is complete, they can run unattended. These lasers can cut up to 3/4" thick mild or stainless steel and have a work envelope of 2 meters x 4 meters.

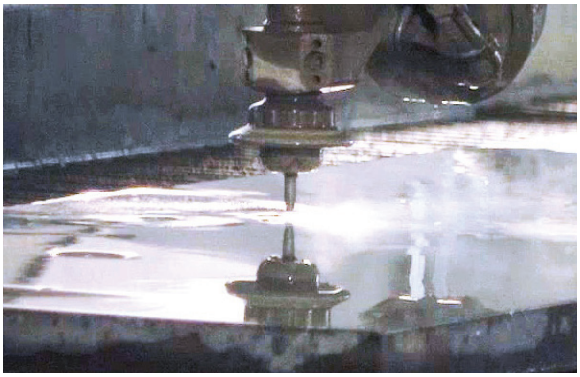




Water Jet - High Pressure Water Cutter

Our waterjet cutter penetrates stainless steel conveyor type sprockets and a number of other components with more precision than a burn table.





Advantages

- No material limitations
- Work Envelope: 150" x 79"
- 5 axis capability
- Highest in the industry water pressure of 87,500 PSI
- Easily cut up to 5" steel plate precisely and accurately, and up to 6" with adjustments



Watch the Water Jet Video

Scan QR code or visit: https://bit.ly/WJetCapability

Notes

INTERCHANGEABLE BUSHINGS

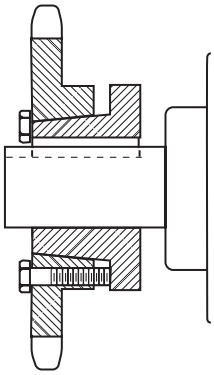
PRODUCT	PAGE
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Stock QD Bushings

MARTIN MOUNTING PROCEDURE – QD BUSHINGS

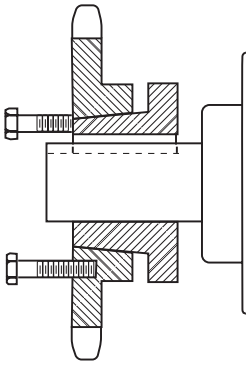
IMPORTANT – BE SURE TAPERED CONE SURFACES OF QD BUSHING AND INSIDE OF SHEAVE OR SPROCKET HUB ARE DRY AND FREE OF ALL FOREIGN SUBSTANCES SUCH AS PAINT, GREASE, OR DIRT.

STANDARD MOUNTING ASSEMBLY FOR QD SHEAVES AND SPROCKETS



MOUNTING

1. Be sure the tapered cone surfaces of the bushing and the inside of the driven product are clean and free of anti-seize lubricants.
2. Slide QD bushing on shaft, flange end first. Assemble key.
3. Position QD bushing on shaft. Tighten set screw over key "hand tight" with standard Allen wrench only. Do not use excessive force.
4. Slide large end of sheave or sprocket taper bore into position over cone aligning drilled bolt holes in sheave or sprocket with tapped holes in flange of bushing. Assemble pull-up bolts and lock washers.
   NOTE: Install M thru S bushings in the hub so that the two extra holes in the hub are located as far as possible from the bushing's saw cut.
5. Tighten pull-up bolts alternately and evenly to tightness indicated in torque table on back. Do not use extensions on wrench handles. There should be a gap between the face of the sheave or sprocket hub and the flange of the QD bushing to insure a satisfactory cone grip and press fit.
   CAUTION: THIS GAP MUST NOT BE CLOSED.



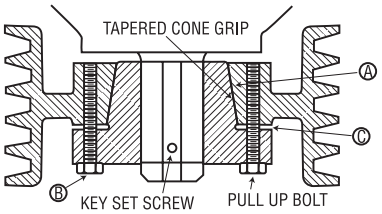
DISMOUNTING

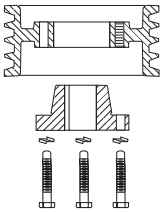
1. Remove pull-up bolts and screw them into TAPPED holes in sheave or sprocket and against flange of QD bushing to break cone grip.
1. Loosen set screw and slide QD bushing from shaft.

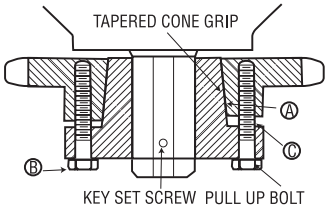
WARNING: Because of the possible danger to person(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed: Products must be used in accordance with the engineering information specified in the catalog. Proper installation, maintenance and operation procedures must be observed. The instructions given above must be followed. Inspections should be made as necessary to assure safe operation under prevailing conditions. All rotating power transmission products when used in a drive are potentially dangerous and must be guarded by the user as required by applicable laws, regulations, standards, and good safety practice. (Refer to ANSI Standard B15.1.)

REVERSE Mounting Assembly
FOR QD SHEAVES AND SPROCKETS USING JA, SH, SD, SDS, SK, SF, E, F, AND J BUSHINGS

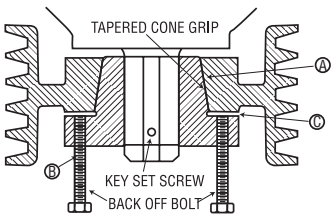
These bushings, as well as the sprockets and sheaves for them, are each drilled with six holes (three drilled and three tapped) to allow pull-up bolts to be inserted from either side. This enables variations of mounting characteristics to suit a particular installation.

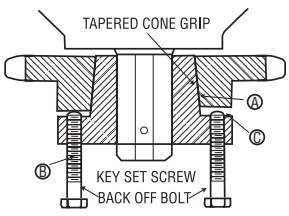






1. Be sure the tapered cone surfaces of the bushing and the inside of the driven product are clean and free of anti-seize lubricants.
2. Assemble sheave or sprocket with bolts inserted (But not tightened) through DRILLED holes in bushing flange into TAPPED holes in sheave, sprocket, or other Martin QD part.
3. With key in shaft keyseat, slide assembly into approximate position on shaft with flange end of bushing away from bearing.
4. Position QD bushing on shaft by tightening set screw over key "hand tight" with standard Allen wrench only. Do not use excessive force.
5. Tighten pull-up bolts alternately and evenly to tightness indicated in torque table below. Do not use extensions on wrench handles. There should be a gap between the face of the sheave or sprocket hub and the flange of the QD bushing to insure a satisfactory cone grip and press fit. CAUTION: THIS GAP MUST NOT BE CLOSED.





1. Remove pull-up bolts and screw them into TAPPED holes in bushing flange and against hub of sheave or sprocket to break cone grip.
2. Loosen set screw in bushing flange and slide QD bushing from shaft.

CAUTION

WARNING: USE OF ANTI-SEIZE LUBRICANT ON TAPERED CONE SURFACE OR ON BOLT THREADS WHEN MOUNTING MAY RESULT IN DAMAGE TO SHEAVE AND SPROCKETS. THIS VOIDS ALL MANUFACTURER'S WARRANTIES

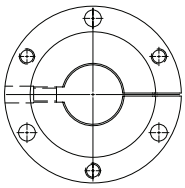
BOLT TORQUE TABLE

QD Bushing Size	Set Screw	Wrench Torque in./lbs.
JA	10 – 24	60
SH, SDS, SD	1/2 – 20	108
SK	5/16 – 18	180
SF	3/8 – 16	360
E	1/2 – 13	720
F	9/16 – 12	900
J	5/8 – 11	1620
M	3/4 – 10	2700
N	7/8 – 9	3600
P	1 – 8	5400
W	1 1/8 – 7	7200
S	1 1/2 – 7	9000

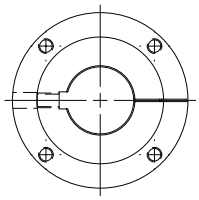
All Steel QD Bushings

★**F** = Length of Mating Bore

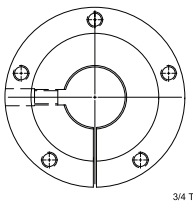
★★**G** = Gap Between QD Bushing and Mating Hub



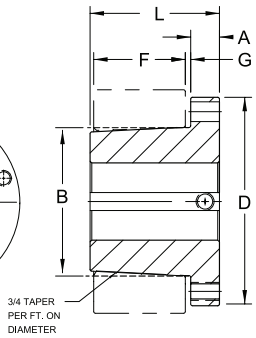
Bushings:
"JA" to "J" inclusive



Bushings:
"M" to "W" inclusive



Bushing:
"S"



Bushing	Bush. Torque Capacity (in-lb)	Dimensions (Inches)								Cap Screws Required	Stock Bore Range			Average Weight (Approx.)
		A	B	D	E	★F	★★G	L	Cap Bolt Circle		Min.	Maximum		
												Standard Keyway	Shallow Keyway	
SF-STL	11,000	0.563	3.125	4.625	1.500	1.250	0.125	2.063	3.875	3 – 3/8 × 2	0.500	2.313	2.813	3.0
E-STL	20,000	0.750	3.834	6.000	1.875	1.625	0.125	2.625	5.000	3 – 1/2 × 2 3/4	0.875	2.875	3.500	10.0
F-STL	30,000	0.813	4.437	6.625	2.813	2.500	0.188	3.625	5.625	3 – 9/16 × 3 5/8	1.000	3.313	4.000	11.5
J-STL	45,000	1.000	5.148	7.250	3.500	3.188	0.188	4.500	6.250	3 – 5/8 × 4 1/2	1.438	3.750	4.500	18.0
M-STL	85,000	1.250	6.500	9.000	5.500	5.188	0.188	6.750	7.875	4 – 3/4 × 6 3/4	2.000	4.750	5.500	37.0
N-STL	150,000	1.500	7.000	10.000	6.625	6.250	0.438	8.125	8.500	4 – 7/8 × 8 1/2	2.500	5.125	5.875	57.0

Bushing	Bores	Keyway
SF-STL	2.375 – 2.563	5/8 × 3/16
	2.625 – 2.750	5/8 × 1/16
	2.813 – 2.875	3/4 × 1/16
	2.938	3/4 × 1/32
	0.875 – 2.875	STD.
E-STL	2.938 – 3.250	3/4 × 1/8
	3.313 – 3.500	7/8 × 1/16
F-STL	1.000 – 3.313	STD.
	3.375 – 3.750	7/8 × 3/16
	3.875 – 3.938	1 × 1/8
	4.000	NONE
J-STL	3.438 – 3.750	STD.
	3.813 – 4.500	1 × 1/8
	2.000 – 4.750	STD.
M-STL	4.813 – 5.500	1 1/4 × 1/4
	2.500 – 5.125	STD.
N-STL	5.188 – 5.500	1 1/4 × 1/4
	5.563 – 5.875	1 1/2 × 1/4

Bushing	Plain Bores Not Split
SH-STL	0.500
SD-STL	0.500
SK-STL	0.500
SF-STL	0.500
E-STL	0.875 – 1.938
F-STL	1.000 – 2.438 – 2.938
J-STL	1.438 – 2.938
M-STL	2.000 – 2.938
N-STL	2.438 – 4.938

Shallow Key Dimension — Standard			
Keyset	Key	Keyset	Key
1/4 × 1/32	1/4 × 5/32	3/4 × 1/8	3/4 × 1/2
1/4 × 1/16	1/4 × 3/16	7/8 × 1/16	7/8 × 1/2
3/8 × 1/32	3/8 × 7/32	7/8 × 3/16	7/8 × 5/8
3/8 × 1/16	3/8 × 1/4	1 × 1/8	1 × 5/8
3/8 × 1/8	3/8 × 5/16	1 1/4 × 1/4	1 1/4 × 7/8
1/2 × 1/32	1/2 × 9/32	1 1/2 × 1/8	1 1/2 × 7/8
1/2 × 1/16	1/2 × 5/16	1 1/2 × 1/4	1 1/2 × 1
1/2 × 1/8	1/2 × 3/8	1 3/4 × 1/8	1 3/4 × 3/4
5/8 × 1/16	5/8 × 3/8	1 3/4 × 1/4	1 3/4 × 7/8
3/4 × 1/16	3/4 × 7/16	2 × 1/4	2 × 1

Shallow Key Dimension — Steel			
Keyset	Key	Keyset	Key
1/4 × 1/32	1/4 × 5/32	3/4 × 1/16	3/4 × 7/16
1/4 × 1/16	1/4 × 3/16	3/4 × 1/8	3/4 × 1/2
3/8 × 1/32	3/8 × 7/32	7/8 × 1/16	7/8 × 1/2
3/8 × 1/16	3/8 × 1/4	7/8 × 3/16	7/8 × 5/8
3/8 × 1/8	3/8 × 5/16	1 × 1/8	1 × 5/8
1/2 × 1/32	1/2 × 3/32	1 1/4 × 1/4	1 1/4 × 7/8
1/2 × 1/16	1/2 × 5/16	1 1/2 × 1/4	1 1/2 × 1
1/2 × 1/8	1/2 × 3/8	1 3/4 × 1/8	1 3/4 × 3/4
5/8 × 1/16	5/8 × 3/8	1 3/4 × 3/8	1 3/4 × 1
5/8 × 3/16	5/8 × 1/2	2 × 1/4	2 × 1

Shallow Key Dimension — Standard		
Bores	Keyset	Key
7/8	3/16 × 3/32	3/16 × 3/16
15/16 – 1 1/4	1/4 × 1/8	1/4 × 1/4
1 5/16 – 1 3/8	5/16 × 5/32	5/16 × 5/16
1 7/16 – 1 3/4	3/8 × 3/16	3/8 × 3/8
1 13/16 – 2 1/4	1/2 × 1/4	1/2 × 1/2
2 5/16 – 2 3/4	5/8 × 5/16	5/8 × 5/8
2 13/16 – 3 1/4	3/4 × 3/8	3/4 × 3/4
3 5/16 – 3 3/4	7/8 × 7/16	7/8 × 7/8
3 13/16 – 4 1/2	1 × 1/2	1 × 1
4 9/16 – 5 1/2	1 1/4 × 5/8	1 1/4 × 1 1/4
5 9/16 – 6 1/2	1 1/2 × 3/4	1 1/2 × 1 1/2
6 9/16 – 7 1/2	1 3/4 × 3/4	1 3/4 × 1 1/2
7 9/16 – 9	2 × 3/4	2 1/2 × 1 1/2
9 1/16 – 11	2 1/2 × 7/8	—
1 11/16 – 13	3 × 1	—

Reborable QD bushings made of stainless steel are available in many sizes. Non stock sizes are available on MTO basis.

Standard QD Bushings

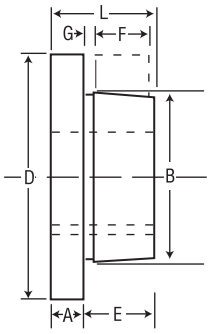
Bushing	Bush. Torque Capacity (in-lb)	Dimensions (in)								Cap Screws Required	Stock Bore Range			Set Screw Size	Average Weight (lb)
		A	B	D	E	F	G	L	Bolt Circle		Min.	Maximum			
												Standard Keyway	Shallow Keyway		
JA	1,000	0.375	1.375	2.000	0.688	0.563	0.210	1.000	1.665	3 – 10 × 1	0.375	1	1 1/4	10 – 24	0.9
SH	3,500	0.438	1.871	2.688	0.875	0.813	0.243	1.250	2.250	3 – 1/4 × 1 3/8	0.500	1 3/8	1 11/16	.25 – 20	1.0
SDS	5,000	0.500	2.187	3.188	0.875	0.750	0.265	1.315	2.688	3 – 1/4 × 1 3/8	0.500	1 11/16	2	.25 – 20	1.0
SD	5,000	0.500	2.187	3.188	0.938	1.250	0.260	1.813	2.688	3 – 1/4 × 1 7/8	0.500	1 11/16	1 15/16	.25 – 20	1.5
SK	7,000	0.563	2.812	3.875	1.375	1.250	0.317	1.875	3.313	3 – 5/16 × 2	0.500	2 2/16	2 1/2	.313 – 18	2.0
SF	11,000	0.563	3.125	4.625	1.500	1.250	0.322	2.000	3.875	3 – 3/8 × 2	0.500	2 5/16	2 5/16	.313 – 18	3.0
E	20,000	0.750	3.834	6.000	1.875	1.625	0.327	2.625	5.000	3 – 1/2 × 2 3/4	0.875	2 7/8	3 1/2	.375 – 16	10.0
F	30,000	0.813	4.437	6.625	2.813	2.500	0.423	3.625	5.625	3 – 9/16 × 3 5/8	1.000	3 5/16	3 15/16	.5 – 13	11.5
J	45,000	1.000	5.148	7.250	3.500	3.188	0.423	4.500	6.250	3 – 5/8 × 4 1/2	1.438	3 3/4	4 1/2	.625 – 11	18.0
M	85,000	1.250	6.500	9.000	5.500	5.188	0.423	6.750	7.875	4 – 3/4 × 6 3/4	1.938	4 3/4	5 1/2	.75 – 10	37.0
N	150,000	1.500	7.000	10.000	6.625	6.250	0.423	8.125	8.500	4 – 7/8 × 8 1/2	2.438	5 1/8	6	.75 – 10	57.0
P	250,000	1.750	8.250	11.750	7.625	7.250	0.423	9.375	10.000	4 – 1 × 9 1/2	2.938	5 15/16	7	.875 – 9	120.0
W	375,000	2.000	10.437	15.000	9.375	9.000	0.564	11.375	12.750	4 – 1 1/8 × 11 1/2	4.000	7 1/2	8 1/2	1 – 8	250.0
S	625,000	3.250	12.125	17.750	12.500	–	0.814	15.750	15.000	5 – 1 1/4 × 15 1/2	6.000	8 1/4	10	1.25 – 7	400.0

Inch Bore

Bushing	Bores	Keyway
JA	0.375 - 0.438	NO K.W.
	0.500 - 1.000	STD.
	1.063 - 1.125	1/4 – 1/16
	0.813	1/4 – 1/16
	1.250	NO K.W.
SH	0.500 - 1.375	STD
	1.438 - 1.500	3/8 × 1/16
	1.563 - 1.625	3/8 × 1/16
	1.688	NO K.W.
SDS	0.500 - 1.688	STD.
	1.750	3/8 × 1/8
	1.813	1/2 × 1/8
	1.875 - 1.938	1/2 × 1/16
	2.000	NO K.W.
SD	0.500 - 1.688	STD.
	1.750	3/8 × 1/8
	1.813	1/2 × 1/8
	1.875	1/2 × 1/16
	1.938	1/2 × 1/16
	2.000	NO K.W.
SK	0.500 - 2.125	STD.
	2.188 - 2.250	1/2 × 1/8
	2.313 - 2.500	5/8 × 1/16
	2.563 - 2.625	NO K.W.
SF	0.500 - 2.250	STD.
	2.313 - 2.500	5/8 × 3/16
	2.563 - 2.750	5/8 × 1/16
	2.813 - 2.875	3/4 × 1/16
	2.938	3/4 × .031

Bushing	Bores	Keyway
E	0.875 - 2.875	STD.
	2.938 - 3.250	3/4 × 1/8
	3.375 - 3.500	7/8 × 1/16
	3.313	7/8 × 1/8
F	1.000 - 3.313	STD.
	3.375 - 3.750	7/8 × 3/16
	3.875 - 3.938	1 × 1/8
	4.000	NONE
J	1.250 - 3.750	STD.
	3.813 - 4.500	1 × 1/8
M	2.000 - 4.750	STD.
	4.813 - 5.500	1 1/4 × 1/4
N	2.438 - 5.000	STD.
	5.125 - 5.500	1 1/4 × 1/4
	5.563 - 6.000	1 1/2 × 1/4
P	2.938 - 5.938	STD.
	6.000 - 6.500	1 1/2 × 1/4
	6.563 - 7.000	1 3/4 × 1/8
W	4.000 - 7.500	STD.
	7.563 - 8.500	2 × 1/4

Keystock provided for nonstandard keyways.



Millimeter Bore

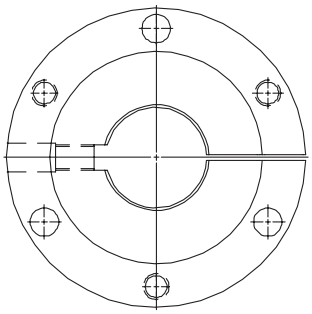
Bushing	Bores (mm)	Key Stock Size ★ w × t
SH	24, 25, 28, 30	8 × 7
	32, 35	10 × 8
SDS	24, 25, 28, 30	8 × 7
	32, 35, 38	10 × 8
	40, 42	12 × 8
SD	24, 25, 28, 30	8 × 7
	32, 35, 38	10 × 8
	40, 42	12 × 8
SK	24, 25, 28, 30	8 × 7
	32, 35, 38	10 × 8
	40, 42	12 × 8
	48, 50	14 × 9
	55	16 × 10
SF	28, 30	8 × 7
	32, 35, 38	10 × 8
	40, 42	12 × 8
	48, 50	14 × 9
	55	16 × 10
	60	18 × 11
E	35, 38	10 × 8
	40, 42	12 × 8
	48, 50	14 × 9
	55	16 × 10
	60, 65	18 × 11
	70, 75	20 × 12
F	48, 50	14 × 9
	55	16 × 10
	60, 65	18 × 11
	70, 75	20 × 12
	80, 85	22 × 14
	90	25 × 14
J	50	14 × 9
	55	16 × 10
	60, 65	18 × 11
	70, 75	20 × 12
	80, 85	22 × 14
	90, 95	25 × 14
	100	28 × 16

★ Important — The metric system does not refer to keyseat or keyway dimensions as does the English system; instead, dimensions are given for the key itself which is rectangular in shape, not square as in the English system.

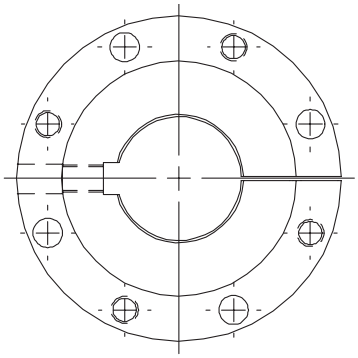
NOTE:
.03937" = 1mm
Ex: 24 mm = 0.94488"

TO ORDER:
SH 24 mm

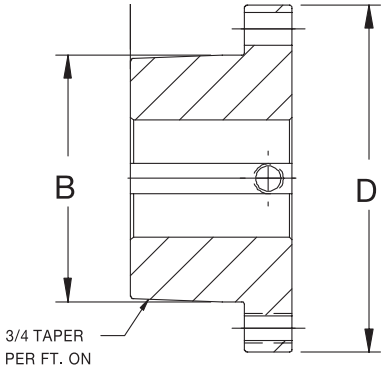
QD Short Bushings



Bushings:
JS



Bushings:
MS to WS inclusive



Inch Bore

Bushing	Bores	Keyway	Average Weight (lb)
JS	2.438 2.938	5/8 × 5/16 3/4 × 3/8	19 17
	3.438 3.500	7/8 × 7/16	15 15
	3.938 4.438	1 × 1/8	13 10
MS	3.438 3.500	7/8 × 7/16	38 37
	3.938 4.438	1 × 1/2	34 30
	4.938 5.438 5.500	1 1/4 × 1/4	26 21 20
NS	3.938 4.438	1 × 1/2	54 49
	4.938	1 1/4 × 5/8	43
	5.438 5.500	1 1/4 × 1/4	38 37
	5.938 6.000	1 1/2 × 1/4	31 30
PS	4.938 5.438	1 1/4 × 5/8	76 70
	5.938	1 1/2 × 3/4	62
	6.000 6.438 6.500	1 1/2 × 1/4	62 55 54
	6.938 7.000	1 3/4 × 1/8	47 45
WS	5.438	1 1/4 × 5/8	154
	5.938 6.000 6.438 6.500	1 1/2 × 3/4	145 144 136 135
	6.938 7.000 7.500	1 3/4 × 3/4	126 125 114
	7.938 8.000 8.438 8.500	2 × 1/4	106 105 94 93



Martin QD short bushings are suitable for use in belt conveyor applications wherever the short hubs of a conveyor pulley require the QD short bushing style.

Millimeter Bore

Bushing	Dimensions (Inches)						Cap Screws Required	Set Screw Size
	A	B	D	E	L	Bolt Circle		
JS	1.000	5.148	7.250	2.380	3.380	6.250	3 – 5/8 × 2 1/2	0.625
MS	1.190	6.500	9.000	3.620	4.810	7.880	4 – 3/4 × 3	0.750
NS	1.500	70.000	10.000	4.500	6.000	8.500	4 – 7/8 × 3 1/2	0.750
PS	1.500	8.250	11.750	5.000	6.500	10.000	4 – 1 × 4	0.875
WS	1.750	10.437	15.000	5.500	7.250	12.750	4 –1 1/8× 5	1.000

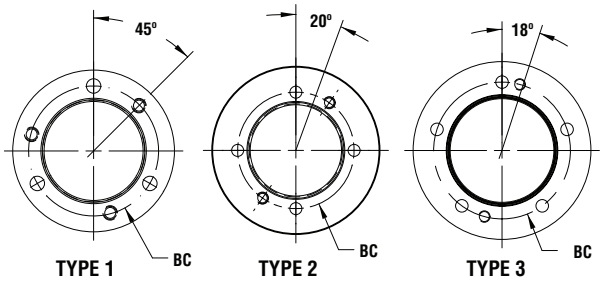
QD and QD Short Weld-On Hubs

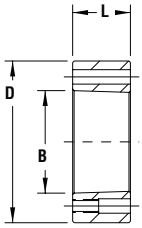
QD Weld-On Hubs

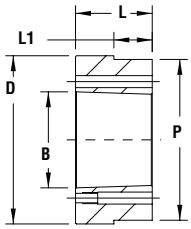
Martin QD weld-on hubs are suitable for use in many applications, such as welding to plate steel sprockets.

QD weld-on hubs are made of steel, drilled, tapped and taper bored for QD bushings







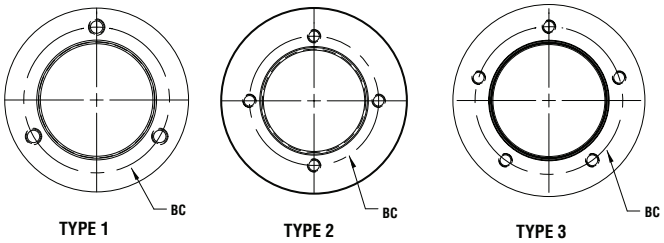


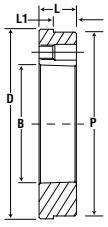
Catalog Number	Dimensions (Inches)						Type Drilling	Weight (lbs)	Mounting
	D ★	L	B (nom)	P	L_1	BC			
JA-A	2.250	0.563	1.370	—	—	1.665	1	0.4	STD or Reverse Mount
SH-A	3.000	0.813	1.870	—	—	2.250	1	1.0	
SDS-A	3.500	0.750	2.180	—	—	2.688	1	1.2	
SK-A	4.375	1.250	2.810	—	—	3.313	1	3.0	
SF-A	5.000	1.250	3.120	—	—	3.875	1	4.0	
E-A	6.250	1.625	3.830	—	—	5.000	1	9.0	
F-A	7.000	2.500	4.440	—	—	5.625	1	16.0	
J-A	7.750	3.188	5.140	—	—	6.250	1	22.5	
M-A	9.500	5.188	6.490	9.250	3.563	7.875	2	50.0	STD Mount Only
N-A	10.500	6.250	6.990	10.250	4.500	8.500	2	75.0	
P-A	13.000	7.250	8.240	—	—	10.000	2	155.0	
W-A	15.500	9.000	10.430	—	—	12.750	2	300.0	
S-A	19.500	12.000	12.120	18.750	7.500	15.000	3	558.0	

★ Tolerance of D Dimension (or P dimension where applicable) JA-A Thru J-A = (+-.002) M-A Thru S-A = (+-.003)

QD Short Weld-On Hubs

Martin QD short weld-on hubs are designed for use in conveyor pulleys.



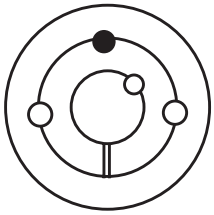


Catalog Number	Dimensions (Inches)						Type Drilling	Weight (lbs)	Mounting
	D	L	B (nom)	P ★	L_1	BC			
SFS-A	5.000	1.000	3.120	4.750	0.563	3.875	1	3.0	Reverse Mount Only
ES-A	6.250	1.125	3.830	6.000	0.625	5.000	1	5.5	
FS-A	7.000	1.250	4.440	6.750	0.688	5.625	1	7.4	
JS-A	8.250	1.625	5.140	8.000	1.000	6.250	1	13.8	
MS-A	9.500	2.375	6.490	9.250	1.625	7.875	2	22.9	
NS-A	10.250	2.375	6.990	10.000	1.563	8.500	2	26.8	
PS-A	12.250	2.875	8.240	12.000	2.000	10.000	2	47.9	
WS-A	15.250	3.375	10.430	14.875	2.438	12.750	2	84.2	
SS-A	17.500	3.875	12.120	17.000	2.750	15.000	3	121.8	

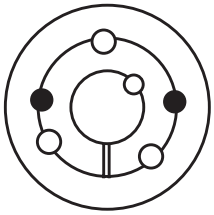
★ Tolerance of P Dimension SFS-A Thru MS-A = (+-.004) NS-A Thru PS-A = (+-.005) WS-A Thru SS-A = (+-.006)

Taper Bushing Installation

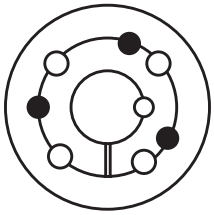
IMPORTANT NOTE: Please follow the instructions on this sheet in order for the Martin bushing to perform satisfactorily.



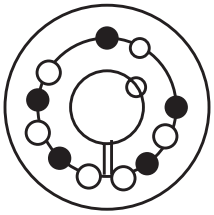
1008 to 3030



3535 to 6050



7060 to 10085



102100

INSTALLATION

1. Clean all oil, dirt, and paint from shaft, bushing bore, outside of bushing and component (sprocket, sheave...etc.) bore.
2. Insert bushing into component. Match the hole pattern, not the threaded holes (each hole will be threaded on one side only.)
3. Thread set or cap screws into those half threaded holes indicated by ❍ on above diagram. Mount assembly on shaft.
4. Alternately torque set or cap screws* to recommended torque setting in chart below.
5. On 3535 and larger bushings use a block, sleeve or drift and hammer large end of bushing (do not hammer bushing directly).
6. Repeat steps 4 and 5 until torque wrench reading, after hammering, is the same as before hammering.
7. Fill all unoccupied holes with grease.

REMOVAL

1. Remove all set or cap screws.
2. Insert set or cap screws in holes indicated by ● on drawing. Loosen bushing by alternately tightening set or cap screws.
3. To reinstall, complete all seven (7) installation instructions.

RECOMMENDED TORQUE		
Bushing No.	**Set Screw**	**Wrench Torque in/lb**
1008, 1108 1210, 1215, 1310 1610, 1615	1/4 – 20 Socket Set Screw	55
	5/16 – 18 Socket Set Screw	165
	3/8 – 16 Socket Set Screw	175
	3/8 – 16 Socket Set Screw	175
2012 2317, 2525 3020, 3030	7/16 – 14 Socket Set Screw	280
	1/2 – 13 Socket Set Screw	430
	5/8 – 11 Socket Set Screw	800
3535 4040 4545	1/2 – 13 Socket Set Screw	1000
	5/8 – 11 Socket Set Screw	1700
	3/4 – 10 Socket Set Screw	2450
5050 6050, 7060, 8065 10085, 120100	7/8 – 9 Socket Set Screw	3100
	1-1/4 – 7 Socket Set Screw	7820
	1-1/2 – 6 Socket Set Screw	13700

If two bushings are used on same component and shaft, fully tighten one bushing before working on the other

CAUTION

WARNING: USE OF ANTI-SEIZE LUBRICANT ON TAPERED CONE SURFACE OR ON BOLT THREADS WHEN MOUNTING MAY RESULT IN DAMAGE TO SHEAVE AND SPROCKETS. THIS VOIDS ALL MANUFACTURER'S WARRANTIES

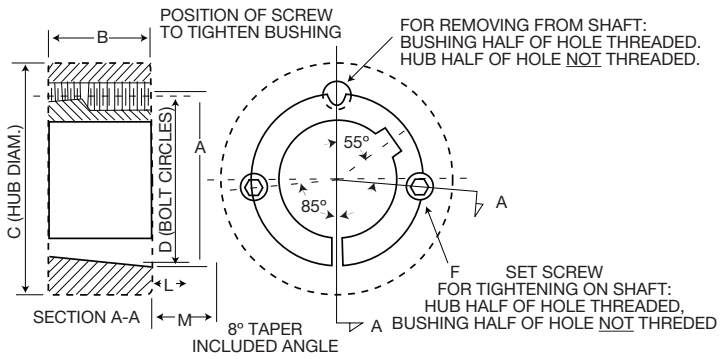
WARNING: Because of the possible danger to person(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed: Products must be used in accordance with the engineering information specified in the catalog. Proper installation, maintenance and operation procedures must be observed. The instructions given above must be followed. Inspections should be made as necessary to assure safe operation under prevailing conditions. All rotating power transmission products when used in a drive are potentially dangerous and must be guarded by the user as required by applicable laws, regulations, standards, and good safety practice. (Refer to ANSI Standard B15.1.)

Taper Bushings Dimensions

No. 1008 to 3030 Taper Bushings

Bush. No.	Bore	Wt. (lb)	Bushing Keyseat	Shaft Keyseat
1008	0.500 - 0.563	0.27	1/8 × 1/16	1/8 × 1/16
	0.625 - 0.875	0.21	3/16 × 3/32	3/16 × 3/32
	0.938 - 1.000	0.16	1/4 × 1/16 ▼	1/4 × 1/8
1108	0.500 - 0.563	0.33	1/8 × 1/16	1/8 × 1/16
	0.625 - 0.875	0.27	3/16 × 3/32	3/16 × 3/32
	0.938 - 1.000	0.22	1/4 × 1/8	1/4 × 1/8
	1.063 - 1.125	0.17	1/4 × 1/16 ▼	1/4 × 1/8
1210	0.500 - 0.563	0.61	1/8 × 1/16	1/8 × 1/16
	0.625 - 0.875	0.55	3/16 × 3/32	3/16 × 3/32
	0.938 - 1.250	0.49	1/4 × 1/8	1/4 × 1/8
1215	0.500 - 0.563	0.8	1/8 × 1/16	1/8 × 1/16
	0.625 - 0.875	0.7	3/16 × 3/32	3/16 × 3/32
	0.938 - 1.250	0.6	1/4 × 1/8	1/4 × 1/8
1310	0.500 - 0.563	0.7	1/8 × 1/16	1/8 × 1/16
	0.625 - 0.875	0.7	3/16 × 3/32	3/16 × 3/32
	0.938 - 1.250	0.6	1/4 × 1/8	1/4 × 1/8
	1.313 - 1.375	0.6	5/16 × 5/32	5/16 × 5/32
1610	0.500 - 0.563	0.9	1/8 × 1/16	1/8 × 1/16
	0.625 - 0.875	0.8	3/16 × 3/32	3/16 × 3/32
	0.938 - 1.250	0.7	1/4 × 1/8	1/4 × 1/8
	1.313 - 1.375	0.7	5/16 × 5/32	5/16 × 5/32
	1.438 - 1.500	0.6	3/8 × 3/16	3/8 × 3/16
	1.563 - 1.625	0.5	3/8 × 1/8 ▼	3/8 × 3/16
1615	0.500 - 0.563	1.2	1/8 × 1/16	1/8 × 1/16
	0.625 - 0.875	1.1	3/16 × 3/32	3/16 × 3/32
	0.938 - 1.250	1.0	1/4 × 1/8	1/4 × 1/8
	1.313 - 1.375	0.8	5/16 × 5/32	5/16 × 5/32
	1.438 - 1.500	0.7	3/8 × 3/16	3/8 × 3/16
	1.563 - 1.625	0.6	3/8 × 1/8 ▼	3/8 × 3/16
2012	0.500 - 0.563	1.7	1/8 × 1/16	1/8 × 1/16
	0.625 - 0.875	1.6	3/16 × 3/32	3/16 × 3/32
	0.938 - 1.250	1.5	1/4 × 1/8 ▼	1/4 × 1/8
	1.313 - 1.375	1.4	5/16 × 5/32	5/16 × 5/32
	1.438 - 1.750	1.2	3/8 × 3/16	3/8 × 3/16
	1.813 - 1.875	1.0	1/2 × 1/4	1/2 × 1/4
	1.938 - 2.000	1.0	1/2 × 3/16 ▼	1/2 × 1/4
2517	0.500 - 0.563	3.5	1/8 × 1/16	1/8 × 1/16
	0.625 - 0.875	3.4	3/16 × 3/32	3/16 × 3/32
	0.938 - 1.250	3.3	1/4 × 1/8	1/4 × 1/8
	1.313 - 1.375	3.2	5/16 × 5/32	5/16 × 5/32
	1.438 - 1.750	3.0	3/8 × 3/16	3/8 × 3/16
	1.813 - 2.250	2.4	1/2 × 1/4	1/2 × 1/4
	2.313 - 2.500	1.9	5/8 × 3/16 ▼	5/8 × 5/16
2525	0.750 - 0.875	4.9	3/16 × 3/32	3/16 × 3/32
	0.938 - 1.250	4.7	1/4 × 1/8	1/4 × 1/8
	0.938 - 1.375	4.5	5/16 × 5/32	5/16 × 5/32
	1.438 - 1.750	4.2	3/8 × 3/16	3/8 × 3/16
	1.813 - 2.250	3.3	1/2 × 1/4	1/2 × 1/4
	2.313 - 2.500	2.5	5/8 × 3/16 ▼	5/8 × 5/16
3020	0.938 - 1.250	6.5	1/4 × 1/8	1/4 × 1/8
	1.313 - 1.375	6.3	5/16 × 5/32	5/16 × 5/32
	1.438 - 1.750	6.0	3/8 × 3/16	3/8 × 3/16
	1.813 - 2.250	5.3	1/2 × 1/4	1/2 × 1/4
	2.313 - 2.750	4.5	5/8 × 5/16	5/8 × 5/16
	2.813 - 3.000	3.9	3/4 × 1/4 ▼	3/4 × 3/8
3030	0.938 - 1.250	9.2	1/4 × 1/8	1/4 × 1/8
	1.313 - 1.375	8.9	5/16 × 5/32	5/16 × 5/32
	1.438 - 1.750	8.6	3/8 × 3/16	3/8 × 3/16
	1.813 - 2.250	7.6	1/2 × 1/4	1/2 × 1/4
	2.313 - 2.750	6.2	5/8 × 5/16	5/8 × 5/16
	2.813 - 3.000	5.0	3/4 × 1/4 t	3/4 × 3/8





Dimensions

Bush. No.	Bush. Torque Capacity (in-lb)	A	B	C Ø			D	F †	L ★		M ★★	
				Class 20 Gray Iron	Class 30 Gray Iron	Steel			Std. Hex. Key	Short Key ‡	Std. Hex. Key	Short Key ‡
1008	1,200	1.386	0.875	2.375	2.188	1.938	1.328	1/4 × 1/2	1 1/8	5/8	1 1/4	3/4
1108	1,300	1.511	0.875	2.500	2.313	2.063	1.453	1/4 × 1/2	1 1/8	5/8	1 1/4	3/4
1210	3,600	1.875	1.000	3.625	3.250	2.875	1.750	3/8 × 5/8	1 3/8	13/16	1 5/8	1 1/16
1215	3,550	1.875	1.500	3.125	2.875	2.625	1.750	3/8 × 5/8	1 3/8	13/16	1 5/8	1 1/16
1310	3,850	2.000	1.000	3.750	3.375	3.000	1.875	3/8 × 5/8	1 3/8	13/16	1 5/8	1 1/16
1610	4,300	2.250	1.000	4.000	3.625	3.250	2.125	3/8 × 5/8	1 3/8	13/16	1 5/8	1 1/16
1615	4,300	2.250	1.500	3.500	3.250	3.000	2.125	3/8 × 5/8	1 3/8	13/16	1 5/8	1 1/16
2012	7,150	2.750	1.250	4.750	4.375	3.875	2.625	7/16 × 7/8	1 9/16	15/16	2	1 3/8
2517	11,600	3.375	1.750	5.500	4.875	4.375	3.250	1/2 × 1	1 5/8	1	2 1/4	1 5/8
2525	11,300	3.375	2.500	4.750	4.500	4.250	3.250	1/2 × 1	1 5/8	1	2 1/4	1 5/8
3020	24,000	4.250	2.000	7.000	6.250	5.625	4.000	5/8 ×1 1/4	1 13/16	1 3/16	2 11/16	2 1/16
3030	24,000	4.250	3.000	6.250	5.750	5.375	4.000	5/8 ×1 1/4	1 13/16	1 3/16	2 11/16	2 1/16

Bushings cannot be bored larger than largest bore listed.

For detail dimensions required for machining hubs, consult factory.

▼ Key furnished for these sizes only.

Ø For general reference. Severe conditions may require larger hub. Heavy well-located web may permit smaller hub. Hub diameter required depends on the particular application. Consult Martin giving full information on the proposed design. Hub diameters shown are based on 20,000, 30,000, and 50,000 P.S.I. minimum ultimate tensile strength respectively for Class 20 gray iron, Class 30 gray iron, and steel hubs.

† 2 screws required. Use in positions shown for tightening bushing on shaft. In removing bushing from shaft, remove screws and use one of them in the other hole. Bushing price includes screws.

★ Space required to tighten bushing. Also space required to loosen screws to permit removal of hub by puller.

★★ Space required to loosen bushing using one screw as jackscrew — no puller required.

‡ Standard hex key cut to minimum usable length.

Taper Bushings Dimensions

No. 3535 to 5050 Bushings

Bushing Number	Bush. Torque Capacity (in-lb)	Bore	Wt.	Bushing Keyseat	Shaft Keyseat	A	B	C Ø			D	F †	G	R
								Class 20 Gray Iron	Class 30 Gray Iron	Steel				
3535	44,800	1.188 - 1.250	14	1/4 x 1/8	1/4 x 1/8	5.00	3.50	7.75	7.00	6.50	4.83	3 – 1/2 × 1 1/2	39°	▲
		1.313 - 1.375	14	5/16 x 5/32	5/16 x 5/32									
		1.438 - 1.750	13	3/8 x 3/16	3/8 x 3/16									
		1.813 - 2.250	12	1/2 x 1/4	1/2 x 1/4									
		2.313 - 2.750	11	5/8 x 5/16	5/8 x 5/16									
		2.813 - 3.250	9	3/4 x 3/8	3/4 x 3/8									
		3.313 - 3.500	8	▼ 7/8 x 1/4	7/8 x 7/16									
4040	77,300	1.438 - 1.750	22	3/8 x 3/16	3/8 x 3/16	5.75	4.00	9.50	8.50	7.75	5.54	3 – 5/8 × 1 3/4	40°	▲
		1.813 - 2.250	21	1/2 x 1/4	1/2 x 1/4									
		2.313 - 2.750	19	5/8 x 5/16	5/8 x 5/16									
		2.813 - 3.250	17	3/4 x 3/8	3/4 x 3/8									
		3.313 - 3.625	15	7/8 x 7/16	7/8 x 7/16									
		3.688 - 3.750	14	7/8 x 7/16	7/8 x 7/16									
		3.813 - 4.000	13	▼ 1 x 1/4	1 x 1/2									
4545	110,000	1.938 - 2.250	30	1/2 x 1/4	1/2 x 1/4	6.38	4.50	10.50	9.50	8.75	6.13	3 – 3/4 × 2	40°	▲
		2.313 - 2.750	28	5/8 x 5/16	5/8 x 5/16									
		2.813 - 3.250	26	3/4 x 3/8	3/4 x 3/8									
		3.313 - 3.750	23	7/8 x 7/16	7/8 x 7/16									
		3.813 - 4.250	20	1 x 1/2	1 x 1/2									
		4.313 - 4.500	18	▼ 1 x 1/4	1 x 1/2									
5050	126,000	2.313 - 2.750	38	5/8 x 5/16	5/8 x 5/16	7.00	5.00	11.50	10.50	9.50	6.72	3 – 7/8 × 2 1/4	37°	▲
		2.813 - 3.250	35	3/4 x 3/8	3/4 x 3/8									
		3.313 - 3.750	32	7/8 x 7/16	7/8 x 7/16									
		3.813 - 4.500	27	1 x 1/2	1 x 1/2									
		4.563 - 5.000	24	▼ 1 1/4 x 7/16	1 1/4 x 5/8									

No. 4030 to 5040 Short Taper Bushings

Bushing Number	Bush. Torque Capacity (in-lb)	Bore	Wt.	Bushing Keyseat	Shaft Keyseat	A	B	C Ø			D	F †	G	R
								Class 20 Gray Iron	Class 30 Gray Iron	Steel				
3525	44,800	1.188 - 1.250	14	1/4 x 1/8	1/4 x 1/8	5.00	3.50	7.75	7.00	6.50	4.83	3 – 1/2 × 1 1/2	39°	▲
		1.313 - 1.375	14	5/16 x 5/32	5/16 x 5/32									
		1.438 - 1.750	13	3/8 x 3/16	3/8 x 3/16									
		1.813 - 2.250	13	1/2 x 1/4	1/2 x 1/4									
		2.313 - 2.750	12	5/8 x 5/16	5/8 x 5/16									
		2.813 - 3.250	10	3/4 x 3/8	3/4 x 3/8									
		3.313	9	▼ 7/8 x 1/8	7/8 x 7/16									
		3.375 - 3.750	8	▼ 7/8 x 3/16	7/8 x 7/16									
		3.813 - 3.938	8	▼ 1 x 1/4	1 x 1/2									
4030	77,300	1.438 - 1.750	24	3/8 x 3/16	3/8 x 3/16	5.75	3.00	9.50	8.50	7.75	5.54	3 – 5/8 × 1 3/4	39°	▲
		1.813 - 2.250	21	1/2 x 1/4	1/2 x 1/4									
		2.313 - 2.750	20	5/8 x 5/16	5/8 x 5/16									
		2.813 - 3.250	18	3/4 x 3/8	3/4 x 3/8									
		3.313 - 3.688	15	7/8 x 7/16	7/8 x 1/4									
		3.750	13	▼ 7/8 x 1/4	7/8 x 7/16									
		3.813	13	1 x 1/2	1 x 1/2									
		3.875 - 4.438	13	1 x 1/4	1 x 1/2									
4535	110,000	1.938 - 2.250	31	1/2 x 1/4	1/2 x 1/4	6.38	3.50	10.50	9.50	8.75	6.13	3 – 5/8 × 1 3/4	40°	▲
		2.313 - 2.750	29	5/8 x 5/16	5/8 x 5/16									
		2.813 - 3.250	25	3/4 x 3/8	3/4 x 3/8									
		3.313 - 3.688	23	7/8 x 7/16	7/8 x 7/16									
		3.813 - 4.250	20	1 x 1/2	1 x 1/2									
		4.375 - 4.500	17	▼ 1 x 1/4	1 x 1/2									
		4.750 - 4.938	15	▼ 1 1/4 x 1/4	1 1/4 x 5/8									
5040	126,000	2.438 - 2.750	40	5/8 x 5/16	5/8 x 5/16	7.00	4.00	11.50	10.50	9.50	6.72	3 – 7/8 × 2 1/4	37°	▲
		2.813 - 3.250	37	3/4 x 3/8	3/4 x 3/8									
		3.313 - 3.750	33	7/8 x 7/16	7/8 x 7/16									
		3.813 - 4.500	29	1 x 1/2	1 x 1/2									
		4.750 - 5.000	23	▼ 1 1/4 x 1/4	1 1/4 x 5/8									

Bushings cannot be bored larger than largest bore listed.

For detail dimensions required for machining hubs, consult factory.

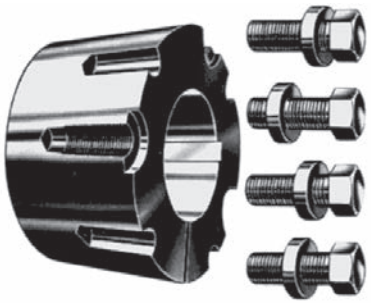
Ø For general reference. Severe conditions may require larger hub. Heavy well located web may permit smaller hub. Hub diameter required depends on the particular application. Consult factory giving full information on the proposed design. Hub diameters shown are based on 20,000, 30,000, and 50,000 P.S.I. minimum ultimate tensile strength respectively for Class 20 gray iron, Class 30 gray iron, and steel hubs.

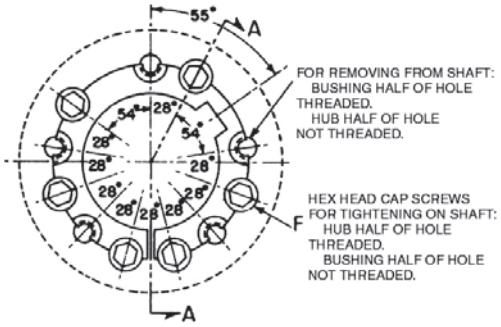
▼ Key furnished for these sizes only.

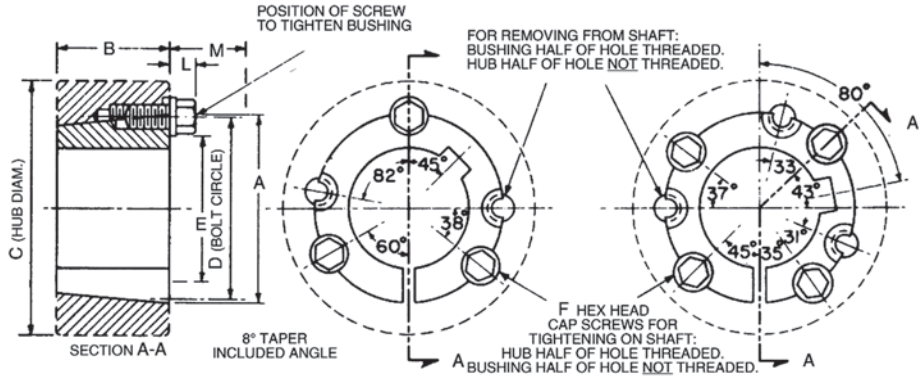
† 3 screws required. Use in positions shown for tightening bushing on shaft. In removing bushing from shaft, remove screws and use two of them in the other two holes. Bushing price includes screws. See following footnote.

▲ Provide sufficient space to tighten and loosen bushing. Width across flats of screw head is same as screw diameter which is shown in column F.

Taper Bushings Dimensions







No 6050 to 120100 Taper Bushings

Bushing Number	Bushing Torque Capacity (in-lb)	Bore	Weight	Bushing Keyseat	Shaft Keyseat	A	B	C Ø			D	E	F †	L ★	M ★★
								Class 20 Gray Iron	Class 30 Gray Iron	Steel					
6050	282,000	3.813 - 4.500	60	1 × 1/2	1 × 1/2	9.25	5.00	17.00	15.50	13.50	9.00	6.75	3 – 1 1/4 × 3 1/2	1.625	4.375
		4.563 - 5.500	55	1 1/4 × 5/8	1 1/4 × 5/8										
		5.563 - 6.000	50	1 1/2 × 3/4	1 1/2 × 3/4										
7060	416,000	4.563 - 5.500	85	1 1/4 × 5/8	1 1/4 × 5/8	10.25	6.00	18.50	17.00	14.75	10.00	7.75	3 – 1 1/4 × 3 1/2	1.625	4.375
		5.563 - 6.500	75	1 1/2 × 3/4	1 1/2 × 3/4										
		6.563 - 7.000	65	1 3/4 × 3/4	1 3/4 × 3/4										
◊ 8065	456,000	5.063 - 5.500	120	1 1/4 × 5/8	1 1/4 × 5/8	11.25	6.50	19.00	17.50	15.50	11.00	8.75	3 – 1 1/4 × 3 1/2	1.625	4.375
		5.563 - 6.500	105	1 1/2 × 3/4	1 1/2 × 3/4										
		6.563 - 7.500	90	1 3/4 × 3/4	1 3/4 × 3/4										
		7.563 - 8.000	75	2 × 3/4	2 × 3/4										
◊ 10085	869,000	6.563 - 7.500	260	1 3/4 × 3/4	1 3/4 × 3/4	14.75	8.50	23.50	22.00	19.50	14.50	11.75	3 – 1 1/2 × 4 1/4	2	5.375
		7.563 - 9.000	230	2 × 3/4	2 × 3/4										
		9.063 - 10.000	190	2 1/2 × 7/8	2 1/2 × 7/8										
◊ 120100	1,520,000	7.563 - 9.000	410	2 × 3/4	2 × 3/4	17.25	10.00	28.00	26.00	23.00	17.00	14.25	6 – 1 1/2 × 4 1/4	2	5.375
		9.063 - 11.000	360	2 1/2 × 7/8	2 1/2 × 7/8										
		11.063 - 12.000	290	3 × 1	3 × 1										

Bushings cannot be bored larger than largest bore listed.

For detail dimensions required for machining hubs, consult Martin.

Ø For general reference. Severe conditions may require larger hub. Heavy well located web may permit smaller hub. Hub diameter required depends on the particular application. Consult Martin giving full information on the proposed design. Hub diameters shown are based on 20,000, 30,000, and 50,000 P.S.I. minimum ultimate tensile strength respectively for Class 20 gray iron, Class 30 gray iron, and steel hubs.

† 3 screws for 6050; four for 7060 to 10085; six for 120100. Use in positions shown for tightening bushing on shaft. In loosening bushing, remove screws and use all except one in the other holes. Bushing price includes screws.

★ Space required to tighten bushing. Also space required to loosen screws to permit removal of hub by puller.

★★ Space required to loosen bushing using screws as jackscrews— no puller required.

◊ Not currently stocked — Available on order.

Taper Bushed Type S-Type W Weld-On Hubs Dimensions

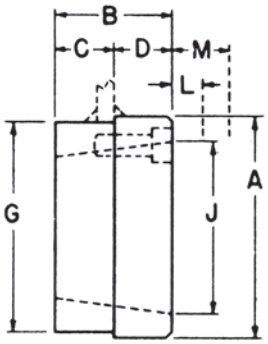
Type S

Martin taper bushed type S weld-on hubs are suitable for use in many applications such as for welding to plate steel sprockets. The outside diameters of these hubs have been reduced to a minimum. This is permissible because of the reinforcing strength of the items to which they are to be welded. Cases where the attached item is of small dimensions should be referred to Martin.



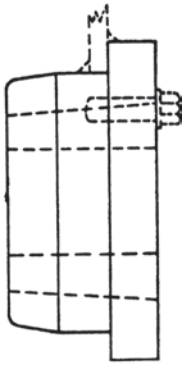
Type S weld-on hubs are made of steel, drilled, tapped, and taper bored for tapered bushings. Their small size and the convenience and advantages of taper bushed construction make them of great value on many devices for use on shafts.

Bushing Number	For Use with Bushing Number	Max. Bore of Bushing	Weight	A	B ◊	C ★★	D ▼	G	J
S16-4	1610	1.625	.9	3.000	1.000	0.275	0.725	2.875 †	2.250
S16-6	1610	1.625	.9	3.000	1.000	0.450	0.550	2.875 †	2.250
S20-6	2012	2.000	1.8	3.563	1.250	0.450	0.800	3.438 †	2.750
S20-8	2012	2.000	1.4	3.563	1.250	0.570	0.680	3.438 †	2.750
S25-6	2517	2.500	2.6	4.250	1.750	0.450	1.300	4.125 †	3.375
S25-8	2517	2.500	2.6	4.250	1.750	0.565	1.185	4.125 †	3.375
S25-10	2517	2.500	2.5	4.250	1.750	0.685	1.065	4.125 †	3.375
S25-16	2517	2.500	2.4	4.250	1.750	1.090	0.660	4.125 †	3.375
S30-10	3020	3.000	4.3	5.250	2.000	0.675	1.325	5.125 †	4.250
S30-16	3020	3.000	4.2	5.250	2.000	1.090	0.910	5.125 †	4.250
S35	3535	3.500	12.8	6.625	3.500	1.160	2.340	6.375 Ø	5.000



See dimension tables on preceding page for bushing data and wrench space required.
† + .000 - .002
◊ + .005 - .010
Ø + .001 - .003
▼ + .000 - .005
★★ + .010 - .010

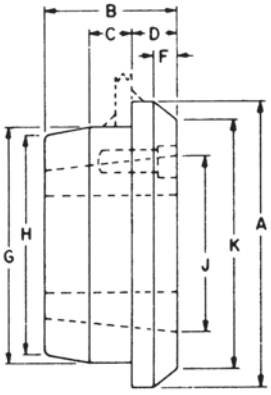




Type WA

Type WA weld-on hubs are made of steel, drilled, tapped, and taper bored to receive tapered bushings. They are very useful for welding into fan rotors, pulleys, plate sprockets, impellers, agitators, and many other devices which must be firmly fastened to the shaft.

Bushing Number	For Use with Bushing Number	Max. Bore of Bushing	Weight	A	B	C	D	F	G	H	J	K
WA12	1215	1.250	1	2.875	1.500	0.375	0.625	0.375	2.500 †	2.375	1.875	2.625
WA16	1615	1.625	2	3.250	1.500	0.375	0.625	0.375	2.875 †	2.750	2.25	3.000
WA25	2517	2.500	4	4.875	1.750	0.500	0.750	0.375	4.375 †	4.250	3.375	4.625
WA30	3030	3.000	9	5.500	3.000	0.750	0.750	0.250	5.125 †	4.813	4.125	5.000
WA35	3535	3.500	15	6.750	3.500	1.250	1.000	0.375	6.250 †	5.938	5.000	6.000
WA40	4040	4.000	29	7.750	4.000	1.500	1.000	0.375	7.250 †	6.875	5.750	7.000
WA45	4545	4.500	42	8.750	4.500	1.750	1.000	0.375	8.000 †	7.625	6.375	8.000
WA50	5050	5.000	57	9.500	5.000	1.750	1.000	0.375	8.750 •	8.375	7.000	8.750
WA60	6050	6.000	115	13.250	5.000	1.750	1.250	–	12.250 ★	11.875	9.250	–
WA70	7060	7.000	155	14.500	6.000	2.250	1.250	–	13.500 ★	13.250	10.250	–
WA80	8065	8.000	180	15.250	6.500	2.250	1.250	–	14.250 ★	14.000	11.250	–
WA100	10085	10.000	340	19.750	8.500	3.500	1.500	–	18.750 ★	18.250	14.750	–



See dimension tables on proceeding page for bushing data and wrench space required.
† + .000 - .002
• + .000 - .003
★ + .000 - .004

Taper Bushings
Metric and Reborable

Stock Taper Bushings With Metric Bores and Keyways

★ Metric Bores	★ Metric Keyway	Taper Bushing Number			
14, 16	5 × 2.3	1008	1108	1210	
		1215	1610	1615	
18, 19	6 × 2.8	1008	1108	1210	1215
20, 22		1610	1615	2012	2517
24	8 × 3.3	1108	1210	1215	
		1610	1615	2012	2517
25	8 × 3.3	1210	1215	1610	
		1615	2012	2517	
28, 30	8 × 3.3	1210	1215	1610	
		1615	2012	2517	3020
32	10 × 3.3	1610	1615		
		2012	2517	3020	
35	10 × 3.3	1610	1615		
		2012	2517	3020	
38	10 × 3.3	1610	1615		
		2012	2517	3020	
40, 42	12 × 3.3	2012			
		2517	3020		
45, 48	14 × 3.8	2012			
		2517	3020		
50	14 × 3.8	2517	3020		
55	16 × 4.3	2517	3020		

★ Millimeter Bores and Keyways from ISO Std. R773. 1" = 25.4 millimeters

NOTE: For other metric bore sizes consult factory.

Stock Reborable Taper Bushings With No Keyways

Sintered Steel		Gray Iron		Steel		Stainless Steel	
1008	.563			1008	.5	1008	.5
1108	.5			1108	.5	1108	
1210	.563			1210	.5	1210	.5
1215	.5			1215	.5	1215	
1310	.5			1310		1310	
1610	.5 1.313			1610	.5	1610	.5
1615	.5 1.313			1615	.5	1615	
2012	.5			2012	.5	2012	.5
2517	.5 1.563			2517	.5	2517	.5
		2525	2.125	2525		2525	
3020	.938 1.688	3020	.938 1.438 2.938	3020	.938	3020	.938
		3030	.938 2.438 2.938	3030		3030	
		3535	1.188 2.438 2.938	3535		3535	
		4040	1.438 3.438 3.938	4040		4040	
		4545	3.938 4.438	4545		4545	
		5050	2.438 3.938				
		6050	3.438 5.438				
		7060	3.938				
		8065	4.438				
		10085	7				
		H120100	8				

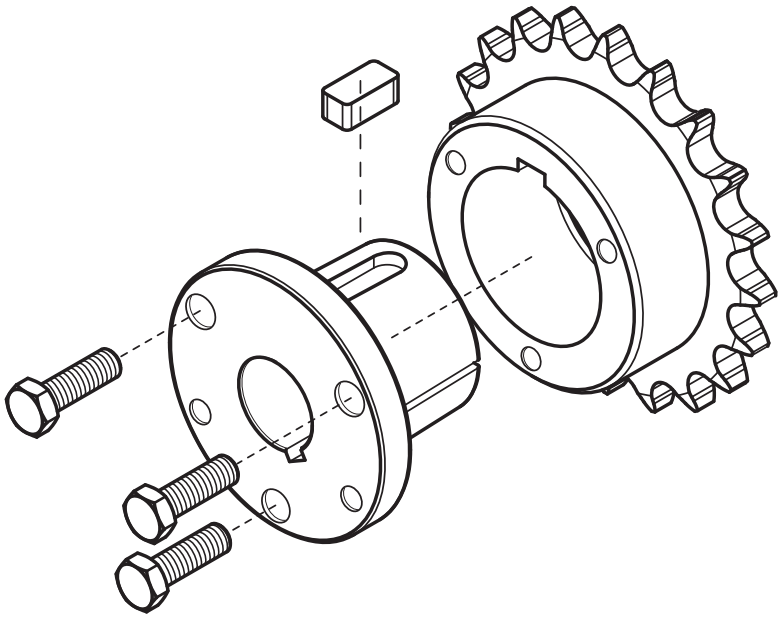
★ Not currently stocked. Consult factory for availability and pricing.

MST® BUSHINGS INSTRUCTIONS

The MST® bushings are easy to install and remove. They are split through the barrel and have a taper to provide a true clamp on the shaft. They are keyed to both the shaft and the hub to help during “blind” installations.

INSTALLATION

1. Be sure the tapered cone surfaces of the bushing and the inside of the driven product are clean and free of anti-seize lubricants.
2. Place bushing in sprocket or other Martin MST® part.
3. Place cap screws loosely in pull-up holes. Bushing remains loose to assure sliding fit on shaft
4. With key on shaft, slide sprocket to desired position on shaft. Be sure heads of cap screws are accessible.
5. Align sprocket. Tighten screws alternately and progressively - until they are pulled up tight (see table below). Do not use extensions on wrench handles. Do not allow sprocket to be drawn in contact with flange of bushing. There should be a gap between bushing flange and sprocket. **CAUTION: THIS GAP MUST NOT BE CLOSED**



REMOVAL

1. Loosen and remove cap screws.
2. Insert cap screws in tapped removal holes.
3. Tighten inserted screws until sprocket is loose on shaft.
4. Remove sprocket from shaft.

WRENCH TORQUE VALUE FOR TIGHTENING BUSHING		
MST® Bushing Size	**Size of Cap Screw**	**Wrench Torque in/lb**
G	1/4 × 5/8	95
H	1/4 × 3/4	95
P	5/16 × 1	192
Q	3/8 × 1 1/4	348
R	3/8 × 1 3/4	348
S	1/2 × 2 1/4	840
U	5/8 × 2 3/4	1680
W	3/4 × 3	3000

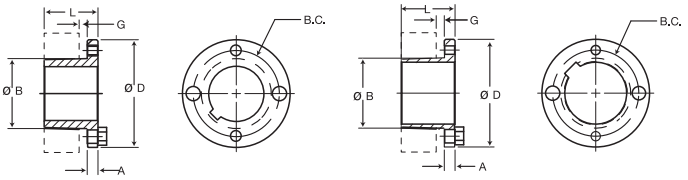
CAUTION

WARNING: USE OF ANTI-SEIZE LUBRICANT ON TAPERED CONE SURFACE OR ON BOLT THREADS WHEN MOUNTING MAY RESULT IN DAMAGE TO SHEAVE AND SPROCKETS. THIS VOIDS ALL MANUFACTURER’S WARRANTIES

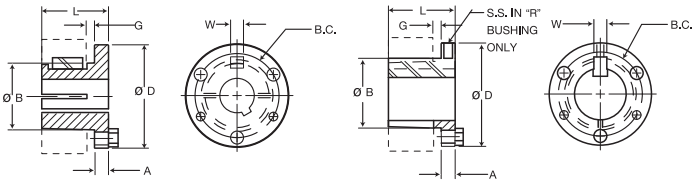
WARNING: Because of the possible danger to person(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed: Products must be used in accordance with the engineering information specified in the catalog. Proper installation, maintenance and operation procedures must be observed. The instructions given above must be followed. Inspections should be made as necessary to assure safe operation under prevailing conditions. All rotating power transmission products when used in a drive are potentially dangerous and must be guarded by the user as required by applicable laws, regulations, standards, and good safety practice. (Refer to ANSI Standard B15.1.)

MST® Bushings

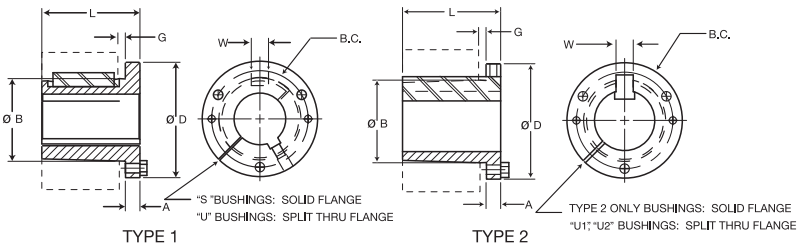




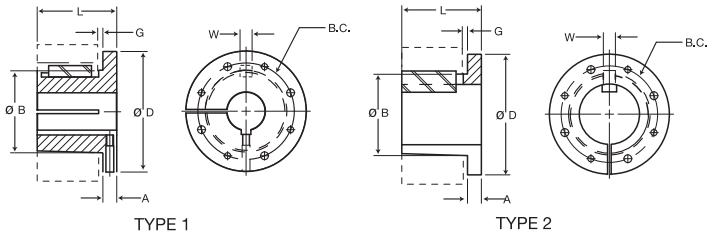
"G" & "H" BUSHINGS



"P", "Q" & "R" BUSHINGS



"S" & "U" BUSHINGS



"W" BUSHINGS

Bushing Specifications

Part Number	Bushing Torque Capacity (in-lb)	Dimensions							Stock Bore Range		Cap Screws		Av. Wt. (lb)	Wrench Torque In./lbs.
		D	L	A	B Large End	G	B.C.	W	Type 1	Type 2	No.	Size		
G	1,000	2.000	1.000	0.250	1.172	0.190	1.560	—	0.375 - 0.938	1.000	2	1/4 × 5/8	.5	95
H	2,500	2.500	1.250	0.250	1.625	0.190	2.000	—	0.375 - 1.375	1.438 - 1.500	2	1/4 × 3/4	.8	95
P1	8,500	3.000	1.940	0.410	1.938	0.220	2.440	0.375	0.500 - 1.438	1.500 - 1.750	3	5/16 × 1	1.3	192
P2	12,000	3.000	2.940	0.410	1.938	0.220	2.440	0.375	0.750 - 1.438	1.500 - 1.750	3	5/16 × 1	1.5	192
P3	14,000	3.000	4.440	0.410	1.938	0.220	2.440	0.375	1.125 - 1.375	1.625	3	5/16 × 1	2.0	192
Q1	21,000	4.120	2.500	0.530	2.875	0.220	3.380	0.500	0.750 - 2.063	2.125 - 2.688	3	3/8 ×1 1/4	3.5	348
Q2	26,000	4.120	3.500	0.530	2.875	0.220	3.380	0.500	1.000 - 2.063	2.125 - 2.625	3	3/8 ×1 1/4	4.5	348
Q3	36,000	4.120	5.000	0.530	2.875	0.220	3.380	0.500	1.375 - 2.063	2.125 - 2.500	3	3/8 ×1 1/4	5.5	348
R1	33,000	5.380	2.880	0.620	4.000	0.250	4.620	0.750	1.125 - 2.813	2.875 - 3.750	3	3/8 ×1 3/4	7.5	348
R2	53,000	5.380	4.880	0.620	4.000	0.250	4.620	0.750	1.375 - 2.813	2.875 - 3.625	3	3/8 ×1 3/4	11.0	348
S1	52,000	6.380	4.380	0.750	4.625	0.310	5.380	0.750	1.688 - 3.188	3.250 - 4.250	3	1/2 ×2 1/4	13.5	840
S2	81,000	6.380	6.750	0.750	4.625	0.310	5.380	0.750	1.875 - 3.188	3.250 - 4.188	3	1/2 ×2 1/4	19.0	840
U0	105,000	8.380	5.250	1.060	6.000	0.440	7.000	1.250	2.375 - 3.063	—	3	5/8 ×2 3/4	30.0	1680
U0	105,000	8.380	4.940	0.75	6.000	0.440	7.000	1.250	3.250 - 4.250	4.375 - 5.500	3	5/8 ×2 3/4	27.0	1680
U1	151,000	8.380	7.120	1.060	6.000	0.440	7.000	1.250	2.375 - 4.250	4.375 - 5.500	3	5/8 ×2 3/4	40.0	1680
U2	215,000	8.380	10.120	1.060	6.000	0.440	7.000	1.250	2.438 - 4.250	4.375 - 5.000	3	5/8 ×2 3/4	50.0	1680
W1	287,000	12.500	8.250	1.440	8.500	0.440	10.000	1.250	3.375 - 6.188	6.250 - 7.438	4	3/4 × 3	104.0	3000
W2	391,000	12.500	11.250	1.440	8.500	0.440	10.000	1.250	3.375 - 6.188	6.250 - 7.438	4	3/4 × 3	133.0	3000

All tapers are .75" per 12" on Diameter.

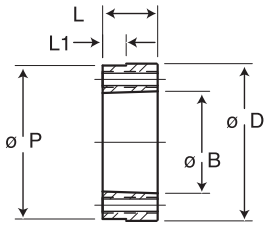
All dimensions are in inches except, as noted.

All bushings are cast iron, ductile iron, sintered steel, or steel. Consult manufacturer for clarification.

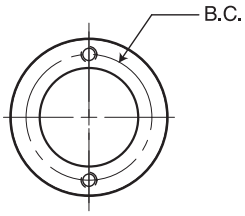
Metric bushings also available.

MST® Weld-On Hubs

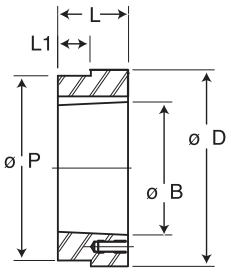


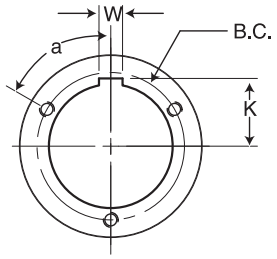


ALL TAPERS .75" PER FT.
ON DIAMETER

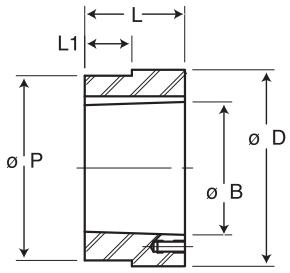


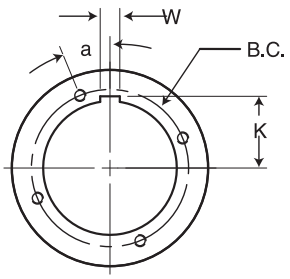
"H" HUBS





"P", "Q", "R", "S", Y "U" HUBS





"W" HUBS

Bushing Specifications

Part Number	For Bushing	Dimensions									Tapped Holes		Wt. Lbs.
		D	L	P	L1	B	K	B.C.	W	a⁰	No.	Size	
HH1	H	2.500	0.880	2.375	0.174	1.621	—	2.000	—	—	2	1/4 – 20	.6
HCH1	H	2.500	0.880	2.375	0.625	1.621	—	2.000	—	—	2	1/4 – 20	.7
HP1	P1	3.000	1.310	2.875	0.292	1.938	1.094	2.438	0.375	60	3	5/16 – 18	1.4
HCP1	P1	3.000	1.310	2.875	1.000	1.938	1.094	2.438	0.375	60	3	5/16 – 18	1.1
HP2	P2	3.000	2.310	2.875	1.100	1.938	1.094	2.438	0.375	60	3	5/16 – 18	2.5
HQ1	Q1	4.500	1.750	4.375	0.709	2.875	1.562	3.375	0.500	60	3	3/8 – 16	4.4
HCQ1	Q1	4.500	1.750	4.375	1.250	2.875	1.562	3.375	0.500	60	3	3/8 – 16	4.4
HQ2	Q2	4.500	2.750	4.375	1.606	2.875	1.562	3.375	0.500	60	3	3/8 – 16	6.9
HR1	R1	5.750	2.000	5.625	0.709	4.000	2.188	4.625	0.750	60	3	3/8 – 16	7.3
HR2	R2	5.750	4.000	5.625	1.606	4.000	2.188	4.625	0.750	60	3	3/8 – 16	15.4
HS1	S1	6.750	3.310	6.500	0.946	4.625	2.562	5.375	0.750	60	3	1/2 – 13	17.3
HS2	S2	6.750	5.690	6.500	2.963	4.625	2.562	5.375	0.750	60	3	1/2 – 13	30.4
HU0	U0	8.500	3.750	8.250	2.000	6.000	3.250	7.000	1.250	60	3	5/8 – 11	32.0
HU1	U1	8.500	5.620	8.250	2.963	6.000	3.250	7.000	1.250	60	3	5/8 – 11	44.6
HU2	U2	8.500	8.620	8.250	6.016	6.000	3.250	7.000	1.250	60	3	5/8 – 11	69.0
HW1	W1	12.500	6.380	12.250	2.963	8.500	4.562	10.000	1.250	22.5	4	3/4 – 10	130.0

All tapers are .75" per 12" on Diameter.

All dimensions are in inches, except as noted.

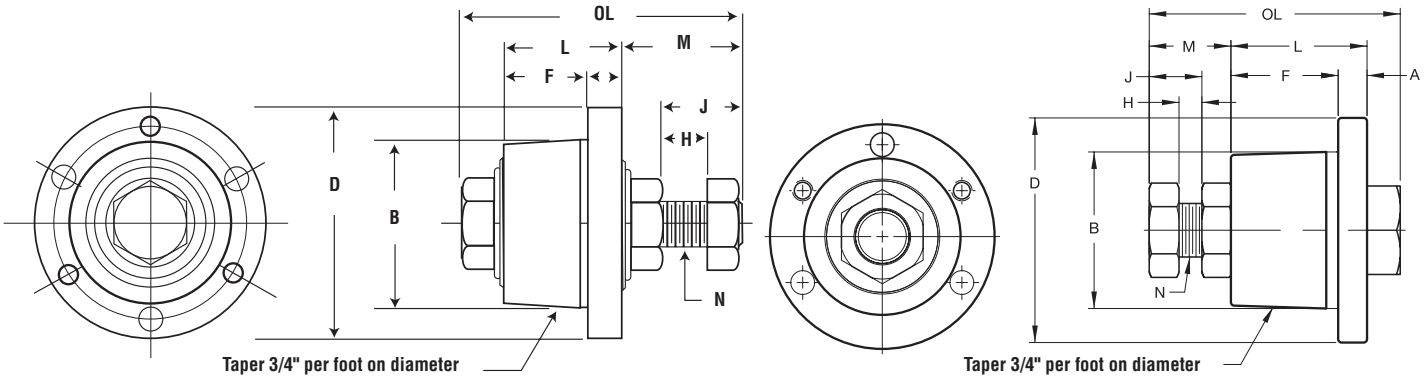
QD and MST®
Idler Bushings



Martin idler bushings are designed to accommodate stock v-belt drives, sprockets, timing belt pulleys, or other products that use QD or MST® type bushings.

They are equipped with two electric motor grade, permanently lubricated ball bearings, mounted on a precision shoulder bolt. Shoulder bolt and two hex jam nuts are zinc plated.

Installation is made by slipping the threaded shaft through a hole bored in support structure, and tightening the locking nut. Sheaves, sprockets, or other products can be removed without dismounting the idler bushing. Available in sizes as shown below. Boxed complete with all mounting hardware and instructions.



QD Radial Load Ratings (lbs)
2500 Hours Service Life

Part Number	RPM				
	100	500	1000	1200	1800
SH-BB	1260	740	580	540	480
SD-BB	1740	1020	800	760	660
SK-BB	2370	1360	1070	1000	880
SF-BB	2550	1500	1180	1100	980
E-BB	4640	2720	2140	2020	1780

Service Temperature Range –40° F Minimum +248° F Maximum.

MST® Radial Load Ratings (lbs)
2500 Hours Service Life

Part Number	RPM				
	100	500	1000	1200	1800
H-BB 1/2	1411	825	655	616	538
P1-BB 5/8	1752	1024	813	765	668
Q1-BB 3/4	2344	1371	1088	1024	894
Q1-BB 1	2555	1494	1186	1116	975

Service Temperature Range –40° F Minimum +248° F Maximum.

Part Number	Dimensions									
	A	B	D	F	H	J	L	M	N	OL
SH-BB	0.438	1.871	2.688	0.750	0.625	0.938	1.313	1.313	0.438	3.063
SD-BB	0.500	2.187	3.188	1.250	0.688	0.688	1.813	1.563	0.625	3.875
SK-BB	0.563	2.812	3.875	1.250	0.750	0.813	1.938	1.750	0.750	4.563
SF-BB	0.563	3.125	4.625	1.250	0.750	0.938	2.063	2.125	0.875	5.000
E-BB	0.750	3.834	6.000	1.625	1.438	2.188	2.625	3.188	1.375	6.875
H-BB 1/2	0.250	1.625	2.500	1.000	0.375	1.063	1.250	1.000	0.500	2.563
P1-BB 5/8	0.406	1.937	3.000	1.531	0.531	0.922	1.938	1.313	0.625	3.641
Q1-BB 3/4	0.531	2.875	4.125	1.938	0.313	0.781	2.500	1.250	0.750	4.219
Q1-BB 1	0.531	2.875	4.125	1.938	0.281	0.891	2.500	1.500	1.000	4.609

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SECTION C

COUPLINGS

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Coupling Comparison Chart

Selection Criterion		Coupling Type					
		ML - Jaw	Chain	Quadra-Flex	Martin-Flex	Go-Flex	Blue-Flex
Shaft Size Range	inch	1/8 to 2-5/8	7/16 to 6-1/8	3/8 to 5-1/2	3/8 to 3-1/2	1/2 to 11	1/2 to 13
	mm	4 to 65	12 to 160	9 to 140	9 to 90	12 to 280	12 to 330
Torque Range	in-lbs	3.5 to 6,228	1,921 to 151,622**	60 to 72,480	649 to 9,076	365 to 1,680,000	460 to 1,650,000
	Nm	0.4 to 704	218 to 17,135	6.78 to 8,190	73 to 1025	40 to 189,840	52 to 186,450
Maximum Angular Misalignment Capability		1/2° to 1°	2°	1°	4°	2°	.25°
Temperature Range Standard Element		-40° to 212° F	-30° to 225° F	-30° to 275° F	-40° to 180° F	-60° to 212° F	-40° to 250° F
		-40° to 100° C	-35° to 108° C	-35° to 135° C	-40° to 85° C	-50° to 100° C	-40° to 121° C
Reactionary Loads due to Misalignment		Medium	Low	Low	Medium	Low	High
Torque to OD Capability		Good	Good	Fair	Fair	Fair	Good
Speed Capability		Good	Good	Fair	Fair	Good	Good
Torsional Stiffness		Low	Medium	Low	Low	Medium	Medium
Ease of Installation/ Maintenance		Excellent	Excellent	Excellent	Excellent	Excellent	Fair
Chemical Resistance		Good	Good	Good	Fair	Good	Fair
Adaptable to Several Designs		Excellent	Poor	Excellent	Good	Excellent	Excellent
Damping Capacity		Good	Poor	Excellent	Excellent	Good	Good
Industry Interchangeable		Yes	Yes	Yes	Yes	Yes	Yes

** MAx allowable torque below 50 RPM
*** Half-coupling ONLY

Whatever Your Need For Couplings — Martin Has Them

Martin Jaw Couplings
Two complete lines of jaw couplings. One for greater horsepower and one for interchangeability.


ML — Type


MS — Type

Martin-Flex® flexible couplings
Smoothly transmit power while compensating for shaft misalignment to 4°, parallel misalignment to .125 and end float to .313. The two piece flange design provides quick and easy installation and the elastomeric element absorbs shock and torsional vibration through a wide temperature range.



Martin Chain Couplings
The most complete line of chain couplings available in the industry


S/B


BS


TB


QD


Aluminum


Plastic

Martin Quadra-Flex®
A proven design which offers long life, torsional flexibility, ease of installation, and withstands misalignment, shock, and vibration.







Martin Blue-Flex® Grid Couplings
Are the best option where both high torque levels and dampening requirements exist.







Martin Go-Flex® Flexible Couplings
Is one of the easiest to install, maintain, and repair!

QUADRA-FLEX® FLEXIBLE COUPLINGS



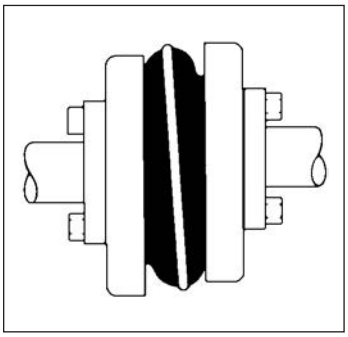
Stocked nationwide
In sizes 3 through 16

Styles J, S, B, and
SC spacers

Quadra-Flex®
4-Way Flexing



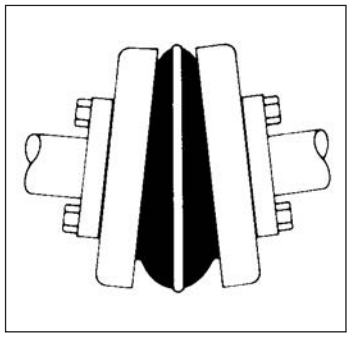
Martin Quadra-Flex® couplings, non lubricated, maintenance free, easy and quick installation
Handles all combinations of shock, vibration, and misalignment



Parallel

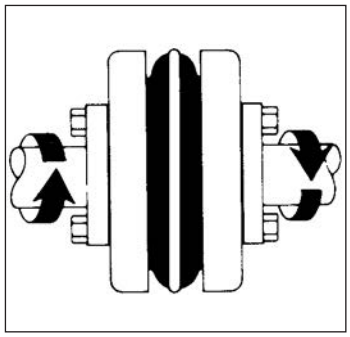
Quadra-Flex® couplings absorb parallel misalignment without wear and with minimal loss of energy.

The amount of parallel offset handled varies by size from .015 on the size 5 up to .062 on the size 16. This minimizes the radial loads on bearings when parallel misalignment occurs.



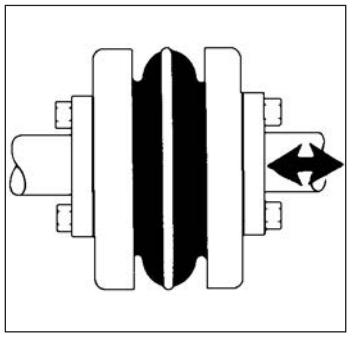
Angular

Due to the flexing characteristics of the sleeve and the locking action of the teeth, Quadra-Flex® couplings easily handle angular misalignment up to 1 degree without any appreciable wear.



Torsional

Quadra-Flex® sleeves are torsionally resilient and are well suited to absorbing shocks and dampening vibrations that would otherwise be transmitted between the equipment.



S/B

The axial flexibility of the sleeve allows the Quadra-Flex® coupling to accept a limited amount of end float. This serves to reduce thrust loads transferred to bearings. Quadra-Flex® units will accept axial movement of approximately .125.

Available in Three Styles

Type J and S Flanges

Bored-to-size flanges are manufactured for a slip fit on standard shafting. Available from stock in a wide range of shaft sizes.



Available in Three Styles

Manufactured from high strength cast iron to fit standard QD bushings in sizes 6 thru 16.



Fast Coupling Disassembly

Martin offers the first true drop-out spacer assembly for the 4JSC spacer coupling. The center portion of the spacer can be taken out, just as in the 5SC thru 14SC, by simply removing four cap screws in each hub. The couplings center section can then be lifted out and the pump gaskets exposed. Flats on the spacer hubs facilitate turning shafts with a wrench.



Type SC Spacer Flange

Quadra-Flex® SC spacer couplings feature all standard spacing requirements for the pump industry. Spacer sizes range from sizes 4 thru 14.



Quadra-Flex® Nomenclature

Type	Description
J ★	SINTERED STEEL, BORED-TO-SIZE
S	CAST IRON, BORED-TO-SIZE
B	CAST IRON, QD BUSHED
SC	SPACER COUPLING FLANGES

★ #6 Currently Supplied in Cast Iron

Hubs — (For SC flanges)

Type	Description
H	REGULAR LENGTH
HS	SHORT LENGTH

Sleeves

Type	Description
JEM	TPR – 1-PIECE SOLID, THERMOPLASTIC
JEMS	TPR – 1-PIECE SPLIT, THERMOPLASTIC
EM	TPR – 2-PIECE W/RETAINING RING
E	EPDM – 2-PIECE W/RETAINING RING
N	NEOPRENE – 2-PIECE W/RETAINING RING
H	HYTREL – 1-PIECE SOLID
HS	HYTREL – 2-PIECE

Quadra-Flex® couplings come in a variety of styles and designs to meet specific customer needs. These include flanges and sleeves of various types and materials. The total product line includes 13 sizes varying in torque ratings up to 72,000 in-lbs.

When ordering Quadra-Flex® couplings, the following basic procedure should help expedite order processing. For coupling flanges, give the basic coupling size, then the letter for the type flange followed by the bore size required. For coupling sleeves, give the coupling size followed by the letter(s) designating the type and material required. (See above)

The following are various examples for reference:

Example: Type J Flange

	Size	Flange	Bore
5J × .75	5	J	.75
7S × 30mm	7	S	30mm

(**Note:** Bored-to-size flanges are furnished with standard keyway and 2 setscrews unless specified otherwise.)

Example: Type B Flange

	Size	Flange	Bushing
8B — SH	8	B	SH

(Note: The SH bushing with required bore size should be specified separately.)

Example: Sleeves

	Size	Style & Material
8JEM	8	Solid, TPR
13E	13	2 Piece, EPDM

(Note: Unless specified, TPR (3 thru 12) or EPDM (13 thru 16) will be supplied.)

Example: Complete spacer coupling

1	6EM	(6 TPR 2 Piece Sleeve)
2	6sc35	(Flanges for 3.5 dropout)
1	6H × 1	(6 Spacer Hub for 1 Bore)
1	6H × 1.125	(6 Spacer Hub for 1.125 Bore)

Sleeve Selection

Quadra-Flex® coupling sleeves are available in four different types of compounds. These include TPR (Thermoplastic Rubber) in types JEM, JEMS, EM; EPDM Rubber in type E; Neoprene in type N; Hytrel in type H and HS. To determine the sleeve best suited for the application, the material characteristics are given below.

TPR
(Sizes 3-12)

Quadra-Flex® couplings are usually supplied with TPR sleeves in sizes 3-12. TPR is a general use sleeve which combines the characteristics of both EPDM & Neoprene into one. These sleeves operate within a temperature range from -50° F to +275° F (-46° C to +135° C). Torsional flexibility is 15°.

EPDM
(Sizes 13-16)

Quadra-Flex® couplings are usually supplied with EPDM rubber sleeves in sizes 13-16. EPDM is a general use sleeve and can operate within a temperature range from -30° F to +275° F (-34° C to +135° C). Torsional flexibility is 15°.

NEOPRENE
(Sizes 11-16)

Neoprene flexible sleeves are also available in sizes 11-14. These sleeves offer a higher resistance than EPDM and are self-extinguishing. Operating temperature range for this sleeve is 0° F to +200° F (-18° C to +93° C). Torsional flexibility is 15°.

*HYTREL®
(Sizes 6-14)

Hytrel sleeves are molded specifically for high torque applications. The type H will transmit approximately four times as much power as an equivalent TPR, EPDM, or Neoprene sleeve. Hytrel has an operating temperature from -65° F to +250° F (-54° C to +121° C). Torsional flexibility is 7°.

Note: Do not use a Hytrel sleeve as a replacement for a TPR, EPDM, or Neoprene sleeve.

Sleeve Chemical Resistance

Resistance To:	TPR	EPDM	Neoprene	Hytrel ★
Acetone	A	A	B	B
Ammonia, Anhydrous	B	T	A	N
Ammonium Hydroxide Solutions	T	A	A(158F)	T
ASTM hydrocarbon test fluid	N	C	X	A
ASTM oil no. 1	B	C	A	A
ASTM oil no. 3	B	C	B(158F)	A
ASTM reference fuel A	B	C	A	A
ASTM reference fuel B	B	C	C	A
ASTM reference fuel C	B	X	C	B
Benzene	C	C	C	B
Butane	B	B	A	A
Carbon Tetrachloride	X	C	C	C
Chlorobenzene	C	X	X	X
Chloroform	X	C	C	C
Chromic Acid, 10-50%	T	T	C	N
Dowtherm A Solvent	X	N	B	N
Ethyl Alcohol	A	A	A(158F)	A
Ethylene Glycol	A	A	A(158F)	A
Fuel Oil	B	X	A	A
Gasoline	B	B-C	B	A
Glycerine	A	T	A(158F)	A
Hydraulic Oils	B	N	A	A
Hydrochloric Acid, 20%	A	T	A	B
Hydrogen Peroxide, 881/2%	N	T	B	T
Isopropyl	A	T	A	A

Resistance To:	TPR	EPDM	Neoprene	Hytrel ★
Kerosene	B	X	B	T
Lacquer Solvents	T	...	C	B
Lubricating Oils	B	X	B(158F)	A
Methyl Alcohol	A	T	A(158F)	A
Mineral Oil	B	X	A	A
Naphtha	B	C	C	A
Nitric Acid, 10%	A	T	B	B
Nitrobenzene	T	A	C	C
Phenol	T	T	B	C
Phosphoric Acid, 20%	A	T	T	N
Phosphate Esters	A	A	C	A
Pickling Solution (20% Nitric Acid, 4% HF)	N	X	B-C	X
Soap Solutions	A	T	A(158F)	A
Sodium Hydroxide, 20%	A	A	A	A
Stearic Acid	T	T	B(158F)	T
Sulfuric Acid, up to 50%	A	T	A(158F)	A
Sulfuric Acid, up to 80%	A	T	B-C	C
Tannic Acid, 10%	T	T	A	T
Toluene	C	C	C	B
Trichloroethylene	C	X	C	C
Turpentine	B	C	C	N
Water	A	A(158F)	A(212F)	A(158F)
Xylene	C	C	X	B

A — Fluid has little or no effect
B — Fluid has minor to moderate effect
C — Fluid has severe effect
N — No evaluation has been attempted.
T — No data; likely to be compatible
X — No data; not likely to be compatible

*Hytrel is a Registered Trademark of Dupont

Selection Procedure

When the driver is an electric motor with standard speed.

Step 1. Determine Service Factor (SF) Symbol based on equipment listed on page C-10.

Step 2. Determine proper Service Factor from chart at top of page C-10.

Step 3. Refer to page C-12 and C-13 for proper selection of coupling. Based on chemical resistance and operating environment found on page C-8, select from chart the type of sleeve material. Find RPM of motor, then, in the column for service factor determined in Step 2, read down to the corresponding horsepower of motor being used as the driver. The number listed is the correct coupling size.

Example: A coupling is needed to connect a 25 HP standard electric motor to a lumber log haul at 1750 RPM.

1. Service Factor Symbol — H
2. Service Factor — 2.0
3. Coupling Size — 9 with TPR sleeve or 6 with Hytrel Sleeve

Step 4. Select flanges from pages C-15 thru C-19, check coupling bore size range for proper shaft fit.

★ **NOTE: Do not oversize coupling hub — will cause premature wear of element.**

When the driver is other than an electric motor or the speeds are different than those shown in the chart on page C-11.

Step 1. Follow steps 1 & 2 in previous procedure.

Step 2. Calculate Horsepower at 100 RPM as follows:

$$\text{HP at 100 RPM} = \frac{\text{HP} \times \text{Service Factor} \times 100}{\text{Coupling RPM}}$$

Step 3. Select coupling size from Tables A or C. Find a HP equal to or greater than the HP/100 RPM

Step 4. Check Maximum bore to be sure that both shaft sizes do not exceed figure listed for size selected in step 4. If maximum is exceeded select the next largest size which will allow for bore size. Do not exceed maximum RPM for new size selected.

Example: A bucket elevator is driven by a motor/reducer and requires a coupling to transmit 14 HP at 1300 RPM.

1. Service Factor Symbol — M
2. Service Factor — 1.5
3. HP at 100 RPM = $\frac{14 \times 1.5 \times 100}{1300} = 1.61$ HP/100 RPM
4. Refer to page C-11; under column for 100 RPM the required 1.61 HP falls between the size 7 (1.2) and the size 8 (1.8). Correct selection is size 8 with TPR sleeve. Check bore sizes for flanges on pages C-15 thru C-19.

Maximum RPM and Allowable Misalignment

Size	Maximum RPM	Types JEM, JEMS, EM, E and N		Types H and HS	
		Parallel	Angular	Parallel	Angular
3	9200	0.010	0.035	—	—
4	7600	0.010	0.043	—	—
5	7600	0.015	0.056	—	—
6	6000	0.015	0.070	0.010	0.016
7	5250	0.020	0.081	0.012	0.020
8	4500	0.020	0.094	0.015	0.025
9	3750	0.025	0.109	0.017	0.028
10	3600	0.025	0.128	0.020	0.032
11	3600	0.032	0.151	0.022	0.037
12	2800	0.032	0.175	0.025	0.042
13	2400	0.040	0.195	0.030	0.050
14	2200	0.045	0.242	0.035	0.060
16	1500	0.062	0.330	—	—

Note: Values shown above apply if the actual torque transmitted is more than 1/4 the coupling rating. For lesser torque, reduce the above values by .5.

Service Factors

Service Factors For Quadra-Flex® Couplings

Service Factor Symbol	Electric Motor Standard Torque	Electric Motor High Torque	Turbines	Reciprocating Engines
L (LIGHT)	1.25	1.5	1.0	1.5
M (MEDIUM)	1.5	2.0	1.25	2.0
H (HEAVY)	2.0	2.5	1.5	2.5

Table 1

Application	SF Symbol
AGITATORS - Paddle, Propeller, Screw	L
BAND RESAW	M
BARGE HAUL PULLER	H
BARKING (Lumber)	H
BAR SCREEN (sewage)	L
BATCHES (textile)	L
BEATER AND PULPER (paper)	M
BENDING ROLL (metal)	M
BLEACHER (paper)	L
BLOWERS	
Centrifugal, Vane	L
Lobe	M
BOTTLING MACHINERY	L
BREW KETTLES (distilling)	L
BUCKET ELEVATOR OR CONVEYOR	M
CALENDERS	
Calender (paper)	M
Calender-super (paper, rubber)	H
CANE KNIVES (sugar)	M
CARD MACHINE (textile)	H
CAR DUMPERS	H
CEMENT KILN	H
CENTRIFUGAL BLOWERS	
COMPRESSORS, FANS or PUMPS	L
CHEMICAL FEEDERS (sewage)	L
CHILLER (oil)	M
CHIPPER (paper)	H
CIRCULAR RESAW	M
CLARIFIER or CLASSIFIER	L
CLAY WORKING MACHINERY	M
COLLECTORS (sewage)	L
COMPRESSORS	
Centrifugal	L
Reciprocating	*
Screw, Lobe	L
CONCRETE MIXERS	M
CONVERTING MACHINE (paper)	M
CONVEYORS	
Apron, Assembly Belt, Flight	L
Oven, Screw	L
Bucket	M
COOKERS- Brewing, Distilling, Food	L
COOLING TOWER FANS	H
COUCH (paper)	M
CRANES & HOISTS	M
Heavy Duty Mine	H
CRUSHERS — Cane (sugar), Stone, Ore	H
CUTTER — Paper	H
CYLINDER (paper)	H
DEWATERING SCREEN (sewage)	M

Application	SF Symbols
DISC FEEDER	L
DOUGH MIXER	M
DRAW BENCH CONVEYOR & Main Drive	H
DREDGES	
Cable Reel, Pumps	M
Cutter Head Drive, Jig Drive	H
Screen Drive	H
Maneuvering and Utility Winch	M
Stacker	M
DYNAMOMETER	L
DRYERS (rotary)	M
EDGER (lumber)	H
ELEVATORS	
Bucket	M
Escalator	L
Freight, Passenger, Service, Man Lift	H
ESCALATORS	L
EXTRUDER (metal)	H
FANS	
Centrifugal	L
Cooling Tower	H
Forced Draft, Large Industrial, Mine	M
FEEDERS	
Apron, Belt, Disc	L
Reciprocating	H
Screw	M
FILTER, PRESS-OIL	M
GENERATORS	
Uniform load	L
Varying load, Holst	M
Welders	H
GRIT COLLECTOR (sewage)	L
GRIZZLY	H
HAMMERMILL	
Light Duty, Intermittent	M
Heavy Duty, Continuous	H
HOISTS	
Heavy Duty	H
Medium Duty	M
JORDAN (paper)	H
KILN, ROTARY	H
LAUNDRY WASHER or TUMBLER	H
LINE SHAFTS	L
LOG HAUL (lumber)	H
LOOM (textile)	M
MACHINE TOOLS, MAIN DRIVE	M
MANGLE (textile)	L
MASH TUBS (distilling)	L
MEAT GRINDER	M
METAL FORMING MACHINES	M

Application	SF Symbols
MILLS	
Ball, Pebble, Rod, Tube	H
Rubber, Tumbling	H
Dryer and Cooler	M
MIXER	
Concrete, Muller	M
Banbury	H
ORE CRUSHER	H
OVEN CONVEYOR	L
PLANER (metal or wood)	M
PRESSES	
Brick, Brlquette Machine	H
Notchlng, Paper, Punch, Printing	M
PUG MILL	M
PULP GRINDER (paper)	H
PULVERIZERS	
Hammermill — light duty, Roller	M
Hammermill — heavy duty, Hog	H
PUMPS	
Centrifugal, Axial	L
Gear, Lobe, Vane	M
Reciprocating — sgl. or dbl. acting	*
REEL, REWINDER (paper) CABLE	M
ROD MILL	H
SAWDUST CONVEYOR	L
SCREENS	
Air Washing, Water	L
Rotary for coal or sand	M
Vibrating	H
SCREW CONVEYOR	L
SLAB CONVEYOR (lumber)	M
SLITTERS (metal)	M
SOAPERS (textile)	L
SORTING TABLE (lumber)	M
SPINNER (textile)	M
STOKER	L
SUCTION ROLL (paper)	M
TENTER FRAMES (textile)	M
TIRE BUILDING MACHINES	H
TIRE & TUBE PRESS OPENER	L
TUMBLING BARRELS	H
WASHER and THICKENER (paper)	M
WINCHES	M
WINDERS, Paper, Textile, Wire	M
WINDLASS	M
WIRE	
Drawing	H
Winding	M
WOODWORKING MACHINERY	L

Coupling Rating

Table 2A — Thermoplastic Rubber (TPR), EPDM & Neoprene

Coupling Size	Sleeve Construction	Basic HP Rating Per Given RPM					Rated Torque (in-lb)	Torsional • Stiffness Factor (in-lb/radians)	Maximum RPM
		100	860	1160	1750	3500			
3	TPR	0.12	1.1	1.4	2.2	4.3	78	229	9200
4	TPR	0.25	2.1	2.9	4.3	8.7	156	458	7600
5	TPR	0.50	4.3	5.7	8.7	17	312	916	7600
6	TPR	0.93	8	11	16	32	585	1718	6000
7	TPR	1.5	13	17	26	52	940	2769	5250
8	TPR	2.3	20	27	41	82	1475	4335	4500
9	TPR	3.7	32	43	65	130	2340	6875	3750
10	TPR	5.9	51	69	104	207	3735	10980	3600
11	TPR	9.3	80	108	164	327	5890	17300	3600
12	TPR	15	128	172	260	-	9360	27500	2800
13	EPDM & Neoprene	23	201	271	410	-	14750	43350	2400
14	EPDM & Neoprene	37	319	431	650	-	23400	68755	2200
16	EPDM	75	645	870	-	-	47250	180480	1500

Table 2C — Hytrel

Coupling Size	Sleeve Construction	Basic HP Rating Per Given RPM					Rated Torque (in-lb)	Torsional • Stiffness Factor (in-lb/radians)	Maximum RPM
		100	860	1160	1750	3500			
3★	HYTREL	-	-	-	-	-	-	-	-
4★	HYTREL	-	-	-	-	-	-	-	-
5★	HYTREL	-	-	-	-	-	-	-	-
6	HYTREL	2.90	25	33	50	100	1800	10000	6000
7	HYTREL	4.6	39	53	80	160	2875	20000	5250
8	HYTREL	7.2	62	83	126	252	4530	30000	4500
9	HYTREL	11.4	98	133	200	400	7200	47500	3750
10	HYTREL	18	155	209	315	630	11350	100000	3600
11	HYTREL	29	246	331	500	1000	18000	125000	3600
12	HYTREL	50	430	580	875	-	31500	225000	2800
13	HYTREL	75	645	870	1312	-	47268	368900	2400
14	HYTREL	115	989	1334	2013	-	72480	593250	2200

★ Hytrel sleeves are available on a made-to-order basis, Consult factory.
• Values shown are for an ambient temperature of 75° F (24° C)

Sleeve Selection Chart

Selection Chart for TPR[1], EPDM, & Neoprene Sleeves

HP	860 RPM Motor					1160 RPM Motor					1750 RPM Motor					3500 RPM Motor				
	Service Factor					Service Factor					Service Factor					Service Factor				
	1.0	1.25	1.5	2.0	2.5	1.0	1.25	1.5	2.0	2.5	1.0	1.25	1.5	2.0	2.5	1.0	1.25	1.5	2.0	2.5
.5	3	3	3	4	4	3	3	3	3	4	3	3	3	3	3	—	—	—	—	—
.75	3	4	4	4	5	3	3	4	4	4	3	3	3	3	4	3	3	3	3	3
1	4	4	4	5	5	3	4	4	4	5	3	3	3	4	4	3	3	3	3	3
1.5	4	5	5	5	6	4	4	5	5	5	3	4	4	4	5	3	3	3	3	4
2	5	5	5	6	6	4	5	5	5	6	4	4	4	5	5	3	3	3	4	4
3	5	6	6	6	7	5	5	6	6	6	4	5	5	5	6	3	4	4	4	5
5	6	6	7	7	8	6	6	6	7	7	5	5	6	6	6	4	4	5	5	5
7.5	7	7	8	8	9	6	7	7	8	8	6	6	6	7	7	5	5	5	6	6
10	7	8	8	9	9	7	7	8	8	9	6	6	7	7	8	5	5	6	6	6
15	8	9	9	10	10	8	8	9	9	10	7	7	8	8	9	6	6	6	7	7
20	9	9	10	10	11	8	9	9	10	10	7	8	8	9	9	6	6	7	7	8
25	9	10	10	11	11	9	9	10	10	11	8	8	9	9	10	6	7	7	8	8
30	10	10	11	11	12	9	10	10	11	11	8	9	9	10	10	7	7	8	8	9
40	10	11	11	12	12	10	10	11	11	12	9	9	10	10	11	7	8	8	9	9
50	11	11	12	12	13	10	11	11	12	12	9	10	10	11	11	8	8	9	9	10
60	11	12	12	13	13	11	11	12	12	13	10	10	11	11	12	8	9	9	10	10
75	12	12	13	13	14	11	12	12	13	13	10	11	11	12	12	9	9	10	10	11
100	12	13	13	14	14	12	12	13	13	14	11	11	12	12	13	9	10	10	11	11
125	13	13	14	14	—	12	13	13	14	14	11	12	12	13	13	10	10	11	11	—
150	13	14	14	16	16	13	13	14	14	16	12	12	13	13	14	10	11	11	—	—
200	14	14	16	16	16	13	14	14	16	16	12	13	13	14	14	11	11	—	—	—
250	14	16	16	16	16	14	14	16	16	16	13	13	14	14	—	11	—	—	—	—
300	16	16	16	16	—	14	16	16	16	16	13	14	14	—	—	—	—	—	—	—
350	16	16	16	—	—	16	16	16	16	16	14	14	—	—	—	—	—	—	—	—
400	16	16	16	—	—	16	16	16	16	—	14	14	—	—	—	—	—	—	—	—
450	16	16	—	—	—	16	16	16	—	—	14	—	—	—	—	—	—	—	—	—
500	16	16	—	—	—	16	16	16	—	—	14	—	—	—	—	—	—	—	—	—
600	16	—	—	—	—	16	16	—	—	—	—	—	—	—	—	—	—	—	—	—
700	—	—	—	—	—	16	16	—	—	—	—	—	—	—	—	—	—	—	—	—
800	—	—	—	—	—	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—

[1] Thermoplastic Rubber

Caution: Applications involving reciprocating engines and reciprocating driven devices are subject to critical rotational speeds which may damage the coupling and/or connected equipment. Contact factory with specific requirements.

Hytrel Selection Chart

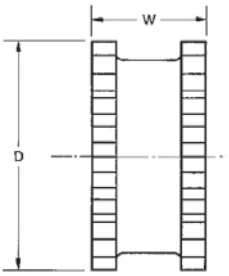
Selection Chart for Hytrel Sleeves

HP	860 RPM Motor					1160 RPM Motor					1750 RPM Motor					3500 RPM Motor				
	Service Factor					Service Factor					Service Factor					Service Factor				
	1.0	1.25	1.5	2.0	2.5	1.0	1.25	1.5	2.0	2.5	1.0	1.25	1.5	2.0	2.5	1.0	1.25	1.5	2.0	2.5
1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7.5	6H	6H	6H	6H	6H	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10	6H	6H	6H	6H	6H	6H	6H	6H	6H	6H	—	—	—	—	—	—	—	—	—	—
15	6H	6H	6H	7H	7H	6H	6H	6H	6H	7H	6H	6H	6H	6H	6H	—	—	—	—	—
20	6H	6H	7H	7H	8H	6H	6H	6H	7H	7H	6H	6H	6H	6H	6H	—	—	—	—	—
25	6H	7H	7H	8H	8H	6H	6H	7H	7H	8H	6H	6H	6H	6H	7H	—	—	—	—	—
30	7H	7H	8H	8H	9H	6H	7H	7H	8H	8H	6H	6H	6H	7H	7H	6H	6H	6H	6H	6H
40	7H	8H	8H	9H	9H	7H	7H	8H	8H	9H	6H	6H	7H	7H	8H	6H	6H	6H	6H	6H
50	8H	8H	9H	9H	10H	7H	8H	8H	9H	9H	6H	7H	7H	8H	8H	6H	6H	6H	6H	7H
60	8H	9H	9H	10H	10H	8H	8H	9H	9H	10H	7H	7H	8H	8H	9H	6H	6H	6H	7H	7H
75	9H	9H	10H	10H	11H	8H	9H	9H	10H	10H	7H	8H	8H	9H	9H	6H	6H	7H	7H	8H
100	9H	10H	10H	11H	11H	9H	9H	10H	10H	11H	8H	8H	9H	9H	10H	6H	7H	7H	8H	8H
125	10H	10H	11H	11H	12H	9H	10H	10H	11H	11H	8H	9H	9H	10H	10H	7H	7H	8H	8H	9H
150	10H	11H	11H	12H	12H	10H	10H	11H	11H	12H	9H	9H	10H	10H	11H	7H	8H	8H	9H	9H
200	11H	11H	12H	12H	13H	10H	11H	11H	12H	12H	9H	10H	10H	11H	11H	8H	8H	9H	9H	10H
250	11H	12H	12H	13H	13H	11H	11H	12H	12H	13H	10H	10H	11H	11H	12H	8H	9H	9H	10H	10H
300	12H	12H	13H	13H	14H	11H	12H	12H	13H	13H	10H	11H	11H	12H	12H	9H	9H	10H	10H	11H
350	12H	12H	13H	14H	14H	12H	12H	12H	13H	14H	11H	11H	12H	12H	12H	9H	10H	10H	11H	11H
400	12H	13H	13H	14H	14H	12H	12H	13H	13H	14H	11H	11H	12H	12H	13H	9H	10H	10H	11H	11H
500	13H	13H	14H	14H	—	12H	13H	13H	14H	14H	11H	12H	12H	13H	13H	10H	10H	11H	11H	—
600	13H	14H	14H	—	—	13H	13H	13H	14H	—	12H	12H	13H	13H	14H	10H	11H	11H	—	—
700	14H	14H	—	—	—	13H	13H	14H	14H	—	12H	12H	13H	14H	14H	11H	11H	—	—	—
800	14H	14H	—	—	—	13H	14H	14H	—	—	12H	13H	13H	14H	14H	11H	11H	—	—	—
900	14H	—	—	—	—	14H	14H	14H	—	—	13H	13H	14H	14H	—	11H	—	—	—	—
1000	—	—	—	—	—	14H	14H	—	—	—	13H	13H	14H	14H	—	11H	—	—	—	—

Quadra-Flex® Sleeves

Martin flexible sleeve elements are offered in four material compounds (Thermoplastic Rubber (TPR), EPDM, Neoprene, and Hytrel) available in three construction styles. Our EM sleeve offers the combination of EPDM's extended temperature range as well as the higher oil resistance which Neoprene provides.



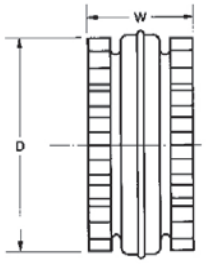




Types JEM — JEMS

Type J sleeves are molded Thermoplastic Rubber (TPR). Available in 1 piece solid (JEM), and 1 piece split, construction (JEMS). TPR material will handle higher temperature ranges as well as be oil resistant.



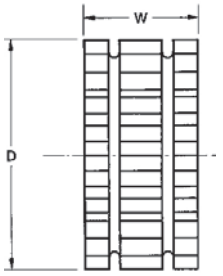




Types EM — E — N

Type EM, E, and N sleeves are of two piece molded construction with retaining ring. They are available in Thermoplastic Rubber (type TPR), EPDM (Type E), or Neoprene (type N). These can be used with any type flanges within a given size range.







Types H & HS

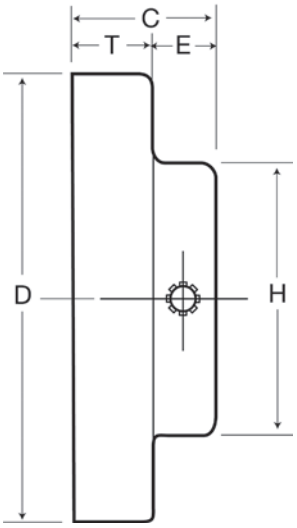
Martin H & HS sleeves are molded Hytrel for higher torque loading than standard EM sleeves. H & HS sleeves cannot be used with style J and B flanges. Hytrel sleeves are not a direct replacement for TPR, EPDM, or Neoprene sleeves.

Dimensions (Inches)

Coupling Size	JEM — JEMS Sleeves			EM — E — N Sleeves			H & HS Sleeves Hytrel •		
	D	W	Wt. (lb)	D	W	Wt. (lb)	D	W	Wt. (lb)
3	1.875	1.000	0.1	—	—	—	—	—	—
4	2.313	1.250	0.1	2.313	1.250	0.1	—	—	—
5	2.938	1.563	0.2	2.938	1.563	0.3	—	—	—
6	3.750	1.875	0.4	3.750	1.875	1.0	3.750	1.875	0.4
7	4.344	2.188	0.5	4.344	2.188	0.8	4.344	2.188	0.7
8	5.063	2.500	0.9	5.063	2.500	1.4	5.063	2.500	1.4
9	6.000	3.000	2.0	6.000	3.000	2.0	6.000	3.000	1.8
10	7.063	3.438	2.2	7.063	3.438	2.9	7.063	3.438	3.0
11	—	—	—	8.188	4.000	4.7	8.188	4.000	4.7
12	—	—	—	9.563	4.688	8.1	9.563	4.688	8.0
13	—	—	—	11.188	5.500	13.0	11.188	5.500	11.8
14	—	—	—	13.094	6.500	21.1	13.094	6.500	19.3
16	—	—	—	17.906	8.750	53.0	—	—	—

• 13 & 14 Hytrel available with HS sleeves only.

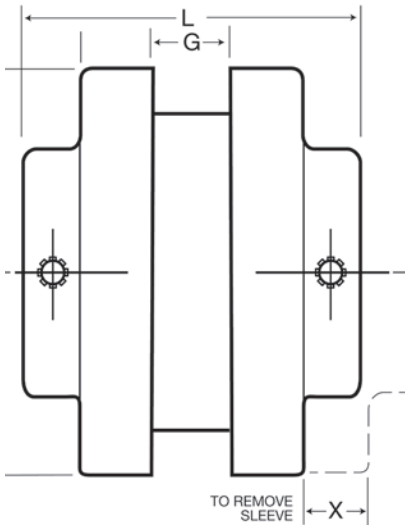
Quadra-Flex® Type J Flanges





Quadra-Flex® Type J Flanges

Martin Type J Flanges are supplied bored to size with standard keyway and two setscrews to slip fit on standard shafting.





Type J Flanges use the Martin JEM 1 Piece,the

Martin JEMS 1 piece split and the Martin EM 2 piece split sleeves.

(Note: Hytrel sleeves are not intended for use with this type of flange.)

Dimensions (Inches)

Coupling Size	Dimensions								Wt. (lb) ★	Finished Bore Sizes • (Inches)	Max. Bore	Millimeters		
	C	D	E	G	H	L	T	X						
3J	0.813	2.062	0.438	0.375	1.250	2.000	0.375	0.563	0.3	0.375** 0.500 0.625 0.750	0.750	—	—	—
	0.813	2.062	0.438	0.375	1.500	2.000	0.375	0.563	0.3	0.875	0.875	—	—	—
4J	0.875	2.460	0.438	0.625	1.625	2.375	0.438	0.750	0.5	0.500 0.625 0.750 0.875 0.938 1.000	1.000	15	20	25
5J	0.688	3.250	0.469	0.750	1.875	2.875	0.594	0.969	0.9	0.500 0.625 0.750 0.875 0.938 1.000 1.125	1.125	—	—	—
6J	0.531	4.000	0.594	0.875	1.938	3.313	0.625	1.094	1.7	0.625 0.750 0.875 0.938 1.000	—	—	—	—
	0.531	4.000	0.594	0.875	2.500	3.313	0.625	1.094	1.7	1.125 1.188 1.250 1.375	1.375	—	—	—

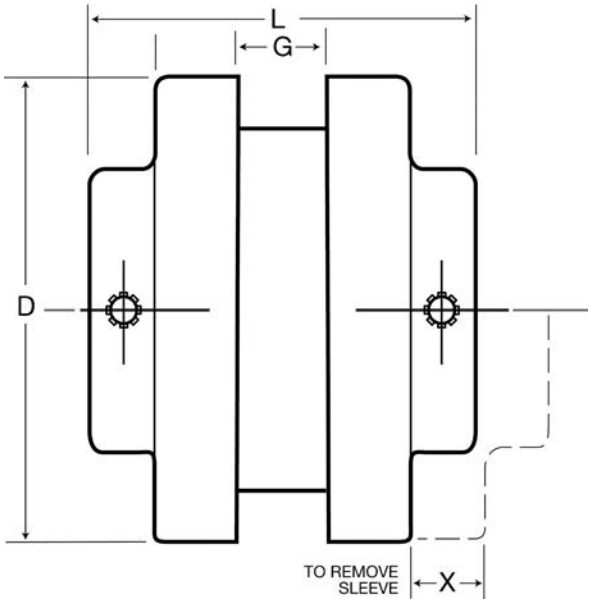
★ Approximate weight for each flange.
** .375 Bore has no Keyway
• J flanges can be rebored if necessary.

Type S Flanges

Quadra-Flex® Type S Couplings (Bored-to-Size)

Type S flexible coupling flanges are bored to size to fit on any standard shaft. They are produced from high strength cast iron. Units are easy to install and remove and are stocked in a wide range of bore sizes as shown on the next page.





Dimensions

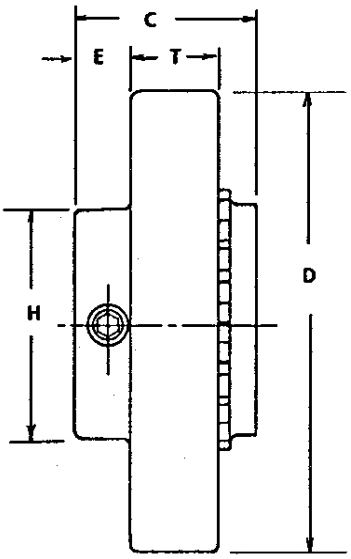
Coupling Size	Flange Diameter (D)	Bore (Inches)			Hub (Inches)			G	L	T	X	Weight (lb) •
		Stock	Rec. Max. ★	Rec. Max. ★★	Hub Diameter (H)	Length Thru (C)	Hub Projected (E)					
5S	3.250	0.500	1.188	1.250	1.875	1.375	0.453	0.750	2.813	0.594	0.969	1.0
6S	4.000	0.625	1.438	1.500	2.500	1.625	0.531	0.875	3.500	0.750	1.094	2.1
	4.000	0.625	—	1.875	2.500	1.563	0.813	0.875	4.000	0.750	1.094	2.1
7S	4.625	0.625	1.625	1.875	2.813	1.844	0.688	1.000	3.938	0.781	1.313	2.7
8S	5.450	0.750	1.938	2.250	3.250	0.719	0.750	1.125	4.438	0.906	1.500	4.5
	5.450	0.750	—	2.375	3.250	1.938	1.031	1.125	5.000	0.906	1.500	4.5
9S	6.350	0.875	2.375	2.500	3.625	2.406	0.781	1.438	5.063	1.031	1.750	6.5
	6.350	0.875	—	2.875	4.125	2.281	1.250	1.438	6.000	1.031	1.750	6.5
10S	7.500	1.125	2.750	3.125	4.375	2.719	0.813	1.625	5.688	1.219	2.000	11.3
	7.500	1.125	—	3.375	4.750	2.688	1.469	1.625	7.000	1.219	2.000	11.3
11S	8.625	1.250	3.375	3.625	5.250	3.438	1.125	1.875	7.125	1.500	2.375	17.6
	8.625	1.250	—	3.875	5.625	3.063	1.563	1.875	8.000	1.500	2.375	17.6
12S	10.000	1.500	3.875	3.938	5.750	4.000	0.594	2.313	8.250	1.688	2.688	27.2
13S	11.750	2.000	4.500	—	6.750	4.375	0.938	2.688	9.250	1.969	3.063	45.6
14S	13.875	2.000	5.000	—	7.500	4.500	0.688	3.250	9.875	2.250	3.500	70.0
16S	18.875	2.000	5.500	6.000	8.000	6.000	2.000	4.750	14.250	2.750	4.250	162.0

★ Recommended max. bore with standard keyway.
★★ Recommended max. bore with shallow keyway. See chart on page C-18 for recommended keyway size.
• Approximate weight for each flange.

Quadra-Flex® Type S Couplings (Bored-to-Size)

Type S flexible coupling flanges are bored to size to fit on any standard shaft. They are produced from high strength cast iron. Units are easy to install and remove and are stocked in a wide range of bore sizes as shown on the next page.





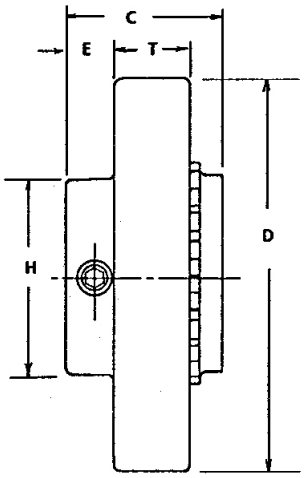
Inches / Millimeters

Coupling Size	Finished Bore Sizes Inches /mm
5S	.625, .75, .813, .875, .938, 1, 1.063, 1.125, 1.188, 1.25 15mm, 20mm, 25mm
6S	.75, .875, .938, 1, 1.063, 1.125, 1.188, 1.25, 1.313, 1.375, 1.438, 1.5, 1.625, 1.75, 1.875 20mm, 25mm, 28mm, 30mm, 35mm
7S	.75, .875, .938, 1, 1.063, 1.125, 1.188, 1.25, 1.313, 1.375, 1.438, 1.5, 1.563, 1.625, 1.688, 1.75, 1.875 25mm, 28mm, 30mm, 38mm, 42mm
8S	.875, .938, 1, 1.063, 1.125, 1.188, 1.25, 1.313, 1.375, 1.438, 1.5, 1.563, 1.625, 1.688, 1.75, 1.875, 1.938, 2.063, 2.125, 2.375 28mm, 30mm, 32mm, 38mm, 42mm, 48mm
9S	.938, 1, 1.063, 1.125, 1.25, 1.375, 1.438, 1.5, 1.563, 1.625, 1.688, 1.75, 1.875, 1.938, 2, 2.063, 2.125, 2.188, 2.25, 2.375, 2.5, 2.875 30mm, 32mm, 38mm, 42mm, 48mm
10S	1.125, 1.25, 1.375, 1.438, 1.5, 1.563, 1.625, 1.688, 1.75, 1.875, 1.938, 2, 2.063, 2.125, 2.188, 2.25, 2.375, 2.438, 2.5, 2.75, 2.875, 3.375 55mm, 60mm
11S	1.25, 1.375, 1.438, 1.563, 1.625, 1.75, 1.875, 2.063, 2.125, 2.25, 2.375, 2.625, 2.75, 2.875, 3.375, 3.875
12S	1.875, 2.125, 2.375, 2.625, 2.875, 3.375, 3.875, 3.938 90mm
13S	2.375, 2.875, 3.375
14S	2.875
16S	*

* Plain bore only.

Keyseat Dimensions





Standard Keyway Dimensions

Shaft Diameter	Width	Depth
0.500 – 0.563	1/8	1/16
0.625 – 0.875	3/16	3/32
0.938 – 1.250	1/4	1/8
0.938 – 1.375	5/16	5/32
1.438 – 1.750	3/8	3/16
1.813 – 2.750	1/2	1/4
2.313 – 2.750	5/8	5/16
2.813 – 3.250	3/4	3/8
3.313 – 3.750	7/8	7/16
3.813 – 4.500	1	1/2
4.563 – 5.500	1 1/4	5/8
5.563 – 6.500	1 1/2	3/4

Bore Tolerances for Types J and S Flanges, SC Hubs

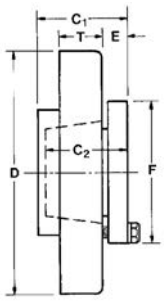
Shaft Diameter	Width
UP to 1.000	+.0000 to +.0010
1.063 to 2.125	+.0000 to +.0015
2.188 to 2.625	+.0000 to +.0020
2.688 to 3.688	+.0000 to +.0025
3.750 to 4.750	+.0000 to +.0030
4.813 to 6.000	+.0000 to +.0035

Shallow Keyseat Dimensions

Coupling Size	Hub Dia. (H)	Length Thru (C)	Shallow Keyseat Dimensions								
			Bore	Keyway	Key	Bore	Keyway	Key	Bore	Keyway	Key
6S	2.500	1.313	1.625	3/8 × 1/8	3/8 × 5/16 × 1 1/4	1.750	3/8 × 1/16	3/8 × 1/4 × 1 1/4	1.875	1/2 × 1/16	1/2 × 5/16 × 11/2
	2.813	1.563									
7S	2.813	1.818	1.875	1/2 × 1/8	1/2 × 3/8 × 1 13/16	–	–	–	–	–	–
8S	3.250	2.188	2.125	1/2 × 3/16	1/2 × 7/16 × 2	2.375	5/8 × 1/8	5/8 × 7/16 × 2	–	–	–
	3.250	1.938	2.125	1/2 × 3/16	1/2 × 7/16 × 2	2.375	5/8 × 1/8	5/8 × 7/16 × 2	–	–	–
9S	3.625	2.406	2.500	5/8 × 3/16	5/8 × 3/8 × 2 3/8	2.875	3/4 × 1/8	3/4 × 1/2 × 2	–	–	–
	4.125	2.281	2.500	5/8 × 3/16	5/8 × 3/8 × 2 3/8	2.875	3/4 × 1/8	3/4 × 1/2 × 2	–	–	–
10S	4.375	2.636	2.875	3/4 × 1/4	3/4 × 5/8 × 2 11/16	3.375	7/8 × 3/16	7/8 × 3/8 × 2 11/16	–	–	–
	4.750	2.688	2.875	3/4 × 1/4	3/4 × 5/8 × 2 11/16	3.375	7/8 × 3/16	7/8 × 3/8 × 2 11/16	–	–	–
11S	3.250	3.438	3.875	1 × 1/4	1 × 3/4 × 3	–	–	–	–	–	–
	4.875	3.438	3.875	1 × 1/4	1 × 3/4 × 3	–	–	–	–	–	–
	5.250	3.438	3.875	1 × 1/4	1 × 3/4 × 3	–	–	–	–	–	–
	5.625	3.063	3.875	1 × 1/4	1 × 3/4 × 3	–	–	–	–	–	–
12S	3.750	4.000	3.938	1 × 1/4	1 × 3/4 × 4	–	–	–	–	–	–
	4.875	4.000	3.938	1 × 1/4	1 × 3/4 × 4	–	–	–	–	–	–
	5.750	4.000	3.938	1 × 1/4	1 × 3/4 × 4	–	–	–	–	–	–

Type B Bushed Quadra-Flex®





Flanges

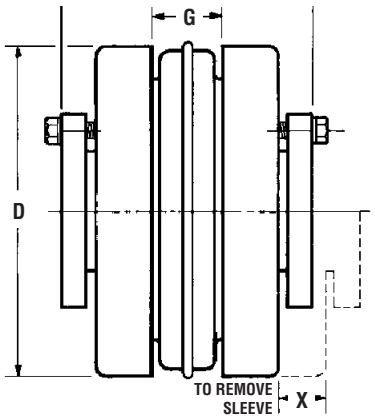
Type B flanges are made of high quality cast iron, the same high strength cast iron used in the Type S and SC Quadra-Flex® flanges. Type B is designed to accommodate Martin QD bushings for easy installation and removal. Type B flanges are not intended for use with Hytrel sleeves

Coupling Size	Bushing Required	Dimensions									Max. Bore ★	Weight (lb) †	
		C_1	C_2	D	E	F	G	L	T	X		Flange	Bushing
6B	JA	1.531	1.000	4.000	0.438	2.000	0.875	3.313	0.758	1.094	1.188	1.7	0 .9
7B	JA	1.594	1.000	4.625	0.438	2.000	1.000	3.438	0.758	1.313	1.188	2.0	1.0
8B	SH	1.818	1.250	5.450	0.500	2.688	1.438	3.938	2.281	1.500	1.625	3.1	1.0
9B	SD	2.188	1.188	6.350	0.438	3.188	1.438	4.625	1.031	1.750	1.938	4.9	1.5
10B	SK	1.818	1.875	7.500	0.625	3.875	1.625	5.313	1.219	2.000	2.500	7.0	2.0
11B	SF	2.125	2.000	8.625	0.625	4.625	1.875	6.125	1.500	2.375	2.750	11.8	3.0
12B	E	2.688	2.625	10.000	0.875	6.000	2.313	7.438	1.688	2.688	3.438	17.2	10.0
13B	F	3.688	3.625	11.750	1.000	6.625	2.688	8.625	1.939	3.000	3.938	30.5	11.5
14B	F	3.688	3.625	13.875	1.000	6.625	3.250	9.750	2.250	3.500	3.938	51.0	11.5
16B	J	4.750	4.500	18.875	1.188	7.250	4.750	12.625	2.750	4.250	4.500	120.0	18.0

★ Maximum bore with keyseat.
† Approximate weight for each flange.

QD Bushing Keyway Dimensions

Bushing	Bores	Keyset
JA	1/2 - 1	STANDARD
	11/16 - 1 1/8	1/4 × 1/16
	13/16	1/4 × 1/16
	1 1/4	NO K.S.
SH	1/2 - 1 3/8	STANDARD
	1 7/16 - 1 5/8	3/8 × 1/16
	1 11/16	NO K.S.
SD	1/2 - 1 11/16	STANDARD
	1 3/4	3/8 × 1/8
	1 13/16	1/2 × 1/8
	1 7/8 - 1 15/16	1/2 × 1/16
	2	NO K.S.
SK	1/2 - 2 1/8	STANDARD
	2 3/16 - 2 1/4	1/2 × 1/8
	2 5/16 - 2 1/2	5/8 × 1/16
	2 9/16 - 2 5/8	NO K.S.
SF	1/2 - 2 1/4	STANDARD
	2 5/16 - 2 1/2	5/8 × 3/16
	2 9/16 - 2 3/4	5/8 × 1/16
	2 13/16 - 2 7/8	3/4 × 1/16
	2 15/16	3/4 × 1/16
E	7/8 - 2 7/8	STANDARD
	2 13/16 - 3 1/4	3/4 × 1/8
	3 5/16 - 3 7/16	7/8 × 1/16
	3 1/2	7/8 × 1/16
F	1 - 3 5/16	STANDARD
	3 3/8 - 3 3/4	7/8 × 3/16
	3 13/16 - 3 15/16	1 × 1/8
	4	NO K.S.
J	1 1/4 - 3 3/4	STANDARD
	3 13/16 - 3 15/16	1 × 1/8
	4 - 4 1/2	1 × 1/8

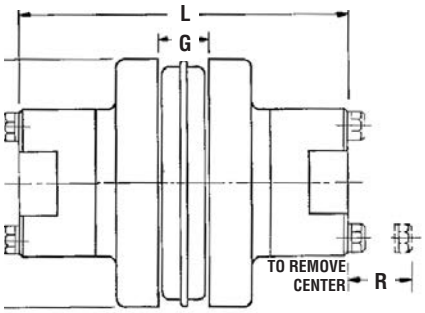


Bushings

Martin QD bushings offer convenient mounting of the flange to the shaft securely without setscrews. They are tapered and are split through both the bushing flange and taper to provide a clamp fit, eliminating wobble, vibration, and fretting corrosion. This is the same bushing used in Martin sprockets and sheaves and is readily available.

Type SC
Spacer Couplings





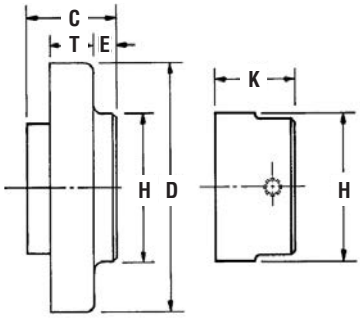
The dimensions for completely assembled Quadra-Flex® Type SC Spacer Couplings are shown below. See next page for dimensions of separate components.

Coupling Size	Required Distance Between Shafts	Use Flange Number	Use Hub Number	Max. Bore Standard Keyway	Dimensions				Weight[2] (lb) •
					D	L[2]	G	R	
4JSC	3.500	4JSC35[1]	4H	1 1/8	2.460	5.625	0.625	0.500	4.7
5SC	3.500	5SC35	5H	1 1/8	3.250	5.625	0.750	0.563	4.1
6SC	3.500	6SC35	6H	1 3/8	4.000	5.875	0.875	0.750	7.1
	4.375	6SC44	6H	1 3/8	4.000	6.750	0.875	0.750	7.9
	5.000	6SC50	6H	1 3/8	4.000	7.375	0.875	0.750	8.5
7SC	3.500	7SC35	7H	1 5/8	4.625	6.375	1.000	0.625	9.1
	4.375	7SC44	7H	1 5/8	4.625	7.250	1.000	0.625	10.1
	5.000	7SC50	7H	1 5/8	4.625	7.875	1.000	0.625	10.7
8SC	3.500	8SC35	8H	1 7/8	5.450	6.875	1.125	0.813	14.7
	3.500	8SC35-10	10H★	2 3/8	5.450	8.125	1.125	0.813	22.7
	4.375	8SC44	8H	1 7/8	5.450	7.750	1.125	0.813	16.1
	5.000	8SC50	8H	1 7/8	5.450	8.375	1.125	0.813	15.9
	5.000	8SC50-10	10H★	2 3/8	5.450	9.625	1.125	0.813	26.5
9SC	3.500	9SC35	9H★	2 1/8	6.350	7.500	1.438	0.688	22.0
	4.375	9SC44	9H★	2 1/8	6.350	8.250	1.438	0.688	23.4
	5.000	9SC50	9H★	2 1/8	6.350	8.875	1.438	0.688	24.6
	5.000	9SC50-11	11H★	2 7/8	6.350	10.375	1.438	0.813	40.2
	7.000	9SC70-11	11H★	2 7/8	6.350	12.375	1.438	0.813	48.2
	7.750	9SC78-11	11H★	2 7/8	6.350	13.125	1.438	0.813	50.8
10SC	4.750	10SC48	10H★	2 3/8	7.500	9.375	1.625	0.813	35.4
	5.000	10SC50	10H★	2 3/8	7.500	9.625	1.625	0.813	38.2
	7.000	10SC70-13	13H★	3 3/8	7.500	13.625	1.625	1.875	71.8
	7.750	10SC78-13	13H★	3 3/8	7.500	14.375	1.625	1.875	75.6
	10.000	10SC100-13	13H★	3 3/8	7.500	16.625	1.625	1.875	89.0
11SC	4.750	11SC48	11H★	2 7/8	8.625	10.625	1.875	0.813	54.5
	5.000	11SC50	11H★	2 7/8	8.625	10.375	1.875	0.813	54.8
	7.000	11SC70-14	14H	3 7/8	8.625	14.625	1.875	2.000	85.7
	7.750	11SC78-14	14H	3 7/8	8.625	15.375	1.875	2.000	90.1
	10.000	11SC100-14	14H	3 7/8	8.625	17.625	1.875	2.000	102.5
12SC	7.000	12SC70	12H★	2 7/8	10.000	12.875	2.313	1.500	87.7
	7.000	12SC70-14	14H	3 7/8	10.000	14.625	2.313	2.000	98.9
	7.750	12SC78	12H★	2 7/8	10.000	13.625	2.313	1.500	91.5
	7.750	12SC78-14	14H	3 7/8	10.000	15.375	2.313	2.000	103.3
	10.000	12SC100-14	14H	3 7/8	10.000	17.625	2.313	2.000	115.5
13SC	7.750	13SC78	13H★	3 3/8	11.750	14.375	2.688	1.875	121.8
14SC	7.750	14SC78	14H	3 7/8	13.875	15.375	3.250	2.000	179.4

★ Short (HS) hub also available.
• Approximate weight for completely assembled spacer coupling.
[1] 4JSC35 × 1.125 has a shallow keyway.
[2] L dimension and weight will change if one or two short (HS) hubs are used.
NOTE: Refer to page C-23 to order — specify components separately.

Type SC Flanges and Hubs





Type SC Flanges and Hubs

Tables below provide dimensional information for Quadra-Flex® Flanges and Hubs used for Spacer Couplings. Assembled dimensions are listed on opposite page. Any of the sleeves shown on page C-14 can be used.

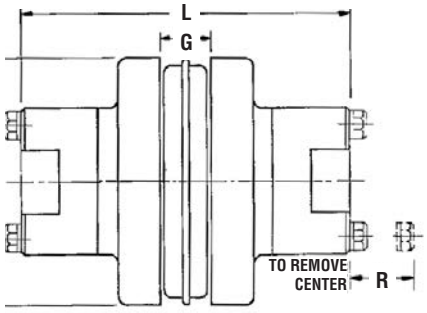
Coupling Size	Flange Number	For Distance Between Shafts ★	For Hubs	Dimensions					Weight (lb) •
				D	E	H	C	T	
4JSC	4JSC35	3.500	4H	2.460	0.438	2.000	0.875	0.438	1.2
5SC	5SC35	3.500	5H	3.250	0.797	2.000	1.688	0.594	1.2
6SC	6SC35	3.500	6H	4.000	0.594	2.500	1.625	0.697	2.0
	6SC44	4.375	6H	4.000	0.344	2.500	2.063	0.697	2.4
	6SC50	5.000	6H	4.000	1.344	2.500	2.375	0.697	2.7
7SC	7SC35	3.500	7H	4.625	0.469	2.813	1.625	0.758	2.3
	7SC44	4.375	7H	4.625	0.879	2.813	2.063	0.758	2.8
	7SC50	5.000	7H	4.625	0.531	2.813	2.375	0.758	3.1
8SC	8SC35	3.500	8H	5.450	0.281	3.250	1.625	0.879	3.5
	8SC35-10	3.500	10H-10HS	5.450	0.281	4.375	1.625	0.879	3.4
	8SC44	4.375	8H	5.450	0.697	3.540	2.063	0.879	4.2
	8SC50	5.000	8H	5.450	0.344	3.250	2.375	0.879	4.6
	8SC50-10	5.000	10H-10HS	5.450	0.344	4.375	2.375	0.879	5.3
9SC	9SC35	3.500	9H-9HS	6.350	0.063	3.625	1.688	0.344	5.1
	9SC44	4.375	9H-9HS	6.350	0.438	3.625	2.063	0.344	5.8
	9SC50	5.000	9H-9HS	6.350	0.750	3.625	2.375	0.344	6.4
	9SC50-11	5.000	11H-11HS	6.350	0.750	5.250	2.375	0.344	6.9
	9SC70-11	7.000	11H-11HS	6.350	1.750	5.250	3.375	0.344	10.9
	9SC78-11	7.750	11H-11HS	6.350	2.125	5.250	3.750	0.344	12.1
10SC	10SC48	4.750	10H-10HS	7.500	0.344	4.375	2.250	0.531	9.8
	10SC50	5.000	10H-10HS	7.500	0.469	4.375	2.375	0.531	10.1
	10SC70-13	7.000	13H-13HS	7.500	1.469	6.125	3.375	0.531	14.5
	10SC78-13	7.750	13H-13HS	7.500	1.818	6.125	3.750	0.531	16.3
	10SC100-13	10.000	13H-13HS	7.500	2.939	6.125	4.875	0.531	22.5
11SC	11SC48	4.750	11H-11HS	8.625	0.031	5.250	1.500	1.500	12.5
	11SC50	5.000	11H11HS	8.625	0.063	5.250	1.563	1.500	12.7
	11SC70-14	7.000	14H	8.625	0.688	6.500	2.563	1.500	16.1
	11SC78-14	7.750	14H	8.625	1.438	6.500	2.938	1.500	18.3
	11SC100-14	10.000	14H	8.625	2.563	6.500	4.063	1.500	24.5
12SC	12SC70	7.000	12H-12HS	10.000	0.636	5.750	2.469	1.688	23.2
	12SC70-14	7.000	14H	10.000	0.636	6.500	2.469	1.688	21.2
	12SC78	7.750	12H-12HS	10.000	0.344	5.750	2.818	1.688	25.1
	12SC78-14	7.750	14H	10.000	0.344	6.500	2.818	1.688	23.4
	12SC100-14	10.000	14H	10.000	0.758	6.500	3.939	1.688	29.5
13SC	13SC78	7.750	13H-13HS	11.750	0.563	6.125	3.250	1.939	38.4
14SC	14SC78	7.750	14H	13.875	0.031	6.500	2.697	2.250	55.0

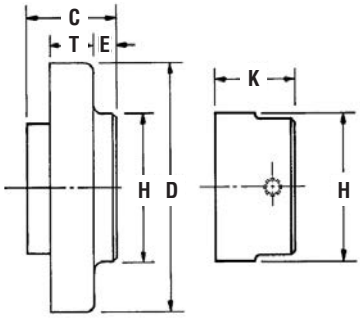
★ Flanges can be mixed to form different Between-Shaft Dimensions. See chart on page 23.
• Approximate weight for each flange.

SC Spacer
Hub Bores









Coupling Size	Hub Number	Max. Bore	Stock Bore									Dimensions			Weight[2] (lb) •
			Plain Bore	Bore with Standard Keyway and Setscrew								K	H	Cap Screws Furnished	
4JSC	4H	1.125	–	0.625	0.875	1.000	1.125★					1.625	2.000	4 — 10 × 2	1.1
5SC	5H	1.125	0.500	0.625	0.750	0.875	1.000	1.125				0.406	2.000	4 — 10 × 1 1/2	0.7
6SC	6H	1.375	0.625	0.750	0.875	1.000	1.125	1.250	1.375			0.531	2.500	4 — 1/4 × 1 3/4	1.3
7SC	7H	1.625	0.625	0.875	1.000	1.125	1.375	1.500	1.625			1.469	2.813	4 — 1/4 × 1 7/8	1.9
8SC	8H	1.875	0.750	0.875	1.000	1.125	1.375	1.500	1.625	1.750	1.875	1.697	3.250	4 — 5/16 × 2 1/4	3.2
9SC	9H	2.125	0.875	1.000	1.125	1.375	1.500	1.625	1.750	1.875	2.125	1.939	3.625	4 — 3/8 × 2 3/4	4.4
	9HS	1.500	–	1.125								1.531	3.625	4 — 3/8 × 2 1/4	3.7
10SC	10H	2.375	1.125	1.625	1.875	2.125	2.375					2.344	4.375	4 — 7/16 × 3	7.3
	10HS	1.625	–	1.125								1.636	4.375	4 — 7/16 × 2 1/2	5.5
11SC	11H	2.875	1.125	1.875	2.125	2.375	2.875					2.697	5.250	4 — 1/2 × 3 1/2	12.2
	11HS	1.875	–	1.125	1.625							1.879	5.250	4 — 1/2 × 2 3/4	9.3
12SC	12H	2.875	1.875	1.875	2.125	2.375	2.875					2.939	5.750	4 — 5/8 × 4	16.6
	12HS	2.500	–	2.375								2.531	5.750	4 — 5/8 × 3 1/2	14.1
13SC	13H	3.375	–	2.375	2.875	3.375						3.344	6.125	4 — 5/8 × 4 3/4	19.9
	13HS	2.500	–	2.125	2.375							2.469	6.125	4 — 5/8 × 3 1/2	16.0
14SC	14H	3.875	–	2.375	2.875	3.375	3.875					3.818	6.500	4 — 5/8 × 5	24.2

★ 4JSC × 1.125 has a shallow keyseat.

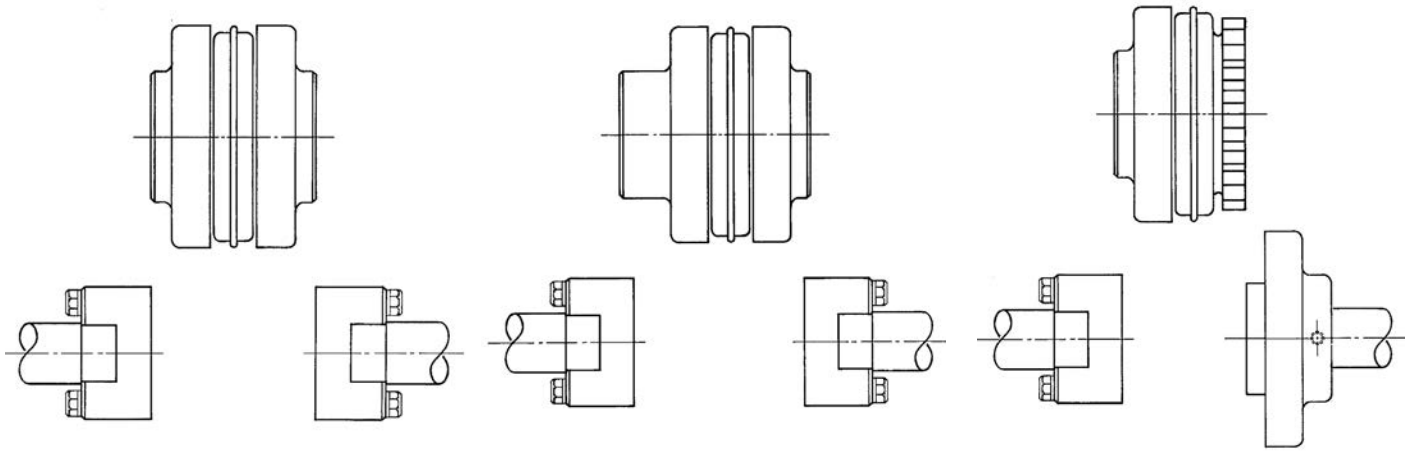
• Approximate weight for each hub.

Between-Shaft Spacings

Type B Bushed Quadra-Flex®

Spacer couplings are available with the most popular between shaft dimensions. Spacings other than standard can be achieved by mixing flanges.

The standard column provides spacings using identical flanges; the combination column provides spacings with mixed flanges; the column headed semi-spacer uses one flange that is not made for spacer coupling and therefore does not have a detachable hub.



Standard

Spacing	Use Flanges ★
3.500	2 - ( ) SC35
4.375	2 - ( ) SC44
5.000	2 - ( ) SC50
7.000	2 - ( ) SC70
7.750	2 - ( ) SC78
10.000	2 - ( ) SC100

Combination

Spacing	Use Flanges ★
3.938	SC35 and SC44
4.250	SC35 and SC50
4.688	SC44 and SC50
5.250	SC35 and SC70
5.625	SC35 and SC78
5.688	SC44 and SC70
6.000	SC50 and SC70
6.063	SC44 and SC78
6.375	SC50 and SC78
6.750	SC35 and SC100 ★★
7.188	SC44 and SC100 ★★
7.375	SC70 and SC78
7.500	SC50 and SC100
8.500	SC70 and SC100
8.875	SC78 and SC100

Semi-Spacer

Spacing	Use Flanges ★
1.875	S and SC35
2.313	S and SC44
2.625	S and SC50
3.625	S and SC70
4.000	S and SC78
5.125	S and SC100

★ Check individual coupling size for flange
★★ Non-Stock
Note: Other combinations available – consult factory

Installation Instructions

Martin Quadra-Flex® flanges (hubs) and elastomeric elements (sleeves) come in a wide range of sizes and types. First, determine the size and type of coupling components required. Remove all components from their boxes and loosely assemble the coupling. Do not install the wire ring on the two piece sleeves at this time. Check maximum RPM values in table against operating speeds.

Martin EM sleeves are rated the same as other EPDM and Neoprene sleeves, and may be used interchangeably; however, Hytrel sleeves are rated at different values and may not be interchanged with Martin EM sleeves, or the EPDM and Neoprene sleeves. Check horsepower and torque ratings when selecting Hytrel sleeves.

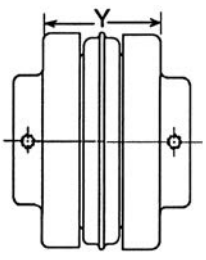


Step 1. Make sure the motor driving the part or components is locked out electrically in such a manner that it cannot be started by anyone, however remote from the area. The same type of lockout procedure applies to any other driving device which may be used. Failure to follow these instructions may result in personal injury or property damage.

Step 2. Prepare shafts for coupling installation. Inspect all coupling components and remove any protective coating or lubricants from bores, mating surfaces, and fasteners.

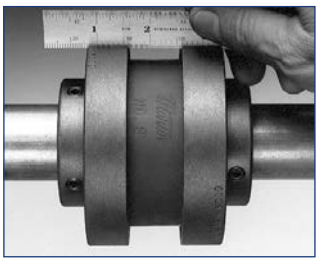
Step 3. Slide one coupling flange onto each prepared shaft using key stock where required. With the QD Type B flange, it may be necessary to expand the QD bushing bore for ease of installation.

Step 4. Position the flange on the shafts to achieve the approximate Y dimension (distance between flanges) shown in table. It is best to have equal shaft length into each flange. Tighten one flange in position, and slide the other flange sufficient distance back to install sleeve. Do not install wire ring on two piece sleeve in its final position at this time, but allow it to hang loosely in groove next to teeth.

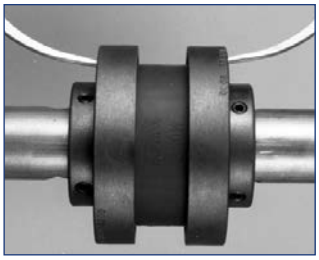




Step 5. Slide loose flange on the shaft until the sleeve has seated completely in teeth of both flanges. Refer to Y dimension although not a critical dimension. Secure the flange to shaft and torque set screws and cap screws to correct torque values.



Parallel



Angular

Step 6. Check parallel alignment by placing a straight edge across the two coupling flanges and measure the maximum offset at several points around the periphery of coupling. Do not rotate coupling when taking these measurements. Refer to table for maximum allowed offset of parallel alignment. Realign the coupling if necessary.

Step 7. Check angular alignment with a micrometer, vernier, or caliper. Take measurement from outside to outside of flanges at several points around the periphery of coupling. Do not rotate coupling when taking these measurements. Determine the difference between maximum and minimum dimensions and check to make sure they do not exceed the angular figure on the table. If a correction is necessary, recheck parallel alignment.

Maximum RPM and Allowable Misalignment
(Dimensions in Inches)

Sleeve Size	Max. RPM	Types JEM, EM, E and N			★ Type H and HS		
		Parallel	Angular	Y	Parallel	Angular	Y
3	9200	0.010	0.035	1.188	—	—	—
4	7600	0.010	0.043	1.500	—	—	—
5	7600	0.015	0.056	1.938	—	—	—
6	6000	0.015	0.070	2.438†	0.010	0.016	2.500
7	5250	0.020	0.081	2.563	0.012	0.020	2.625
8	4500	0.020	0.094	2.938	0.015	0.025	3.000
9	3750	0.025	0.109	3.500	0.017	0.028	3.563
10	3600	0.025	0.128	4.053	0.020	0.032	4.125
11	3600	0.032	0.151	4.875	0.022	0.037	4.938
12	2800	0.032	0.175	5.688	0.025	0.042	5.750
13	2400	0.040	0.195	6.688	0.030	0.050	6.688
14	2200	0.045	0.242	7.750	0.035	0.060	7.813
16	1500	0.062	0.330	10.250	—	—	—

NOTE: Values shown above may apply if the actual torque transmitted is more than .25 the coupling rating. For lesser torque, reduce the above values by .5.

★ Type H & HS sleeves should not be used as direct replacements for JEM or EM sleeves.
† Value when using 6J flanges is 2.125.

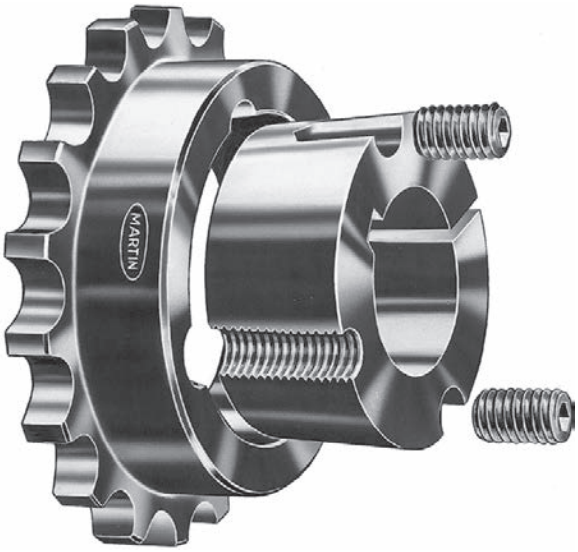
Step 8. If the coupling employs the two-piece sleeve with wire ring, install ring in center groove of sleeve.

Note: Some force may be required to seat the ring in groove.

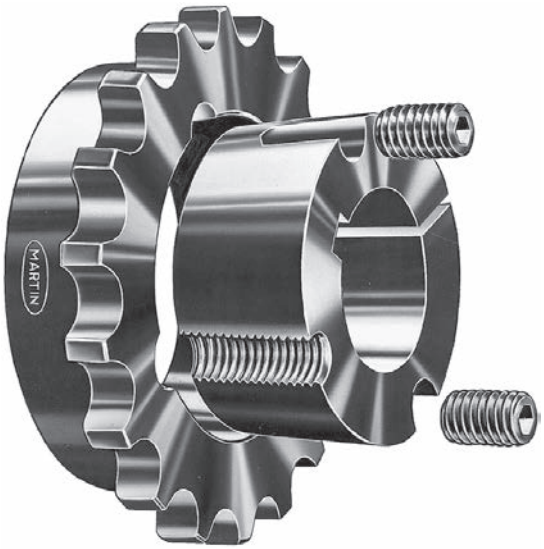
Step 9. Install protective guards and/or shields per OSHA and any other additional local or state safety codes as required.

Warning: Coupling sleeves may be forced from coupling when subjected to a severe shock load or abuse.

Stock Flexible Couplings



Type TBH



Type TBF



Bored-to-Size and Stock Bore



QD



Covers

Stock Flexible Couplings

Bored-to-Size Couplings with Finished Bore, Keyway, and Set Screw

Coupling Number	Stock Finished Bores Include Standard Keyway and Setscrew	A	B	C	L	Coupling O.D.	Weight (lb)
4012	0.500, 0.625, 0.750, 1.406, 1.125, 0.281, 2.531, 2.406	1.406	1.125	0.281	2.531	2.406	.4
4016	0.625, 0.750, 0.875, 0.938, 1.000, 1.125, 1.188, 1.250, 1.969, 1.125, 0.281, 2.531, 3.031	1.969	1.125	0.281	2.531	3.031	.8
5016	0.750, 0.875, 1.000, 1.125, 1.188, 1.250, 1.375, 1.438, 1.500, 1.625, 2.500, 1.438, 0.375, 3.250, 3.781	2.500	1.438	0.375	3.250	3.781	1.6
5018	0.750, 0.875, 1.000, 1.125, 1.188, 1.250, 1.375, 1.438, 1.500, 1.625, 1.750, 1.875, 1.938, 2.969, 1.688, 0.375, 3.750, 4.188	2.969	1.688	0.375	3.750	4.188	2.4
6018	1.000, 1.125, 1.188, 1.250, 1.375, 1.438, 1.500, 1.625, 1.750, 1.875, 1.938, 2.000, 2.125, 2.188, 2.250, 2.375, 2.438, 3.500, 1.875, 0.438, 4.188, 5.000	3.500	1.875	0.438	4.188	5.000	4.8
6020	1.125, 1.250, 1.500, 1.750, 1.938, 2.125, 2.375, 2.438, 2.625, 3.875, 2.000, 0.438, 4.438, 5.500	3.875	2.000	0.438	4.438	5.500	5.2
6022	1.125, 1.750, 1.875, 1.938, 2.125, 2.375, 2.438, 2.625, 2.750, 2.875, 4.500, 2.125, 0.438, 4.688, 5.953	4.500	2.125	0.438	4.688	5.953	7.8
8018	1.125, 1.750, 1.938, 2.000, 2.125, 2.375, 2.438, 2.625, 2.875, 2.938, 4.563, 2.375, 0.578, 5.328, 6.656	4.563	2.375	0.578	5.328	6.656	9.5
8020	1.500, 2.188, 2.438, 2.688, 2.938, 3.125, 3.375, 3.438, 5.375, 2.625, 0.578, 5.516, 7.297	5.375	2.625	0.578	5.516	7.297	13.4
10018	1.500, 2.438, 2.875, 2.938, 3.438, 5.688, 2.750, 0.719, 6.219, 8.328	5.688	2.750	0.719	6.219	8.328	18.2
10020	2.000, 3.375, 3.688, 3.938, 6.719, 3.125, 0.719, 6.969, 9.125	6.719	3.125	0.719	6.969	9.125	25.0
12018	3.438, 3.938, 4.438, 6.750, 3.500, 0.859, 7.875, 10.000	6.750	3.500	0.859	7.875	10.000	28.0
12022	4.375, 4.438, 4.938, 8.750, 4.000, 0.859, 8.875, 11.891	8.750	4.000	0.859	8.875	11.891	55.0

CAUTION: All rotating power transmission products are potentially dangerous and must be properly guarded for the speeds and applications for which they were intended.

QD Couplings

Coupling Number	Bushing Used	Max. Bore★★	A	B	D	C	L	Coupling O. D.	K†	Weight (lb)
4016JA	JA	1.000	2.000	0.875	1.313	0.281	2.906	3.031	1.250	0.9
5018SH	SH	1.375	2.969	1.000	1.500	0.375	3.375	4.188	1.750	1.3
6020SK	SK	2.125	3.875	1.250	1.875	0.438	4.188	5.500	2.250	2.5
8018SF	SF	2.313	4.563	1.750	2.375	0.578	5.328	6.656	2.250	5.3

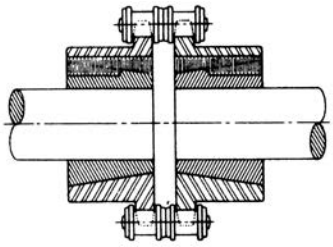
★★ Maximum bore shown is the maximum bore with standard keyway. It is recommended that this maximum not be exceeded in both halves of a coupling.
† Minimum clearance required to remove the coupling half by using the screws as jack screws.

Taper Bushed Couplings Type TBH and TBF

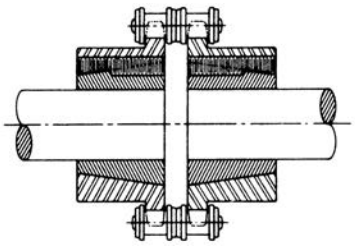
Type TBH	Type TBF	Bushing Data			A	B	C	J★	K†	L	OD	Weight (lb)
Coupling Number	Coupling Number	Bushing Used	Max. Bore	Min. Bore								
4016TBH	4016TBF	1108	1.125	0.500	1.969	0.875	0.281	0.625	0.750	2.031	3.031	0.9
5018TBH	5018TBF	1610	1.625	0.500	2.969	1.000	0.375	0.813	1.167	2.375	4.188	1.1
6020TBH	6020TBF	2012	2.000	0.500	3.875	1.250	0.438	0.938	1.375	2.938	5.500	2.7
8020TBH	8020TBF	3020	3.000	0.938	5.375	2.000	0.578	1.188	2.167	4.578	7.297	6.1
10020TBH	10020TBF	3535	3.500	1.188	6.719	3.500	0.719	2.000	2.625	7.719	9.125	19.0

★★ Space needed for (1) tightening bushing with shortened hex key (2) loosening screws for puller to remove hub.
† Minimum clearance required to remove the coupling half by using the screws as jack screws with shortened hex key.

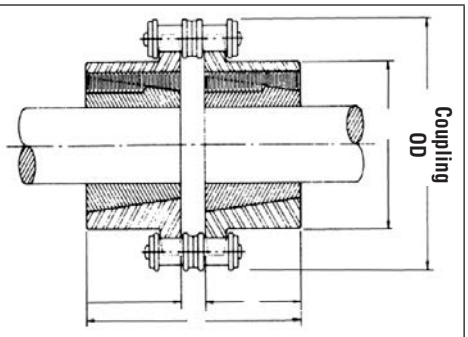
Our High-Speed Standard Covers Fit These Couplings



HH

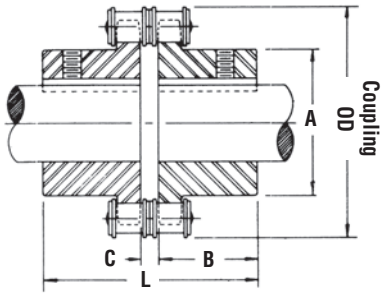


FF



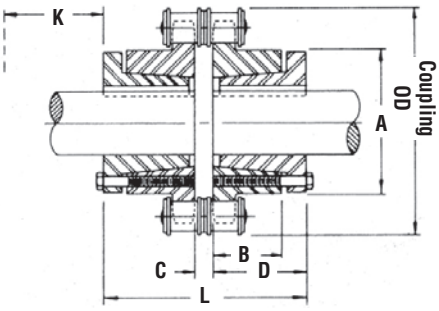
FH

Stock Flexible Couplings





BS Coupling





QD Coupling



Type TBF



Type TBH

All Martin chain couplings have hardened teeth

Coupling Selection

Roller chain couplings have a torque capacity in excess of the torque normally transmitted by shafting which falls within the coupling bore range. Select the smallest coupling which will accommodate both shafts. For a reversing operation, shock or pulsating loads, or other severe operating conditions, select the next larger coupling size.

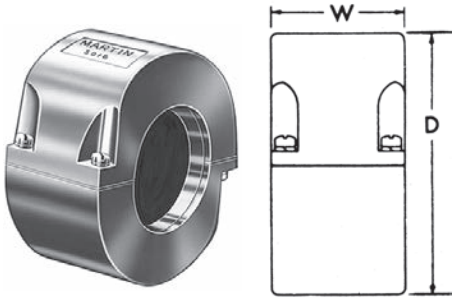
A cover should be used to assure maximum service life, particularly if the coupling operates at high speeds or under moist conditions. For proper lubrication, fill the space between the cover and the coupling with soft to medium consistency coupling grease.

Coupling with Plain Bores for Reboring

Coupling Number	Maximum Bore Inches	Minimum Plain Bore Inches	Weight (lb)	Recommended Maximum RPM	Coupling Chain Number	Weight (lb)
4012	0.875	0.438	0.5	5000	4012 CHN	0.4
4016	1.313	0.625	1.0	5000	4016 CHN	0.5
5016	1.688	0.625	2.2	4000	5016 CHN	1.2
5018	2.000	0.750	3.5	3600	5018 CHN	1.3
6018	2.438	1.000	5.0	3000	6018 CHN	2.2
6020	2.750	1.125	6.5	2500	6020 CHN	2.6
6022	3.000	1.125	9.4	2500	6022 CHN	2.7
8018	3.125	1.125	11.0	2000	8018 CHN	5.3
8020	3.563	1.500	16.3	2000	8020 CHN	5.9
10018	3.875	1.500	20.3	1800	10018 CHN	9.8
10020	4.625	1.500	31.8	1800	10020 CHN	10.9
12018	4.688	2.000	36.8	1500	12018 CHN	17.3
12022	6.125	2.000	70.0	1200	12022 CHN	21.2

Stock Coupling Covers

Covers fit taper bushed, QD and stock, and finished bore couplings. Covers allow excellent lubrication, and their use is recommended to obtain maximum coupling life. Covers are of aluminum or plastic, and are made in halves for easy installation. Synthetic rubber oil seals, which contact the coupling hubs, retain the lubricant and prevent the entry of dirt. Covers are fitted with gaskets between the halves.



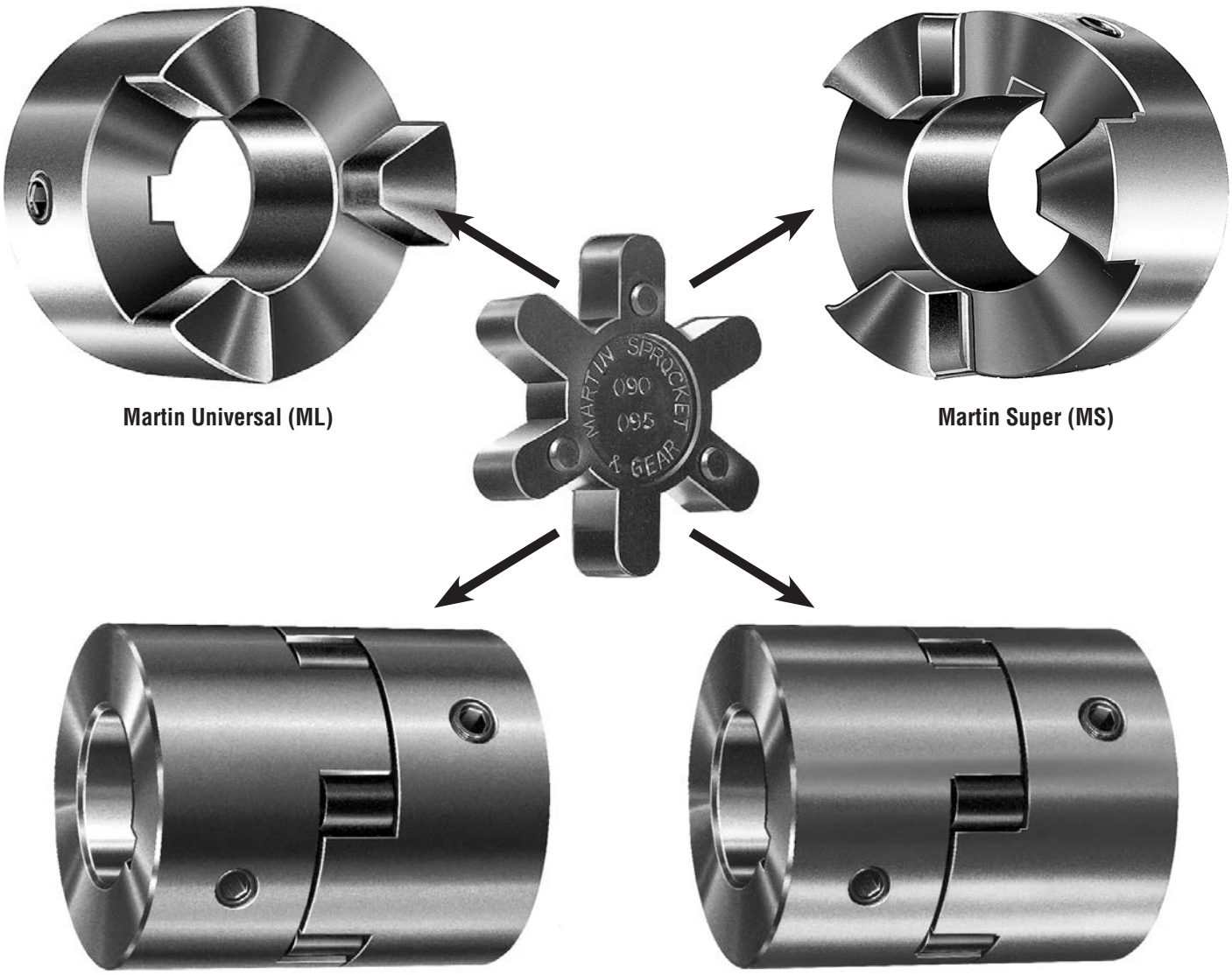
Aluminum and Plastic

Cover Cat. No.	Aluminum		Plastic		Weight (lb)
	D	W	D	W	
4012COV**	4.000	2.000	4.000	2.313	0.8
4016COV**	4.000	2.000	4.000	2.313	0.9
5016COV**	5.125	2.375	5.125	2.625	1.3
5018COV**	5.125	2.375	5.125	2.625	1.3
6018COV**	6.375	2.938	6.375	3.167	2.4
6020COV**	6.375	2.938	6.375	3.167	2.4
6022COV*	8.188	4.000	8.188	4.000	4.9
8018COV	8.188	4.000	8.188	4.000	4.9
8020COV	8.188	4.000	8.188	4.000	4.9
10018COV	9.375	5.938	9.375	5.938	8.8
10020COV	10.125	5.250	10.125	5.250	12.7
12018COV	11.375	7.375	11.375	7.375	16.5
12022COV	13.250	7.938	13.250	7.938	19.5

* Use 8018 cover — Special Seals Available

** Furnished in Plastic unless specified with AL Suffix when ordering.

Flexible Jaw Couplings



Martin Universal (ML)

Martin Super (MS)

Now Martin Offers Two Styles

The Martin Super — Higher Horsepower

The Martin Universal — Completely Interchangeable

- No lubrication
- Easy installation
- No metal to metal contact
- Resistant to oil, dirt, sand, moisture, grease
- Easy inspection of load carrying spider
- Flexibility of angular or parallel misalignment of shafts by buna-n spider member permits smooth power transmission

Stock Jaw Couplings

Jaw Coupling Selection Procedure

A. Determine service factor by matching driven unit with prime mover in service factor guide.

B. Multiply service factor by driven unit or motor hp to obtain adjusted HP.

C. Select flexible coupling with horsepower capacity equal to or greater than adjusted hp.

Service Factor Guide	Prime Mover		
Driven Unit (Machinery)	Electric Motor or Steam Turbine	Gasoline or Diesel Engine, 6 or More Cyl.	Gasoline or Diesel Engine, Less Than 6 Cyl.
Light: Uniform or steady load never exceeding horsepower rating, infrequent starting. Agitators, Blowers, Conveyors, Evaporators, Fans, Generators, Centrifugal Pumps, Stokers	1.0	1.5	2.0
Moderate: Heavy inertia, moderate shock, frequent starting; peak loads do not exceed 125 per cent average horsepower. Uneven load. Beaters, Rotary Pumps and Compressors, Cranes, Elevators, Mine and Propellor Fans, Generators, Pulp Grinders, Hoists, Kilns, Machine Tools, Mixers, Gear Pumps, Woodworking Machines	1.5	2.0	2.5
Heavy: Heavy shock conditions or frequent reversing. Peak loads do not exceed 150 per cent average horsepower. Uneven load. Reciprocating Pumps and Compressors, Crushers, Freight and Passenger Elevators, Mills (Hammer, Ball, Rolling, Turf, Flour), Vibrating Screens, Winches, Wire Drawing Machines, Punches, Shears	2.0	2.5	3.0







Bore Tolerances:
0.5 – 1.75 + 0.001 – 0.000
1.8125 – 2.625 + 0.0015 – 0.0000

Martin ML (Universal Series) — Torque and Horsepower Ratings

Catalog Number	Stainless Steel Catalog Number	Torque Rating lb — in		Buna-N Horsepower Capacity at Various RPM					Max. Bore	(Each) Weight
		Buna-N	Hytrel®	100	300	1200	1800	3600		
ML035	ML035SS	3.5	—	0.006	0.02	0.07	0.10	0.20	0.375	0.10
ML050	ML050SS	31.5	94.5	0.05	0.15	0.60	0.9	1.8	0.625	0.15
ML070	ML070SS	43.2	126	0.07	0.21	0.84	1.2	2.5	0.750	0.31
ML075	ML075SS	90	242	0.13	0.39	1.56	2.3	4.7	0.875	0.45
ML090	ML090SS	144	420	0.22	0.66	2.64	4.0	7.9	1.125	0.75
ML095	ML095SS	194	567	0.30	0.90	3.6	5.4	10.8	1.125	0.89
ML099	ML099SS	318	870	0.46	1.4	5.5	8.3	16.6	1.375	1.02
ML100	ML100SS	417	1,248	0.66	2.0	7.9	11.9	23.8	1.375	1.48
ML110	ML110SS	792	2,268	1.2	3.6	14.4	21.6	43.2	1.625	3.18
ML150	ML150SS	1,240	3,708	1.9	5.7	22.8	34.2	68.4	1.875	4.83
ML190	ML190SS	1,728	4,680	2.4	7.2	28.8	43.2	86.4	2.125	7.65
ML225	ML225SS	2,340	6,804	3.6	10.8	43.2	64.8	129.6	2.625	10.66
ML276	ML276SS	4,716	7,860							

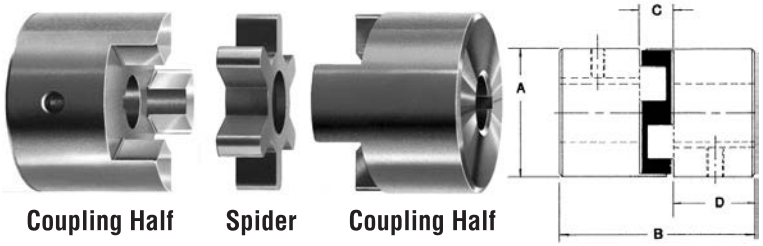
Martin MS (Super Series) — Torque and Horsepower Ratings

Catalog Number	Torque Rating lb — in		Buna-N Horsepower Capacity at Various RPM					Max. Bore	(Each) Weight
	Buna-N	Hytrel®	100	300	1200	1800	3600		
MS050	37.3	112	0.06	0.18	0.71	1.0	2.1	0.625	0.13
MS070	59.4	178	0.09	0.28	1.1	1.7	3.4	0.750	0.25
MS075	157	471	0.25	0.75	3.0	4.5	8.9	0.875	0.53
MS090	241	723	0.38	1.1	4.6	6.9	13.7	1.125	0.58
MS095	241	723	0.38	1.1	4.6	6.9	13.7	1.125	0.70
MS099	512	1536	0.81	2.4	9.7	14.6	29.2	1.325	1.12
MS100	512	1536	0.81	2.4	9.7	14.6	29.2	1.325	1.43
MS110	1014	3042	1.6	4.8	19.3	28.9	57.8	1.325	3.24
MS150	1630	4890	2.6	7.7	31.0	46.5	93.0	1.875	4.76
MS190	2450	7350	3.9	11.6	46.6	69.9	139.7	2.125	7.66
MS225	2920	8760	4.6	13.9	55.5	83.2	166.5	2.625	10.76

NOTE: Above HP capacities are for Buna-N rubber spider and service factor of one. When Hytrel spider is used multiply capacities by three.
Misalignment Capacities: Angular up to 1°, Parallel up to .015 inches.
Hytrel is a registered trademark of E.I. DuPont & Co.

Stock
Jaw Couplings

Catalog Number	Hub Dia.	Overall Length	Distance Between Flanges	Length Thru Bore	Bore		Wt. (lb)
	A	B	C	D	Min.	Max.	
ML035 or MS035	0.625	0.813	0.281	0.266	0.125	0.375	0.1
ML050 or MS050	1.167	1.719	0.469	0.625	0.250	0.625	0.1
ML070 or MS070	1.375	2.000	0.500	0.750	0.250	0.750	0.3
ML075 or MS075	1.750	2.125	0.500	0.813	0.250	0.875	0.4
ML090 or MS090	2.125	2.125	0.500	0.813	0.250	1.125	0.7
ML095 or MS095	2.125	2.500	0.500	1.000	0.438	1.125	0.8
ML099 or MS099	2.531	2.875	0.750	1.067	0.500	1.375	1.2
ML100 or MS100	2.531	3.500	0.750	1.375	0.438	1.375	1.5
ML110 or MS110	3.313	4.250	0.875	1.688	0.500	1.625	3.2
ML150 or MS150	3.750	4.500	1.000	1.750	0.625	1.875	4.5
ML190 or MS190	4.500	4.875	1.000	1.938	0.750	2.125	8.3
ML225 or MS225	5.000	5.375	1.000	2.188	0.750	2.625	12.0
ML276	6.180	7.813	1.580	3.120	0.875	2.875	30.5



Coupling Half Spider Coupling Half

Bore sizes are standard in .0625 increments from minimum to maximum bore range and have keyway and set screw except as shown below:
.125 through .375 Bore — No KW — No SS
#050 — .438 through .625 Bore — No KW — 1-SS
#070, 075, 090, 095 — .438 and .5 Bore — No KW — 1-SS
#099, 100, 110 — .5 Bore — No KW — No SS
#150 — .625 Bore — No KW — No SS
#190, 225 — .75 Bore — No KW — No SS
NOTE: In each coupling size a min. plain bore is available that can be used to make special bores such as spline, hex, metric, or other shapes or sizes.
For Standard Keyway sizes see Martin Catalog, page E-158 and E-159.

Spiders

Description	Temp Range	Misalignment		Dampening	Color
		Angular	Parallel		
Buna-N – Nitrile butadiene rubber is a flexible elastomer material that is oil resistant, resembles natural rubber in resilience and elasticity. Good resistance to oil. Standard elastomer.	-40° to 212° F -40° to 100° C	1°	0.015	High	Black
URETHANE – Urethane has greater torque capability than NBR (1.5 times), provides less dampening effect. Good resistance to oil and chemicals. Not recommended for cyclic or start/stop applications.	-30° to 160° F -34° to 71° C	1°	0.015	Low	Blue
HYTREL® – Hytrel is a flexible elastomer designed for high torque and high temperature operations. Hytrel has an excellent resistance to oil and chemicals. Not recommended for cyclic or start/stop applications.	-60° to 250° F -51° to 121° C	1/2°	0.015	Low	Tan
BRONZE – Bronze is a rigid, porous oil-impregnated metal insert exclusively for slow speed (maximum 250 RPM) applications requiring high torque capabilities. Bronze operations are not affected by extreme temperatures, water, oil, or dirt.	-40° to 450° F -40° to 232° C	1/2°	0.015	N/A	Bronze

Temperature Range			-40° to 212°					-30° to 160°					-60° to 250°					-40° to 450°				
Size	Max Bore		Buna-N Torque					Urethane Torque					Hytrel Torque					Bronze Torque				
	in	mm	Part Number	in-lb	Nm	RPM	Wt. lb	Part Number	in-lb	Nm	RPM	Wt. lb	Part Number	in-lb	Nm	RPM	Wt. lb	Part Number	in-lb	Nm	RPM	Wt. lb
ML035	0.375	9	SRL35	3.5	0.4	31,000	0.01	—	—	—	—	—	—	—	—	—		—	—	—	—	—
ML050	0.625	16	SRL50	31.5	3	18,000	0.01	SUL50	39	4.5	18,000	0.01	SHL50	50	5.6	18,000	0.01	SBL50	50	5.6	250	0.06
ML070	0.750	19	SRL70	43.2	4.9	14,000	0.02	SHL70	65	7.3	14,000	0.02	SHL70	114	12.9	3,600	0.02	SBL70	114	12.9	250	0.08
ML075	0.875	22	SRL75	90	10.2	11,000	0.03	SHL75	135	15.3	11,000	0.03	SHL75	227	25.6	3,600	0.03	SBL75	227	25.6	250	0.15
ML090	1.000	25	SRL90	144	16.3	9,000	0.04	SHL90	216	24.4	9,000	0.04	SHL90	401	45.3	3,600	0.04	SBL90	401	45.3	250	0.17
ML095	1.125	28	SRL95	194	21.9	9,000	0.04	SHL95	291	32.9	9,000	0.04	SHL95	561	63.4	3,600	0.04	SBL95	561	63.4	250	0.17
ML099	1.188	30	SRL99	318	35.9	7,000	0.07	SHL99	477	53.9	7,000	0.07	SHL99	792	89.5	3,600	0.07	SBL99	792	89.5	250	0.50
ML100	1.375	35	SRL100	417	47.1	7,000	0.07	SHL100	626	70.7	7,000	0.07	SHL100	1,134	128	3,600	0.07	SBL100	1,134	128	250	0.50
ML110	1.625	42	SRL110	792	89.5	5,000	0.14	SHL110	1,188	134	5,000	0.14	SHL110	2,268	256	5,000	0.14	SBL110	2,268	256	250	0.62
ML150	1.875	48	SRL150	1,240	140	5,000	0.21	SHL150	1,860	210	5,000	0.21	SHL150	3,708	419	5,000	0.21	SBL150	3,706	419	250	1.00
ML190	2.125	55	SRL190	1,728	195	5,000	0.27	SHL190	2,592	293	5,000	0.27	SHL190	4,680	529	5,000	0.27	SBL190	4,680	529	250	1.30
ML225	2.625	65	SRL225	2,340	264	4,200	0.41	SHL225	3,510	397	4,200	0.41	SHL225	6,228	704	4,200	0.41	SBL225	6,228	704	250	1.60
ML276	2.875	73	SRL276	4,716	533	1,800	1.04	SHL276	4,750	397	1,800	1.04	SHL276	7,860	704	1,800	1.04	SBL276	12,500	1,412	250	2.80

Coupling Selection Chart for 60 Hz Nema Motor Frames Based on Buna-N (Rubber) Spider ★†

Shaft Dia.	Nema Frame	Coupling Size	Max. HP @ RPM					
			1140		1725		3450	
			MS	ML	MS	ML	MS	ML
0.375	42	050	0.5	0.5	1	0.75	2	1.5
0.500	48	050	0.5	0.5	1	0.75	2	1.5
0.625	56,56 H	050	0.5	0.5	1	0.75	2	1.5
0.750	66	070	1	0.75	1.5	1	3	2
0.875	56HZ, 143T, 145T	075	2	1	3	2	7.5	3
	182, 184	090	3	2	5	3	10	7.5
1.375	182T, 184T, 213	095	3	3	5	5	10	10
	215	099	7.5	5	10	7.5	25	15
1.875	213T, 215T, 245U, 256U	100	7.5	7.5	10	10	25	20
2.125	254T, 256T, 248U, 286U	110	15	10	25	20	50	40
2.375	284T, 286T, 324U, 326U, 326TS	150	30	20	40	30	75	60
2.125	324T, 326T, 364U, 365U	190	40	25	60	40	125	75
2.375	364T, 365T	225	50	40	75	60	150	100

Coupling Sizes are based on the rated torque, max. bore and a have a service factor of 1.0.
★ When using Hytrel or Bronze spider multiply above horsepower ratings by 3.
† When using Urethane spider multiply above horsepower ratings by 1.5.

Jaw Couplings
Imperial Bores

Bore	Keyway	ML035	ML050	ML070	ML075	ML090	ML095	ML099	ML100	ML110	ML150	ML190	ML225	ML276
Reboreable				ML070BLK 1/4	ML075BLK 1/4	ML090BLK 1/4	ML095BLK 7/16	ML099BLK 7/16	ML100BLK 7/16	ML110BLK 5/8	ML150BLK 3/4	ML190BLK 3/4	ML225BLK 3/4	ML276BLK 7/8
Reboreable								ML099BLK 1/2	ML100BLK 1/2			ML190BLK 1 3/8	ML225BLK 1 3/8	
Reboreable									ML100BLK 1 1/4				ML225BLK 1 1/2	
1/8	No KW	ML035 1/8												
3/16	No KW	ML035 3/16												
1/4	No KW	ML035 1/4				ML090 1/4								
1/4			ML050 1/4	ML070 1/4	ML075 1/4									
5/16	No KW	ML035 5/16	ML050 5/16	ML070 5/16	ML075 5/16	ML090 5/16								
5/16					ML075 5/16 NKW									
3/8	No KW	ML035 3/8	ML050 3/8	ML070 3/8	ML075 3/8	ML090 3/8								
3/8			ML050 3/8 W/KW	ML070 3/8 W/KW	ML075 3/8 W/KW	ML090 3/8 W/KW								
3/8			ML050 3/8N/S KW			ML090 3/8N/S KW								
7/16	No KW		ML050 7/16	ML070 7/16	ML075 7/16	ML090 7/16	ML095 7/16	ML099 7/16 W/KW	ML100 7/16					
7/16					ML075 7/16 W/KW	ML090 7/16 W/KW	ML095 7/16 W/KW							
7/16					ML075 7/16 NSKW	ML090 7/16 NSKW								
1/2	No KW		ML050 1/2	ML070 1/2	ML075 1/2		ML095 1/2	ML099 1/2	ML100 1/2	ML110 1/2				
1/2			ML050 1/2 W/KW	ML070 1/2 W/KW	ML075 1/2 W/KW	ML090 1/2	ML095 1/2 W/KW	ML099 1/2 W/KW						
9/16	No KW		ML050 9/16 W/KW	ML070 9/16	ML075 9/16 NKW	ML090 9/16 NKW	ML095 9/16 NKW	ML099 9/16 NKW						
9/16			ML050 9/16		ML075 9/16	ML090 9/16	ML095 9/16	ML099 9/16	ML100 9/16					
5/8	No KW		ML050 5/8	ML070 5/8 NKW	ML075 5/8 NKW			ML099 5/8 NKW		ML110 5/8 NKW	ML150 5/8 NKW			
5/8				ML070 5/8	ML075 5/8	ML090 5/8	ML095 5/8	ML099 5/8	ML100 5/8	ML110 5/8	ML150 5/8			
5/8				ML070 5/8 NSKW	ML075 5/8N/S KW	ML090 5/8N/S KW	ML095 5/8 NKW		ML100 5/8N/S KW	ML110 5/8 NSKW	ML150 5/8 NSKW			
11/16				ML070 11/16	ML075 11/16	ML090 11/16	ML095 11/16	ML099 11/16	ML100 11/16	ML110 11/16	ML150 11/16			
3/4	No KW					ML090 3/4 NKW		ML099 3/4 NKW	ML100 3/4 NSKW				ML225 3/4	
3/4				ML070 3/4	ML075 3/4	ML090 3/4	ML095 3/4	ML099 3/4	ML100 3/4	ML110 3/4	ML150 3/4	ML190 3/4		
3/4				ML070 3/4 NSKW	ML075 3/4 NSKW		ML095 3/4 NSKW					ML190 3/4 W/KW		
13/16					ML075 13/16	ML090 13/16	ML095 13/16	ML099 13/16	ML100 13/16	ML110 13/16	ML150 13/16	ML190 13/16	ML225 13/16	ML276 7/8
7/8	No KW							ML099 7/8 NKW						
7/8					ML075 7/8	ML090 7/8	ML095 7/8	ML099 7/8	ML100 7/8	ML110 7/8	ML150 7/8	ML190 7/8	ML225 7/8	
7/8								ML099 7/8 NSKW	ML100 7/8 NSKW	ML110 7/8 NSKW	ML150 7/8 NSKW	ML190 7/8 NSKW	ML225 7/8 NSKW	
15/16						ML090 15/16	ML095 15/16	ML099 15/16	ML100 15/16	ML110 15/16	ML150 15/16	ML190 15/16	ML225 15/16	
1						ML090 1	ML095 1	ML099 1	ML100 1	ML110 1	ML150 1	ML190 1	ML225 1	ML276 1
1						ML090 1 N/S KW	ML095 1 N/S KW		ML100 1 NSKW		ML150 1 N/S KW		ML225 1 N/S KW	
1 1/16						ML090 1 1/16	ML095 1 1/16	ML099 1 1/16	ML100 1 1/16	ML110 1 1/16	ML150 1 1/16	ML190 1 1/16	ML225 1 1/16	
1 1/8						ML090 1 1/8	ML095 1 1/8	ML099 1 1/8	ML100 1 1/8	ML110 1 1/8	ML150 1 1/8	ML190 1 1/8	ML225 1 1/8	ML276 1 1/8
1 3/16								ML099 1 3/16	ML100 1 3/16	ML110 1 3/16	ML150 1 3/16	ML190 1 3/16	ML225 1 3/16	
1 1/4								ML099 1 1/4	ML100 1 1/4	ML110 1 1/4	ML150 1 1/4	ML190 1 1/4	ML225 1 1/4	ML276 1 1/4
1 1/4										ML110 1 1/4 N/S	ML150 1 1/4 N/S		ML225 1 1/4NSKW	ML276 1 1/4NSKW
1 5/16								ML099 1 5/16	ML100 1 5/16	ML110 1 5/16	ML150 1 5/16	ML190 1 5/16	ML225 1 5/16	
1 3/8								ML099 1 3/8	ML100 1 3/8	ML110 1 3/8	ML150 1 3/8	ML190 1 3/8	ML225 1 3/8	ML276 1 3/8
1 3/8														
1 7/16										ML110 1 7/16	ML150 1 7/16	ML190 1 7/16	ML225 1 7/16	ML276 1 7/16
1 1/2										ML110 1 1/2	ML150 1 1/2	ML190 1 1/2	ML225 1 1/2	ML276 1 1/2
1 1/2														
1 9/16										ML110 1 9/16	ML150 1 9/16	ML190 1 9/16	ML225 1 9/16	
1 5/8										ML110 1 5/8	ML150 1 5/8	ML190 1 5/8	ML225 1 5/8	ML276 1 5/8
1 11/16											ML150 1 11/16	ML190 1 11/16	ML225 1 11/16	ML276 1 11/16
1 3/4											ML150 1 3/4	ML190 1 3/4	ML225 1 3/4	ML276 1 3/4
1 3/4														
1 13/16											ML150 1 13/16	ML190 1 13/16	ML225 1 13/16	
1 7/8											ML150 1 7/8	ML190 1 7/8	ML225 1 7/8	ML276 1 7/8
1 15/16												ML190 1 15/16	ML225 1 15/16	ML276 1 15/16
2												ML190 2	ML225 2	ML276 2
2 1/16												ML190 2 1/16	ML225 2 1/16	
2 1/8												ML190 2 1/8	ML225 2 1/8	ML276 2 1/8
2 3/16													ML225 2 3/16	ML276 2 3/16
2 1/4													ML225 2 1/4	ML276 2 1/4
2 5/16													ML225 2 5/16	
2 3/8													ML225 2 3/8	ML276 2 3/8
2 7/16													ML225 2 7/16	
2 1/2													ML225 2 1/2	ML276 2 1/2
2 5/8													ML225 2 5/8	ML276 2 5/8
2 3/4														ML276 2 3/4
2 7/8														ML276 2 7/8

Metric Bore Chart

Bore	Keyway	ML035	ML050	ML070	ML075	ML090	ML095	ML099	ML100	ML110	ML150	ML190	ML225	ML276
4MM	No KW	ML035 4MM												
5MM	No KW	ML035 5MM	ML050 5MM											
6MM	No KW	ML035 6MM	ML050 6MM NKW											
7MM	No KW			ML070 7MM NKW										
7MM			ML050 7MM											
8MM	No KW	ML035 8MM	ML050 8MM NKW	ML070 8MM NKW		ML090 8MM NKW								
9MM	No KW													
9MM			ML050 9MM	ML070 9MM	ML075 9MM									
10MM	No KW		ML050 10MM NKW	ML070 10MM NKW	ML075 10MM NKW									
10MM			ML050 10MM	ML070 10MM	ML075 10MM	ML090 10MM								
11MM	No KW					ML090 12MM								
11MM			ML050 11MM	ML070 11MM	ML075 11MM		ML095 11MM							
12MM	No KW		ML050 12MM NKW	ML070 12MM NKW		ML090 12MM NKW								
12MM			ML050 12MM	ML070 12MM	ML075 12MM		ML095 12MM		ML100 12MM					
14MM	No KW		ML050 14MM NKW	ML070 14MM NKW		ML090 14MM NKW	ML095 14MM							
14MM			ML050 14MM	ML070 14MM	ML075 14MM	ML090 14MM		ML099 14MM	ML100 14MM					
15MM	No KW		ML050 15MM NKW		ML075 15MM NKW		ML095 15MM NKW	ML099 15MM NKW	ML100 15MM NKW					
15MM			ML050 15MM	ML070 15MM	ML075 15MM	ML090 15MM	ML095 15MM	ML099 15MM	ML100 15MM					
16MM	No KW													
16MM			ML050 16MM	ML070 16MM	ML075 16MM	ML090 16MM	ML095 16MM	ML099 16MM	ML100 16MM	ML110 16MM	ML150 16MM			
17MM				ML070 17MM	ML075 17MM		ML095 17MM		ML100 17MM	ML110 17MM	ML150 17MM			
18MM				ML070 18MM	ML075 18MM	ML090 18MM	ML095 18MM	ML099 18MM	ML100 18MM	ML110 18MM				
19MM	No KW					ML090 19MM NKW								
19MM				ML070 19MM	ML075 19MM	ML090 19MM	ML095 19MM	ML099 19MM	ML100 19MM	ML110 19MM	ML150 19MM	ML190 19MM		
20MM					ML075 20MM	ML090 20MM	ML095 20MM	ML099 20MM	ML100 20MM	ML110 20MM	ML150 20MM	ML190 20MM		
22MM					ML075 22MM	ML090 22MM	ML095 22MM	ML099 22MM	ML100 22MM	ML110 22MM	ML150 22MM			
24MM						ML090 24MM	ML095 24MM	ML099 24MM	ML100 24MM	ML110 24MM	ML150 24MM	ML190 24MM		
25MM						ML090 25MM	ML095 25MM	ML099 25MM	ML100 25MM	ML110 25MM	ML150 25MM			
28MM	No KW										ML150 28MM NKW	ML190 28MM NKW		
28MM							ML095 28MM	ML099 28MM	ML100 28MM	ML110 28MM	ML150 28MM	ML190 28MM		
30MM								ML099 30MM	ML100 30MM	ML110 30MM	ML150 30MM	ML190 30MM	ML225 30MM	
32MM	No KW										ML150 32MM NKW		ML225 32MM NKW	ML276 32MM NKW
32MM									ML100 32MM	ML110 32MM	ML150 32MM	ML190 32MM	ML225 32MM	ML276 32MM
34MM									ML100 34MM					
35MM	No KW										ML150 35MM NKW	ML190 35MM NKW	ML225 35MM NKW	
35MM									ML100 35MM	ML110 35MM	ML150 35MM	ML190 35MM	ML225 35MM	
38MM										ML110 38MM	ML150 38MM	ML190 38MM	ML225 38MM	ML276 38MM
40MM										ML110 42MM	ML150 42MM	ML190 42MM	ML225 42MM	ML276 42MM
45MM											ML150 45MM	ML190 45MM	ML225 45MM	ML276 45MM
48MM	No KW										ML150 48MM NKW			
48MM											ML150 48MM	ML190 48MM	ML225 48MM	ML276 48MM
50MM	No KW											ML190 50MM NKW	ML225 50MM NKW	ML276 50MM NKW
50MM												ML190 50MM	ML225 50MM	ML276 50MM
55MM	No KW											ML190 55MM NKW	ML225 55MM NKW	ML276 55MM NKW
55MM												ML190 55MM	ML225 55MM	ML276 55MM
60MM	No KW													ML276 60MM NKW
60MM													ML225 60MM	ML276 60MM
65MM	No KW													ML276 65MM NKW
65MM													ML225 65MM	ML276 65MM
70MM														ML276 70MM

Spline Bore Chart

Major Dia.	Teeth	Pitch	ML090	ML095	ML099	ML100	ML110	ML150	ML190	ML225	ML276
5/8	9	16/32	ML090SPL 5/8	ML095SPL 5/8	ML099SPL 5/8	ML100SPL 5/8					
3/4	11	16z/32	ML090SPL 3/4	ML095SPL 3/4		ML100SPL 3/4	ML110SPL 3/4	ML150SPL 3/4			
7/8	13	16/32	ML090SPL 7/8	ML095SPL 7/8	ML099SPL 7/8	ML100SPL 7/8	ML110SPL 7/8	ML150SPL 7/8	ML190SPL 7/8		
1	15	16/32			ML099SPL 1	ML100SPL 1	ML110SPL 1	ML150SPL 1	ML190SPL 1	ML225SPL 1	
1 1/4	14	12/24					ML110SPL 1 1/4	ML150SPL 1 1/4	ML190SPL 1 1/4	ML225SPL 1 1/4	ML276SPL 1 1/4
1 3/8	21	16/32					ML110SPL 1 3/8	ML150SPL 1 3/8	ML190SPL 1 3/8	ML225SPL 1 3/8	
1 1/2	23	16/32								ML225SPL 1 1/2	
1 3/4	27	16/32					ML110SPL 1 3/4	ML150SPL 1 3/4	ML190SPL 1 3/4	ML225SPL 1 3/4	

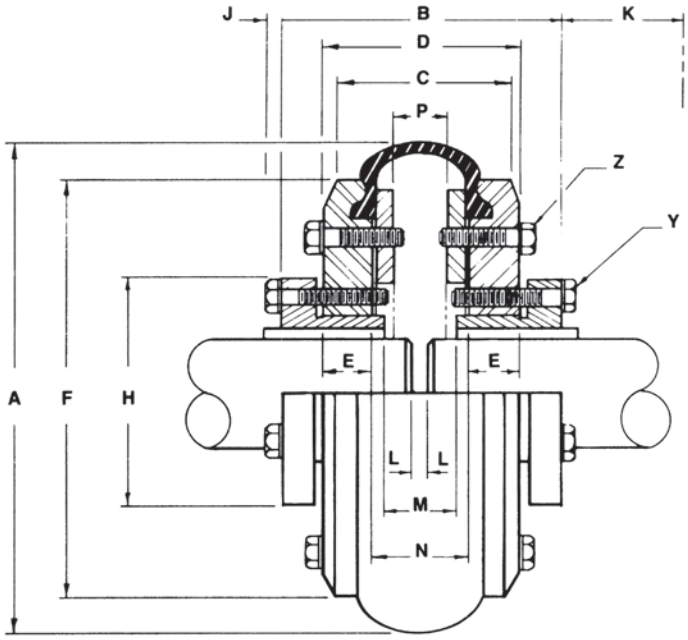
Parts List and Engineering Data

Coupling Size	QD Bushing (2 Required Per Coupling)*	Steel Flange Assembly (2 Required Per Coupling)		Rubber Element (1 Required Per Coupling)		Max RPM	Horsepower @ 100 RPM (1.0 Factor)	Torque (1.0 Service Factor)		Average Static Torsional Stiffness Coefficient (K)		Approx. WR** (LB - Ft²)
		Flange No.	Weight Each	Element No.	Weight			LB - In	LB - Ft	LB - In/DEG	LB - In/RAD	
5	JA	F5JA	3.0	E5	.6	4500	1.03	649	54.1	244	12,850	.08
6	JA	F6JA	4.0	E6	.9	4000	1.80	1134	94.5	414	23,700	.22
7	SH	F7SH	7.0	E7	1.3	3600	3.12	1966	163.8	544	31,200	.40
8	SDS	F8SDS	8.0	E8	1.7	3100	4.68	2950	245.8	876	50,200	.70
9	SK	F9SK	13.0	E9	2.0	2800	6.90	4349	362.4	1088	62,400	1.33
10	SF	F10SF	17.0	E10	2.0	2600	8.33	5250	437.5	1530	87,700	2.10
11	SF	F11SF	18.0	E11	3.0	2300	9.92	6252	521.0	2420	138,700	2.90
12	E	F12E	31.0	E12	3.8	2100	14.40	9076	756.3	4014	217,000	5.80

* See page B5 for QD bushing bore sizes and dimensions.
** Coupling plus QD bushing.
Weight in pounds.

Rubber tire element also available in Neoprene.





Dimensions

Coupling Size	A	B	C	D	E	F	H	J	K*	M	N	P	Y	Z Clamp Ring Bolts		
													B.C. Dia.	B.C. Dia.	No. and Size*** Capscrews	Torque In lb
5	5.250	3.438	2.167	2.563	0.625	4.000	2.000	0.156	1.250	1.438	1.313	0.375	1.660	2.438	(5) 1/4 - 20 × 1 1/8	125
6	6.500	3.563	2.188	2.688	0.625	4.938	2.000	0.156	1.250	1.563	1.438	0.500	1.660	3.313	(5) 5/16 - 18 × 1 1/8	200
7	7.375	4.313	2.688	3.188	0.813	5.625	2.688	0.219	1.625	1.688	1.563	0.750	2.250	3.875	(5) 5/16 - 18 × 1 1/4	300
8	8.375	4.438	2.813	3.313	0.813	6.500	3.188	0.219	1.625	1.813	1.688	0.875	2.688	4.625	(6) 5/16 - 18 × 1 1/2	300
9	9.250	5.188	3.438	3.938	1.167	7.375	3.875	0.281	2.250	1.438	1.813	0.875	3.313	5.250	(6) 3/8 - 16 × 1 3/4	400
10	10.000	5.813	3.563	4.167	1.167	8.313	4.625	0.313	2.750	1.563	1.563	1.000	3.875	6.000	(6) 3/8 - 16 × 1 3/4	400
11	11.000	5.625	3.125	3.875	1.167	9.000	4.625	0.313	2.750	1.375	1.375	0.938	3.875	6.500	(6) 3/8 - 16 × 1 3/4	400
12	12.375	7.250	4.000	4.750	1.375	10.167	6.000	0.438	3.250	1.250	1.250	0.750	5.000	7.250	(6) 1/2 - 13 × 2 1/4	900

Shaft ends are normally M or N apart; they may project beyond the bushings. In this case allow space for end float and misalignment.
* Clearance required to remove bushing using pull-up capscrews as jackscrews.
** Grade 8.
Dimensions in inches.

Other Sizes Available as Made-to-Order

Martin-Flex® Couplings

Martin Flex® flexible couplings smoothly transmit power while compensating for shaft misalignment to 4°, parallel misalignment to .125 and end float to .313. The two piece flange design provides quick and easy installation and the elastomeric element absorbs shock and torsional vibration through a wide temperature range.

Selection Procedure

1. Select the proper service factor from Chart 1.
2. Determine **Design Horsepower** by multiplying the **Service Factor** and the **Drive Horsepower.**
3. Locate the intercept of **Shaft Speed** and **Design Horsepower** from Chart 2.
4. Order per coupling: (2) bushings, (2) flange assemblies, (1) flexible tire element.

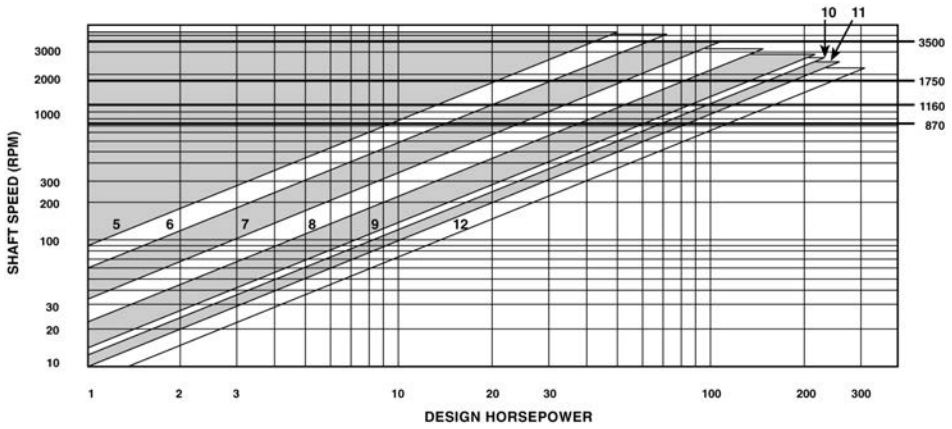
Chart 1 Service Factors

Application	Factor
AGITATORS	
Paddle or Propeller (Vert. or Horiz.), Screw	1.0
BREWING AND DISTILLING	
Bottling Machinery, Brew Kettle, Cooker (Cont Duty), Mash Tub	1.0
Scale Hopper — Frequent Starting Peaks	1.5
CAN FILLING MACHINE	1.0
CAR DUMPER	1.5
CAR PULLER	1.5
CLARIFIER	1.0
CLASSIFIER	1.0
CLAY-WORKING MACHINES	
Brick Press, Briquette Machine, Clay Working Machine, Pug Mill	1.5
COMPRESSORS	
Lobe, Rotary	2.0
Reciprocating** —	
1 cyl. — single acting	3.5
1 cyl. — double acting	3.0
2 cyl. — single acting	3.0
2 cyl. — double acting	2.5
3 cyl. or more — single acting	2.5
3 cyl. or more — double acting	2.0
CONVEYORS	
Apron, Assembly, Belt, Chain, Flight, Oven	1.0
Reciprocating	2.5
Screw	1.0
CRANES AND HOISTS	
Main Hoist — Medium Duty	1.5
Main Hoist — Heavy Duty	2.0
Skip Hoist, Travel Motion, Trolley Motion, Slope	1.5
CRUSHERS	
Cane	2.0
Gyratory	2.5
DREDGES	
Cable Reel, Conveyor	1.5
Cutter Head Drive, Jog Drive	2.5
Pump, Screen Drive, Stacker, Utility Winch	1.5
DYNAMOMETER	1.0
ELEVATORS	
Bucket, Freight	2.0
EXCITER	1.0
FANS	
Centrifugal	1.0
Cooling Tower	2.0
Large (Mine, etc.)	1.5
Light	1.0
Propeller (indoor)	1.5
FOOD INDUSTRY	
Beet Slicer	1.5
Cereal Cooker	1.0
Dough Mixer, Meat Grinder	1.5
GENERATORS	
Even Load	1.0
Hoist or Railway Service	1.5
Welder Load	2.0
GRIZZLY	2.0
KILN	2.0
LAUNDRY MACHINES	
Tumbler, Washer	2.0
LINE SHAFTS	
Driving Processing Machinery	1.0
Light	1.0
LUMBER INDUSTRY	
Band Resaw, Circular Resaw	1.5
Edger, Head Rig, Hog, Log Haul	2.0
Planer	1.5
Rolls Non-Reversing	1.5
Rolls Reversing	2.0
Sawdust Conveyor	1.0
Slab Conveyor, Sorting Table	1.5
MACHINE TOOLS	
Auxiliary	1.0
Main Drive, Notching Press, Planer (Reversing), Plate Planer, Punch Press	1.5
Traverse	1.0
METAL FORMING MACHINES	
Draw Bench Carriage, Main Drive, Extruder, Wire Drawing, Flattening Machine	2.0
MILLS (ROTARY TYPE)	
Ball or Pebble Direct or	2.5
on LS Shaft Gear Reducer	2.5
on HS Shaft Gear Reducer	2.0
Dryer and Cooler	1.5
Rod or Tube Direct or	2.5
on LS Shaft Gear Reducer	2.5
on HS Shaft Gear Reducer	2.0
Tumbling Barrel	1.5
MIXERS	
Concrete (Continuous or Intermittent), Muller-Simpson type	1.5
OIL INDUSTRY	
Chiller	1.0
Oil Well Pumping (not over 150% peak torque)	2.0
Paraffin Filter Press	1.5
PAPER MILLS	
Agitator	1.0
Barking Drum	2.5
Beater and Pulper	1.5
Bleacher	1.0
Calender	2.0
Chipper	3.0
Couch, Cylinder, Dryer	1.5
Felt Stretcher	1.0
Fourdrinier	1.5
Jordan	2.0
Press	2.0
Pulp Grinder	2.0
Stock Chest	1.5
Stock Pump Reciprocating	2.0
Rotary	1.5
Suction Roll	2.0
Winder	1.5
PARAFFIN FILTER PRESS	1.5
PRINTING PRESS	1.5
PROPELLER (MARINE)	1.5
PULVERIZERS	
Hammermill — Light Duty	1.5
Hammermill — Heavy Duty	2.0
Hog	2.0
Roller	1.5
PUMPS	
Centrifugal	1.0
Descaling, Gear Type	1.5
Oil Well Pumping (not over 150% peak torque)	2.0
Rotary — other than gear	1.5
Reciprocating —	
1 cyl. — single acting	2.5
1 cyl. — double acting	2.0
2 cyl. — single acting	2.0
2 cyl. — double acting	1.5
3 cyl. — or more	1.5
RUBBER INDUSTRY	
BANBURY MIXER	2.5
Calender	2.0
Cracker, Mixing Mill, Plasticator	2.5
Refiner, Sheeter, Tire Building Machine	2.0
Tire and Tube Press Opener (Based on Peak Torque)	1.0
Tuber and Strainer	1.5
Warming Mill	2.0
Washer	2.5
SCREENS	
Air Washing	1.0
Coal and Sand (Rotary)	1.5
Vibrating	2.5
Water	1.0
SEWAGE DISPOSAL EQUIPMENT	1.0
SHOVEL	2.0
SHREDDER	1.5
STEEL INDUSTRY	
Cold Mills Coiler (up or down)	1.5
Strip, Temper	2.0
Hot Mills Coiler (up or down), Edger Drive	1.5
Feed Roll (Blooming), Roughing Mill Delivery (Non-reversing), Sheet, Strip	3.0
Rod Mill	2.5
Soaking Pit Cover Drive	3.0
STEERING GEAR	1.0
STOKER	1.0
TEXTILE MILLS	
Batcher	1.0
Calender, Card Machine, Dry Can	1.5
Dyeing Machinery	1.0
Loom	1.5
Mangel, Napper, Soaper	1.0
Spinner, Tenter Frame	1.5
WINDLASS	1.5
WOODWORKING MACHINES	1.0

The service factors listed are intended only as a general guide for smooth power sources such as electric motors and steam turbines. Add 0.5 to factor for somewhat rougher power sources such as internal combustion engines of four or more cylinders, steam engines and water turbines. Where substantial shock occurs or starting or stopping is frequent as on some inching drives and on some reversing drives or where the power source is an internal combustion engine with less than four cylinders — consult factory. Where torsional vibrations occur as in, for example, internal combustion engines or reciprocating compressors or pump applications, check the coupling for possible development of damaging large amplitude vibrations.

** Add 0.5 to factor if without flywheel.

Chart 2 Size Selection



Blue-Flex® Grid Couplings

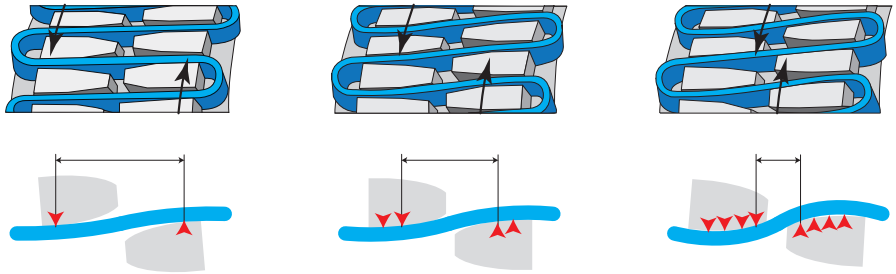


Martin Blue-Flex® grid couplings are the best option where both high torque levels and dampening requirements exist. Unlike other metallic couplings, Martin Blue-Flex® grid

Couplings have the ability to reduce vibration and cushion shock loads to driven and driving power transmitting equipment components.

Progressive contact between the curved profile of the hub teeth and the flexible grid makes it possible to absorb impact energy by spreading it out, reducing the magnitude of the peak loads.

Martin Blue-Flex® grid couplings follow the same Martin product/ service standards that make Martin the one industries rely on for quality, availability, service and response time that is second to none.



Light Load

The grid bears the stress near the outer edge of the hub teeth. The long span between the point of contact remains free to flex under load variations.

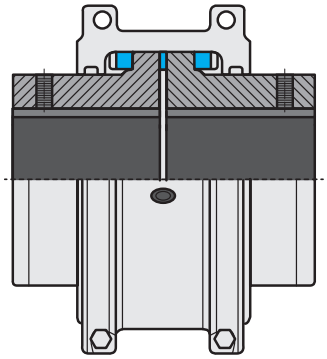
Normal Load

As the load increases, the distance between contact points on the hub teeth is shortened, but a free span still remains to cushion shock loads.

Shock Load

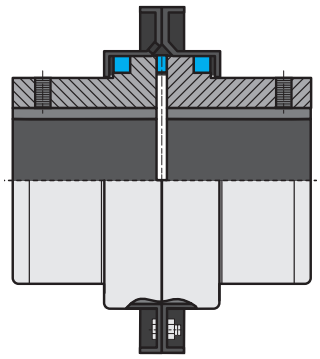
The coupling is flexible within its rated capacity. Under extreme overloads, the grid bears the stress fully on the hub teeth and transmits full load directly.

Available in 2 Close-Coupled Styles



T10

A flexing, close-coupled design for use in four-bearing systems. Includes a horizontally split cover which allows for grid replacement without disturbance of the connected equipment.



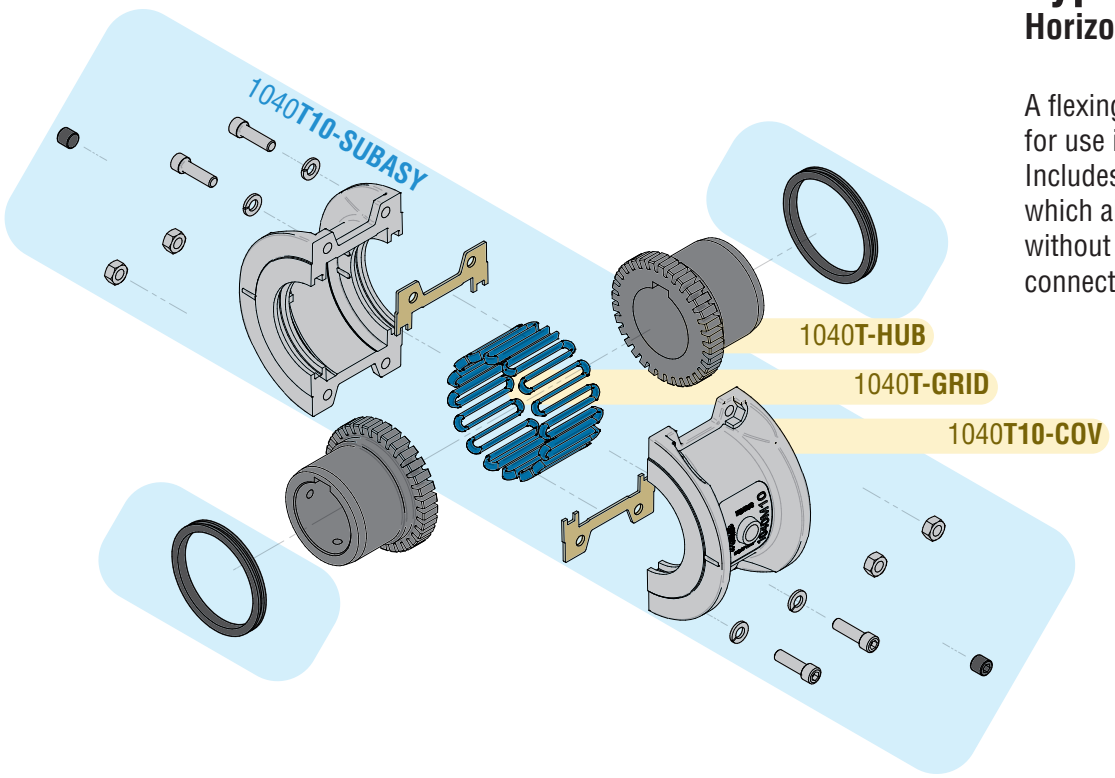
T20

A flexing design featuring a vertically-split steel cover. Ideal for higher running speeds and higher torque capacity.

Cover Design
Component Guide

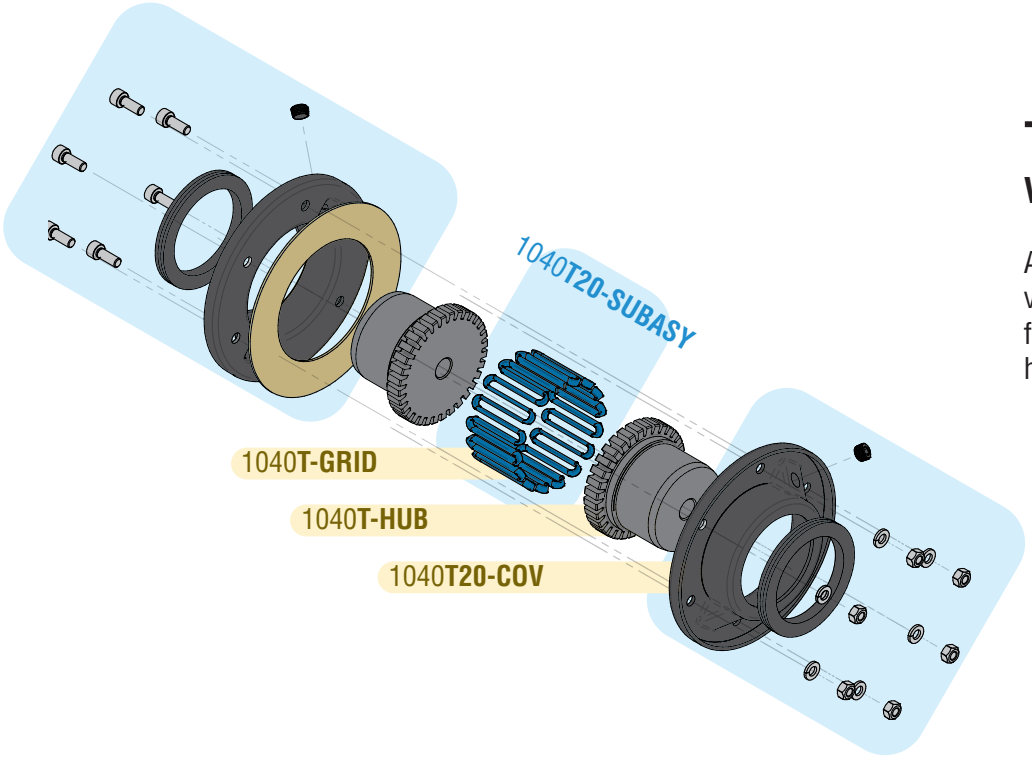
Type T10
Horizontal Cover Design

A flexing, close-coupled design for use in four-bearing systems. Includes a horizontally split cover which allows for grid replacement without disturbance of the connected equipment.



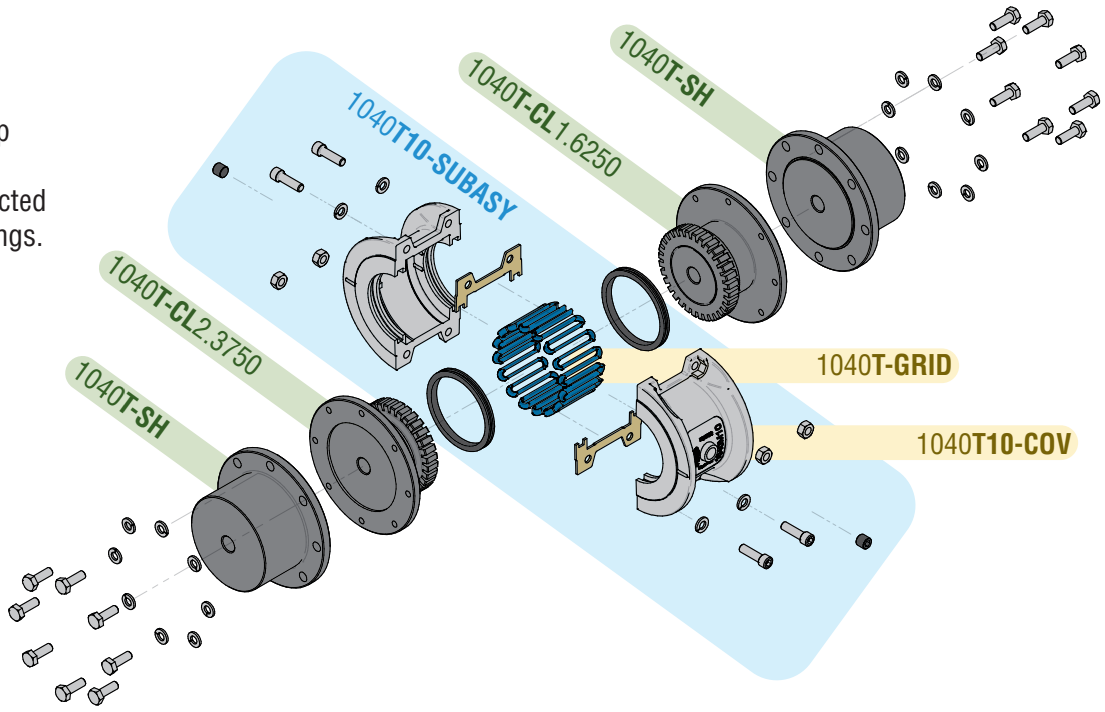
Type T20
Vertical Cover Design

A flexing design featuring a vertically-split steel cover. Ideal for higher running speeds and higher torque capacity.



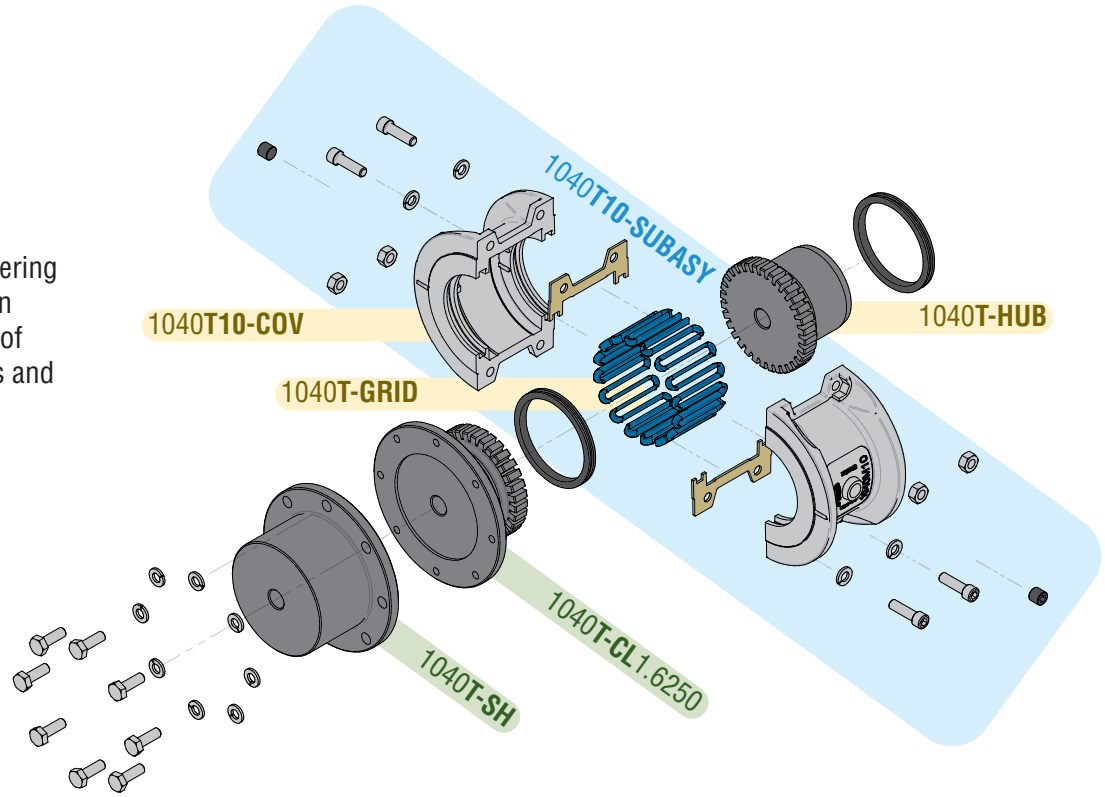
Type T31
Spacer Design

A complete Full Spacer drop out center section allowing easy maintenance of connected equipment, seals and bearings.



Type T35
Half Spacer Design

An economical solution, offering Half Spacer drop out section allowing easy maintenance of connected equipment, seals and bearings.



Blue-Flex®
Selection Procedure

Standard Selection Method

The standard selection method can be used for most motor, turbine or engine-driven applications. The following information is required to select a flexible coupling:

- Horsepower or torque
- Running RPM
- Application or type of equipment to be connected
- Shaft diameters
- Shaft gaps
- Physical space limitations
- Special bore or finish, and type of fit

Step 1. Rating: Determine system torque. If torque is not given, calculate as shown below:

$$\text{Torque (lb-in)} = \frac{\text{HP x 63,000}}{\text{RPM}}$$

Where horsepower is the actual or transmitted power required by the application (if unknown, use the motor or turbine nameplate rating) and rpm is the actual speed the coupling is rotating. Applications that require rapid changes in direction or torque reversals should be referred to Martin Engineering.

Step 2. Service Factor: Determine appropriate service factor from C-40.

Step 3. Required Minimum Coupling Rating: Determine the required minimum coupling rating as shown below:

Min. Coupling Rating = S.F. (Service Factor) x Torque (lb-in)

Step 4. Type: Refer to pages C-34 and C-35 and select the appropriate coupling type.

Step 5. Size: Turn to appropriate pages for the coupling type chosen and trace down the torque column to a value that is equal or greater than that determined in Step 3 above. The coupling size is shown in the first column.

Step 6. Check: Speed (RPM), bore, gap and dimensions.

Example: A Field Engineer wants to use a Grid Coupling to connect a 60 horsepower electric motor running at 1750 RPM to a rotary lobe compressor. The shaft diameter of both the motor and compressor is 1 3/4. Motor shaft extension is 3 and compressor shaft extension is 2 1/2. Gap between shaft ends is 1/8.

1. **Determine Required Rating:**

$$\text{Torque (lb-in)} = \frac{\text{60 x 63,000}}{\text{1750 RPM}} = \text{2160 lb-in}$$

2. **Service Factor:** From C-38 = 1.25

3. **Required Min. Coupling Rating**:

1.25 x 2160 lb-in = 2700 lb-in

4. **Size:** From page C-42 a size 1050T10 is the proper selection based on a torque rating of 3850 lb-in exceeding the required min. coupling rating of 2700 lb-in.

5. **Check:** Allowable speed capacity of 4500 (T10) exceeds the required speed of 1750 rpm. Maximum bore capacity of 1 7/8 exceeds the actual shaft diameters.

Formula Selection Method

The Standard Selection Method will work when selecting most couplings. The Formula Selection Method should be used for:

- High Peak Loads
- High Braking Torques

Providing system peak torque and frequency, duty cycle and brake torque rating will allow for a more refined selection using the Formula Selection Method.

1. **High Peak Loads:** Use one of the following formulas for applications using motors with torque characteristics that are higher than normal; applications with intermittent operations, shock loading, inertia effects due to starting and stopping and/or system-induced repetitive high peak torques. System Peak Torque is the maximum torque that can exist in the system. Select a coupling with a torque rating equal to or greater than selection torque calculated below.

   a. Non-Reversing High Peak Torque

   Selection Torque (lb-in) = System Peak Torque

   or

   $$\text{System Torque (lb-in)} = \frac{\text{System Peak HP} \times 63{,}000}{\text{RPM}}$$

   b. Reversing High Peak Torque

   Selection Torque (lb-in) = 2 x System Peak Torque

   or

   $$\text{System Torque (lb-in)} = \frac{2 \times \text{Peak HP} \times 63{,}000}{\text{RPM}}$$

   c. Occasional Peak Torques (Non-reversing) If a system peak torque occurs less than 1000 times during the expected coupling life, use the following formula:

   Selection Torque (lb-in) = 0.5 x System Peak Torque

   or

   $$\text{System Torque (lb-in)} = \frac{0.5 \times \text{Peak HP} \times 63{,}000}{\text{RPM}}$$

2. **High Braking Torques:** If the torque rating of the braking exceeds the motor torque, use the braking rating as follows:

   Selection Torque (lb-in) = Braking Torque Rating x S.F.

Example: A Maintenance Engineer needs a Grid Coupling to connect an electric motor to a reversing runout mill table roll. The system peak torque is estimated to be 118,000 lb-in with the motor running at 80 RPM. The motor shaft diameter is 7 and the driven shaft diameter is 8 . The motor and driven shaft extensions are both 8 1/2. Distance between shaft ends is 8.00.

1. **Type:** Refer to pages C-34 and C-35 and select the appropriate.

2. **Required Minimum Coupling Rating:**

   Use the Reversing High Peak Torque formula.
   2 x 118,000 = 236,000 = Selection Torque

3. **Size:** From page C-44 a size 1140T10 with a torque rating of 253,000 exceeds the selection torque of 236,000 lb-in.

4. **Check:** The 1140T35 has a maximum BE dimension of 8.06; maximum bore of 8 with one rectangular key (Table 3, page C-39); and the allowable speed of 1650 rpm and the dimensions on page C-46, meet the requirements.

Table 3 – Coupling Ratings & Allowable Speeds

Coupling Size	HP per 100 RPM	Torque Rating (lb-in)	Allowable Speeds – RPM		
			T10	T20	T31, T35, T10/82
1020T	0.73	460	4,500	6,000	3,600
1030T	2.09	1,320	4,500	6,000	3,600
1040T	3.49	2,200	4,500	6,000	3,600
1050T	6.11	3,850	4,500	6,000	3,600
1060T	9.60	6,050	4,350	6,000	3,600
1070T	14.0	8,800	4,125	5,500	3,600
1080T	28.8	18,150	3,600	4,750	3,600
1090T	52.4	33,000	3,600	4,000	3,600
1100T	88.1	55,550	2,440	3,250	2,440
1110T	131	82,500	2,250	3,000	2,250
1120T	192	121,000	2,025	2,700	2,025
1130T	279	176,000	1,800	2,400	1,800
1140T	401	253,000	1,650	2,200	1,650
1150T	559	352,000	1,500	2,000	1,500
1160T	785	495,000	1,350	1,750	1,350
1170T	1047	660,000	1,225	1,600	1,225
1180T	1452	915,200	1,100	1,400	1,100
1190T	1920	1,210,000	1,050	1,300	1,050
1200T	2618	1,650,000	900	1,200	900

Consult Martin for higher speeds.

Blue-Flex®
Selection Procedure

Quick Selection Method

Step 1. Select Coupling Type. Refer to pages C-34 and C-35 and select the type of coupling to suit your application. If an application requires a special purpose coupling, refer application details to your local Martin representative.

Step 2. Determine Service Factor. Refer to Table 6 and Table 7.

A. Refer to the formula selection method if your application has high braking torques or high peak loads.

Step 3. Determine Equivalent Horsepower. Refer to Table 4 – Under the actual HP required and tracing horizontally from the service factor determined in Step 2, read the equivalent HP.

Step 4. Determine Coupling Size.

A. Refer to Table 5 – Trace horizontally from the required speed to a HP value equal to or larger than the hp determined in Step 3. Read the coupling size at top of column.

B. Check shaft diameters on coupling maximum bores shown on pages for the type of coupling selected. If a larger bore is required, select a larger coupling.

C. Check the required speed against the allowable speed shown in Table 3 page C-39 for the type of coupling selected. If a higher speed is required, refer to Martin Engineering.

D. Check application dimension requirements against catalog page for the type of coupling selected.

Example: A 400 horsepower electric motor rated for 1200 RPM needs a grid coupling to drive a tire shredder. The shaft gap is 0.1 to 0.2. The motor shaft diameter is 3 and the driven shaft diameter is 3 1/4. The motor and driven shaft extensions are both 5.

1. **Select Coupling Type**: To connect close-coupled shafts (0.1 to 0.2 gap), a Type T10 or T20 coupling is the proper selection. Type T10 is selected.
2. **Determine Service Factor:** From Table 6, the service factor is 1.5.
3. **Determine Equivalent HP:** From Table 4, the equivalent HP is 600.
4. **Select Coupling Size:** (A) From Table 5, the coupling size is 1090T10. (B) From Table 8, the maximum bore with square key is 3.500. (C) From Table 3, the allowable speed of a 1090T10 is 3600 RPM. (D) Dimensions for the 1090T10 coupling shown on page C-44 satisfies the application requirements.

Table 4 – Equivalent Horsepower = (Actual HP x Service Factor)

Service Factor •	Actual HP																									
	3/4	1	1-1/2	2	3	5	7-1/2	10	15	20	25	30	40	50	60	75	100	125	150	200	250	300	350	400	450	500
1.00	0.75	1.0	1.5	2.0	3.0	5.0	7.5	10	15	20	25	30	40	50	60	75	100	125	150	200	250	300	350	400	450	500
1.25	0.94	1.25	1.9	2.5	3.8	6.3	9.4	12.5	19	25	31	38	50	63	75	94	125	156	188	250	312	375	438	500	563	625
1.50	1.1	1.5	2.3	3.0	4.5	7.5	11.3	15	23	30	38	45	60	75	90	113	150	188	225	300	375	450	525	600	675	750
1.75	1.3	1.8	2.6	3.5	5.3	8.8	13.1	18	26	35	44	53	70	88	105	131	175	219	262	350	438	525	613	700	787	875
2.00	1.5	2.0	3.0	4.0	6.0	10.0	15.0	20	30	40	50	60	80	100	120	150	200	250	300	400	500	600	700	800	900	1000
2.50	1.9	2.5	3.8	5.0	7.5	12.5	18.8	25	38	50	63	75	100	125	150	187	250	312	375	500	625	750	875	1000	1125	1250
3.00	2.3	3.0	4.5	6.0	9.0	15.0	22.5	30	45	60	75	90	120	150	180	225	300	375	450	600	750	900	1050	1200	1350	1500
3.50	2.6	3.5	5.3	7.0	10.5	17.5	26.2	35	52	70	87	105	140	175	210	262	350	437	525	700	875	1050	1225	1400	1575	1750

• For service factor not listed, Equivalent HP = Actual HP x Service Factor.

Table 5 – Coupling Selection Based on Equivalent HP Ratings

Coupling Size	1020T	1030T	1040T	1050T	1060T	1070T	1080T	1090T	1100T	1110T	1120T	1130T	1140T	1150T	1160T	1170T	1180T	1190T	1200T
Max Bore (in)	1.125	1.375	1.625	1.875	2.125	2.500	3.000	3.500	4.000	4.500	5.000	6.000	7.250	8.000	9.000	10.000	11.000	12.000	13.000
Max Speed T10	4500 RPM	4500 RPM	4500 RPM	4500 RPM	4350 RPM	4125 RPM	3600 RPM	3600 RPM	2440 RPM	2250 RPM	2025 RPM	1800 RPM	1650 RPM	1500 RPM	1350 RPM	1225 RPM	1100 RPM	1050 RPM	900 RPM
Max Speed T20	6000 RPM	6000 RPM	6000 RPM	6000 RPM	6000 RPM	5500 RPM	4750 RPM	4000 RPM	3250 RPM	3000 RPM	2700 RPM	2400 RPM	2200 RPM	2000 RPM	1750 RPM	1600 RPM	1400 RPM	1300 RPM	1100 RPM
Torque (lb-in)	460	1320	2200	3850	6050	8800	18,150	33,000	55,550	82,500	121,000	176,000	253,000	352,000	495,000	660,000	915,200	1,210,000	1,650,000
HP/100 RPM	0.73	2.09	3.49	6.11	9.60	14.0	28.8	52.4	88.1	131	192	279	401	559	785	1047	1452	1920	2618
RPM	HP Ratings																		
4500	32.8	94.2	157	275	432 ◊	628 ◊	1296 ◊	–	–	–	–	–	–	–	–	–	–	–	–
3600	26.3	75.4	126	220	346	503	1037	1885	–	–	–	–	–	–	–	–	–	–	–
3000	21.9	62.8	105	183	288	419	864	1571	2644 ◊	3927 ◊	–	–	–	–	–	–	–	–	–
2500	18.2	52.4	87	153	240	349	720	1309	2203 ◊	3273 ◊	3456 ◊	–	–	–	–	–	–	–	–
2100	15.3	44.0	73.3	128	202	293	605	1100	1851	2749	3456 ◊	5864 ◊	8430 ◊	–	–	–	–	–	–
1800	13.1	37.7	62.8	110	173	251	518	942	1587	2356	3456	5027	7226 ◊	10053 ◊	–	–	–	–	–
1750	12.8	36.7	61.1	107	168	244	504	916	1542	2291	3360	4887	7025 ◊	9774 ◊	13745 ◊	–	–	–	–
1450	10.6	30.4	50.6	89	139	202	418	759	1278	1898	2784	4049	5821	8098	11388 ◊	15184 ◊	–	–	–
1170	8.5	24.5	40.8	71.5	112	163	337	613	1031	1532	2246	3267	4697	6535	9189	12252	–	–	–
1000	7.3	20.9	34.9	61.1	96	140	288	524	881	1309	1920	2793	4014	5585	7854	10472	14521	19199	–
870	6.3	18.2	30.4	53.1	84	121	251	456	767	1139	1670	2430	3492	4859	6833	9111	12633	16703	22777
720	5.3	15.1	25.1	44.0	69	101	207	377	635	942	1382	2011	2890	4021	5655	7540	10455	13823	18850
650	4.7	13.6	22.7	39.7	62.4	91	187	340	573	851	1248	1815	2609	3630	5105	6807	9439	12479	17017
580	4.2	12.1	20.2	35.4	55.7	81	167	304	511	759	1114	1620	2328	3239	4555	6074	8422	11135	15184
520	3.8	10.9	18.2	31.8	49.9	73	150	272	458	681	998	1452	2087	2904	4084	5445	7551	9983	13614
420	3.1	8.8	14.7	25.7	40.3	59	121	220	370	550	806	1173	1686	2346	3299	4398	6099	8063	10996
350	2.6	7.3	12.2	21.4	33.6	49	101	183	308	458	672	977	1405	1955	2749	3665	5082	6720	9163
280	2.0	5.9	9.8	17.1	26.9	39.1	81	147	247	367	538	782	1124	1564	2199	2932	4066	5376	7330
230	1.7	4.8	8.0	14.0	22.1	32.1	66	120	203	301	442	642	923	1285	1806	2409	3340	4416	6021
190	1.4	4.0	6.6	11.6	18.2	26.5	55	99	167	249	365	531	763	1061	1492	1990	2759	3648	4974
155	1.1	3.2	5.4	9.5	14.9	21.6	44.6	81	137	203	298	433	622	866	1217	1623	2251	2976	4058
125	0.9	2.6	4.4	7.6	12.0	17.5	36.0	65	110	164	240	349	502	698	982	1309	1815	2400	3273
100	0.73	2.1	3.5	6.1	9.6	14.0	28.8	52	88	131	192	279	401	559	785	1047	1452	1920	2618
84	0.61	1.8	2.9	5.1	8.1	11.7	24.2	44.0	74	110	161	235	337	469	660	880	1220	1613	2199
68	0.50	1.4	2.4	4.2	6.5	9.5	19.6	35.6	60	89	131	190	273	380	534	712	987	1306	1780
56	0.41	1.17	2.0	3.4	5.4	7.8	16.1	29.3	49	73	108	156	225	313	440	586	813	1075	1466
45	0.33	0.94	1.6	2.7	4.3	6.3	13.0	23.6	39.7	59	86	126	181	251	353	471	653	864	1178
37	0.27	0.77	1.3	2.3	3.6	5.2	10.7	19.4	32.6	48.4	71	103	149	207	291	387	537	710	969
30	0.22	0.63	1.0	1.8	2.9	4.2	8.6	15.7	26.4	39.3	58	84	120	168	236	314	436	576	785
25	0.18	0.52	0.9	1.5	2.4	3.5	7.2	13.1	22.0	32.7	48.0	70	100	140	196	262	363	480	655
20	0.15	0.42	0.70	1.2	1.9	2.8	5.8	10.5	17.6	26.2	38.4	56	80	112	157	209	290	384	524
16.5	0.12	0.35	0.58	1.0	1.6	2.3	4.8	8.6	14.5	21.6	31.7	46.1	66	92	130	173	240	317	432
13	0.095	0.27	0.45	0.79	1.2	1.8	3.7	6.8	11.5	17.0	25.0	36.3	54	75	106	141	196	259	353
11	0.080	0.23	0.38	0.67	1.1	1.5	3.2	5.8	9.7	14.4	21.1	30.7	44.2	61	86	115	160	211	288
9	0.066	0.19	0.31	0.55	0.86	1.3	2.6	4.7	7.9	11.8	17.3	25.1	36.1	50	71	94	131	173	236
7.5	0.055	0.16	0.26	0.46	0.72	1.0	2.2	3.9	6.6	9.8	14.4	20.9	30.1	42	59	79	109	144	196
5	0.036	0.10	0.17	0.31	0.48	0.7	1.4	2.6	4.4	6.5	9.6	14.0	20.1	27.9	39	52	73	96	131

◊ Ratings apply to Type T20 only.

Blue-Flex®
Selection Procedure

Table 6 – Flexible Coupling Service Factors• Service factors listed are typical values based on normal operation of the drive systems.

Application	Service Factor
AERATOR	2.0
AGITATORS	
Vertical and Horizontal Screw, Propeller, Paddle	1.0
BARGE HAUL PULLER	1.5
BLOWERS	
Centrifugal	1.0
Lobe or Vane	1.25
CAR DUMPERS	2.5
CAR PULLERS	1.5
CLARIFIER OR CLASSIFIER	1.0
COMPRESSORS	
Centrifugal	1.0
Rotary, Lobe or Vane	1.25
Rotary, Screw	1.0
Reciprocating Direct Connected	•
Without Flywheel	•
With Flywheel and Gear between Compressor and Prime Mover	
1 cylinder, single acting	3.0
1 cylinder, double acting	3.0
2 cylinders, single acting	3.0
2 cylinders, double acting	3.0
3 cylinders, single acting	3.0
3 cylinders, double acting	2.0
4 or more cyl., single act	1.75
4 or more cyl., double act	1.75
CONVEYORS	
Apron, Assembly, Belt, Chain, Flight, Screw	1.0
Bucket	1.25

Application	Service Factor
Live Roll, Shaker and Reciprocating	3.0
CRANES AND HOIST	
Main Hoist	1.7
Skip Hoist	1.75
Slope	1.5
Bridge, Travel or Trolley	1.75
DYNAMOMETER	1.0
ELEVATORS	
Bucket, Centrifugal Discharge	1.25
Freight or Passenger	◊
Gravity Discharge	1.25
ESCALATORS	◊
EXCITER, GENERATOR	1.0
EXTRUDER, PLASTIC	1.5
FANS	
Centrifugal	1.0
Cooling Tower	2.0
Forced Draft — Across the Line start	1.5
Forced Draft Motor driven thru fluid or electric slip clutch	1.0
Gas Recirculating	1.5
Induced Draft with damper control or blade cleaner	1.25
Induced Draft without controls	2.0
FEEDERS	
Apron, Belt, Disc, Screw	1.0
Reciprocating	2.5
GENERATORS	
Even Load	1.0
Hoist or Railway Service	1.5

Application	Service Factor
Welder Load	2.0
HAMMERMILL	1.75
LAUNDRY WASHER OR TUMBLER	2.0
LINE SHAFTS	
Any Processing Machinery	1.5
MACHINE TOOLS	
Auxiliary and Traverse Drive	1.0
Bending Roll, Notching Press, Punch Press, Planer, Plate Reversing	1.75
Main Drive	1.5
MAN LIFTS	◊
METAL FORMING MACHINES	
Continuous Caster	1.75
Draw Bench Carriage and Main Drive	2.0
Extruder	2.0
Farming Machine and Forming Mills	2.0
Slitters	1.0
Wire Drawing or Flattening	1.75
Wire Winder	1.5
Coilers and Uncoilers	1.5
MIXERS (see Agitators)	
Concrete	1.75
Muller	1.5
PRESS, PRINTING	1.5
PUG MILL	1.75
PULVERIZERS	
Hammermill and Hog	1.75
Roller	1.5
PUMPS	
Boiler Feed	1.5

Application	Service Factor
Centrifugal — Constant Speed	1.0
Frequent Speed Changes under Load	1.25
Descaling, with accumulators	1.25
Gear, Rotary, or Vane	1.25
Reciprocating, Plunger Piston	
1 cyl., single or double act	3.0
2 cyl., single acting	2.0
2 cyl., double acting	1.75
3 or more cylinders	1.5
Screw Pump, Progressing Cavity	1.25
Vacuum Pump	1.25
SCREENS	
Air Washing	1.0
Grizzly	2.0
Rotary Coal or Sand	1.5
Vibrating	2.5
Water	1.0
SKI TOWS & LIFTS	◊
STEERING GEAR	1.0
STOKER	1.0
TIRE SHREDDER	1.50
TUMBLING BARREL	1.75
WINCH, MANEUVERING	
Dredge, Marine	1.5
WINDLASS	1.5
WOODWORKING MACHINERY	1.0
WORK LIFT PLATFORMS	◊

Industry	Service Factor
AGGREGATE, CEMENT, MINING	
KILNS; TUBE, ROD AND BALL MILLS	
Direct or on L.S. shaft of Reducer, with final drive Machined Spur Gears	2.0
Single Helical or Herringbone Gears	1.75
Conveyors, Feeders, Screens, Elevators	
Crushers, Ore or Stone	2.5
Dryer, Rotary	1.75
Grizzly	2.0
Hammermill or Hog	1.75
Tumbling Mill or Barrel	1.75
BREWING AND DISTILLING	
Bottle and Can Filling Machines	1.0
Brew Kettle	1.0
Cookers, Continuous Duty	1.25
Lauter Tub	1.5
Mash Tub	1.25
Scale Hopper, Frequent Peaks	1.75
CLAY WORKING INDUSTRY	
Brick Press, Briquette Machine, Clay Working	
Machine, Pug Mill	1.75
DREDGES	
Cable Reel	1.75
Conveyors	1.25
Cutter head, Jig Drive	2.0
Maneuvering Winch	1.5
Pumps (uniform load)	1.5
Screen Drive, Stacker	1.75
Utility Winch	1.5
FOOD INDUSTRY	
Beet Slicer	1.75
Bottling, Can Filling Machine	1.0
Cereal Cooker	1.25
Dough Mixer, Meat Grinder	1.75
LUMBER	
Band Resaw	1.5
Circular Resaw, Cut-off	1.75
Edger, Head Rig, Hog	2.0
Gang Saw (Reciprocating)	•
Log Haul	2.0
Planer	1.75

Industry	Service Factor
Rolls, Non-Reversing	1.25
Rolls, Reversing	2.0
Sawdust Conveyor	1.25
Slab Conveyor	1.75
Sorting Table	1.5
Trimmer	1.75
METAL ROLLING MILLS	
Coilers (Up or Down) Cold Mills only	1.5
Coilers (Up or Down) Hot Mills only	2.0
Coke Plants	
Pusher Ram Drive	2.5
Door Opener	2.0
Pusher or Larry Car Traction Drive	3.0
Continuous Caster	1.75
Cold Mills — Strip Mills	•
Temper Mills	•
Cooling Beds	1.5
Drawbench	2.0
Feed Rolls - Blooming Mills	3.0
Furnace Pushers	2.0
Hot and Cold Saws	2.0
Hot Mills —	
Strip or Sheet Mills	•
Reversing Blooming	•
Slabbing Mills	•
Edger Drives	•
Ingot Cars	2.0
Manipulators	3.0
Merchant Mills	•
Mill Tables	
Roughing Breakdown Mills	3.0
Hot Bed or Transfer, non-reversing	1.5
Runout, reversing	3.0
Runout, non-reversing, non-plugging	2.0
Reel Drives	1.75
Rod Mills	•
Screwdown	2.0
Seamless Tube Mills	
Piercer	3.0
Thrust Block	2.0
Tube Conveyor Rolls	2.0
Reeler	2.0
Kick Out	2.0

Industry	Service Factor
Shear, Croppers	•
Sideguards	3.0
Skelp Mills	•
Slitters, Steel Mill only	1.75
Soaking Pit Cover Drives —	
Lift	1.0
Travel	2.0
Straighteners	2.0
Unscramblers (Billet Bundle Busters)	2.0
Wire Drawing Machinery	1.75
OIL INDUSTRY	
Chiller	1.25
Oilwell Pumping (not over 150% peak torque)	2.0
Paraffin Filter Press	1.5
Rotary Kiln	2.0
PAPER MILLS	
Barker Auxiliary, Hydraulic	2.0
Barker, Mechanical	2.0
Barking Drum	
L.S. shaft of reducer with final drive - Helical	
or Herringbone Gear	2.0
Machined Spur Gear	2.5
Cast Tooth Spur Gear	3.0
Beater & Pulper	1.75
Bleachers, Coaters	1.0
Calender & Super Calender	1.75
Chipper	2.5
Converting Machine	1.25
Couch	1.75
Cutter, Felt Whipper	2.0
Cylinder	1.75
Dryer	1.75
Felt Stretcher	1.25
Fourdrinier	1.75
Jordan	2.0
Log Haul	2.0
Line Shaft	1.5
Press	1.75
Pulp Grinder	1.75
Reel, Rewinder, Winder	1.5
Stock Chest, Washer, Thickener	1.5
Stock Pumps, Centrifugal	

Industry	Service Factor
Constant Speed	1.0
Frequent Speed Changes Under Load	1.25
Suction Roll	1.75
Vacuum Pumps	1.25
RU BBER INDUSTRY	
Calender	2.0
Cracker, Plasticator	2.5
Extruder	1.75
Intensive or Banbury Mixer	2.5
Mixing Mill, Refiner or Sheeter	
One or two in line	2.5
Three or four in line	2.0
Five or more in line	1.75
Tire Building Machine	2.5
Tire & Tube Press Opener (Peak Torque)	1.0
Tuber, Strainer, Pelletizer	1.75
Warming Mill	
One or two Mills in line	2.0
Three or more Mills in line	1.75
Washer	2.5
SEWAGE DISPOSAL EQUIPMENT	
Bar Screen, Chemical Feeders, Collectors, Dewatering Screen, Grit Collector	1.0
SUGAR INDUSTRY	
Cane Carrier & Leveler	1.75
Cane Knife & Crusher	2.0
Mill Stands, Turbine Driver with all Helical or Herringbone gears	1.5
Electric Drive or Steam Engine Drive with Helical, Herringbone, or Spur Gears with any Prime Mover	1.75
TEXTILE INDUSTRY	
Batcher	1.25
Calender, Card Machine	1.5
Cloth Finishing Machine	1.5
Dry Can, Loom	1.5
Dyeing Machinery	1.25
Knitting Machine	•
Mangle, Napper, Soaper	1.25
Spinner, Tenter Frame, Winder	1.5

• Refer to Factory

◊ Not Approved

See Application Listing

Table 7 – Engine Drive Service Factors

Service Factors (S. F.) for engine drives are those required for applications where good flywheel regulation prevents torque fluctuations greater than ±20%. For drives where torque fluctuations are greater or where the operation is near a serious critical or torsional vibration, a mass elastic study is necessary.

No. of Cylinders	4 or 5					6 or more				
Table 6 S.F.	1.0	1.25	1.5	1.75	2.0	1.0	1.25	1.5	1.75	2.0
Engine S.F.	2.0	2.25	2.5	2.75	3.0	1.5	1.75	2.0	2.25	2.5

To use Table 7, first determine application service factor from Table 6. Use that factor to determine Engine Service Factor from Table 7. When service factor from Table 6 is greater than 2.0, or where 1, 2 or 3 cylinder engines are involved, refer complete application details to Martin Engineering.

• For engine drives, refer to Table 7. Electric motors, generators, engines, compressors and other machines fitted with sleeves or straight roller bearings usually require limited end float couplings. If in doubt, provide axial clearances and centering forces to the Factory for a recommendation.

How to Order Blue-Flex®

How to Order

To ensure your exact specifications are met the following information is required for a quote or order.

Step 1. Application: Driver & Driven

Step 2. Power: Normal hp, Maximum hp or Torque (lb-in)

Step 3. Speed (RPM)

Step 4. Quantity

Step 5 Coupling Size and Type

Step 6. Shaft Gap or distance between shaft ends (BE Dimension)

Step 7. Bore Sizes: Must specify clearance or interference fit, or fit will be furnished per Table 14, page C-56. Bore sizes will be furnished as per Table 16 on page C-57 or Table 17 on pages C-58 and C-59 unless specified differently

Step 8. Shaft Dimensions as follows:

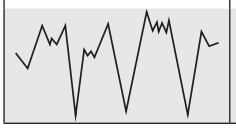
For Straight Shafts:

	Driving Shaft		**Driven Shaft**
Diameter	_____	Diameter	_____
Tolerance	_____	Tolerance	_____
Length	_____	Length	_____
Keyway	_____	Keyway	_____

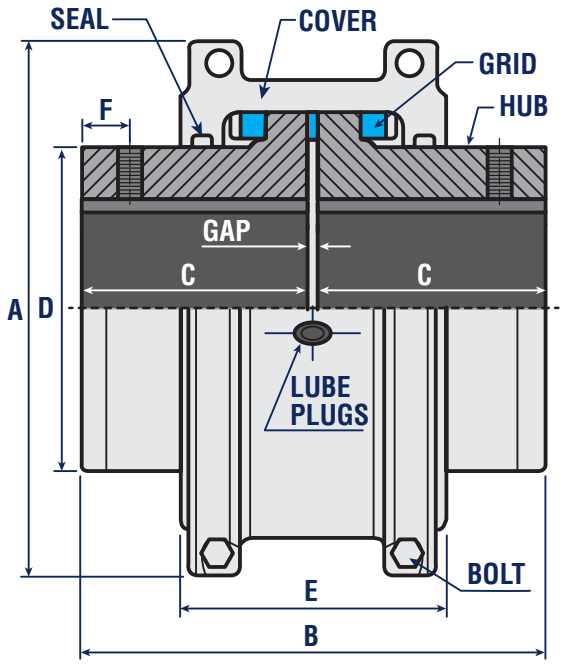
NOTE: Provide shaft tolerances if different than those shown in Table 15 through Table 17, pages C-56 to C-58. Unless otherwise specified, keyway sizes in inch shafts will be furnished based on key sizes listed in Table 14, page C-56, to Martin tolerances; metric keyways will be furnished for keys listed in Table 14, page C-56 per ISO/R773-1969 (ANSI/AGMA 9112) and JS9 width tolerances. For other shaft/bore requirements, consult Martin.

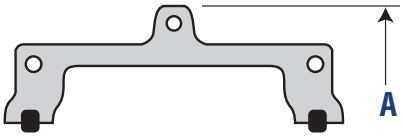
Service Factors

Are a guide, based on experience, of the ratio between coupling catalog rating and system characteristics. The system characteristics are best measured with a torque meter.

Torque Demands Driven Machine	Typical applications for electric motor or turbine driven equipment	Typical Service Factor
	Constant torque such as Centrifugal Pumps, Blowers and Compressors.	1.0
	Continuous duty with some torque variations including Plastic Extruders, Forced Draft Fans.	1.5
	Light shock loads from Metal Extruders, Cooling Towers, Cane Knife, Log Haul.	2.0
	Moderate shock loading as expected from a Car Dumper, Stone Crusher, Vibrating Screen.	2.5
	Heavy shock load with some negative torques from Roughing Mills, Reciprocating Pumps, Compressors, Reversing Runout Tables.	3.0
	Applications like Reciprocating Compressors with frequent torque reversals, which do not necessarily cause reverse rotations.	Refer to Factory

Stock
T10 Cover Design





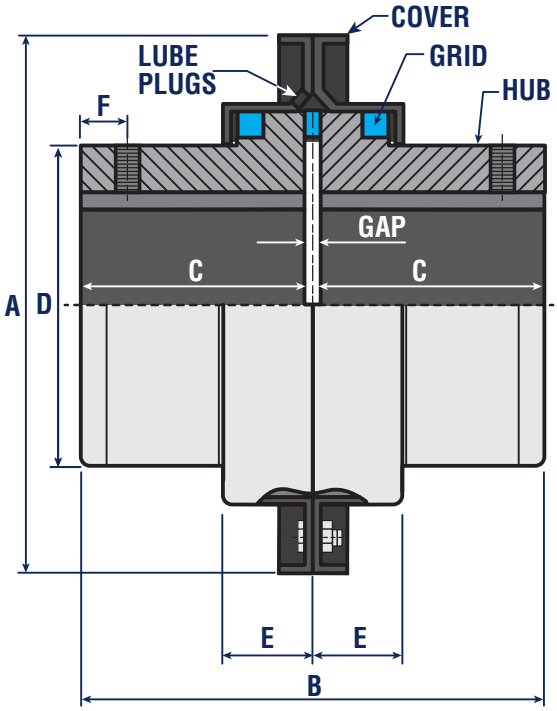
Sizes 1150 - 1200

Martin Blue-Flex® Grid Coupling – T10 Style

Coupling Size	HP per 100 RPM	Max Speed (RPM)	Basic Torque (lb-in)	Bore Dia.		Dimensions (in)						Gap (in)	Complete Weight (lb)	Lub. Wt. (lb)
				Max.	Min.	A	B	C	D	E	F	Normal		
1020T10	0.68	4,500	460	1.12	0.50	4.00	3.86	1.87	1.56	2.62	0.31	0.12	4.2	0.1
1030T10	1.93	4,500	1,320	1.37	0.50	4.37	3.86	1.87	1.94	2.69	0.31	0.12	5.7	0.1
1040T10	3.22	4,500	2,200	1.62	0.50	4.63	4.12	2.00	2.25	2.76	0.31	0.12	7.5	0.1
1050T10	5.63	4,500	3,850	1.87	0.50	5.43	4.87	2.37	2.63	3.13	0.31	0.12	11.9	0.1
1060T10	8.85	4,350	6,050	2.12	0.75	5.93	5.12	2.50	3.00	3.62	0.31	0.12	16.1	0.2
1070T10	13	4,125	8,800	2.50	0.75	6.37	6.12	3.00	3.44	3.74	0.50	0.12	22.0	0.2
1080T10	27	3,600	18,150	3.00	1.06	7.64	7.12	3.50	4.13	4.57	0.50	0.12	39.7	0.4
1090T10	48	3,600	33,000	3.50	1.06	8.39	7.87	3.87	4.87	4.80	0.63	0.12	55.1	0.6
1100T10	81	2,400	55,550	4.00	1.63	9.84	9.67	4.75	5.59	6.12	0.63	0.18	92.6	0.9
1110T10	121	2,250	82,500	4.50	1.63	10.63	10.18	5.00	6.31	6.36	0.75	0.18	119.0	1.1
1120T10	177	2,025	121,000	5.00	2.37	12.13	11.98	5.87	7.06	7.54	0.75	0.25	178.6	1.6
1130T10	257	1,800	176,000	6.00	2.63	13.62	12.98	6.37	8.56	7.68	1.19	0.25	266.8	2.0
1140T10	370	1,650	253,000	7.25	2.63	15.12	14.63	7.20	10.00	7.91	1.19	0.25	392.4	2.5
1150T10	515	1,500	352,000	8.00	4.25	17.84	14.64	7.20	10.60	10.68	1.19	0.25	515.9	4.3
1160T10	724	1,350	495,000	9.00	4.75	19.74	15.83	7.80	12.00	10.98	1.19	0.25	698.9	6.2
1170T10	965	1,225	660,000	10.00	5.25	22.30	17.24	8.50	14.00	11.98	1.19	0.25	987.7	7.7
1180T10	1338	1,100	915,000	11.00	6.00	24.80	19.05	9.40	15.50	12.64	1.50	0.25	1364.7	8.3
1190T10	1770	1,050	1,210,000	12.00	6.00	26.60	20.64	10.20	17.20	12.80	1.50	0.25	1710.8	9.7
1200T10	2413	900	1,650,000	13.00	7.00	29.80	22.24	11.00	19.60	14.00	1.50	0.25	2330.3	12.4

Consult Martin for higher speeds.
Max. bores listed fit standard recommended keys per ANSI B17.1

Stock
T20 Cover Design

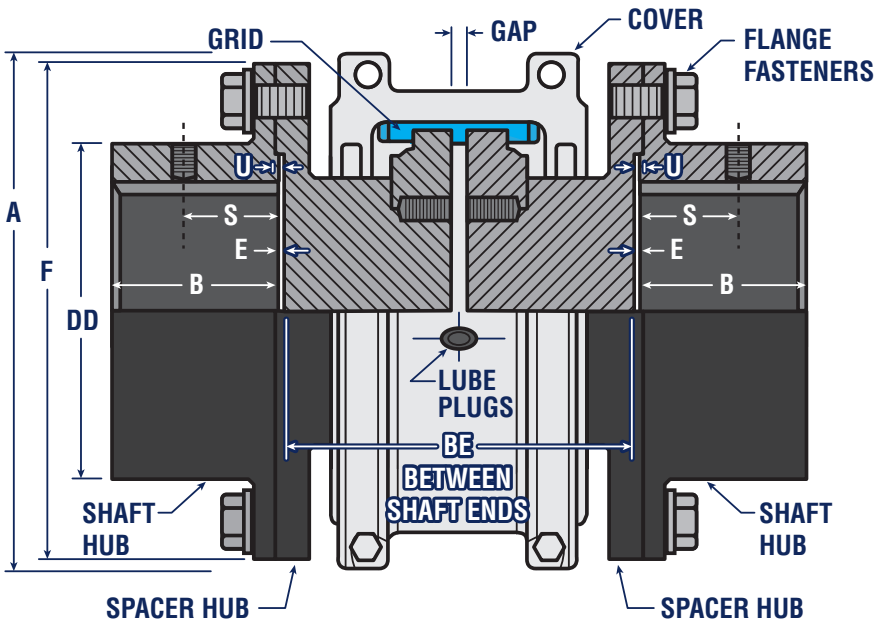


Martin Blue-Flex® Grid Coupling – T20 Style

Coupling Size	HP per 100 RPM	Max Speed (RPM)	Basic Torque (lb-in)	Bore Dia.		Dimensions (in)						Gap (in)	Complete Weight (lb)	Lub. Wt. (lb)
				Max.	Min.	A	B	C	D	E	F	Normal		
1020T20	0.68	6000	460	1.12	0.50	4.37	3.86	1.87	1.56	0.95	0.31	0.12	4.4	0.1
1030T20	1.93	6000	1,320	1.37	0.50	4.75	3.86	1.87	1.94	0.98	0.31	0.12	5.7	0.1
1040T20	3.22	6000	2,200	1.62	0.50	5.06	4.12	2.00	2.25	1.01	0.31	0.12	7.5	0.1
1050T20	5.63	6000	3,850	1.87	0.50	5.81	4.87	2.37	2.63	1.23	0.31	0.12	11.9	0.1
1060T20	8.85	6000	6,050	2.12	0.75	6.40	5.12	2.50	3.00	1.27	0.31	0.12	16.1	0.2
1070T20	13	5500	8,800	2.50	0.75	6.81	6.12	3.00	3.44	1.33	0.50	0.12	22.9	0.2
1080T20	27	4750	18,150	3.00	1.06	7.87	7.12	3.50	4.13	1.74	0.50	0.12	39.0	0.4
1090T20	48	4000	33,000	3.50	1.06	8.42	7.87	3.87	4.87	1.88	0.63	0.12	56.0	0.6
1100T20	81	3250	55,550	4.00	1.63	10.50	9.67	4.75	5.59	2.36	0.63	0.18	93.0	0.9
1110T20	121	3000	82,500	4.50	1.63	11.25	10.18	5.00	6.31	2.53	0.75	0.18	119.9	1.1
1120T20	177	2700	121,000	5.00	2.37	12.56	11.98	5.87	7.06	2.89	0.75	0.25	179.9	1.6
1130T20	257	2400	176,000	6.00	2.63	14.87	12.98	6.37	8.56	2.96	1.19	0.25	270.1	2.0
1140T20	370	2200	253,000	7.25	2.63	16.38	14.63	7.20	10.00	3.08	1.19	0.25	397.1	2.5
1150T20	515	2000	352,000	8.00	4.25	18.75	14.64	7.20	10.60	4.21	1.19	0.25	507.1	4.3
1160T20	724	1750	495,000	9.00	4.75	21.00	15.83	7.80	12.00	4.50	1.19	0.25	707.9	6.2
1170T20	965	1600	660,000	10.00	5.25	23.00	17.24	8.50	14.00	4.70	1.19	0.25	988.1	7.7
1180T20	1,338	1400	915,000	11.00	6.00	24.80	19.04	9.40	15.50	5.12	1.50	0.25	1302.9	8.3
1190T20	1,770	1300	1,210,000	12.00	6.00	26.97	20.64	10.20	17.20	5.31	1.50	0.25	1677.7	9.7
1200T20	2,413	1100	1,650,000	13.00	7.00	29.02	22.24	11.00	19.60	5.71	1.50	0.25	2250.9	12.4

Consult Martin for higher speeds.
Max. bores listed fit standard recommended keys per ANSI B17.1

Stock
T31 Spacer Design

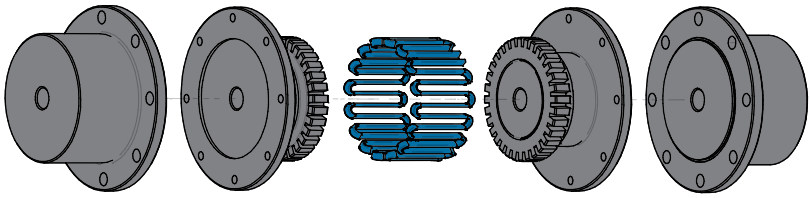


Martin Blue-Flex® Grid Coupling – T31 Style

Coupling Size	Torque Rating (in-lb)*	Allow Speed RPM**	Bore		A	B	BE		E	F	S	U	GAP	Flange Fasteners		Wt Without Bore & Min BE (lb)	Wt Added per inch of BE over Min (lb)	Lube Wt (lb)
			Max	Min ***			Min	Max						No. per Flange & Grade	Dia (in)			
1020T	460	3,600	1.38	0.5	3.82	1.38	3.5	8	0.03	3.38	1.08	0.08	0.19	4, GR 8	0.25	8.5	0.57	0.06
1030T	1,320	3,600	1.63	0.5	4.16	1.62	3.5	8.5	0.03	3.69	1.24	0.08	0.19	8, GR 8	0.25	11.5	0.87	0.09
1040T	2,200	3,600	2.13	0.5	4.5	2.12	3.5	8.5	0.03	4.44	1.08	0.08	0.19	8, GR 8	0.25	18.6	1.17	0.12
1050T	3,850	3,600	2.38	0.5	5.32	2.38	4.37	8.5	0.03	4.94	1.6	0.08	0.19	8, GR 8	0.31	28.2	1.58	0.15
1060T	6,050	3,600	2.88	0.75	5.82	2.88	4.81	13	0.06	5.69	1.7	0.11	0.19	8, GR 8	0.38	45.1	2.06	0.19
1070T	8,800	3,600	3.13	0.75	6.25	3.12	5	13	0.06	6	1.84	0.11	0.19	12, Gr 8	0.38	54.6	2.69	0.25
1080T	18,150	3,600	3.50	1.06	7.5	3.5	6.12	16	0.06	7	1.96	0.11	0.19	12, Gr 8	0.5	88.1	3.86	0.38
1090T	33,000	3,600	4	1.06	8.31	4	6.44	16	0.06	8.25	2.24	0.11	0.19	12, Gr 8	0.63	132	5.37	0.56
1100T	55,550	2,440	4.75	1.5	9.88	3.56	8	16	0.06	9.88	–	0.12	0.25	12, Gr 8	0.75	199	6.95	0.94
1110T	82,500	2,250	5.50	2	10.62	4.1	8.25	16	0.06	10.88	–	0.12	0.25	12, Gr 8	0.75	261	8.98	1.12
1120T	121,000	2,025	6.25	2.5	12.12	4.7	9.69	16	0.06	12.56	–	0.16	0.38	12, Gr 8	0.88	392	11.2	1.62
1130T	176,000	1,800	7	3	13.62	5.3	10.12	16	0.06	13.62	–	0.16	0.38	12, Gr 8	1	522	16.5	2
1140T	253,000	1,650	8	3.5	15.12	6	10.5	16	0.06	15.19	–	0.16	0.38	12, Gr 8	1.13	720	22.4	2.5

* Peak torque capacity is two times the published rating. Torque ratings for hubs with bushings differ from those shown, refer to Table 9, page C48.
** Consult Martin for higher speeds..
*** Minimum bore is the smallest bore to which a Rough Stock Bore (RSB) hub can be bored. Depending upon coupling size, RSB hubs may have only a blind centering hole or a through hole that will permit remachining of the hubs to the minimum bores specified.

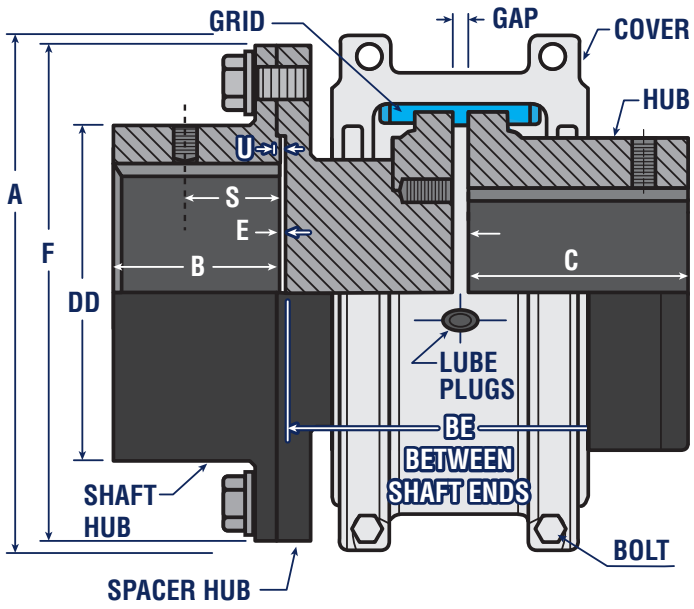
Spacer Selection Guide



Full Spacer Type T31 Application Shaft Separation – DBSE (Distance Between Shaft Ends)

DBSE	Spacer Hubs	1020T	1030T	1040T	1050T	1060T	1070T	1080T	1090T	1100T	1110T
3.500	Hub 1	1.625	1.625	1.625							
	Hub 2	1.625	1.625	1.625							
3.938	Hub 1	1.625	1.625	1.625							
	Hub 2	2.062	2.062	2.062							
4.250	Hub 1	1.625	1.625	1.625							
	Hub 2	2.375	2.375	2.375							
4.375	Hub 1	2.062	2.062	2.062	2.062						
	Hub 2	2.062	2.062	2.062	2.062						
4.688	Hub 1	2.062	2.062	2.062	2.062						
	Hub 2	2.375	2.375	2.375	2.375						
5.000	Hub 1	2.375	2.375	2.375	2.375	2.344	2.344				
	Hub 2	2.375	2.375	2.375	2.375	2.344	2.344				
5.219	Hub 1			1.625							
	Hub 2			3.344							
5.375	Hub 1		1.625	1.625							
	Hub 2		3.500	3.500							
5.510	Hub 1	2.631	2.631	2.631	2.631	2.600	2.600				
	Hub 2	2.631	2.631	2.631	2.631	2.600	2.600				
5.656	Hub 1		2.062	2.062	2.062						
	Hub 2		3.344	3.344	3.344						
5.813	Hub 1		2.062	2.062	2.062						
	Hub 2		3.500	3.500	3.500						
5.969	Hub 1		2.375	2.375	2.375						
	Hub 2		3.344	3.344	3.344						
6.125	Hub 1		2.375	2.375	2.375	2.344	2.344				
	Hub 2		3.500	3.500	3.500	3.469	3.469				
6.938	Hub 1	3.344	3.344	3.344	3.344	3.312					
	Hub 2	3.344	3.344	3.344	3.344	3.312					
7.000	Hub 1						3.344	3.344			
	Hub 2						3.344	3.344			
7.094	Hub 1			3.344	3.344		3.387	3.387	3.387		
	Hub 2			3.500	3.500		3.387	3.387	3.387		
7.250	Hub 1		3.500	3.500	3.500	3.469	3.469	3.469	3.469		
	Hub 2		3.500	3.500	3.500	3.469	3.469	3.469	3.469		
8.000	Hub 1									3.812	
	Hub 2									3.812	
8.593	Hub 1							3.469			
	Hub 2							4.812			
8.625	Hub 1					2.344	2.344				
	Hub 2					5.696	5.696				
8.875	Hub 1									3.812	
	Hub 2									4.688	
9.750	Hub 1					3.469	3.469	3.469	3.469	4.688	4.688
	Hub 2					5.969	5.969	5.969	5.969	4.688	4.688
9.938	Hub 1							4.812		4.733	4.733
	Hub 2							4.812		4.733	4.733
11.093	Hub 1							4.812			
	Hub 2							5.969			
12.250	Hub 1					5.969	5.969	5.969	5.969	5.938	
	Hub 2					5.969	5.969	5.969	5.969	5.938	
14.049	Hub 1										6.837
	Hub 2										6.837

Stock
T35 Spacer Design



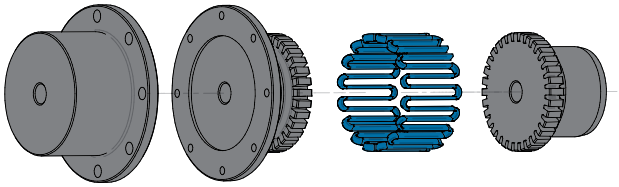
Martin Blue-Flex® Grid Coupling – T35 Style

Coupling Size	Torque Rating (in-lb)*	Allow Speed RPM**	Max Bore		Min Bore ***	A	B	BE		E	F	S	U	GAP	Flange Fasteners		Wt Without Bore & Min BE (lb)	Wt Added per inch of BE over Min (lb)	Lube Wt (lb)
			Shaft Hub	Hub				Min	Max						No. per Flange & Grade	Dia (in)			
1020T	460	3,600	1.38	1.13	0.5	3.82	1.38	1.78	4.03	0.03	3.38	1.08	0.08	0.19	4, GR 8	0.25	8.5	0.57	0.06
1030T	1,320	3,600	1.63	1.38	0.5	4.16	1.62	1.78	4.28	0.03	3.69	1.24	0.08	0.19	8, GR 8	0.25	11.5	0.87	0.09
1040T	2,200	3,600	2.13	1.63	0.5	4.5	2.12	1.78	4.28	0.03	4.44	1.08	0.08	0.19	8, GR 8	0.25	18.6	1.17	0.12
1050T	3,850	3,600	2.38	1.88	0.5	5.32	2.38	2.22	4.28	0.03	4.94	1.6	0.08	0.19	8, GR 8	0.31	28.2	1.58	0.15
1060T	6,050	3,600	2.88	2.13	0.75	5.82	2.88	2.44	6.53	0.06	5.69	1.7	0.11	0.19	8, GR 8	0.38	45.1	2.06	0.19
1070T	8,800	3,600	3.13	2.5	0.75	6.25	3.12	2.53	6.53	0.06	6	1.84	0.11	0.19	12, Gr 8	0.38	54.6	2.69	0.25
1080T	18,150	3,600	3.5	3	1.06	7.5	3.5	3.09	8.03	0.06	7	1.96	0.11	0.19	12, Gr 8	0.5	88.1	3.86	0.38
1090T	33,000	3,600	4	3.5	1.06	8.31	4	3.25	8.03	0.06	8.25	2.24	0.11	0.19	12, Gr 8	0.63	132	5.37	0.56
1100T	55,550	2,440	4.75	4	1.63	9.88	3.56	4.06	8.06	0.06	9.88	–	0.12	0.25	12, Gr 8	0.75	199	6.95	0.94
1110T	82,500	2,250	5.5	4.5	1.63	10.62	4.1	4.19	8.06	0.06	10.88	–	0.12	0.25	12, Gr 8	0.75	261	8.98	1.12
1120T	121,000	2,025	6.25	5	2.38	12.12	4.7	4.91	8.06	0.06	12.56	–	0.16	0.38	12, Gr 8	0.88	392	11.2	1.62
1130T	176,000	1,800	7	6	2.63	13.62	5.3	5.12	8.06	0.06	13.62	–	0.16	0.38	12, Gr 8	1	522	16.5	2
1140T	253,000	1,650	8	7.25	2.63	15.12	6	5.31	8.06	0.06	15.19	–	0.16	0.38	12, Gr 8	1.13	720	22.4	2.5

* Peak torque capacity is two times the published rating. Torque ratings for hubs with bushings differ from those shown, refer to Table 9, page C48.

** Consult Martin for higher speeds..

*** Minimum bore is the smallest bore to which a Rough Stock Bore (RSB) hub can be bored. Depending upon coupling size, RSB hubs may have only a blind centering hole or a through hole that will permit remachining of the hubs to the minimum bores specified.



Half Spacer Type T35 Application Shaft Separation – DBSE (Distance Between Shaft Ends)

DBSE	Spacer Hub 1 side only	Half Spacer type T35 Application Shaft Separation DBSE (Distance Between Shaft Ends)									
		1020T	1030T	1040T	1050T	1060T	1070T	1080T	1090T	1100T	1110T
1.781	Hub 1	1.625	1.625	1.625							
	Hub 2	STD	STD	STD							
2.219	Hub 1	2.062	2.062	2.062	2.062						
	Hub 2	STD	STD	STD	STD						
2.531	Hub 1	2.375	2.375	2.375	2.375	2.344	2.344				
	Hub 2	STD	STD	STD	STD	STD	STD				
3.500	Hub 1	3.344	3.344	3.344	3.344	3.312					
	Hub 2	STD	STD	STD	STD	STD					
3.531	Hub 1						3.344	3.344			
	Hub 2						STD	STD			
3.656	Hub 1			3.500	3.500	3.469	3.469	3.469	3.469		
	Hub 2			STD	STD	STD	STD	STD	STD		
4.062	Hub 1									3.812	
	Hub 2									STD	
4.938	Hub 1									4.688	4.688
	Hub 2									STD	STD
5.000	Hub 1							4.812		4.733	4.733
	Hub 2							STD		STD	STD
6.156	Hub 1					5.969	5.969	5.969	5.969		
	Hub 2					STD	STD	STD	STD		
6.188	Hub 1									5.938	
	Hub 2									STD	
7.090	Hub 1										6.837
	Hub 2										STD

Bore-To-Size Hubs

Blue-Flex® Bored-To-Size Hubs with Finished Bore, Keyway, and 2 Set Screw

Bore Size	Keyway (Inches)	Part Number by Coupling Size							
		1020T	1030T	1040T	1050T	1060T	1070T	1080T	1090T
Plain Bore		1020T-HUB	1030T-HUB	1040T-HUB	1050T-HUB	1060T-HUB	1070T-HUB	1080T-HUB	1090T-HUB
Inches									
1/2	1/8 x 1/16	1020T-HUB1/2	—	—	—	—	—	—	—
5/8	3/16 x 3/32	1020T-HUB5/8	1030T-HUB5/8	1040T-HUB5/8	—	—	—	—	—
3/4	3/16 x 3/32	1020T-HUB3/4	1030T-HUB3/4	1040T-HUB3/4	1050T-HUB3/4	1060T-HUB3/4	—	—	—
7/8	3/16 x 3/32	1020T-HUB7/8	1030T-HUB7/8	1040T-HUB7/8	1050T-HUB7/8	1060T-HUB7/8	—	—	—
15/16	1/4 x 1/8	1020T-HUB15/16	1030T-HUB15/16	1040T-HUB15/16	1050T-HUB15/16	1060T-HUB15/16	—	—	—
1	1/4 x 1/8	1020T-HUB1	1030T-HUB1	1040T-HUB1	1050T-HUB1	1060T-HUB1	1070T-HUB1	—	—
1 1/8	1/4 x 1/8	1020T-HUB1 1/8	1030T-HUB1 1/8	1040T-HUB1 1/8	1050T-HUB1 1/8	1060T-HUB1 1/8	1070T-HUB1 1/8	1080T-HUB1 1/8	—
1 3/16	1/4 x 1/8	—	1030T-HUB1 3/16	1040T-HUB1 3/16	1050T-HUB1 3/16	1060T-HUB1 3/16	1070T-HUB1 3/16	—	—
1 1/4	1/4 x 1/8	—	1030T-HUB1 1/4	1040T-HUB1 1/4	1050T-HUB1 1/4	1060T-HUB1 1/4	1070T-HUB1 1/4	1080T-HUB1 1/4	—
1 3/8	5/16 x 5/32	—	1030T-HUB1 3/8	1040T-HUB1 3/8	1050T-HUB1 3/8	1060T-HUB1 3/8	1070T-HUB1 3/8	1080T-HUB1 3/8	1090T-HUB1 3/8
1 7/16	3/8 x 3/16	—	—	1040T-HUB1 716	1050T-HUB1 716	1060T-HUB1 7/6	1070T-HUB1 716	1080T-HUB1 716	1090T-HUB1 7/16
1 1/2	3/8 x 3/16	—	—	1040T-HUB1 1/2	1050T-HUB1 1/2	1060T-HUB1 1/2	1070T-HUB1 1/2	1080T-HUB1 1/2	1090T-HUB1 1/2
1 9/16	3/8 x 3/16	—	—	1040T-HUB1 9/16	1050T-HUB1 9/16	1060T-HUB1 9/16	1070T-HUB1 9/16	1080T-HUB1 9/16	—
1 5/8	3/8 x 3/16	—	—	1040T-HUB1 5/8	1050T-HUB1 5/8	1060T-HUB1 5/8	1070T-HUB1 5/8	1080T-HUB1 5/8	1090T-HUB1 5/8
1 11/16	3/8 x 3/16	—	—	—	1050T-HUB1 11/16	1060T-HUB1 11/16	1070T-HUB1 11/16	1080T-HUB1 11/16	1090T-HUB1 11/16
1 3/4	3/8 x 3/16	—	—	—	1050T-HUB1 3/4	1060T-HUB1 3/4	1070T-HUB1 3/4	1080T-HUB1 3/4	1090T-HUB1 3/4
1 13/16	1/2 x 1/4	—	—	—	1050T-HUB1 13/16	1060T-HUB1 13/16	1070T-HUB1 13/16	1080T-HUB1 13/16	1090T-HUB1 13/16
1 7/8	1/2 x 1/4	—	—	—	1050T-HUB1 7/8	1060T-HUB1 7/8	1070T-HUB1 7/8	1080T-HUB1 7/8	1090T-HUB1 7/8
1 15/16	1/2 x 1/4	—	—	—	—	1060T-HUB1 15/16	1070T-HUB1 15/16	1080T-HUB1 15/16	1090T-HUB1 15/16
2	1/2 x 1/4	—	—	—	—	1060T-HUB2	1070T-HUB2	1080T-HUB2	1090T-HUB2
2 1/8	1/2 x 1/4	—	—	—	—	1060T-HUB2 1/8	1070T-HUB2 1/8	1080T-HUB2 1/8	1090T-HUB2 1/8
2 3/16	1/2 x 1/4	—	—	—	—	—	1070T-HUB2 3/16	1080T-HUB2 3/16	1090T-HUB2 3/16
2 1/4	1/2 x 1/4	—	—	—	—	—	1070T-HUB2 1/4	1080T-HUB2 1/4	1090T-HUB2 1/4
2 3/8	5/8 x 5/16	—	—	—	—	—	1070T-HUB2 3/8	1080T-HUB2 3/8	1090T-HUB2 3/8
2 7/16	5/8 x 5/16	—	—	—	—	—	1070T-HUB2 7/16	1080T-HUB2 7/16	1090T-HUB2 7/16
2 1/2	5/8 x 5/16	—	—	—	—	—	1070T-HUB2 1/2	1080T-HUB2 1/2	1090T-HUB2 1/2
2 5/8	5/8 x 5/16	—	—	—	—	—	—	1080T-HUB2 5/8	1090T-HUB2 5/8
2 11/16	5/8 x 5/16	—	—	—	—	—	—	1080T-HUB2 11/16	1090T-HUB2 11/16
2 3/4	5/8 x 5/16	—	—	—	—	—	—	1080T-HUB2 3/4	1090T-HUB2 3/4
2 7/8	3/4 x 3/8	—	—	—	—	—	—	1080T-HUB2 7/8	1090T-HUB2 7/8
2 15/16	3/4 x 3/8	—	—	—	—	—	—	1080T-HUB2 15/16	1090T-HUB2 15/16
3	3/4 x 3/8	—	—	—	—	—	—	1080T-HUB3	1090T-HUB3
3 1/8	3/4 x 3/8	—	—	—	—	—	—	—	1090T-HUB3 1/8
3 1/4	3/4 x 3/8	—	—	—	—	—	—	—	1090T-HUB3 1/4
3 3/8	7/8 x 7/16	—	—	—	—	—	—	—	1090T-HUB3 3/8
3 7/16	7/8 x 7/16	—	—	—	—	—	—	—	1090T-HUB3 7/16
3 1/2	7/8 x 7/16	—	—	—	—	—	—	—	1090T-HUB3 1/2
Taper Bushed		—	1030T-HUB1108	1040T-HUB1108	1050T-HUB1215	1060T-HUB1615	1070T-HUB2012	1080T-HUB2525	1090T-HUB3030
Metric									
14	5 x 2.3	1020T-HUB14MM	—	—	—	—	—	—	—
15	5 x 2.3	1020T-HUB15MM	—	—	—	—	—	—	—
16	5 x 2.3	1020T-HUB16MM	—	—	—	—	—	—	—
19	6 x 2.8	1020T-HUB19MM	1030T-HUB19MM	—	—	—	—	—	—
20	6 x 2.8	1020T-HUB20MM	1030T-HUB20MM	—	—	—	—	—	—
22	6 x 2.8	1020T-HUB22MM	1030T-HUB22MM	—	—	—	—	—	—
24	8 x 3.3	1020T-HUB24MM	1030T-HUB24MM	1040T-HUB24MM	—	—	—	—	—
25	8 x 3.3	1020T-HUB25MM	1030T-HUB25MM	1040T-HUB25MM	—	—	—	—	—
28	8 x 3.3	—	1030T-HUB28MM	1040T-HUB28MM	1050T-HUB28MM	—	—	—	—
30	8 x 3.3	—	1030T-HUB30MM	1040T-HUB30MM	1050T-HUB30MM	—	—	—	—
32	10 x 3.3	—	1030T-HUB32MM	1040T-HUB32MM	1050T-HUB32MM	1060T-HUB32MM	—	—	—
35	10 x 3.3	—	1030T-HUB35MM	1040T-HUB35MM	1050T-HUB35MM	1060T-HUB35MM	1070T-HUB35MM	—	—
38	10 x 3.3	—	—	1040T-HUB38MM	1050T-HUB38MM	1060T-HUB38MM	1070T-HUB38MM	1080T-HUB38MM	—
40	12 x 3.3	—	—	—	—	1060T-HUB40MM	1070T-HUB40MM	—	—
42	12 x 3.3	—	—	1040T-HUB42MM	1050T-HUB42MM	1060T-HUB42MM	1070T-HUB42MM	1080T-HUB42MM	1090T-HUB42MM
45	14 x 3.8	—	—	—	—	1060T-HUB45MM	1070T-HUB45MM	—	—
48	14 x 3.8	—	—	—	1050T-HUB48MM	1060T-HUB48MM	1070T-HUB48MM	1080T-HUB48MM	1090T-HUB48MM
50	14 x 3.8	—	—	—	—	1060T-HUB50MM	—	—	—
55	16 x 4.3	—	—	—	—	1060T-HUB55MM	1070T-HUB55MM	1080T-HUB55MM	1090T-HUB55MM
60	18 x 4.4	—	—	—	—	—	—	1080T-HUB60MM	—
65	18 x 4.4	—	—	—	—	—	—	—	1090T-HUB65MM
70	20 x 4.9	—	—	—	—	—	—	1080T-HUB70MM	1090T-HUB70MM
80	22 x 5.4	—	—	—	—	—	—	1080T-HUB80MM	1090T-HUB80MM
85	22 x 5.4	—	—	—	—	—	—	—	1090T-HUB85MM

Spacer and Shaft Hubs



Spacer Hubs



Shaft Hubs
Plain Bore and Finished Bore with Keyway, and 2 Set Screws Taper Bushed Available

Spacer Length	Part Number by Coupling Size									
	1020T	1030T	1040T	1050T	1060T	1070T	1080T	1090T	1100T	1110T
1.625	1020T-CL1.6250	1030T-CL1.6250	1040T-CL1.6250							
2.0620	1020T-CL2.0620	1030T-CL2.0620	1040T-CL2.0620	1050T-CL2.0620						
2.3440					1060T-CL2.3440	1070T-CL2.3440	1080T-CL3.3440			
2.3750	1020T-CL2.3750	1030T-CL2.3750	1040T-CL2.3750	1050T-CL2.3750						
2.6000					1060T-CL2.6000	1070T-CL2.6000				
2.6310	1020T-CL2.6310	1030T-CL2.6310	1040T-CL2.6310	1050T-CL2.6310						
3.3120					1060T-CL3.3120					
3.3440	1020T-CL3.3440	1030T-CL3.3440	1040T-CL3.3440	1050T-CL3.3440		1070T-CL3.3440				
3.3870						1070T-CL3.3870	1080T-CL3.3870	1090T-CL3.3870		
3.4690					1060T-CL3.4690	1070T-CL3.4690	1080T-CL3.4690	1090T-CL3.4690		
3.5000		1030T-CL3.5000	1040T-CL3.5000	1050T-CL3.5000						
3.8120									1100T-CL3.8120	
4.6880									1100T-CL4.6880	1110T-CL4.6880
4.7330									1100T-CL4.7330	1110T-CL4.7330
4.8120							1080T-CL4.8120			
5.2620									1100T-CL5.2620	
5.3250							1080T-CL5.3250	1090T-CL5.3250		
5.9375									1100T-CL5.9375	
5.9690					1060T-CL5.9690	1070T-CL5.9690	1080T-CL5.9690	1090T-CL5.9690		
6.8370										1110T-CL6.8370
6.9000								1090T-CL6.9000		

Blue-Flex® Shaft Hubs with Plain Bore and Finished Bore (with Keyway, and 2 Set Screws)

Bore Size	Keyway (Inches)	Part Number by Coupling Size									
		1020T	1030T	1040T	1050T	1060T	1070T	1080T	1090T	1100T	1110T
Plain Bore		1020T-SH	1030T-SH	1040T-SH	1050T-SH	1060T-SH	1070T-SH	1080T-SH	1090T-SH	1100T-SH	1110T-SH
1/2	1/8 x 1/16	1020T-SH1/2									
5/8	3/16 x 3/32	1020T-SH5/8	1030T-SH5/8					**Bore Size**	**1120T**	**1130T**	**1140T**
3/4	3/16 x 3/32	1020T-SH3/4	1030T-SH3/4	1040T-SH3/4				Plain Bore	1120T-SH	1130T-SH	1140T-SH
7/8	3/16 x 3/32	1020T-SH7/8	1030T-SH7/8	1040T-SH7/8							
1	1/4 x 1/8	1020T-SH1	1030T-SH1	1040T-SH1	1050T-SH1						
1 1/8	1/4 x 1/8	1020T-SH1 1/8	1030T-SH1 1/8	1040T-SH1 1/8	1050T-SH1 1/8	1060T-SH1 1/8					
1 1/4	1/4 x 1/8	1020T-SH1 1/4	1030T-SH1 1/4	1040T-SH1 1/4	1050T-SH1 1/4	1060T-SH1 1/4					
1 3/8	5/16 x 5/32	1020T-SH1 3/8	1030T-SH1 3/8	1040T-SH1 3/8	1050T-SH1 3/8	1060T-SH1 3/8	1070T-SH1 3/8				
1 1/2	3/8 x 3/16		1030T-SH1 1/2	1040T-SH1 1/2	1050T-SH1 1/2	1060T-SH1 1/2	1070T-SH1 1/2				
1 5/8	3/8 x 3/16		1030T-SH1 5/8	1040T-SH1 5/8	1050T-SH1 5/8	1060T-SH1 5/8	1070T-SH1 5/8	1080T-SH1 5/8		1100T-SH1 5/8	
1 3/4	3/8 x 3/16			1040T-SH1 3/4	1050T-SH1 3/4	1060T-SH1 3/4	1070T-SH1 3/4	1080T-SH1 3/4			
1 7/8	1/2 x 1/4			1040T-SH1 7/8	1050T-SH1 7/8	1060T-SH1 7/8	1070T-SH1 7/8	1080T-SH1 7/8	1090T-SH1 7/8		
2	1/2 x 1/4			1040T-SH2	1050T-SH2	1060T-SH2	1070T-SH2	1080T-SH2	1090T-SH2		
2 1/8	1/2 x 1/4			1040T-SH2 1/8	1050T-SH2 1/8	1060T-SH2 1/8	1070T-SH2 1/8	1080T-SH2 1/8	1090T-SH2 1/8		
2 1/4	1/2 x 1/4				1050T-SH2 1/4	1060T-SH2 1/4	1070T-SH2 1/4	1080T-SH2 1/4	1090T-SH2 1/4		
2 3/8	5/8 x 5/16				1050T-SH2 3/8	1060T-SH2 3/8	1070T-SH2 3/8	1080T-SH2 3/8	1090T-SH2 3/8		
2 1/2	5/8 x 5/16					1060T-SH2 1/2	1070T-SH2 1/2	1080T-SH2 1/2	1090T-SH2 1/2		
2 5/8	5/8 x 5/16					1060T-SH2 5/8	1070T-SH2 5/8	1080T-SH2 5/8	1090T-SH2 5/8		
2 7/8	3/4 x 3/8					1060T-SH2 7/8	1070T-SH2 7/8	1080T-SH2 7/8	1090T-SH2 7/8		
3	3/4 x 3/8						1070T-SH3	1080T-SH3	1090T-SH3	1100T-SH3	1110T-SH3
3 1/8	3/4 x 3/8							1080T-SH3 1/8	1090T-SH3 1/8		
3 1/4	3/4 x 3/8							1080T-SH3 1/4	1090T-SH3 1/4		
3 3/8	7/8 x 7/16							1080T-SH3 3/8	1090T-SH3 3/8	1100T-SH3 3/8	
3 1/2	7/8 x 7/16								1090T-SH3 1/2		
3 5/8	7/8 x 7/16								1090T-SH3 5/8		
3 7/8	1 x 1/2								1090T-SH3 7/8		
4	1 x 1/2								1090T-SH4	1100T-SH4	



Plain Bore Hubs
1-Day Rebore Available



Bored-To-Size Hubs
Finished Bore, Keyway, and 2 Set Screws
Taper Bushed Available



Blue-Flex® Grid

Coupling Size	Part Number
1020T	1020T-GRID
1030T	1030T-GRID
1040T	1040T-GRID
1050T	1050T-GRID
1060T	1060T-GRID
1070T	1070T-GRID
1080T	1080T-GRID
1090T	1090T-GRID
1100T	1100T-GRID
1110T	1110T-GRID
1120T	1120T-GRID
1130T	1130T-GRID
1140T	1140T-GRID
1150T	1150T-GRID
1160T	1160T-GRID
1170T	1170T-GRID
1180T	1180T-GRID
1190T	1190T-GRID
1200T	1200T-GRID



T10 Cover



T20 Cover



Fastener Sets



Seal & Gasket Kits

Blue-Flex® Parts and Kits

Coupling Size	T10 Cover Horizontal Split				T20 Cover Vertical Split for Higher RPM			
	Cover (Cover, Seals, Gaskets & Fasteners)	Cover Fastener Set	Seal Kit (Seal & Gasket)	Cover Grid Assemblies (Cover, Grid, Seals, Gaskets & Fasteners) *Includes Grease	Cover (Cover, Seals, Gaskets & Fasteners)	Cover Fastener Set	Seal Kit (Seal & Gasket)	Cover Grid Assemblies (Cover, Grid, Seals, Gaskets & Fasteners) *Includes Grease
1020T	1020T10-COV	1020T10-FAS	1020T10-SEAL	1020T10-SUBASY*	1020T20-COV	1020T20-FAS	1020T20-SEAL	1020T20-SUBASY*
1030T	1030T10-COV	1030T10-FAS	1030T10-SEAL	1030T10-SUBASY*	1030T20-COV	1030T20-FAS	1030T20-SEAL	1030T20-SUBASY*
1040T	1040T10-COV	1040T10-FAS	1040T10-SEAL	1040T10-SUBASY*	1040T20-COV	1040T20-FAS	1040T20-SEAL	1040T20-SUBASY*
1050T	1050T10-COV	1050T10-FAS	1050T10-SEAL	1050T10-SUBASY*	1050T20-COV	1050T20-FAS	1050T20-SEAL	1050T20-SUBASY*
1060T	1060T10-COV	1060T10-FAS	1060T10-SEAL	1060T10-SUBASY*	1060T20-COV	1060T20-FAS	1060T20-SEAL	1060T20-SUBASY*
1070T	1070T10-COV	1070T10-FAS	1070T10-SEAL	1070T10-SUBASY*	1070T20-COV	1070T20-FAS	1070T20-SEAL	1070T20-SUBASY*
1080T	1080T10-COV	1080T10-FAS	1080T10-SEAL	1080T10-SUBASY*	1080T20-COV	1080T20-FAS	1080T20-SEAL	1080T20-SUBASY*
1090T	1090T10-COV	1090T10-FAS	1090T10-SEAL	1090T10-SUBASY*	1090T20-COV	1090T20-FAS	1090T20-SEAL	1090T20-SUBASY*
1100T	1100T10-COV	1100T10-FAS	1100T10-SEAL	1100T10-SUBASY	1100T20-COV	1100T20-FAS	1100T20-SEAL	1100T20-SUBASY
1110T	1110T10-COV	1110T10-FAS	1110T10-SEAL	1110T10-SUBASY	1110T20-COV	1120T20-FAS	1110T20-SEAL	1110T20-SUBASY
1120T	1120T10-COV	1120T10-FAS	1120T10-SEAL	1120T10-SUBASY	1120T20-COV	1120T20-FAS	1120T20-SEAL	1120T20-SUBASY
1130T	1130T10-COV	1130T10-FAS	1130T10-SEAL	1130T10-SUBASY	1130T20-COV	1130T20-FAS	1130T20-SEAL	1130T20-SUBASY
1140T	1140T10-COV	1140T10-FAS	1140T10-SEAL	1140T10-SUBASY	1140T20-COV	1140T20-FAS	1140T20-SEAL	1140T20-SUBASY
1150T	1150T10-COV	1150T10-FAS	1150T10-SEAL	1150T10-SUBASY	1150T20-COV	1150T20-FAS	1150T20-SEAL	1150T20-SUBASY
1160T	1160T10-COV	1160T10-FAS	1160T10-SEAL	1160T10-SUBASY	1160T20-COV	1160T20-FAS	1160T20-SEAL	1160T20-SUBASY
1170T	1170T10-COV	1170T10-FAS	1170T10-SEAL	1170T10-SUBASY	1170T20-COV	1170T20-FAS	1170T20-SEAL	1170T20-SUBASY
1180T	1180T10-COV	1180T10-FAS	1180T10-SEAL	1180T10-SUBASY	1180T20-COV	1180T20-FAS	1180T20-SEAL	1180T20-SUBASY
1190T	1190T10-COV	1190T10-FAS	1190T10-SEAL	1190T10-SUBASY	1190T20-COV	1190T20-FAS	1190T20-SEAL	1190T20-SUBASY
1200T	1200T10-COV	1200T10-FAS	1200T10-SEAL	1200T10-SUBASY	1200T20-COV	1200T20-FAS	1200T20-SEAL	1200T20-SUBASY

Note: All Covers include Seal Kits

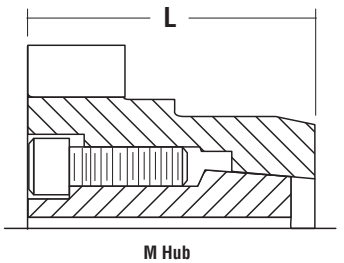
Table 8 – Type T Hub Bore Ranges with Square & Rectangular Keys

Size	Inches																Millimeters		
	Min Bore	For One Square Key			For One Rectangular Key						For Two Square Keys			For Two Rectangular Keys			Min Bore	Max Bore	
			Y=X			Y=X		Y=W/2				Y=X			Y=X			Std Bore Fits per Table 16	Int Fit per Table 16 w/Setscrew Over Keyway
		Max Bore	W	X	Max Bore	W	X	Max Bore	W	X	Max Bore	W	X	Max Bore	W	X			
1020T	0.500	1.125 •	0.250 •	0.125 •	1.187	0.250	0.093	1.250	0.250	0.062	–	–	–	–	–	–	13	28	24
1030T	0.500	1.375 •	0.312 •	0.156 •	1.437	0.375	0.125	1.562	0.375	0.062	–	–	–	–	–	–	13	35	30
1040T	0.500	1.625 •	0.375 •	0.187 •	1.750	0.375	0.125	1.750	0.375	0.062	–	–	–	–	–	–	13	43	38
1050T	0.500	1.875 •	0.500 •	0.250 •	2.000	0.500	0.187	2.125	0.500	0.125	–	–	–	–	–	–	13	50	45
1060T	0.750	2.125 •	0.500 •	0.250 •	2.250	0.500	0.187	2.375	0.625	0.125	–	–	–	–	–	–	20	56	50
1070T	0.750	2.500 •	0.625 •	0.312 •	2.687	0.625	0.218	2.875	0.750	0.125	–	–	–	–	–	–	20	67	60
1080T	1.062	3.000 •	0.750 •	0.375 •	3.250	0.750	0.250	3.375	0.875	0.187	–	–	–	–	–	–	27	80	75
1090T	1.062	3.500 •	0.875 •	0.437 •	3.750	0.875	0.312	3.875	1.000	0.250	–	–	–	–	–	–	27	95	90
1100T	1.625	4.000 •	1.000 •	0.500 •	4.250	1.000	0.375	4.500	1.000	0.250	–	–	–	–	–	–	42	110	100
1110T	1.625	4.500 •	1.000 •	0.500 •	4.625	1.250	0.437	5.000	1.250	0.250	–	–	–	–	–	–	42	120	110
1120T	2.375	5.000 •	1.250 •	0.625 •	5.375	1.250	0.437	5.750	1.500	0.250	–	–	–	–	–	–	61	140	120
1130T	2.625	6.000 •	1.500 •	0.750 •	6.500	1.500	0.500	6.500	1.500	0.250	–	–	–	–	–	–	67	170	150
1140T	2.625	7.000	1.750	0.875	7.250 •	1.750 •	0.750 •	7.750	2.000	0.500	–	–	–	–	–	–	67	200	180
1150T	4.250	7.500	1.750	0.875	8.000 •	2.000 •	0.750 •	–	–	–	–	–	–	–	–	–	108	215	190
1160T	4.750	8.500	2.000	1.000	9.000 •	2.000 •	0.750 •	–	–	–	–	–	–	–	–	–	121	240	215
1170T	5.250	9.750	2.500	1.250	10.000 •	2.500 •	0.875 •	–	–	–	10.750	1.750	0.875	11.000	1.750	0.750	134	280	240
1180T	6.000	10.750	2.500	1.250	11.000 •	2.500 •	0.875 •	–	–	–	12.000	1.750	0.875	12.250	2.000	0.750	153	300	260
1190T	6.000	11.750	3.000	1.500	12.000 •	3.000 •	1.000 •	–	–	–	13.000	2.000	1.000	13.250	2.000	0.750	153	336	290
1200T	7.000	12.750	3.000	1.500	13.000 •	3.000 •	1.000 •	–	–	–	14.000	2.500	1.250	14.250	2.500	0.875	178	360	320

Y = Shaft keyway depth; X = Hub keyway depth; W = Keyway width
• Maximum bores using standard recommended keys on Table 13.
◊ Consult Martin.

Table 9 – Taper Bushings for Type T Hubs

Coupling Size	M Hub			
	Taper Bushing			L (in)
	Catalog Part No.	Bore Range (in)	Torque (lb-in)	
1020T	–	–	–	–
1030T	1108	0.500 to 1.125	1,300	1.62
1040T	1108	0.500 to 1.125	1,300	1.62
1050T	1215	0.500 to 1.250	3,550	1.88
1060T	1615	0.500 to 1.625	4,300	2.12
1070T	2012	0.500 to 2.000	7,150	2.12
1080T	2525	0.750 to 2.500	11,300	2.62
1090T	3030	0.938 to 3.000	24,000	3.12
1100T	3030	0.938 to 3.000	24,000	3.50
1110T	3535	1.188 to 3.500	44,800	3.62
1120T	4040	1.438 to 4.000	77,300	4.38
1130T	4545	1.938 to 4.500	110,000	4.62
1140T	5050	2.438 to 5.000	126,000	5.12
1150T	5050	2.438 to 5.000	126,000	7.20
1160T	5050	2.438 to 5.000	126,000	7.80
1170T	7060	3.938 to 7.000	416,000	8.50
1180T	8065	4.438 to 8.000	456,000	9.40
1190T	8065	4.438 to 8.000	456,000	10.20
1200T	10085	7.000 to 10.000	869,000	11.00



M Hub

Bushings require shaft keyways as calculated in Table 13.
Taper bores not recommended for shock load, reverse load, or 1.75+ coupling service factor applications.

Table 10 – WR² Values (lb-in²)

WR2 values are based on hubs with no bore; seals, lube plugs and gaskets are not considered.

Coupling Size	Coupling Type					
	T10	T20	T31		T35	
			WR^2 (Min DBSE)	WR^2 Added per inch of DBSE	WR^2 (Min DBSE)	WR^2 Added per inch of DBSE
1020T	4.83	5.32	9.8	0.18	7.3	0.18
1030T	7.61	7.99	15.3	0.42	11.5	0.42
1040T	11.19	11.99	31.8	0.76	21.5	0.76
1050T	24.85	25.76	62	1.4	43.4	1.4
1060T	40.66	41.16	132	2.38	86.4	2.38
1070T	63.18	61.68	175	4.06	119	4.06
1080T	154	148	396	8.37	275	8.37
1090T	269	272	805	16.2	537	16.2
1100T	609	608	1756	27.2	1183	27.2
1110T	923	930	2726	45.4	1825	45.4
1120T	1755	1611	5341	70.9	3548	70.9
1130T	3378	3568	8563	153	5970	153
1140T	6306	6431	14871	283	10588	283
1150T	11922	11243	–	–	–	–
1160T	19876	20597	–	–	–	–
1170T	35621	35625	–	–	–	–
1180T	62553	63343	–	–	–	–
1190T	89359	90487	–	–	–	–
1200T	148676	150553	–	–	–	–

Table 11 – Type T Coupling Puller Bolt Holes (in)

Coupling Size	Coupling Type	
	B.C.	Tap Size (UNC)
1020T	1.531	#6-32 x 0.38
1030T	1.875	#6-32 x 0.38
1040T	2.125	#10-24 x 0.38
1050T	2.500	#10-24 x 0.38
1060T	2.875	0.250-20 x 0.38
1070T	3.312	0.250-20 x 0.38
1080T	3.937	0.250-20 x 0.38
1090T	4.562	0.3125-18 x 0.44
1100T	5.250	0.375-16 x 0.50
1110T	5.875	0.4375-14 x 0.62
1120T	6.625	0.4375-14 x 0.62
1130T	7.750	0.625-11 x 0.82
1140T	9.125	0.625-11 x 0.82
1150T	10.375	0.750-10 x 0.94
1160T	11.750	0.875-9 x 1.06
1170T	13.250	1.125-7 x 1.25
1180T	14.875	1.250-7 x 1.50
1190T	16.250	1.500-6 x 1.75
1200T	17.937	1.500-6 x 1.75

Table 12 – Reduced Max Bores Interference Fit & Setscrew Over Keyway — All Type M Couplings

Size	Bore
1020T	1.000
1030T	1.250
1040T	1.375
1050T	1.750
1060T	1.875
1070T	2.250
1080T	2.750
1090T	3.250
1100T	3.500
1110T	4.000

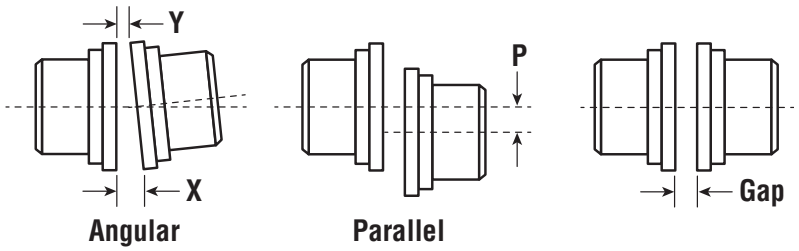
Size	Bore
1120T	4.500
1130T	5.500
1140T	6.500
1150T	7.000
1160T	8.000
1170T	9.000
1180T	9.750
1190T	10.750
1200T	11.750

Table 13 – Misalignment Capability (in)

Maximum life and minimum maintenance for the coupling and connected machinery will result if couplings are accurately aligned. Coupling life expectancy between initial alignment and maximum operating limits is a function of load, speed and lubrication. For applications requiring greater misalignment, refer application details to Martin.

Angular misalignment is expressed in degrees and as the difference between the value of X minus Y, as illustrated.

Parallel misalignment is the distance P between shaft center lines as shown.



Coupling Size	Recommended Installation Maximum		Maximum Operating		Normal GAP +/- 10%	
	Parallel Offset -P	Angular (1/16°) X Minus Y	Parallel Offset -P	Angular (1/16°) X Minus Y	T10, T20, T35	T31
	T10, T20, T31, T35		T10, T20, T31, T35			
1020T	0.006	0.002	0.012	0.009	0.125	0.188
1030T	0.006	0.003	0.012	0.010	0.125	0.188
1040T	0.006	0.003	0.012	0.013	0.125	0.188
1050T	0.008	0.004	0.016	0.016	0.125	0.188
1060T	0.008	0.004	0.016	0.018	0.125	0.188
1070T	0.008	0.005	0.016	0.020	0.125	0.188
1080T	0.008	0.006	0.016	0.024	0.125	0.188
1090T	0.008	0.007	0.016	0.028	0.125	0.188
1100T	0.010	0.008	0.020	0.032	0.188	0.250
1110T	0.010	0.009	0.020	0.035	0.188	0.250
1120T	0.011	0.010	0.022	0.040	0.250	0.375
1130T	0.011	0.012	0.022	0.047	0.250	0.375
1140T	0.011	0.013	0.022	0.053	0.250	0.375
1150T	0.012	0.015	0.024	0.061	0.250	0.375
1160T	0.012	0.017	0.024	0.070	0.250	0.375
1170T	0.012	0.020	0.024	0.079	0.250	0.375
1180T	0.015	0.022	0.030	0.089	0.250	0.375
1190T	0.015	0.024	0.030	0.096	0.250	0.375
1200T	0.015	0.027	0.030	0.107	0.250	0.375

Table 14 – Recommended Commercial Keys for Bores with One Key (in/mm)

Inches (Per ANSI B17.1 Standard)											
Shaft Dia.		Key	Shaft Dia.		Key	Shaft Dia.		Key	Shaft Dia.		Key
Over	Through		Over	Through		Over	Through		Over	Through	
0.438	0.562	0.125 x 0.125	1.750	2.250	0.500 x 0.500	4.500	5.500	1.250 x 1.250	11.000	13.000	3.000 x 2.000
0.562	0.875	0.188 x 0.188	2.250	2.750	0.625 x 0.625	5.500	6.500	1.500 x 1.500	13.000	15.000	3.500 x 2.500
0.875	1.250	0.250 x 0.250	2.750	3.250	0.750 x 0.750	6.500	7.500	1.750 x 1.500	15.000	18.000	4.000 x 3.000
1.250	1.375	0.312 x 0.312	3.250	3.750	0.875 x 0.875	7.500	9.000	2.000 x 1.500	18.000	20.000	5.000 x 3.500
1.375	1.750	0.375 x 0.375	3.750	4.500	1.000 x 1.000	9.000	11.000	2.500 x 1.750	–	–	–
Millimeters (Per ISO R773 Standard)											
6	8	2 x 2	38	44	12 x 8	95	110	28 x 16	260	290	63 x 32
8	10	3 x 3	44	50	14 x 9	110	130	32 x 18	290	330	70 x 36
10	12	4 x 4	50	58	16 x 10	130	150	36 x 20	330	380	80 x 40
12	17	5 x 5	58	65	18 x 11	150	170	40 x 22	380	440	90 x 45
17	22	6 x 6	65	75	20 x 12	170	200	45 x 25	440	500	100 x 50
22	30	8 x 7	75	85	22 x 14	200	230	50 x 28	–	–	–
30	38	10 x 8	85	95	25 x 14	230	260	56 x 32	–	–	–

Table 15 – Standard Bore Fits — Unless Otherwise Specified

Model	Coupling Size	Coupling Type	Bore Fit
Blue-Flex® Grid Couplings	1020 - 1090	T10, T20	Clearance
	1100 and Larger	T10, T20	Interference

Table 16 – Recommended Bores for Steel Hubs (in)

Shaft Dia.	Clearance Fit		Interference Fit	
	Hub Bore	Clearance	Hub Bore	Interference
+.0000 - .0005	**+.0010 - .0000**	**.0000 .0015**	**+.0005 - .0000**	**.0000 .0010**
0.5000	0.5000	↓	0.4990	↓
0.5625	0.5625		0.5615	
0.6250	0.6250		0.6240	
0.6875	0.6875		0.6865	
0.7500	0.7500		0.7490	
0.8125	0.8125		0.8115	
0.8750	0.8750		0.8740	
0.9375	0.9375		0.9365	
1.0000	1.0000		0.9990	
1.0625	1.0625		1.0615	
1.1250	1.1250		1.1240	
1.1875	1.1875		1.1865	
1.2500	1.2500		1.2490	
1.3125	1.3125		1.3115	
1.3750	1.3750		1.3740	
1.4375	1.4375		1.4365	
1.5000	1.5000		1.4990	
+.0000 - .0010	**+.0010 - .0000**	**.0000 .0020**	**+.0005 - .0000**	**.0000 .0015**
1.5625	1.5625	↓	1.5610	↓
1.6250	1.6250		1.6235	
1.6875	1.6875		1.6860	
1.7500	1.7500		1.7485	
1.8125	1.8125		1.8110	
1.8750	1.8750		1.8735	
1.9375	1.9375		1.9360	
2.0000	2.0000		1.9985	
+.0000 - .0010	**+.0015 - .0000**	**.0000 .0025**	**+.0005 - .0000**	**.0000 .0015**
2.0625	2.0625	↓	2.0610	↓
2.1250	2.1250		2.1235	
2.1875	2.1875		2.1860	
+.0000 - .0010	**+.0015 - .0000**	**.0000 .0025**	**+.0010 - .0000**	**.0000 .0020**
2.2500	2.2500	↓	2.2480	↓
3.3125	2.3125		2.3105	
2.3750	2.3750		2.3730	
2.4375	2.4375		2.4355	
2.5000	2.5000		2.4980	
2.5625	2.5625		2.5605	
2.6250	2.6250		2.6230	
2.6875	2.6875		2.6855	
2.7500	2.7500		2.7480	
2.8125	2.8125		2.8105	
2.8750	2.8750		2.8730	
2.9375	2.9375		2.9355	
3.0000	3.0000		2.9980	

Shaft Dia.	Clearance Fit		Interference Fit	
	Hub Bore	Clearance	Hub Bore	Interference
+.0000 - .0010	**+.0015 - .0000**	**.0000 .0025**	**+.0010 - .0000**	**.0005 .0025**
3.0625	3.0625	↓	3.0600	↓
3.1250	3.1250		3.1225	
3.1875	3.1875		3.1850	
3.2500	3.2500		3.2475	
3.3125	3.3125		3.3100	
3.3750	3.3750		3.3725	
3.4375	3.4375		3.4350	
3.5000	3.5000		3.4975	
3.5625	3.5625		3.5600	
3.6250	3.6250		3.6225	
3.6875	3.6875		3.6850	
3.7500	3.7500		3.7475	
3.8125	3.8125		3.8100	
3.8750	3.8750		3.8725	
3.9375	3.9375		3.9350	
4.0000	4.0000		3.9975	
+.0000 - .0010	**+.0015 - .0000**	**.0000 .0025**	**+.0015 - .0000**	**.0010 .0035**
4.0625	4.0625	↓	4.0590	↓
4.1250	4.1250		4.1215	
4.1875	4.1875		4.1840	
4.2500	4.2500		4.2465	
4.3125	4.3125		4.3090	
4.3750	4.3750		4.3715	
4.4375	4.4375		4.4340	
4.5000	4.5000		4.4965	
4.5625	4.5625		4.5590	
4.6250	4.6250		4.6215	
4.6875	4.6875		4.6840	
4.7500	4.7500		4.7465	
4.8125	4.8125		4.8090	
4.8750	4.8750		4.8715	
4.9375	4.9375		4.9340	
5.0000	5.0000		4.9965	
5.0625	5.0625		5.0585	**.0015 .0040**
5.1250	5.1250		5.1210	
5.1875	5.1875	↓	5.1835	↓
5.2500	5.2500		5.2460	
5.3125	5.3125		5.3085	
5.3750	5.3750		5.3710	
5.4375	5.4375		5.4335	
5.5000	5.5000		5.4960	
5.5625	5.5625		5.5585	
5.6250	5.6250		5.6210	
5.6875	5.6875		5.6835	
5.7500	5.7500		5.7460	
5.8125	5.8125		5.8085	
5.8750	5.8750		5.8710	
5.9375	5.9375		5.9335	
6.0000	6.0000		5.9960	
6.2500	6.2500		6.2460	
6.5000	6.5000		6.4960	

Shaft Dia.	Interference Fit	
	Hub Bore	Interference
0000 - .0010	**+.0015 - .0000**	**.0015 .0040**
6.7500	6.7460	↓
7.0000	6.9960	
+.0000 - .0010	**+.0020 - .0000**	**.0020 .0050**
7.250	7.2450	↓
7.500	7.4950	
7.750	7.7450	
8.000	7.9950	
8.250	8.2445	**.0025**
8.500	8.4945	**.0055**
8.750	8.7445	↓
9.000	8.9945	
9.250	9.2440	**.0030**
9.500	9.4940	**.0060**
9.750	9.7440	↓
10.000	9.9940	
10.250	10.2435	**.0035**
10.500	10.4935	**.0065**
10.750	10.7435	↓
11.000	10.9935	
11.250	11.2430	**.0040**
11.500	11.4930	**.0070**
11.750	11.7430	↓
12.000	11.9930	
12.500	12.4925	**.0045**
13.000	12.9925	**.0075**
13.500	13.4920	**.0050**
14.000	13.9920	**.0080**
14.500	14.4915	**.0055**
15.000	14.9915	**.0085**
+.000 - .001	**+.0025 - .0000**	**.0055 .0090**
15.500	15.4910	↓
16.000	15.9910	
16.500	16.4905	**.0060**
17.000	16.9905	**.0095**
17.500	17.4895	.0070
18.000	17.9895	.0105
18.500	18.4890	.0075
19.000	18.9890	.0110
19.500	19.4880	.0085
20.000	19.9880	.0120

For shaft diameters larger than 20.000, use an average interference fit of 0.0005 per inch of shaft diameter within the following bore tolerances:

+.003, –.000 for over 20 to 30 dia. incl.
+.004, –.000 for over 30 to 40 dia. incl.

Tolerances and fits comply with, or are within, AGMA 9002 standard (Class 1 clearance fit).

Table 17 – Recommended Bores for Metric Shafts per ISO/R775–1969 (ANSI/AGMA 9112)

	Shaft Diameter	Clearance Fit		Transitional Fit		Interference Fit	
		Hub Bore	Fit*	Hub Bore	Fit*	Hub Bore	Fit*
MM	**j6**	**F7**	**+.008**	**H7**	**-.008**	**M6**	**-.023**
	+.008 / -.003	**+.016 / +.034**	**+.037**	**+.000 / +.018**	**+.021**	**-.015 / -.004**	**-.001**
12	0.4727 / 0.4724	0.4731 / 0.4737	+.0003	0.4725 / 0.4731	-.0003	0.4718 / 0.4723	-.0009
14	0.5515 / 0.5511	0.5518 / 0.5525	+.0015	0.5512 / 0.5519	+.0008	0.5506 / 0.5511	+.0000
16	0.6302 / 0.6298	0.6306 / 0.6312	↓	0.6300 / 0.6306	↓	0.6293 / 0.6298	↓
18	0.7089 / 0.7086	0.7093 / 0.7100		0.7087 / 0.7093		0.7080 / 0.7085	
MM	**j6**	**F7**	**+.011**	**H7**	**-.009**	**M6**	**-.026**
	+.009 / -.004	**+.020 / +.041**	**+.045**	**+.000 / +.021**	**+.025**	**-.017 / -.004**	**-.000**
19	0.7483 / 0.7479	0.7488 / 0.7496	+.0004	0.7481 / 0.7488	-.0004	0.7473 / 0.7479	-.0010
20	0.7877 / 0.7873	0.7882 / 0.7890	+.0018	0.7874 / 0.7882	+.0010	0.7867 / 0.7873	+.0000
22	0.8665 / 0.8660	0.8670 / 0.8677		0.8662 / 0.8669		0.8654 / 0.8660	
24	0.9452 / 0.9448	0.9457 / 0.9465		0.9449 / 0.9457		0.9442 / 0.9448	
25	0.9846 / 0.9841	0.9851 / 0.9858		0.9843 / 0.9850		0.9835 / 0.9841	
28	1.1027 / 1.1022	1.1032 / 1.1039	↓	1.1024 / 1.1032	↓	1.1017 / 1.1022	↓
30	1.1814 / 1.1810	1.1819 / 1.1827		1.1811 / 1.1819		1.1804 / 1.1810	
>30	**k6**	**F7**	**+.007**	**H7**	**-.018**	**K6**	**-.031**
MM	**+.018 / +.002**	**+.025 / +.050**	**+.048**	**+.000 / +.025**	**+.023**	**- .013 / +.003**	**+.001**
32	1.2605 / 1.2600	1.2609 / 1.2618	+.0003	1.2599 / 1.2608	-.0007	1.2593 / 1.2600	-.0012
35	1.3786 / 1.3781	1.3790 / 1.3799	+.0019	1.3780 / 1.3789	+.0009	1.3774 / 1.3781	+.0000
38	1.4967 / 1.4962	1.4971 / 1.4980		1.4961 / 1.4970		1.4955 / 1.4962	
40	1.5755 / 1.5750	1.5758 / 1.5767		1.5748 / 1.5758		1.5743 / 1.5750	
42	1.6542 / 1.6537	1.6546 / 1.6555		1.6536 / 1.6545		1.6530 / 1.6537	
45	1.7723 / 1.7718	1.7727 / 1.7736		1.7717 / 1.7726		1.7711 / 1.7718	
48	1.8904 / 1.8899	1.8908 / 1.8917	↓	1.8898 / 1.8907	↓	1.8892 / 1.8899	↓
50	1.9692 / 1.9686	1.9695 / 1.9704		1.9685 / 1.9695		1.9680 / 1.9687	
>50	**m6**	**F7**	**+.000**	**H7**	**-.030**	**K6**	**-.051**
MM	**+.030 / +.011**	**+.030 / +.060**	**+.049**	**+.000 / +.030**	**+.019**	**- .021 / +.009**	**+.002**
55	2.1665 / 2.1658	2.1666 / 2.1677	+.0000	2.1654 / 2.1665	-.0012	2.1645 / 2.1657	-.0020
56	2.2059 / 2.2052	2.2059 / 2.2071	+.0019	2.2047 / 2.2059	+.0007	2.2039 / 2.2051	-.0001
60	2.3634 / 2.3627	2.3634 / 2.3645		2.3622 / 2.3634		2.3614 / 2.3626	
63	2.4815 / 2.4808	2.4815 / 2.4827		2.4803 / 2.4815		2.4795 / 2.4807	
65	2.5602 / 2.5595	2.5603 / 2.5614		2.5591 / 2.5602		2.5582 / 2.5594	
70	2.7571 / 2.7564	2.7571 / 2.7582		2.7559 / 2.7571		2.7551 / 2.7563	
71	2.7964 / 2.7957	2.7965 / 2.7976		2.7953 / 2.7964		2.7944 / 2.7957	
75	2.9539 / 2.9532	2.9540 / 2.9551		2.9528 / 2.9539		2.9519 / 2.9531	
80	3.1508 / 3.1501	3.1508 / 3.1519	↓	3.1496 / 3.1508	↓	3.1488 / 3.1500	↓
>80	**m6**	**F7**	**+.001**	**H7**	**-.035**	**M7**	**-.070**
MM	+035 / +.013	+.036 / +.071	+.058	+.000 / +.035	+.022	-.035 / +.000	-.013
85	3.3478 / 3.3470	3.3479 / 3.3492	+.0000	3.3465 / 3.3478	-.0014	3.3451 / 3.3465	-.0028
90	3.5447 / 3.5438	3.5447 / 3.5461	+.0023	3.5433 / 3.5447	+.0009	3.5419 / 3.5433	-.0005
95	3.7415 / 3.7407	3.7416 / 3.7429	↓	3.7402 / 3.7415	↓	3.7388 / 3.7402	↓
100	3.9384 / 3.9375	3.9384 / 3.9398		3.9370 / 3.9384		3.9356 / 3.9370	
>100	**m6**	**F7**		**H7**		**P7**	**-.094**
MM	**+.035 / +.013**	**+.036 / +.071**		**+.000 / +.035**		**-.059 / -.024**	**-.037**
110	4.3321 / 4.3312	4.3321 / 4.3335	↓	4.3307 / 4.3321	↓	4.3284 / 4.3298	-.0037
120	4.7258 / 4.7249	4.7258 / 4.7272		4.7244 / 4.7258		4.7221 / 4.7235	-.0015
>120	**m6**	**F7**	**+.003**	**H7**	**-.040**	**P7**	**-.108**
MM	**+.040 / +.015**	**+.043 / +.083**	**+.068**	**+.000 / +.040**	**+.025**	**-.068 / -.028**	**-.043**
125	4.9228 / 4.9219	4.9230 / 4.9245	+.0001	4.9213 / 4.9228	-.0016	4.9186 / 4.9202	-.0043
130	5.1197 / 5.1187	5.1198 / 5.1214	+.0027	5.1181 / 5.1197	+.0010	5.1154 / 5.1170	-.0017
140	5.5134 / 5.5124	5.5135 / 5.5151		5.5118 / 5.5134		5.5091 / 5.5107	
150	5.9071 / 5.9061	5.9072 / 5.9088		5.9055 / 5.9071		5.9028 / 5.9044	
160	6.3008 / 6.2998	6.3009 / 6.3025		6.2992 / 6.3008		6.2965 / 6.2981	
170	6.6945 / 6.6935	6.6946 / 6.6962		6.6929 / 6.6945		6.6902 / 6.6918	
180	7.0882 / 7.0872	7.0883 / 7.0899	↓	7.0866 / 7.0882	↓	7.0839 / 7.0855	↓
>180	**m6**	**F7**	**+.004**	**H7**	**-.046**	**P7**	**-.125**
MM	**+.046 / +.017**	**+.050 / +.096**	**+.079**	**+.000 / +.046**	**+.029**	**-.079 / -.033**	**-.050**
190	7.4821 / 7.4810	7.4823 / 7.4841	+.0002	7.4803 / 7.4821	-.0018	7.4772 / 7.4790	-.0049
200	7.8758 / 7.8747	7.8760 / 7.8778	+.0031	7.8740 / 7.8758	+.0011	7.8709 / 7.8727	-.0020

Dimensions in **BOLD** are in millimeters, rest is in inches.

* Positive values are clearance, negative values are interference. For reference only.

Continued on Continued on Page C-59

Table 17 – Recommended Bores for Metric Shafts per ISO/R775–1969 (ANSI/AGMA 9112)

	Shaft Diameter	Clearance Fit		Transitional Fit		Interference Fit	
		Hub Bore	Fit*	Hub Bore	Fit*	Hub Bore	Fit*
>200	**m6**	**F7**		**H7**		**R7**	**-.155**
MM	**+.046 / +.017**	**+.050 / +.096**		**+.000 / +.046**		**-.109 / -.063**	**-.080**
210	8.2695 / 8.2684	8.2697 / 8.2715		8.2677 / 8.2695		8.2634 / 8.2652	-.0061
220	8.6632 / 8.6621	8.6634 / 8.6652		8.6614 / 8.6632		8.6571 / 8.6589	-.0031
225	8.8601 / 8.8589	8.8602 / 8.8620		8.8583 / 8.8601		8.8540 / 8.8558	↓
>225	**m6**	**F7**		**H7**		**R7**	**-.159**
MM	**+.046 / +.017**	**+.050 / +.096**		**+.000 / +.046**		**-.113 / -.067**	**-.084**
230	9.0569 / 9.0558	9.0571 / 9.0589		9.0551 / 9.0569		9.0507 / 9.0525	-.0063
240	9.4506 / 9.4495	9.4508 / 9.4526		9.4488 / 9.4506		9.4444 / 9.4462	-.0033
250	9.8443 / 9.8432	9.8445 / 9.8463		9.8425 / 9.8443		9.8381 / 9.8399	↓
>250	m6	F7	+.004	H7	-.052	R7	-.178
MM	+.052 / +.020	+.056 / +.108	+.088	+.000 / +.052	+.032	-.126 / -.074	-.094
260	10.2383 / 10.2370	10.2384 / 10.2405	+.0002	10.2362 / 10.2383	-.0020	10.2313 / 10.2333	-.0070
270	10.6320 / 10.6307	10.6321 / 10.6342	+.0035	10.6299 / 10.6320	+.0013	10.6250 / 10.6270	-.0037
280	11.0257 / 11.0244	11.0258 / 11.0279		11.0236 / 11.0257		11.0187 / 11.0207	↓
>280	m6	F7		H7		R7	-.182
MM	+.052 / +.020	+.056 / +.108		+.000 / +.052		-.130 / -.078	-.098
290	11.4194 / 11.4181	11.4195 / 11.4216		11.4173 / 11.4194		11.4122 / 11.4143	-.0072
300	11.8131 / 11.8118	11.8132 / 11.8153		11.8110 / 11.8131		11.8059 / 11.8080	-.0039
310	12.2068 / 12.2055	12.2069 / 12.2090		12.2047 / 12.2068		12.1996 / 12.2017	
315	12.4036 / 12.4024	12.4038 / 12.4058		12.4016 / 12.4036		12.3965 / 12.3985	↓
>315	m6	F7	+.005	H7	-.057	R7	-.201
MM	.+057 / +.021	+.062 / +.119	+.098	+.000 / +.057	+.036	-.144 / -.087	-.108
320	12.6007 / 12.5993	12.6009 / 12.6031	+.0008	12.5984 / 12.6007	-.0022	12.5928 / 12.5950	-.0079
330	12.9944 / 12.9930	12.9946 / 12.9968		12.9921 / 12.9944	+.0014	12.9865 / 12.9887	-.0043
340	13.3881 / 13.3867	13.3883 / 13.3905		13.3858 / 13.3881		13.3802 / 13.3824	
350	13.7818 / 13.7804	13.7820 / 13.7842		13.7795 / 13.7818		13.7739 / 13.7761	↓
355	13.9786 / 13.9772	13.9788 / 13.9811		13.9764 / 13.9786		13.9707 / 13.9730	
>355	m6	F7		H7		R8	-.260
MM	+.057 / +.021	+.062 / +.119		+.000 / +.057		-.203 / -.114	-.135
360	14.1755 / 14.1741	14.1757 / 14.1779		14.1732 / 14.1755		14.1652 / 14.1687	-.0102
370	14.5692 / 14.5678	14.5694 / 14.5716		14.5669 / 14.5692		14.5589 / 14.5624	-.0053
380	14.9629 / 14.9615	14.9631 / 14.9653		14.9606 / 14.9629		14.9526 / 14.9561	
390	15.3566 / 15.3552	15.3568 / 15.3590		15.3543 / 15.3566		15.3463 / 15.3498	↓
400	15.7503 / 15.7489	15.7505 / 15.7527		15.7480 / 15.7503		15.7400 / 15.7435	
>400	m6	F7	+.005	H7	-.063	R8	-.286
MM	+.063 / +.023	+.068 / +.131	+.108	+.000 / +.063	+.040	-.223 / -.126	-.149
410	16.1442 / 16.1426	16.1444 / 16.1469	+.0002	16.1417 / 16.1442	-.0025	16.1330 / 16.1368	-.0113
420	16.5379 / 16.5363	16.5381 / 16.5406	+.0043	16.5354 / 16.5379	+.0016	16.5267 / 16.5305	-.0059
430	16.9316 / 16.9300	16.9318 / 16.9343		16.9291 / 16.9316		16.9204 / 16.9242	
440	17.3253 / 17.3237	17.3255 / 17.3280		17.3228 / 17.3253		17.3141 / 17.3179	↓
450	17.7190 / 17.7174	17.7192 / 17.7217		17.7165 / 17.7190		17.7078 / 17.7116	
>450	m6	F7		H7		R8	-.292
MM	+.063 / +.023	+.068 / +.131		+.000 / +.063		-.229 / -.132	-.155
460	18.1127 / 18.1111	18.1129 / 18.1154		18.1102 / 18.1127		18.1012 / 18.1050	-.0115
470	18.5064 / 18.5048	18.5066 / 18.5091		18.5039 / 18.5064		18.4949 / 18.4987	-.0061
480	18.9001 / 18.8985	18.9003 / 18.9028		18.8976 / 18.9001		18.8886 / 18.8924	
490	19.2938 / 19.2922	19.2940 / 19.2965		19.2913 / 19.2938		19.2823 / 19.2861	
500	19.6875 / 19.6859	19.6877 / 19.6902		19.6850 / 19.6875		19.6760 / 19.6798	↓

Dimensions in **BOLD** are in millimeters, rest is in inches.

* Positive values are clearance, negative values are interference. For reference only.

Go-Flex® Couplings



Martin Go-Flex® couplings are one of the easiest to install, maintain, and replace!

A complete coupling consists of 2 hubs, available in carbon or stainless steel, a urethane split insert (choose from 5 types), and a cover – either a slide over cover retained by a snap ring, a vertically split for high-speed applications, or a horizontally split cover for extreme torque applications.

Once you have correctly selected and properly installed a Martin Go-Flex® coupling, the split insert is all you should have to replace. Replacement of the insert is easy and your equipment can be back up and running in minutes! Once the hubs are installed, they never need to be moved again.

Remove only the cover, replace the insert, re-install the cover, and you are ready to go!

Advantages

- Fast and easy insert replacement
- Low maintenance
- Minimal downtime
- No lubrication
- Urethane inserts available from standard to extreme duty, high temperature, and metal detectable
- Can be installed vertically or horizontally
- The teeth on the hubs do not touch or overlap thus if the insert fails, you do not have metal to metal contact that could potentially destroy the hubs
- Reversing applications
- No realignment required after insert replacement

Go-Flex® Nomenclature

Hubs (2 required)



Go-Flex® **GF 20 CS 010 H**

Coupling Size
10, 20, 30, 40, 50, 60 70
80, 90, 100, 110 & 120

Material
- **CS** Carbon Steel
- **SS** Stainless Steel

Bore Size*

PB	Plain Bore	**114**	1-7/8
008	1/2	**115**	1-15/16
010	5/8	**200**	2
012	3/4	**202**	2-1/8
014	7/8	**203**	2-3/16
100	1	**204**	2-1/4
102	1-1/8	**206**	2-3/8
103	1-3/16	**207**	2-7/16
104	1-1/4	**208**	2-1/2
106	1-3/8	**210**	2-5/8
107	1-7/16	**212**	2-3/4
108	1-1/2	**214**	2-7/8
110	1-5/8	**215**	2-15/16
112	1-3/4	**300**	3

*Metric, Shrink Fit, Spline Bores available on request

Description
- **H** Hub

Inserts



Go-Flex® **GF 20 SD - INS**

Coupling Size
10, 20, 30, 40, 50, 60 70
80, 90, 100, 110 & 120

Insert Type
- **SD** Standard Duty (Red)
- **MD** Medium Duty (Dark Blue)
- **XD** Extreme Duty (Black)
- **HT** Hi-Temp (White)
- **FG** Food Grade Metal Detectable (Light Blue)

Description
- **INS** Insert

Covers



Go-Flex® **GF 20 SD - CVR**

Coupling Size
10, 20, 30, 40, 50, 60 70
80, 90, 100, 110 & 120

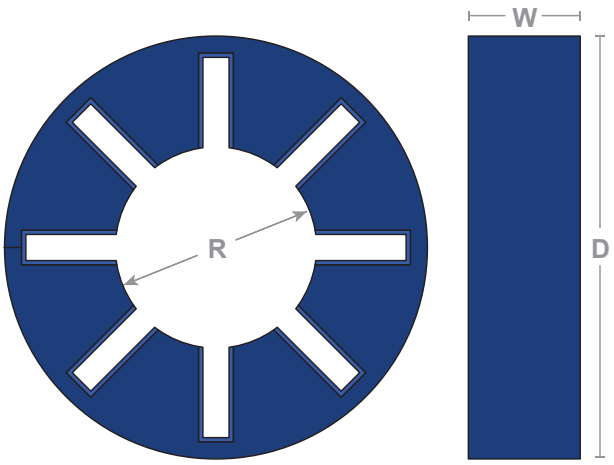
Cover Type
- **SD** Standard Duty (Carbon Steel)
- **SS** Standard Duty (Stainless Steel)
- **XP** Horizontal Split (Aluminum)
- **VS** Vertical Split
- **HS** Horizontal/Vertical Split

Description
- **CVR** Cover

Go-Flex®
Inserts

Martin Go-Flex®
Insert Dimensions (in)

Coupling Series	R	D	W	Wt. (lb)
GF10	1.23	2.23	0.63	0.05
GF20	1.66	2.86	0.85	0.1
GF30	2.16	3.80	1.23	0.3
GF40	2.41	5.05	1.64	0.8
GF50	3.05	6.44	2.02	1.45
GF60	3.90	7.37	2.35	2.0
GF70	4.13	8.20	2.32	3.0
GF80	4.34	9.98	2.63	5.0
GF90	6.19	11.30	2.96	6.0
GF100	7.60	13.61	3.24	9.0
GF110	9.15	15.93	3.67	13.0
GF120	11.25	19.04	5.43	31.0



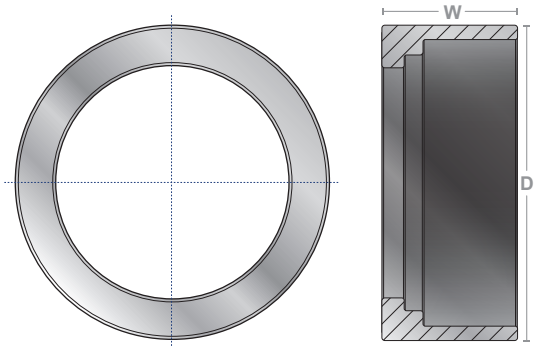


Standard	Medium Torque	Extreme High Torque	Hi-Temp	Metal Detectable
Operational temperature range of -60°F to 212°F (-50°C to 100°C)	**Operational temperature range of -60°F to 212°F** (-50°C to 100°C)	**Operational temperature range of -60°F to 212°F** (-50°C to 100°C)	**Operational temperature range up to 300°F** (148°C)	**Operational temperature range of -60°F to 212°F** (-50°C to 100°C)
Moderately soft urethane compound	**Higher durometer urethane** resulting in a more rigid insert designed for higher torque applications than the regular insert	**Insert provides our highest torque ratings**	**Urethane compound made for Hi-temp applications**	**Metal Detectable Inserts are made with a FDA compliant additive that provides metal detectability**
Applications Vibration dampening, cushioning of shock loads, reversing, or quick starting and stopping of high inertial loads	**Applications** Moderate to high torque	**Applications** High torque	**Applications** Moderate to high torque	**Applications** Food and chemical Industries where plastic contamination compromises production

Go-Flex® Covers

Martin Go-Flex® – Standard Cover

Designed for applications where low torque and/or high speed is present.

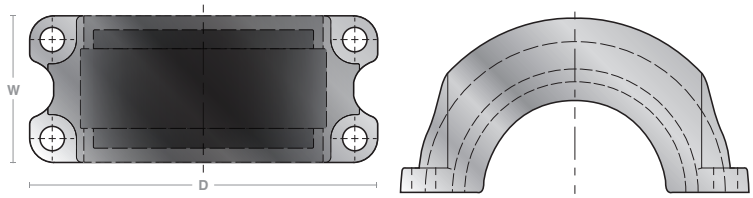


Part Number		Max. RPM◊	W	D	Bolt Size
Carbon Steel	Stainless Steel				
GF10SD-CVR	GF10SS-CVR	12,000	0.95	2.49	Retaining Ring
GF20SD-CVR	GF20SS-CVR	9,000	1.35	3.16	Retaining Ring
GF30SD-CVR	GF30SS-CVR	7,000	1.95	4.21	Retaining Ring
GF40SD-CVR	GF40SS-CVR	6,000	2.38	5.48	Retaining Ring
GF50SD-CVR	GF50SS-CVR	4,800	2.96	7.00	Retaining Ring
GF60SD-CVR	GF60SS-CVR	4,200	3.27	8.00	Retaining Ring
GF70SD-CVR	GF70SS-CVR	3,800	3.50	8.88	(8) M10-1.5 x 35MM
GF80SD-CVR	GF80SS-CVR	3,400	4.05	10.77	(8) M10-1.5 x 35MM
GF90SD-CVR	GF90SS-CVR	3,000	4.88	12.13	(8) M10-1.5 x 35MM
GF100SD-CVR	GF100SS-CVR	2,400	5.00	14.38	(8) M12-1.75 x 45MM
GF110SD-CVR	GF110SS-CVR	2,000	5.50	16.75	(8) M20-2.5 x 45MM
GF120SD-CVR	GF120SS-CVR	1,800	7.94	20.10	(8) M20-2.5 x 45MM

G10 to GF 60 Cover are held into position with a retaining ring. GF70 covers are held into position with (8) bolts.

Martin Go-Flex® – Horizontal Split Cover

Designed for all applications including high and/or low torque and high or low speeds while reducing axial loading.



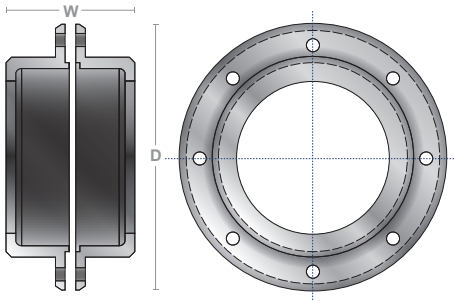
Part Number	Max. RPM◊*	W	D	Bolt Size
GF20XP-CVR	9,000	1.93	3.99	(4) M6-1.00 x 25MM
GF30XP-CVR	7,000	2.61	5.34	(4) M10-1.5 x 35MM
GF40XP-CVR	6,000	3.02	7.28	(4) M12-1.75 x 45MM
GF50XP-CVR	4,800	5.96	7.76	(4) M12-1.75 x 60MM
GF60XP-CVR	4,200	6.17	8.52	(4) M16-2.0 x 65MM
GF70XP-CVR	3,800	6.54	10.29	(4) M20-2.5 x 60MM
GF80XP-CVR	3,400	7.93	12.05	(4) M20-2.5 x 60MM

* With Extreme-Duty Insert.
Stainless Steel hardware provided with all High Performance Covers.

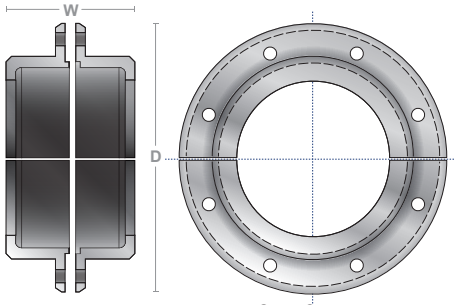
Martin Go-Flex® – Vertical Split and Horizontal/Vertical Split Covers

Designed for high-Speed applications.

Part Number		Max. RPM◊	W	D	Flange Bolt Size	Hub Bolt Size
Vertical Split	Horizontal/ Vertical Split					
GF20VS-CVR	GF20HS-CVR	9,000	4.7	1.78	(8) M6-1.00 x 20MM	Retaining Ring
GF30VS-CVR	GF30HS-CVR	7,000	5.62	2.5	(8) M6-1.00 x 20MM	Retaining Ring
GF40VS-CVR	GF40HS-CVR	6,000	7.62	3.46	(8) M10-1.5 x 20MM	Retaining Ring
GF50VS-CVR	GF50HS-CVR	4,800	8.95	4.35	(8) M10-1.5 x 35MM	Retaining Ring
GF60VS-CVR	GF60HS-CVR	4,200	9.85	4.5	(8) M10-1.5 x 35MM	Retaining Ring
GF70VS-CVR	GF70HS-CVR	3,800	10.5	4.68	(8) M10-1.5 x 35MM	(8) M10-1.5 x 35MM
GF80VS-CVR	GF80HS-CVR	3,400	13.5	5.88	(12) M12-1.75 x 45MM	(8) M10-1.5 x 35MM
GF90VS-CVR	GF90HS-CVR	3,000	15.25	6.21	(16) M12-1.75 x 45MM	(8) M10-1.5 x 35MM
GF100VS-CVR	GF100HS-CVR	2,800	17.75	7.32	(16) M12-1.75 x 50MM	(8) M12-1.75 x 45MM
GF110VS-CVR	GF110HS-CVR	2,000	19.59	7.42	(20) M12-1.75 x 45MM	(8) M20-2.5 x 45MM
GF120VS-CVR	GF120HS-CVR	1,200	24.38	10.85	(20) M12-1.75 x 45MM	(8) M20-2.5 x 45MM



Vertical Split Cover



Horizontal/Vertical Split Cover

◊ For applications above listed RPM, consult Martin.

Go-Flex®
Quick Selection Guide

Insert Features







Standard-Duty (Red)	Medium-Duty (Dark Blue)	Extreme-Duty (Black)	High Temp (White)	Metal Detectable (Light Blue)
Max Temp: 212°F	Max Temp: 212°F	Max Temp: 212°F	Max Temp: 300°F	Max Temp: 212°F
Greatest Dampening	Lower Dampening	Lowest Dampening	Lower Dampening	Greatest Dampening
Lowest Torque	Higher Torque	Highest Torque	Higher Torque	Lowest Torque

High-Speed Standard Cover

Max Bore	Coupling Series	Max Torque Rating (in. lb.)				
1-1/4	GF10	377	792	792	792	365

Horizontal Split, Vertical Split & Horizontal/Vertical Split Covers

Max Bore	Coupling Series	Max Torque Rating (in. lb.)				
1-5/8	GF20	1,254	2,457	3,789	2,457	1,254
2-1/4	GF30	4,099	7,730	11,914	7,730	4,099
2-3/8	GF40	8,630	17,099	25,870	17,099	8,630
3	GF50	17,315	34,336	52,408	34,336	17,315
3-7/8	GF60	30,353	58,137	87,110	58,137	30,353
4-1/8	GF70	38,048	75,538	116,432	75,538	38,048
4-1/2	GF80	75,000	145,000	220,000	145,000	75,000
5-1/2	GF90	105,000	204,000	310,000	204,000	105,000
7	GF100	175,000	345,000	550,000	345,000	175,000
8	GF110	300,000	565,000	870,000	565,000	300,000
11	GF120	599,700	1,120,000	1,680,000	1,120,000	599,700

Formula Selection Method

Information required before a coupling can be selected:

- HP and RPM or torque of driver
- Shaft sizes of driver and driven equipment
- Corresponding keyways
- Application description to determine service factor
- Environmental conditions

Step 1. Determine the Nominal Torque (T) of your application

$$\text{in/lb} = T = \frac{(63025 \times HP)}{RPM}$$

Step 2. Refer to pages C-63 & 66 to determine Application Service Factor

Step 3. Calculate the Design Torque of your application.

Design Torque = Nominal Torque (T) x Application Service Factor

Example:

Driver: 5HP, 1800RPM electric motor

Driven: belt conveyor (refer to pages C-63 & 66)

$$\text{in/lbs} = T = \frac{(63025 \times 5HP)}{1800}$$

Nominal Torque (T) = 175 in/lbs

Design Torque = 175 (Nominal Torque) x 1.75 (Application Service Factor from pages C-63 & 66)

Design Torque = 306.25 in/lbs Torque

Step 4. Refer to page C-64 to select correct coupling size - ie. GF10

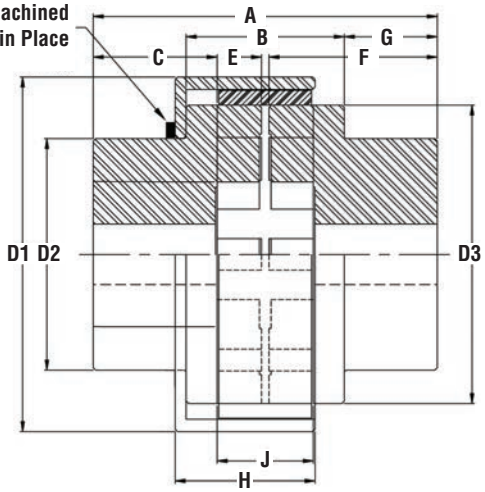
Step 5. Confirm that the shaft size of the driver and driven shafts are equal to or less than the maximum bore size (refer to coupling dimensional pages)

Step 6. Confirm environmental conditions to determine correct cover, hubs, and insert material (stainless steel or carbon steel hubs and cover, food grade, high temp or standard insert)

For reversing applications with high inertia loads, please consult Martin.

Go-Flex® with Standard Cover Dimensions/Ratings

Go-Flex® Couplings up to GF60 have machined Snap Ring Grooves to hold the Covers in Place



Martin Go-Flex® Coupling with Standard Cover Dimensions/Ratings (Carbon Steel and Stainless Steel)

Coupling Series	Pilot Bore Diameter	Maximum Bore Size ○ Square Key	Max RPM*	Maximum Torque (in-lbs)■	A	B	D1	D2	D3	C	E MIN	E MAX	F	G	H	J	Wt. ◊ (lb)
GF10	1/2	1-1/4	12,000	792	2.8	1.03	2.49	2	2.07	1.08	0.062	0.092	1.37	0.88	0.95	0.66	4
GF20	1/2	1-5/8	9,000	2,457	3.54	1.28	3.16	2.31	2.55	1.34	0.089	0.104	1.75	1.14	1.35	0.88	5
GF30	3/4	2-1/4	7,000	7,730	4.86	2	4.21	3.19	3.37	1.81	0.1	0.13	2.39	1.42	1.95	1.25	11
GF40	7/8	2-3/8	6,000	17,099	5.96	2.42	5.48	3.52	4.49	2.16	0.105	0.181	2.96	1.78	2.38	1.66	15
GF50	1	3	4,800	34,336	7.07	3.48	7	4.25	5.92	2.46	0.18	0.211	3.4	1.76	2.96	2.19	37
GF60	1	3-7/8	4,200	58,137	7.69	3.67	8	5.5	6.75	2.67	0.253	0.293	3.75	2	3.27	2.45	57
GF70	1-1/2	4-1/8	3,800	75,538	8.51	3.96	8.88	5.79	7.48	3.1	0.17	0.209	4.21	2.33	3.5	2.49	71
GF80	1-7/8	4-1/2	3,400	145,000	10.13	4.67	10.77	7	9.25	3.75	0.196	0.25	5	2.75	4.05	2.75	126
GF90	1-7/8	5-1/2	3,000	204,000	12.29	5.09	12.13	7.81	10.5	4.6	0.237	0.349	6	3.6	4.88	3.04	216
GF100	2-1/8	7	2,400	345,000	14.28	5.92	14.38	9.5	12.8	5.74	0.25	0.347	7.26	4.45	5	3.35	400
GF110	2-1/8	8	2,000	565,000	16.2	6.2	16.75	11	15.09	6.18	0.167	0.309	7.98	5	5.5	3.99	532
GF120	2-1/8	11	1,800	1,120,000	20.08	9.18	20.1	15	17.75	7.22	0.236	0.424	9.88	5.45	7.94	5.68	1116

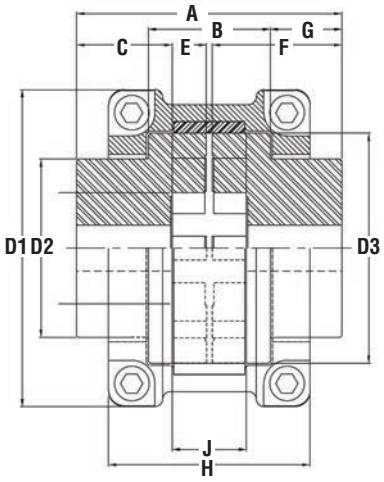
* For applications above listed RPM, consult Martin.
◊ All weights shown are approximate for a complete standard coupling assembly.
■ Maximum torque values (in-lbs) are based on use with black insert. Refer to page C-64 for complete torque ratings.
○ Maximum bore size has reduced keyway on sizes GF20, GF30, and GF40.
Reduced keyways in max bore hubs measure as follows: GF20SD1-5/8 - 3/8 x 3/32 keyway; GF30SD2-1/8 - 1/2 x 1/8 keyway; GF40SD2-3/8 - 5/8 x 5/32 keyway.

Note:
It is not recommended to use the Black insert with the Standard Cover. In high torque applications we recommend the use of the Horizontal Split Cover.

Martin Go-Flex® Insert Maximum Torque Ratings (in-lb)

Coupling Series	Standard-Duty Red	Medium-Duty Dark Blue	Extreme-Duty Black	High Temp White	Metal Detectable Light Blue
GF10	377	792	-	792	377
GF20	1,254	2,457	-	2,457	1,254
GF30	4,099	7,730	-	7,730	4,099
GF40	8,630	17,099	-	17,099	8,630
GF50	17,315	34,336	-	34,336	17,315
GF60	30,353	58,137	-	58,137	30,353
GF70	38,048	75,538	-	75,538	38,048
GF80	75,000	145,000	-	145,000	75,000
GF90	105,000	204,000	-	204,000	105,000
GF100	175,000	345,000	-	345,000	175,000
GF110	300,000	565,000	-	565,000	300,000
GF120	599,700	1,120,000	-	1,120,000	599,700

Go-Flex® with Horizontal Split Cover Dimensions/Ratings



Martin Go-Flex® Coupling with Horizontal Split Cover Dimensions/Ratings (Carbon Steel Only)

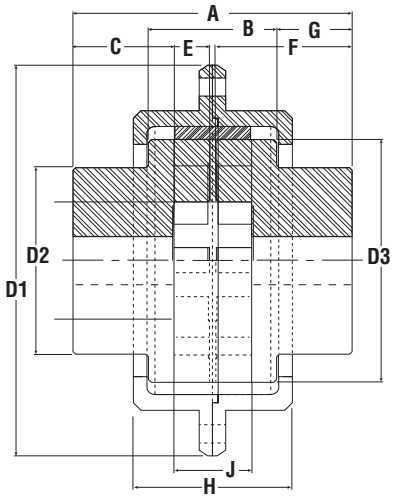
Coupling Series	Pilot Bore Diameter	Maximum Bore Size ○ Square Key	Max RPM*	Maximum Torque (in-lbs)■	A	B	D1	D2	D3	C	E MIN	E MAX	F	G	H	J	Wt. ◊ (lb)
GF20	1/2	1-5/8	9,000	2,457	3.54	1.28	3.99	2.31	2.55	1.34	0.089	0.104	1.75	1.14	1.93	0.88	5
GF30	3/4	2-1/4	7,000	7,730	4.86	2	5.34	3.19	3.37	1.81	0.1	0.13	2.39	1.42	2.61	1.25	12
GF40	7/8	2-3/8	6,000	17,099	5.96	2.42	7.28	3.52	4.49	2.16	0.105	0.14	2.96	1.78	3.02	1.66	17
GF50	1	3	4,800	34,336	7.07	3.48	7.76	4.25	5.92	2.46	0.221	0.32	3.4	1.76	5.96	2.19	40
GF60	1	3-7/8	4,200	58,137	7.69	3.67	8.52	5.5	6.75	2.67	0.253	0.314	3.75	2	6.17	2.45	59
GF70	1-1/2	4-1/8	3,800	75,538	8.51	3.96	10.29	5.79	7.48	3.1	0.17	0.209	4.21	2.33	6.54	2.49	81
GF80	1-7/8	4-1/2	3,400	145,000	10.13	4.67	12.02	7	9.25	3.75	0.196	0.335	5	2.75	7.92	2.75	138

* For applications above listed RPM, consult Martin.
◊ All weights shown are approximate for a complete standard coupling assembly.
■ Maximum torque values (in-lbs) are based on use with black insert. Refer to page C-64 for complete torque ratings.
○ Maximum bore size has reduced keyway on sizes GF20, GF30, and GF40.
Reduced keyways in max bore hubs measure as follows: GF20XP1-5/8 - 3/8 x 3/32 keyway; GF30XP2-1/8 - 1/2 x 1/8 keyway; GF40XP2-3/8 - 5/8 x 5/32 keyway.

Martin Go-Flex® Insert Maximum Torque Ratings (in-lb)

Coupling Series	Standard-Duty Red	Medium-Duty Dark Blue	Extreme-Duty Black	High Temp White	Metal Detectable Light Blue
GF20	1,254	2,457	3,789	2,457	1,254
GF30	4,099	7,730	11,914	7,730	4,099
GF40	8,630	17,099	25,870	17,099	8,630
GF50	17,315	34,336	52,408	34,336	17,315
GF60	30,353	58,137	87,110	58,137	30,353
GF70	38,048	75,538	116,432	75,538	38,048
GF80	75,000	145,000	220,000	145,000	75,000

Go-Flex® with Vertical Split Dimensions/Ratings



Martin Go-Flex® Coupling with Vertical Split Cover Dimensions/Ratings

Coupling Series	Pilot Bore Diameter	Maximum Bore Size ○ Square Key	Max RPM*	Maximum Torque (in-lbs)■	A	B	D1	D2	D3	C	E MIN	E MAX	F	G	H	J	Wt. ◊ (lb)
GF20	1/2	1-5/8	9,000	2,457	3.54	1.28	4.7	2.31	2.55	1.34	0.089	0.104	1.75	1.14	1.78	0.88	7
GF30	3/4	2-1/4	7,000	7,730	4.86	2	5.62	3.19	3.37	1.81	0.1	0.13	2.39	1.42	2.5	1.25	13
GF40	7/8	2-3/8	6,000	17,099	5.96	2.42	7.62	3.52	4.49	2.16	0.105	0.181	2.96	1.78	3.08	1.66	20
GF50	1	3	4,800	34,336	7.07	3.48	8.95	4.25	5.92	2.46	0.221	0.32	3.4	1.76	4.36	2.19	47
GF60	1	3-7/8	4,200	58,137	7.69	3.67	9.85	5.5	6.75	2.67	0.253	0.314	3.75	2	4.5	2.45	65
GF70	1-1/2	4-1/8	3,800	75,538	8.51	3.96	10.5	5.79	7.48	3.1	0.17	0.209	4.21	2.33	4.67	2.49	80
GF80	1-7/8	4-1/2	3,400	145,000	10.13	4.67	13.5	7	9.25	3.75	0.196	0.335	5	2.75	5.88	2.75	136
GF90	1-7/8	5-1/2	3,000	204,000	12.29	5.09	15.25	7.81	10.5	4.6	0.237	0.349	6	3.6	6.21	3.04	226
GF100	2-1/8	7	2,400	345,000	14.28	5.92	17.75	9.5	12.8	5.74	0.288	0.397	7.26	4.45	7.32	3.35	410
GF110	2-1/8	8	2,000	565,000	16.2	6.2	19.56	11	15.09	6.18	0.167	0.309	7.98	5	7.42	3.99	542
GF120	2-1/8	11	1,800	1,120,000	20.08	9.18	24.38	15	17.75	7.22	0.236	0.424	9.88	5.45	10.85	5.68	1136

* For applications above listed RPM, consult Martin.

◊ All weights shown are approximate for a complete standard coupling assembly.

■ Maximum torque values (in-lbs) are based on use with black insert. Refer to page C-64 for complete torque ratings.

○ Maximum bore size has reduced keyway on sizes GF20, GF30, and GF40.

Reduced keyways in max bore hubs measure as follows:
GF20VS1-5/8 - 3/8 x 3/32 keyway; GF30VS2-1/8 - 1/2 x 1/8 keyway;
GF40VS2-3/8 - 5/8 x 5/32 keyway.

Martin Go-Flex® Insert Maximum Torque Ratings (in-lb)

Coupling Series	Standard-Duty Red	Medium-Duty Dark Blue	Extreme-Duty Black	High Temp White	Metal Detectable Light Blue
GF20	1,254	2,457	3,789	2,457	1,254
GF30	4,099	7,730	11,914	7,730	4,099
GF40	8,630	17,099	25,870	17,099	8,630
GF50	17,315	34,336	52,408	34,336	17,315
GF60	30,353	58,137	87,110	58,137	30,353
GF70	38,048	75,538	116,432	75,538	38,048
GF80	75,000	145,000	220,000	145,000	75,000
GF90	105,000	204,000	310,000	204,000	105,000
GF100	175,000	345,000	550,000	345,000	175,000
GF110	300,000	565,000	870,000	565,000	300,000
GF120	599,700	1,120,000	1,680,000	1,120,000	599,700

Go-Flex®
Keyway Sizes and Tolerances

Martin Go-Flex® Standard Bore Sizes

Coupling Size	PB	1/2	5/8	3/4	7/8	1	1-1/8	1-3/16	1-1/4	1-3/8	1-7/16	1-1/2	1-5/8	1-3/4	1-7/8	1-15/16
GF10	X	X	X	X	X	X	X	X	X							
GF20	X		X	X	X	X	X	X	X	X	X	X	X			
GF30	X				X	X	X	X	X	X	X	X	X	X	X	X
GF40	X				X	X	X		X	X	X	X	X	X	X	X
GF50	X											X	X	X	X	X
GF60	X															
GF70	X															
GF80	X															

Martin Go-Flex® Standard Bore Sizes (cont'd)

Coupling Size	2	2-1/8	2-3/16	2-1/4	2-3/8	2-7/16	2-1/2	2-5/8	2-3/4	2-7/8	2-15/16	3
GF10												
GF20												
GF30	X	X										
GF40	X	X	X	X	X							
GF50	X	X		X	X	X	X	X	X	X	X	X
GF60												
GF70												
GF80												

Martin Go-Flex® Bore Tolerances and Keyway Sizes

Shaft Diameter (Nom)	Keyway Size (Nom)		Bore Tolerances				Set Screw Size
	Width	Depth	Clearance Fit**		Interference fit**		
1/2 - 9/16	1/8	1/16	+.0015	-0.0000	-0.0005	-0.0010	5/16
5/8 - 7/8	3/16	3/32	+.0015	-0.0000	-0.0005	-0.0010	5/16
15/16 - 1-1/4	1/4	1/8	+.0015	-0.0000	-0.0005	-0.0010	5/16
1-15/16 - 1-3/8	5/16	5/32	+.0015	-0.0000	-0.0005	-0.0010	5/16
1-7/16 - 1-3/4	3/8	3/16	+.0015	-0.0000	-0.0005	-0.0015	5/16
1-13/16 - 2-1/4	1/2	1/4	+.0025	-0.0000	-0.0005	-0.0015	3/8
2-5/16 - 2-3/4	5/8	5/16	+.0025	-0.0000	-0.0010	-0.0020	1/2
2-13/16 - 3-1/4	3/4	3/8	+.0025	-0.0000	-0.0010	-0.0020	5/8
3-5/16 - 3-3/4	7/8	7/16	+.0025	-0.0000	-0.0015	-0.0025	5/8
3-13/16 - 4-1/2	1	1/2	+.0025	-0.0000	-0.0025	-0.0035	5/8

** For Class 1 Fit

Reduced keyways in max bore hubs measure as follows: GF20X1-5/8 - 3/8 x 3/32 keyway; GF30X2-1/8 - 1/2 x 1/8 keyway; GF40X2-3/8 - 5/8 x 5/32 keyway.

Torque Ratings

Torque Ratings for Martin Go-Flex® Carbon Steel Couplings with Standard Cover

Coupling Series	Insert Part Number	Insert Color	Continuous Torque (in-lb)	HP Ratings @ Various RPM (Service Factor = 1)							
				100	300	600	900	1200	1800	2400	3600
GF10	GF10SD-INS	Red	365	1	2	3	5	7	10	14	21
	GF10MD-INS	Blue	792	1	4	8	11	15	23	30	45
	GF10HT-INS	White	792	1	4	8	11	15	23	30	45
	GF10FG-INS	Light Blue	365	1	2	3	5	7	10	14	21
GF20	GF20SD-INS	Red	1,254	2	6	12	18	24	36	48	72
	GF20MD-INS	Blue	2,457	4	12	23	35	47	70	94	140
	GF20HT-INS	White	2,457	4	12	23	35	47	70	94	140
	GF20FG-INS	Light Blue	1,254	2	6	12	18	24	36	48	72
GF30	GF30SD-INS	Red	4,099	7	20	39	59	78	117	156	234
	GF30MD-INS	Blue	7,730	12	37	74	110	147	221	294	442
	GF30HT-INS	White	7,730	12	37	74	110	147	221	294	442
	GF30FG-INS	Light Blue	4,099	7	20	39	59	78	117	156	234
GF40	GF40SD-INS	Red	8,630	14	41	82	123	164	246	329	493
	GF40MD-INS	Blue	17,099	27	81	163	244	326	488	651	977
	GF40HT-INS	White	17,099	27	81	163	244	326	488	651	977
	GF40FG-INS	Light Blue	8,630	14	41	82	123	164	246	329	493
GF50	GF50SD-INS	Red	17,315	27	82	165	247	330	495	659	989
	GF50MD-INS	Blue	34,336	54	163	327	490	654	981	1,308	1,961
	GF50HT-INS	White	34,336	54	163	327	490	654	981	1,308	1,961
	GF50FG-INS	Light Blue	17,315	27	82	165	247	330	495	659	989
GF60	GF60SD-INS	Red	30,353	48	144	289	433	578	867	1,156	1,734
	GF60MD-INS	Blue	58,137	92	277	553	830	1,107	1,660	2,214	3,321
	GF60HT-INS	White	58,137	92	277	553	830	1,107	1,660	2,214	3,321
	GF60FG-INS	Light Blue	30,353	48	144	289	433	578	867	1,156	1,734
GF70	GF70SD-INS	Red	38,048	60	181	362	543	724	1,087	1,449	2,173
	GF70MD-INS	Blue	75,538	120	360	719	1,079	1,438	2,157	2,877	4,315
	GF70HT-INS	White	75,538	120	360	719	1,079	1,438	2,157	2,877	4,315
	GF70FG-INS	Light Blue	38,048	60	181	362	543	724	1,087	1,449	2,173
GF80	GF80SD-INS	Red	75,000	119	357	714	1,071	1,428	2,142	2,856	-
	GF80MD-INS	Blue	145,000	230	690	1,380	2,071	2,761	4,141	5,522	-
	GF80HT-INS	White	145,000	230	690	1,380	2,071	2,761	4,141	5,522	-
	GF80FG-INS	Light Blue	75,000	119	357	714	1,071	1,428	2,142	2,856	-
GF90	GF90SD-INS	Red	105,000	167	500	1,000	1,499	1,999	2,999	3,998	-
	GF90MD-INS	Blue	204,000	324	971	1,942	2,913	3,884	5,826	7,768	-
	GF90HT-INS	White	204,000	324	971	1,942	2,913	3,884	5,826	7,768	-
	GF90FG-INS	Light Blue	105,000	167	500	1,000	1,499	1,999	2,999	3,998	-
GF100	GF100SD-INS	Red	175,000	278	833	1,666	2,499	3,332	4,998	6,664	-
	GF100MD-INS	Blue	345,000	547	1,642	3,284	4,927	6,569	9,853	13,138	-
	GF100HT-INS	White	345,000	547	1,642	3,284	4,927	6,569	9,853	13,138	-
	GF100FG-INS	Light Blue	175,000	278	833	1,666	2,499	3,332	4,998	6,664	-
GF110	GF110SD-INS	Red	300,000	476	1,428	2,856	4,284	5,712	8,568	-	-
	GF110MD-INS	Blue	565,000	896	2,689	5,379	8,068	10,758	16,136	-	-
	GF110HT-INS	White	565,000	896	2,689	5,379	8,068	10,758	16,136	-	-
	GF110FG-INS	Light Blue	300,000	476	1,428	2,856	4,284	5,712	8,568	-	-
GF120	GF120SD-INS	Red	599,700	952	2,855	5,709	8,564	11,418	17,127	-	-
	GF120MD-INS	Blue	1,120,000	1,777	5,331	10,662	15,994	21,325	31,987	-	-
	GF120HT-INS	White	1,120,000	1,777	5,331	10,662	15,994	21,325	31,987	-	-
	GF120FG-INS	Light Blue	599,700	952	2,855	5,709	8,564	11,418	17,127	-	-

Martin Go-Flex® flexible couplings can sustain momentary peak torque loads in excess of 200% of its maximum torque rating.

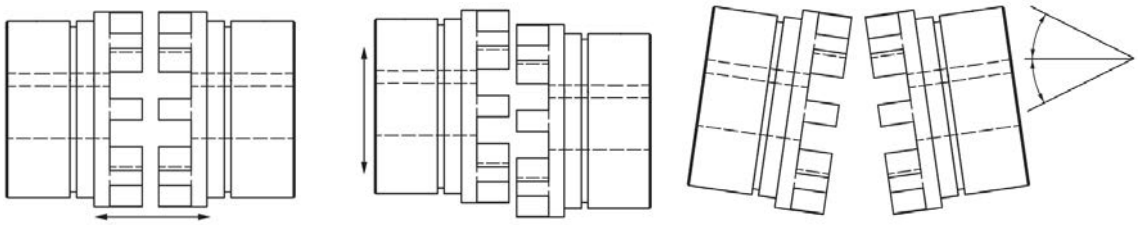
Torque Ratings for Martin Go-Flex® Carbon Steel Couplings with Horizontal Split, Vertical Split and Horizontal/ Vertical Split Cover

Coupling Series	Insert Part Number	Insert Color	Continuous Torque (in-lb)	HP Ratings @ Various RPM (Service Factor = 1)							
				100	300	600	900	1200	1800	2400	3600
GF20	GF20SD-INS	Red	1,254	2	6	12	18	24	36	48	72
	GF20MD-INS	Blue	2,457	4	12	23	35	47	70	94	140
	GF20XD-INS	Black	3,789	6	18	36	54	72	108	144	216
	GF20HT-INS	White	2,457	4	12	23	35	47	70	94	140
	GF20FG-INS	Light Blue	1,254	2	6	12	18	24	36	48	72
GF30	GF30SD-INS	Red	4,099	7	20	39	59	78	117	156	234
	GF30MD-INS	Blue	7,730	12	37	74	110	147	221	294	442
	GF30XD-INS	Black	11,914	19	57	113	170	227	340	454	681
	GF30HT-INS	White	7,730	12	37	74	110	147	221	294	442
	GF30FG-INS	Light Blue	4,099	7	20	39	59	78	117	156	234
GF40	GF40SD-INS	Red	8,630	14	41	82	123	164	246	329	493
	GF40MD-INS	Blue	17,099	27	81	163	244	326	488	651	977
	GF40XD-INS	Black	25,870	41	123	246	369	493	739	985	1,478
	GF40HT-INS	White	17,099	27	81	163	244	326	488	651	977
	GF40FG-INS	Light Blue	8,630	14	41	82	123	164	246	329	493
GF50	GF50SD-INS	Red	17,315	27	82	165	247	330	495	659	989
	GF50MD-INS	Blue	34,336	54	163	327	490	654	981	1,308	1,961
	GF50XD-INS	Black	52,408	83	249	499	748	998	1,497	1,996	2,994
	GF50HT-INS	White	34,336	54	163	327	490	654	981	1,308	1,961
	GF50FG-INS	Light Blue	17,315	27	82	165	247	330	495	659	989
GF60	GF60SD-INS	Red	30,353	48	144	289	433	578	867	1,156	1,734
	GF60MD-INS	Blue	58,137	92	277	553	830	1,107	1,660	2,214	3,321
	GF60XD-INS	Black	87,110	138	415	829	1,244	1,659	2,488	3,317	4,976
	GF60HT-INS	White	58,137	92	277	553	830	1,107	1,660	2,214	3,321
	GF60FG-INS	Light Blue	30,353	48	144	289	433	578	867	1,156	1,734
GF70	GF70SD-INS	Red	38,048	60	181	362	543	724	1,087	1,449	2,173
	GF70MD-INS	Blue	75,538	120	360	719	1,079	1,438	2,157	2,877	4,315
	GF70XD-INS	Black	116,432	185	554	1,108	1,663	2,217	3,325	4,434	6,651
	GF70HT-INS	White	75,538	120	360	719	1,079	1,438	2,157	2,877	4,315
	GF70FG-INS	Light Blue	38,048	60	181	362	543	724	1,087	1,449	2,173
GF80	GF80SD-INS	Red	75,000	119	357	714	1,071	1,428	2,142	2,856	-
	GF80MD-INS	Blue	145,000	230	690	1,380	2,071	2,761	4,141	5,522	-
	GF80XD-INS	Black	220,000	349	1,047	2,094	3,142	4,189	6,283	8,378	-
	GF80HT-INS	White	145,000	230	690	1,380	2,071	2,761	4,141	5,522	-
	GF80FG-INS	Light Blue	75,000	119	357	714	1,071	1,428	2,142	2,856	-
GF90	GF90SD-INS	Red	105,000	167	500	1,000	1,499	1,999	2,999	3,998	-
	GF90MD-INS	Blue	204,000	324	971	1,942	2,913	3,884	5,826	7,768	-
	GF90XD-INS	Black	310,000	492	1,476	2,951	4,427	5,902	8,854	11,805	-
	GF90HT-INS	White	204,000	324	971	1,942	2,913	3,884	5,826	7,768	-
	GF90FG-INS	Light Blue	105,000	167	500	1,000	1,499	1,999	2,999	3,998	-
GF100	GF100SD-INS	Red	175,000	278	833	1,666	2,499	3,332	4,998	6,664	-
	GF100MD-INS	Blue	345,000	547	1,642	3,284	4,927	6,569	9,853	13,138	-
	GF100XD-INS	Black	550,000	873	2,618	5,236	7,854	10,472	15,708	20,944	-
	GF100HT-INS	White	345,000	547	1,642	3,284	4,927	6,569	9,853	13,138	-
	GF100FG-INS	Light Blue	175,000	278	833	1,666	2,499	3,332	4,998	6,664	-
GF110	GF110SD-INS	Red	300,000	476	1,428	2,856	4,284	5,712	8,568	-	-
	GF110MD-INS	Blue	565,000	896	2,689	5,379	8,068	10,758	16,136	-	-
	GF110XD-INS	Black	870,000	1,380	4,141	8,282	12,424	16,565	24,847	-	-
	GF110HT-INS	White	565,000	896	2,689	5,379	8,068	10,758	16,136	-	-
	GF110FG-INS	Light Blue	300,000	476	1,428	2,856	4,284	5,712	8,568	-	-
GF120	GF120SD-INS	Red	599,700	952	2,855	5,709	8,564	11,418	-	-	-
	GF120MD-INS	Blue	1,120,000	1,777	5,331	10,662	15,994	21,325	-	-	-
	GF120XD-INS	Black	1,680,000	2,666	7,997	15,994	23,990	31,987	-	-	-
	GF120HT-INS	White	1,120,000	1,777	5,331	10,662	15,994	21,325	-	-	-
	GF120FG-INS	Light Blue	599,700	952	2,855	5,709	8,564	11,418	-	-	-

Martin Go-Flex® flexible couplings can sustain momentary peak torque loads in excess of 200% of its maximum torque rating.

Misalignment Tolerances

Martin Go-Flex® Couplings Misalignment Tolerances



Coupling Series	Axial Misalignment Tolerance (in)	Radial Misalignment Tolerance (in)	Angular Misalignment Tolerance
GF10	0.078	0.020	2°
GF20	0.116	0.039	2°
GF30	0.116	0.039	2°
GF40	0.116	0.039	2°
GF50	0.156	0.058	2°
GF60	0.175	0.058	1.3°
GF70	0.234	0.058	1.3°
GF80	0.234	0.058	1°
GF90	0.234	0.058	1°
GF100	0.312	0.058	1°
GF110	0.312	0.078	1°
GF120	0.312	0.078	1°

Go-Flex® Service Factors

Application	Factor
AERATORS	2.5
AGGREGATE PROCESSING, CEMENT, MINING KILNS	
Direct or on Line Shaft of Reducer	
With Final Drive Machined Spur Gears	2.25
With Single Helical or Herringbone Gears	2.0
Crushers, Ore or Stone	2.75
Dryer, Rotary	2.0
Grizzly	2.25
Hammermill or Hog	2.0
Tumbling Mill or Barrel	2.0
AGITATORS	
Vertical, Horizontal, Screw, Propeller, Paddle	1.25
BARGE HAUL PULLER	1.75
BLOWERS	
Centrifugal	1.5
Lobe or Vane	1.5
BREWING AND DISTILLING	
Bottle and Can Filling Machines	1.5
Brew Kettle	1.25
Cookers, Continuous Duty	1.5
Lauter Tub	1.75
Mash Tub	1.5
Scale Hopper, Frequent Peaks	2.0
CLARIFIER OR CLASSIFIER	1.25
CLAY WORKING INDUSTRY	
Brick Press, Briquette Machine, Clay Working Machine, Pug Mill	2.0
COMPRESSORS	
Centrifugal	1.25
Rotary, Lobe or Vane	1.5
Rotary, Screw	1.5
Reciprocating	
Direct Connected	Refer to Factory
Without Flywheels	
With Flywheel and Gear between Compressor and Prime Monitor	
1 Cylinder, Single Acting	3.0
1 Cylinder, Double Acting	3.0
2 Cylinders, Single Acting	3.0
2 Cylinders Double Acting	3.0
3 Cylinders Single Acting	3.0
3 Cylinders, Double Acting	2.0
4 Or More Cyl Single Acting	2.5
4 Or More Cyl Double Acting	2.5

Application	Factor
CONVEYORS	
Apron, Assembly, Belt, Chain, Flight, Screw	1.75
Bucket	1.75
Live Roll, Shaker and Reciprocating	3.0
Bridge, Travel or Trolley	2.50
DREDGERS	
Cable Reel	2.0
Conveyors	1.50
Cutter Head, Jig Drive	2.5
Maneuvering Winch	1.75
Pumps (Uniform Load)	1.75
Screen Drive, Stacker	2.0
Utility Winch	2.0
DYNAMOMETER	1.5
ELEVATORS - BUCKET, CENTRIFUGAL DISCHARGE	1.75
EXCITER, GENERATOR	1.5
EXTRUDER, PLASTIC	1.5
FANS	
Centrifugal	1.25
Cooing Tower	2.0
Forced Draft-Across the Line Start	1.75
FOOD INDUSTRY	
Beet Slicer	2.0
Bottling, Can, Filling Machine	1.5
Cereal Cooker	1.5
Dough Mixer, Meat Grinder	2.0
Forced Draft Motor driven thru fluid or Electric Slip Clutch	1.25
Gas Recirculating	1.50
Induced Draft with damper control or blade cleaner	1.50
Induced Draft without controls	2.0
FEEDERS	
Apron, Belt, Disc, Screw	1.25
Reciprocating	2.5
GENERATORS	
Even Load	1.25
Hoist or Railway Service	1.75
Welder Load	2.0
HAMMERMILL	1.75
LAUNDRY WASHER OR TUMBLER	2.0
LINE SHAFTS ANY PROCESSING MACHINERY	1.5
LUMBER	
Band Resaw	2.0
Circular Resaw, Cutoff	2.0
Edger, Head Rig, Hog	2.5
Gang Saw (Reciprocating)	3.0

Application	Factor
Log Haul	2.5
Planer	2.0
Rolls, Non-Reversing	1.5
Rolls, Reversing	2.5
Sawdust Conveyor	1.5
Slab Conveyor	2.0
Sorting Table	1.75
Trimmer	2.0
MACHINE TOOLS	
Auxiliary and Traverse Drive	1.0
Bending Roll, Notching Press, Punch, Press, Planer, Plate Reversing	1.75
Main Drive	1.5
METAL ROLLING MILLS	
Coilers (Up or Down) Cold Mill Only	1.75
Coilers (Up or Down) Hot Mill Only	2.25
Coke Plants	
Pusher Ram Drive	2.75
Door Opener	2.25
Pusher or Larry Car Traction Drive	3.25
Continuous Caster	2.0
Cold Mills	
Strip Mills	Refer to Factory
Temper Mills	
Cooling Beds	1.75
Drawbench	2.25
Feed Rolls - Blooming Mills	3.25
Furnace Pushers	2.25
Hot and Cold Saws	2.25
Hot Mills	
Strip or Sheet Mills	Refer to Factory
Reversing Blooming	
Slabbing Mills	
Edger Drives	
Ingot Cars	2.25
Manipulators	3.25
Merchant Mills	Refer to Factory
Mill Tables	
Roughing Breakdown Mills	3.25
Hot Bed or Transfer (non-reversing)	1.75
Runout (reversing)	3.25
Runout (non-reversing, non-plugging)	2.25
Reel Drives	2.0
Rod Mills	Refer to Factory
Screwdown	2.25
Seamless Tube Mills	
Piercer	3.25

* For reversing applications with high inertia loads, please consult Martin.

Go-Flex®
Service Factors (Cont'd)

Application	Factor
Thrust Block	2.25
Tube Conveyor Rolls	2.25
Reeler	2.25
Kick Out	2.25
Shear, Croppers	Refer to Factory
Sideguards	3.25
Skelp Mills	Refer to Factory
Slitters (Steel Mill only)	2.0
Soaking Pit Cover Drives	
Lift	1.25
Travel	2.25
Straighteners	2.25
Unscramblers (Billet Bundle Busters)	2.25
Wire Drawing Machinery	2.0
MIXERS (ALSO SEE AGITATORS)	
Concrete	1.75
Muller	1.5
OIL INDUSTRY	
Chiller	1.50
Oilwell Pumping (not over 150% peak torque)	2.5
Paraffin Filter Press	1.75
Rotary Kiln	2.5
PAPER MILLS	
Barker, Auxiliary, Hydraulic	2.5
Barker, Mechanical	2.5
Barker, Drum L.S. shaft of reducer with final drive-	
Helical or Herringbone Gear	2.5
Machined Spur Gear	3.0
Cast Tooth Spur Gear	3.0
Beater & Pulper	2.0
Bleachers, Coaters	1.5
Calendar & Super Calendar	2.0
Chipper	3.0
Converting Machine	1.5
Couch	2.0
Cutter, Felt Whipper	2.25
Cylinder, Dryer	2.0
Felt Stretcher	1.75
Fourdrinier	2.0
Jordan	2.5
Log Haul	2.5
Line Shaft	1.75
Press	2.0
Pulp Grinder	2.0
Reel, Rewinder, Winder	2.0
Stock Chest, Washer, Thickener	1.75

Application	Factor
Stock Pumps, Centrifugal	
Constant Speed	1.25
Frequent Speed Changes Under Load	1.5
Suction Roll	2.0
PRESS, PRINTING	1.5
PUG MILL	1.75
PULVERIZERS	
Hammermill and Hog	1.75
Roller	1.5
PUMPS CENTRIFUGAL	
Constant Speed	1.0
Frequent Speed Changes Under Load	1.75
Descaling, with Accumulators	1.75
Gear, Rotary, or Vane	1.75
PUMPS RECIPROCATING	
1 Cyl., single or double acting	3.0
2 Cyl., single acting	2.5
2 Cyl., double acting	2.0
3 or more cylinders	2.0
RUBBER INDUSTRY	
Calendar	2.25
Cracker, Plasticolour	2.5
Extruder	2.0
Tire & Tube Press Opener (peak torque)	1.5
Warming Mill	
One or two mills in line	2.0
Three or more mills in line	2.5
Washer	2.75
SCREENS	
Air Washing	1.5
Grizzly	2.5
Rotary Coal or Sand	2.0
Vibrating	2.5
Water	1.5
SEWAGE DISPOSAL EQUIPMENT	
Bar Screen, Chemical Feeders, Collectors,	
Dewatering Screen, Grit Collector	1.5
Mill Stands, Turbine Driven with all Helical or Herringbone Gears	1.75
Electric Drive or Steam Engine Drive with Helical or Herringbone	2.0
STOKER	1.0
SUGAR INDUSTRY	
Cone Carrier and Leveler	2.25
Cane Knife and Crusher	2.5
Mill Stands, Turbine Driver with all helical or Herringbone Gears	1.75

Application	Factor
Electric Drive or Steam Engine Drive with helical, Herringbone, or Spur Gears with any Prime Mover	2.0
TEXTILE INDUSTRY	
Batcher	1.5
Calendar, Card Machine	1.75
Cloth Finishing Machine	1.75
Dry Can, Loom	1.75
Dyeing Machinery	1.5
Knitting Machine	Refer to Factory
Mangle, Napper, Soaper	1.5
Spinner, Tenter Frame, Winder	1.75
TUMBLING BARREL	2.0
WINCH, MANEUVERING - DREDGE, MARINE	1.5
WINDLASS	1.5

Engine Service Factors

Service Factors for engine drives are those required for applications where good flywheel regulation prevents torque fluctuation greater than 20%. For drives where torque fluctuations are greater or where the operation is near a serious critical or torsional vibration, a mass elastic study is necessary.

To determine an engine drive service factor, first determine the application service factor for motors. Then, use that to find the correct engine service factor in the table below. When the application service factor for motors is greater than 2.0 or where 1, 2, or 3 cylinder engines are involved, please contact customer service with complete application details for engineering review.

Application Service Factor	Engine Factor	
	4 to 5 Cylinders	6+ Cylinders
1.0	2.0	1.5
1.25	2.25	1.75
1.5	2.5	2.0
1.75	2.75	2.25
2.0	3.0	2.5

* For reversing applications with high inertia loads, please consult Martin.

Go-Flex® Compatibility Chart

A = Little to No Effect **B = Minor to Moderate Effect** **C = Severe Effect to Destruction** **N = No Data; Test Prior to Use**

Acetaldehyde	C
Acetamide	N
Acetic Acid	C
Acetic Anhydride	C
Acetone	C
Acetyl Bromide	C
Acetyl Chloride	C
Acetylene	C
Adipic Acid	A
Aero Shell Grease	B
Aero Lubriplate	A
Aero Safe 2300	N
Aerozene 50	N
Aluminum Acetate	N
Aluminum Bromide	N
Aluminum Chloride	B
Aluminum Sulfate	B
Ammonia	B
Ammonium Carbonate	B
Ammonium Chloride	N
Ammonium Hydroxide	B
Ammonium Nitrate	B
Ammonium Persulfate	B
Ammonium Sulfate	B
Ammonium Sulfide	B
Ammonium Thiocynate	B
Amonnium Acetate	C
Amyl Acetate	C
Amyl Alcohol	C
Aniline	C
Aniline Hydrochloride	C
Animal Fats & Oils	B
Antimony Salts	B
Aqua Regia	C
Arsenic Salts	B
ASTM Oil #1	A
ASTM Oil #2	B
ASTM Oil #3	B
ASTM Reference Fuel	A
ASTM Reference Fuel	B
Atlantic Oil	A
Barium Carbonate	B
Barium Hydroxide	A
Beer	A
Benzaldehyde	B
Benzene	C
Benzoic Acid	B
Black Sulphate Liquors	N
Bleach Solutions	N
Boric Acid	A

Brake Fluid	N
Bromine	B
Bunker Oil	A
Butane	A
Butyl Acetate	C
Butyl Alcohol	B
Calcium Carbonate	B
Calcium Chloride	A
Calcium Hydroxide	A
Calcium Nitrate	B
Calcium Sulfate	B
Carbon Dioxide	A
Carbon Disulfide	B
Carbon Monoxide	A
Carbon Tetrachloride	C
Chlorine	N
Chloroacetic Acid	C
Chloroform	C
Chromic Acid	C
Chromium Potassium Sulfate	B
Citric Acid	B
Corn Oil	A
Cottonseed Oil	A
Cresol	C
Crude Oil	B
Cupric Chloride	A
Cupric Nitrate	B
Cupric Sulfate	B
Cutting Oil	B
Cyclohexane	B
Cyclohexanone	C
Dibutyl Phthalate	C
Dichlorobenzene	C
Diesel Fuel	B
Diester Oil	B
Dimethyl Acetamide	C
Dimethyl Formamide	C
Dodecyl Mercaptan	B
DTE Oil	B
Dibutyl Ether	B
EP Lubes	A
Esso #90 Lube Oil	A
Ether	B
Ethyl Acetate	C
Ethyl Alcohol (Ethanol)	C
Formic Acid	C
Freon, 12 or 113	A
Fuel Oil	B
Gasoline	B
Glucose	A

Glue	N
Glycerin	A
Heptane	A
Hexane	A
Hydrazine	C
Hydrobromic Acid	B
Hydrocarbon Oil	A
Hydrochloric Acid	B
Hydrofluoric Acid	B
Hydrogen	A
Hydrogen Peroxide	B
Hydrogen Sulfide	C
Hydrologic Acid	B
Iodine	A
Isobutyl Alcohol	N
Isopropyl Chloride	N
Isopropyl Ether	B
Isopropyl Alcohol (Propanol)	B
JP4 Oil	B
JP5 & 6 Oil	C
Kerosene	B
Lactic Acid	B
Lead Acetate	B
Linseed Oil	B
Liquefied Petroleum Gas	A
Lubrication Oil	B
Lye	N
Magnesium Chloride	N
Magnesium Hydroxide	A
Magnesium Salts	B
Malaic Acid	C
Mercury	B
Methyl Alcohol (methanol)	A
Methyl Ethyl Ketone	C
Methylene Chloride	C
MIL-D-5606 Oil	C
MIL-L-7808 Oil	B
Mineral Oil	A
Mineral Spirits	N
Naphthalene	B
Natural Gas	B
Nickel Salts	C
Oxygen	A
Ozone	A
Paimitic Acid	A
Paint Thinner	B
Peanut Oil	A
Perchloric Acid	C
Perchloroethylene	C
Petroleum	B

Phenol (carbolic acid)	C
Phosphoric Acid	C
Potassium Cyanide	A
Potassium Salts	B
Propane	B
Propyl Alcohol	B
Propylene Glycol	B
Pydraul Oil	C
SAE #10 Oil	A
Seawater	A
Silicic Acid	B
Silver Nitrate	B
Skydrol Oil	C
Soap	B
Sodium Acetate	A
Sodium Bicarbonate	B
Sodium Borate	B
Sodium Carbonate	B
Sodium Chloride	B
Sodium Cyanide	B
Sodium Hydrosulfite	B
Sodium Hydroxide	B
Sodium Hypochlorite	C
Sodium Nitrate	B
Sodium Silicate	A
Sodium Sulfate	B
Sodium Sulfide	B
Steam	C
Styrene	B
Sulfur Dioxide	B
Sulfuric Acid	C
Tannic Acid	A
Tartaric Acid	A
Toluene	C
Transformer Oil	B
Turpentine	C
Urea	B
Varnish	B
Water	B

Go-Flex® Coupling Installation Instructions

Please follow the step by step installation instructions to properly install Martin Go-Flex® Couplings:

Required components:

2 Hubs

1 Insert

1 Cover with hardware: Identify what style cover you are using as this will determine the proper installation procedure.

There are three types of covers (Figure 1):

1. **Standard Cover (SD)**: for coupling sizes GF10 through GF70 a standard snap ring secures cover in place.
2. **Horizontal Split Cover (XP)**: It is a free floating cover that encapsulates the insert and the shoulder of both hubs. Each cover assembly comes with four socket head cap screws to secure the two halves together.
3. **Vertical Split Cover (VS):** GF20 through GF70 use eight bolts around the rim to secure the two halves together, GF80 through GF100 use 16 bolts with lock washers to secure the covers to one of the hubs.
4. **Horizontal/Vertical Split Cover (HS):** GF20 through GF70 use eight bolts around the rim to secure the 4 parts. Together, GF80 through GF100 use 16 bolts with lock washers to secure the covers to one of the hubs.

Figure 1. Martin Go-Flex® covers and types



Standard Duty Cover



Horizontal Split Cover



Vertical Split Cover



Horizontal/Vertical Split Cover

Go-Flex® Coupling Installation Instructions

Installation Instructions:

1. Confirm bore sizes of each coupling half and the corresponding shaft diameter to ensure that you have the proper bore size.
2. Ensure that the shafts are clean and free from burrs.
3. Verify cover style:
   - When using a **Standard Duty Cover (SD)**, it should be located on the driven shaft. If space is limited, then it can be mounted on the drive shaft. Slide snap ring first, then **Standard Duty Cover (SD)** with larger opening facing the shaft separation.
   - When using an **Horizontal Split Cover (XP)**, proceed to step 4.
   - When using a **Vertical Split Cover (VS)**, Install one cover half on each shaft with flange side facing the shaft separation prior to installing the hubs.
   - If using a **Vertical Split Cover (VS), GF70 or larger**, use bolts and washers to secure in place. Slide one bolt into place until installation is complete.
4. Installing the first hub: It should be mounted so that the end of the shaft is flush with surface A as shown in Figure 2. It is acceptable for the shaft to extend past A as long as it is not past the teeth shown as B.

   Please note: Standard hubs are supplied with a clearance fit and should slide onto the shaft without excessive force. If the hubs have been ordered with interference fit (shrink fit), then heat the coupling halves to approximately 572°F (300°C) before installing on shafts.
5. With the insert in place, install the second hub. This will help establish set the hubs at the minimum hub gap (E min) dimension to ensure proper clearance. Please see Table 1 on the next page for specific E min and E max dimensions.
6. Now ensure both hubs are securely tightened to the shafts.
7. Check coupling for misalignment and align as necessary. Please refer to page C-72 Martin Big Catalog for misalignment tolerances.
8. Installation of cover:
   - **Standard Duty Cover (SD)**: slide the cover over hub and insert until the step in the cover contacts the shoulder of the hub. Use snap ring pliers to slide snap ring over hub and into snap ring groove in hub to hold the cover in place for GF10 through GF60. GF70 and above use the bolts and washer to secure the cover to the hub. Reference Table 2 for recommended tightening torque..
   - **Horizontal Split Cover (HP)**: place each half over the insert and shoulder on hubs. Secure the two housing halves together by using the included hardware set supplied. Reference Table 2 for recommended tightening torque.
   - **Vertical Split Cover (VS):** slide the two cover halves over the hub and insert until faces meet. Install the radial outer bolts used to secure the two halves together. If cover uses a snap ring, use snap ring pliers to slide snap ring over hub and into snap ring groove in hub to hold the cover in place. For GF70 or larger, use bolts and washers to secure the cover to one hub. Reference Table 2 for recommended tightening torque.
   - **Horizontal/Vertical Split Cover (HS):** place each part around the hub and Install the radial outer bolts used to secure the parts together. If cover uses a snap ring, use snap ring pliers to slide snap ring over hub and into snap ring groove in hub to hold the cover in place. For GF70 or larger, use bolts and washers to secure the cover to one hub. Reference Table 2 for recommended tightening torque.

Maximum RPM and Balance:

The Martin Go-Flex® Coupling inherently has good dynamic balance due to our manufacturing process. In high speed applications, it is important that the key used to attach hubs to shaft is the same length as the hub. The set screws should also be changed to full length to fill the hole. Please refer to Table 1 on the next page for maximum RPM ratings.

Go-Flex® Coupling Installation Instructions

Figure 2. Martin Go-Flex® shaft-to-hub alignment.
See page C-72 for Misalignment Tolerances.

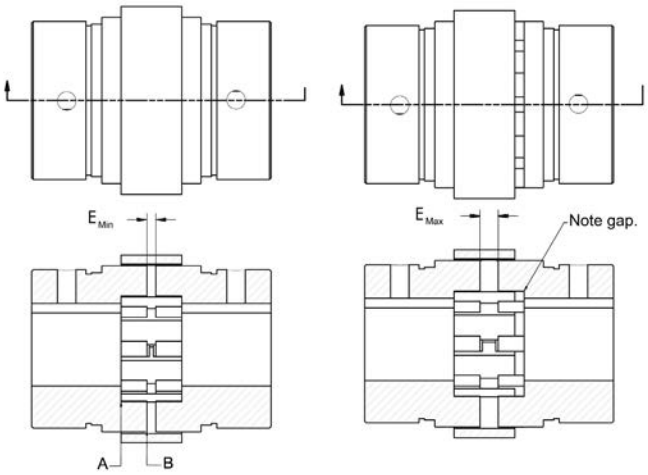


Table 1. EMIN and EMAX Dimensions

Coupling Series	Maximum RPM*	Standard Split Cover		Horizontal Split Cover		Vertical & Horizontal/Vertical Split Covers	
		EMIN	EMAX	EMIN	EMAX	EMIN	EMAX
GF10	4000	0.062	0.092	—	—	—	—
GF20	4000	0.036	0.110	0.036	0.220	0.036	0.126
GF30	4000	0.080	0.205	0.080	0.160	0.080	0.140
GF40	4000	0.035	0.208	0.035	0.160	0.035	0.220
GF50	4000	0.140	0.290	0.140	0.370	0.140	0.380
GF60	4000	0.188	0.208	0.188	0.368	0.188	0.348
GF70	3800	0.100	0.230	0.100	0.318	0.100	0.258
GF80	3400	0.125	0.250	0.204	0.375	0.204	0.375
GF90	3000	0.194	0.388	—	—	0.189	0.410
GF100	2400	0.241	0.278	—	—	0.242	0.454
GF110	2000	0.121	0.305	—	—	0.121	0.380
GF120	1800	0.158	0.505	—	—	0.147	0.492

For applications over 4000 RPM, consult Martin.

Table 2. Tightening Torque Chart

Coupling Size	Standard Split Cover	Horizontal Split Cover	Vertical & Horizontal/Vertical Split Covers	
	Cover Bolt Torque (in-lbs)	Cover Bolt Torque (in-lbs)	Cover Bolt Torque (in-lbs)	Cover Side Bolt Torque (in-lbs)
GF10	Snap Ring	-	-	-
GF20	Snap Ring	300	150	Snap Ring
GF30	Snap Ring	600	150	Snap Ring
GF40	Snap Ring	1000	775	Snap Ring
GF50	Snap Ring	1000	775	Snap Ring
GF60	Snap Ring	2500	775	Snap Ring
GF70	775	2500	775	775
GF80	775	2500	1300	775
GF90	775	-	1300	775
GF100	1300	-	1300	1300
GF110	1300	-	1300	1300
GF120	1300	-	1300	1300

Notes

Notes

BELT DRIVE

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Martin v-belt sheaves meet the toughest demands of industry, while continuing the martin tradition of providing the utmost in service and maintaining unsurpassed manufacturing standards.

Totally committed to meeting the individual needs of customers, Martin Sprocket & Gear now serves the v-belt industry with extensive stock inventories, the capacity to meet large quantity requirements and the versatility to respond quickly to made-to-order applications.

Nomenclature

QD

HI-CAP® WEDGE (Also Referred To As "Narrow")		CONVENTIONAL (Also Referred To As "Classical")	
2 3V 220 JA		**12 D 580 P**	
2	Number of Grooves	**12**	Number of Grooves
3V	Belt Cross Section	**D**	Belt Cross Section
220	2.2" Outside Diameter	**580**	58.0" Pitch Diameter
JA	Bushing Required	**P**	Bushing Required

Taper Bushed

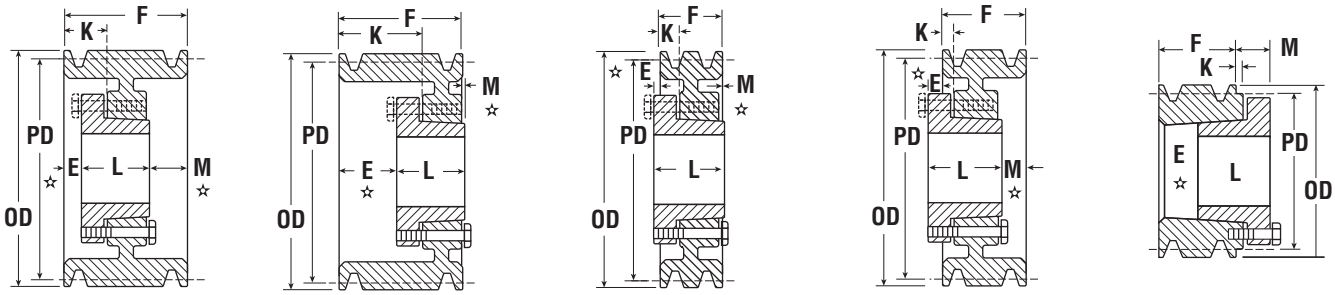
HI-CAP® WEDGE (Also Referred To As "Narrow")		CONVENTIONAL (Also Referred To As "Classical")	
10 8V 5300 TB		**1 B 34 TB**	
10	Number of Grooves	**1**	Number of Grooves
8V	Belt Cross Section	**B**	Belt Cross Section
5300	53" Outside Diameter	**34**	3.4" Pitch Diameter (B-Belt)
TB	Taper Bushing Required	**TB**	Taper Bushing Required

MST®

HI-CAP® WEDGE (Also Referred To As "Narrow")		CONVENTIONAL (Also Referred To As "Classical")	
6 5V 925 R		**3 C 110 Q**	
6	Number of Grooves	**3**	Number of Grooves
5V	Belt Cross Section	**C**	Belt Cross Section
925	9.25" Outside Diameter	**110**	11.0" Pitch Diameter (B-Belt)
R	Taper Bushing Required	**TQ**	Taper Bushing Required

Call Martin for your made-to-order and large quantity requirements.

Hi-Cap Wedge Stock QD Sheaves 3V



Dimensions for Martin sheaves are listed in the following tables with QD bushings in place. The type of sheave shown below is indicated by a letter, and the construction is indicated by a number, as shown on facing page.

QD Sheaves – 3V

1 Groove* F = 11/16											2 Grooves F = 1 3/32								
Part Number	OD	PD 3V Belt	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
1 3V 220 JA	2.20	2.20	E-1	JA	1.25	.5625	0.4375	1	0.9375	0.7	2 3V 220 JA	E-1	JA	1.25	0.9688	0.4375	1	0.9375	0.9
1 3V 235 JA	2.35	2.35	E-1	JA	1.25	0.5625	0.4375	1	0.9375	0.8	2 3V 235 JA	E-1	JA	1.25	0.9688	0.4375	1	0.9375	1.0
1 3V 250 JA	2.50	2.50	E-1	JA	1.25	0.5625	0.4375	1	0.9375	0.8	2 3V 250 JA	E-1	JA	1.25	0.9688	0.4375	1	0.9375	1.2
1 3V 265 JA	2.65	2.65	C-1	JA	1.25	0.375	0.125	1	–	0.9	2 3V 265 JA	D-1	JA	1.25	0.375	0.125	1	0.4063	1.3
1 3V 280 JA	2.80	2.80	C-1	JA	1.25	0.375	0.125	1	–	0.9	2 3V 280 JA	D-1	JA	1.25	0.375	0.125	1	0.4063	1.4
1 3V 300 JA	3	3	C-1	JA	1.25	0.375	0.125	1	–	1.0	2 3V 300 JA	D-1	JA	1.25	0.375	0.125	1	0.4063	1.6
1 3V 315 JA	3.15	3.15	C-1	JA	1.25	0.375	0.125	1	–	1.0	2 3V 315 JA	D-1	JA	1.25	0.375	0.125	1	0.4063	1.8
1 3V 335 JA	3.35	3.35	C-1	JA	1.25	0.375	0.125	1	–	1.1	2 3V 335 SH	D-1	SH	1.6875	0.4219	0.1406	1.25	0.2031	2.0
1 3V 365 SH	3.65	3.65	D-1	SH	1.6875	0.5625	–	1.25	0.0625	1.3	2 3V 365 SH	D-1	SH	1.6875	0.4219	0.1406	1.25	0.2031	2.4
1 3V 412 SH	4.12	4.12	D-1	SH	1.6875	0.5625	–	1.25	0.0625	1.7	2 3V 412 SH	D-1	SH	1.6875	0.2813	0.2813	1.25	0.0625	2.7
1 3V 450 SH	4.50	4.50	D-2	SH	1.6875	0.5625	–	1.25	0.0625	2.1	2 3V 450 SH	D-1	SH	1.6875	0.25	0.3125	1.25	0.0313	2.9
1 3V 475 SH	4.75	4.75	D-2	SH	1.6875	0.5625	–	1.25	0.0625	2.5	2 3V 475 SH	D-1	SH	1.6875	0.25	0.3125	1.25	0.0313	3.1
1 3V 500 SH	5	5	D-2	SH	1.6875	0.5625	–	1.25	0.0625	2.8	2 3V 500 SH	D-1	SH	1.6875	0.25	0.3125	1.25	0.0313	3.6
1 3V 530 SH	5.30	5.30	D-2	SH	1.6875	0.5625	–	1.25	0.0625	3.2	2 3V 530 SH	D-1	SH	1.6875	0.25	0.3125	1.25	0.0313	4.5
1 3V 560 SH	5.60	5.60	D-2	SH	1.6875	0.5625	–	1.25	0.0625	3.2	2 3V 560 SH	D-1	SH	1.6875	0.25	0.3125	1.25	0.0313	5.0
1 3V 600 SH	6	6	D-2	SH	1.6875	0.5625	–	1.25	0.0625	3.5	2 3V 600 SH	D-1	SH	1.6875	0.25	0.3125	1.25	0.0313	5.5
1 3V 650 SH	6.50	6.50	D-3	SH	1.6875	0.5625	–	1.25	0.0625	3.9	2 3V 650 SDS	D-3	SDS	2	0.3125	0.3125	1.315	0.0313	5.8
1 3V 690 SH	6.90	6.90	D-3	SH	1.6875	0.5625	–	1.25	0.0625	4.5	2 3V 690 SDS	D-3	SDS	2	0.3125	0.3125	1.315	0.0313	6.6
1 3V 800 SDS	8	8	C-3	SDS	2	0.625	–	1.315	–	5.5	2 3V 800 SDS	D-3	SDS	2	0.3125	0.3125	1.315	0.0313	7.0
1 3V 1060 SDS	10.60	10.60	C-3	SDS	2	0.625	–	1.315	–	8.0	2 3V 1060 SK	C-3	SK	2.625	0.4375	0.25	1.875	0.4063	10.0
1 3V 1400 SK	14	14	C-3	SK	2.625	0.6875	–	1.875	–	13.5	2 3V 1400 SK	C-3	SK	2.625	0.4375	0.25	1.875	0.4063	16.0
1 3V 1900 SK	19	19	C-3	SK	2.625	0.6875	–	1.875	–	17.0	2 3V 1900 SK	C-3	SK	2.625	0.4375	0.25	1.875	0.4063	25.0
–	25	25	–	–	–	–	–	–	–	–	2 3V 2500 SF	C-3	SF	2.9375	0.4375	0.25	2	0.5313	28.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-3 and B-4 for additional bushing dimensions.

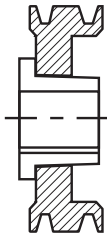
* F = 0.75" for 1 3V 800 SDS and 1 3V 1060 SDS, F = 13/16" for 1 3V 1400 SK and 1 3V 1900 SK.

★ E and M dimensions are nominal and will vary depending on shaft tolerances. Type E sheaves are drilled for reverse mounting only.

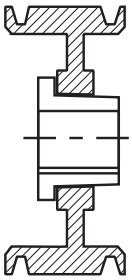
3V Hi-Cap Wedge Stock QD Sheaves



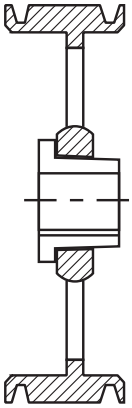
3V



1 = Solid



2 = Web



3 = Arm/Spoke



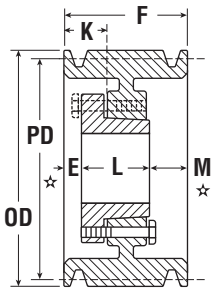
Let Martin quote your made-to-order and large quantity requirements.

QD Sheaves – 3V

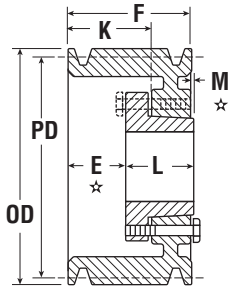
3 Grooves F = 1 ½											4 Grooves F = 1 29/32								
Part Number	OD	PD 3V Belt	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
3 3V 250 JA	2.50	2.50	E-1	JA	1.25	1.625	0.4375	1	0.9375	1.6	–	–	–	–	–	–	–	–	–
3 3V 265 JA	2.65	2.65	D-1	JA	1.25	0.375	0.125	1	0.8125	1.8	4 3V 265 JA	D-1	JA	1.250	0.375	0.125	1	1.2188	1.3
3 3V 280 JA	2.80	2.80	D-1	JA	1.25	0.375	0.125	1	0.8125	2.0	4 3V 280 JA	D-1	JA	1.250	0.375	0.125	1	1.2188	1.6
3 3V 300 SH	3	3	E-1	SH	1.6875	1.0625	-	1.25	0.5625	2.2	4 3V 300 SH	E-1	SH	1.6875	1.4688	0.3125	1.25	0.875	1.9
3 3V 315 SH	3.15	3.15	E-1	SH	1.6875	1.0625	0.3125	1.25	0.875	2.5	4 3V 315 SH	E-1	SH	1.6875	1.4688	0.3125	1.25	0.875	2.2
3 3V 335 SH	3.35	3.35	D-1	SH	1.6875	0.4375	0.125	1.25	0.625	2.8	4 3V 335 SH	D-1	SH	1.6875	0.4375	0.125	1.25	1.0313	2.5
3 3V 365 SH	3.65	3.65	D-1	SH	1.6875	0.4375	0.125	1.25	0.625	3.0	4 3V 365 SH	D-1	SH	1.6875	0.4375	0.125	1.25	1.0313	2.8
3 3V 412 SH	4.12	4.12	A-1	SH	1.6875	0.125	0.6875	1.25	0.0625	3.3	4 3V 412 SH	A-1	SH	1.6875	0.25	0.8125	1.25	0.3438	3.2
3 3V 450 SDS	4.50	4.50	A-1	SDS	2	0.0625	0.6875	1.315	0.0625	3.5	4 3V 450 SDS	A-1	SDS	2	0.1875	0.8125	1.315	0.3438	3.5
3 3V 475 SDS	4.75	4.75	A-1	SDS	2	0.0625	0.6875	1.315	0.0625	3.7	4 3V 475 SDS	A-1	SDS	2	0.1875	0.8125	1.315	0.3438	4.0
3 3V 500 SDS	5	5	A-1	SDS	2	0.0625	0.6875	1.315	0.0625	4.0	4 3V 500 SDS	A-1	SDS	2	0.1875	0.8125	1.315	0.3438	4.5
3 3V 530 SDS	5.30	5.30	A-1	SDS	2	0.0625	0.6875	1.315	0.0625	4.3	4 3V 530 SDS	A-1	SDS	2	0.1875	0.8125	1.315	0.3438	5.0
3 3V 560 SDS	5.60	5.60	A-1	SDS	2	0.0625	0.6875	1.315	0.0625	4.9	4 3V 560 SDS	A-1	SDS	2	0.1875	0.8125	1.315	0.3438	5.7
3 3V 600 SDS	6	6	A-1	SDS	2	0.0625	0.6875	1.315	0.0625	5.9	4 3V 600 SK	D-1	SK	2.625	0.0625	0.625	1.875	0.0313	7.5
3 3V 650 SDS	6.50	6.50	A-3	SDS	2	0.0625	0.6875	1.315	0.0625	6.3	4 3V 650 SK	A-1	SK	2.625	0.0625	0.625	1.875	0.0313	8.0
3 3V 690 SDS	6.90	6.90	A-3	SDS	2	0.0625	0.6875	1.315	0.0625	6.8	4 3V 690 SK	A-1	SK	2.625	0.0625	0.625	1.875	0.0313	10.0
3 3V 800 SK	8	8	C-2	SK	2.625	0.4375	0.25	1.875	–	10.6	4 3V 800 SK	D-2	SK	2.625	0.0625	0.625	1.875	0.0313	12.0
3 3V 1060 SK	10.60	10.60	C-3	SK	2.625	0.4375	0.25	1.875	–	12.0	4 3V 1060 SK	D-3	SK	2.625	0.0625	0.625	1.875	0.0313	16.0
3 3V 1400 SK	14	14	C-3	SK	2.625	0.4375	0.25	1.875	–	20.0	4 3V 1400 SK	D-3	SK	2.625	0.0625	0.625	1.875	0.0313	22.0
3 3V 1900 SF	19	19	C-3	SF	2.9375	0.4375	0.25	2	0.125	33.0	4 3V 1900 SF	C-3	SF	2.9375	0.0625	0.625	2	0.0938	37.0
3 3V 2500 SF	25	25	C-3	SF	2.9375	0.4375	0.25	2	0.125	45.0	4 3V 2500 SF	C-3	SF	2.9375	0.0625	0.625	2	0.0938	53.0
3 3V 3350 SF	33.50	33.50	C-3	SF	2.9375	0.4375	0.25	2	0.125	75.0	4 3V 3350 E	C-3	E	3.5	0.375	0.5	2.625	0.3438	80.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-3 and B-4 for additional bushing dimensions.
★ E and M dimensions are nominal and will vary depending on shaft tolerances. Type E sheaves are drilled for reverse mounting only.

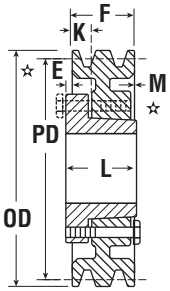
Hi-Cap Wedge Stock QD Sheaves 3V



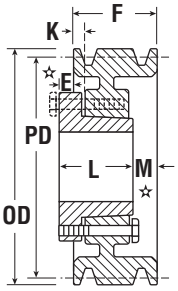
Type A



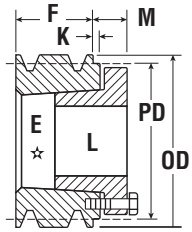
Type B



Type C



Type D



Type E

QD Sheaves – 3V

5 Grooves* F = 2 5/16											6 Grooves F = 2 23/32								
Part Number	OD	PD 3V Belt	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
5 3V 475 SDS	4.75	4.75	A-2	SDS	2	0.1875	0.8125	1.315	0.75	4.5	6 3V 475 SK	D-1	SK	2.625	0.5625	0.125	1.815	1.3438	6.0
5 3V 500 SDS	5	5	A-2	SDS	2	0.1875	0.8125	1.315	0.75	5.3	6 3V 500 SK	D-1	SK	2.625	0.5625	0.125	1.815	1.3438	6.5
5 3V 530 SK	5.30	5.30	A-1	SK	2.625	0.25	0.9375	1.815	0.125	5.8	6 3V 530 SK	A-1	SK	2.625	0.625	1.3125	1.815	0.1563	6.8
5 3V 560 SK	5.60	5.60	A-1	SK	2.625	0.25	0.9375	1.815	0.125	7.0	6 3V 560 SK	A-1	SK	2.625	0.625	1.3125	1.815	0.1563	8.0
5 3V 600 SK	6	6	A-1	SK	2.625	0.25	0.9375	1.815	0.125	8.3	6 3V 600 SK	A-1	SK	2.625	0.625	1.3125	1.815	0.1563	9.0
5 3V 650 SK	6.50	6.50	A-1	SK	2.625	0.25	0.9375	1.815	0.125	9.0	6 3V 650 SK	A-2	SK	2.625	0.625	1.3125	1.815	0.1563	10.0
5 3V 690 SK	6.90	6.90	A-1	SK	2.625	0.25	0.9375	1.815	0.125	12.0	6 3V 690 SK	A-2	SK	2.625	0.625	1.3125	1.815	0.1563	11.5
5 3V 800 SK	8	8	A-2	SK	2.625	0.25	0.9375	1.815	0.125	13.0	6 3V 800 SK	A-2	SK	2.625	0.1875	0.875	1.815	0.5938	17.0
5 3V 1060 SK	10.60	10.60	A-3	SK	2.625	0.25	0.9375	1.815	0.125	17.0	6 3V 1060 SF	A-2	SF	2.9375	0.1875	0.875	2	0.4688	25.0
5 3V 1400 SF	14	14	A-3	SK	2.9375	0.1875	0.875	2	0.0625	27.0	6 3V 1400 SF	A-3	SF	2.9375	0.1875	0.875	2	0.4688	34.0
5 3V 1900 SF	19	19	A-3	SK	2.9375	0.1875	0.875	2	0.0625	40.0	6 3V 1900 E	B-3	E	3.5	0.125	1	2.625	0.0313	45.0
5 3V 2500 E	25	25	C-3	E	3.5	0.25	0.625	2.625	0.0625	69.0	6 3V 2500 E	B-3	E	3.5	0.125	1	2.625	0.0313	75.0
5 3V 3350 E	33.50	33.50	C-3	E	3.5	0.25	0.625	2.625	0.0625	97.0	6 3V 3350 E	B-3	E	3.5	0.125	1	2.625	0.0313	98.0

QD Sheaves – 3V

8 Grooves* F = 3 17/32											10 Grooves F = 4 11/32								
Part Number	OD	PD 3V Belt	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
8 3V 475 SK	4.75	4.75	D-1	SK	2.625	0.5625	0.125	1.815	2.1563	6.0	10 3V 475 SK	D-1	SK	2.625	0.5625	0.125	1.815	2.9688	7.0
8 3V 500 SK	5	5	D-1	SK	2.625	0.5625	0.125	1.815	2.1563	6.9	10 3V 500 SK	D-1	SK	2.625	0.5625	0.125	1.815	2.9688	8.6
8 3V 530 SK	5.30	5.30	A-1	SK	2.625	0.625	1.3125	1.815	0.9688	7.8	10 3V 530 SK	A-1	SK	2.625	0.75	1.4375	1.815	1.6563	9.0
8 3V 560 SK	5.60	5.60	A-1	SK	2.625	0.625	1.3125	1.815	0.9688	9.0	10 3V 560 SK	A-1	SK	2.625	0.75	1.4375	1.815	1.6563	10.0
8 3V 600 SK	6	6	A-1	SK	2.625	0.625	1.3125	1.815	0.9688	10.0	10 3V 600 SK	A-1	SK	2.625	0.75	1.4375	1.815	1.6563	11.0
8 3V 650 SK	6.50	6.50	A-2	SK	2.625	0.625	1.3125	1.815	0.9688	12.9	10 3V 650 SK	A-2	SK	2.625	0.75	1.4375	1.815	1.6563	14.0
8 3V 690 SK	6.90	6.90	A-2	SK	2.625	0.625	1.3125	1.815	0.9688	14.0	10 3V 690 SK	A-2	SK	2.625	0.75	1.4375	1.815	1.6563	16.0
8 3V 800 SF	8	8	A-1	SF	2.9375	0.4375	1.125	2	1.0313	20.0	10 3V 800 SF	A-1	SF	2.9375	0.8125	1.5	2	1.4688	22.0
8 3V 1060 SF	10.60	10.60	A-2	SF	2.9375	0.4375	1.125	2	1.0313	28.0	10 3V 1060 E	A-2	E	3.5	0.375	1.25	2.625	1.3438	33.0
8 3V 1400 E	14	14	A-3	E	3.5	0.375	1.25	2.625	0.5313	40.0	10 3V 1400 E	A-3	E	3.5	0.375	1.25	2.625	1.3438	43.0
8 3V 1900 E	19	19	A-3	E	3.5	0.375	1.25	2.625	0.5313	62.0	10 3V 1900 E	A-3	E	3.5	0.375	1.25	2.625	1.3438	66.0
8 3V 2500 E	25	25	A-3	E	3.5	0.375	1.25	2.625	0.5313	87.0	10 3V 2500 F	A-3	F	3.9375	0.3125	1.3125	3.625	0.4063	98.0
8 3V 3350 F	33.50	33.50	B-3	F	3.9375	0.0625	1.0625	3.625	0.1563	152.0	10 3V 3350 F	A-3	F	3.9375	0.3125	1.3125	3.625	0.4063	178.0

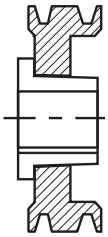
NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-3 and B-4 for additional bushing dimensions.
★ E and M dimensions are nominal and will vary depending on shaft tolerances. Type E sheaves are drilled for reverse mounting only.

5V Hi-Cap Wedge Stock QD Sheaves

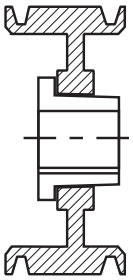


5/8 × 17/32

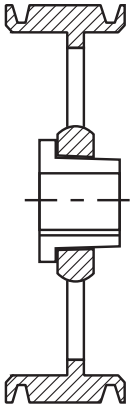
5V



1 = Solid



2 = Web



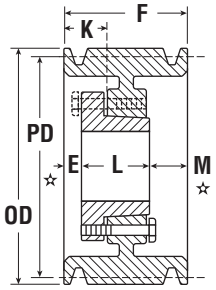
3 = Arm/Spoke

QD Sheaves – 5V

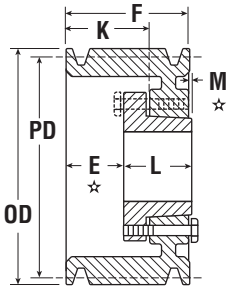
2 Grooves F = 1 11/16											3 Grooves F = 2 3/8								
Part Number	OD	PD 5V Belt	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
2 5V 440 SH	4.40	4.40	A-1	SH	1.6875	0.3125	0.875	1.25	0.0625	4.0	3 5V 440 SDS	E-1	SDS	2	1.625	–	1.315	0.625	5.5
2 5V 465 SDS	4.65	4.65	A-1	SDS	2	0.9375	–	1.315	0.625	4.5	3 5V 465 SDS	E-1	SDS	2	1.625	–	1.315	0.625	6.5
2 5V 490 SDS	4.90	4.90	A-1	SDS	2	0.0625	0.6875	1.315	0.25	5.0	3 5V 490 SDS	A-1	SDS	2	0.4375	1.0625	1.315	0.5625	7.0
2 5V 520 SDS	5.20	5.20	A-1	SDS	2	0.0625	0.6875	1.315	0.25	5.5	3 5V 520 SDS	A-1	SDS	2	0.4375	1.0625	1.315	0.5625	7.5
2 5V 550 SDS	5.5	5.5	A-1	SDS	2	0.0625	0.6875	1.315	0.25	6.0	3 5V 550 SDS	A-1	SDS	2	0.4375	1.0625	1.315	0.5625	8.0
2 5V 590 SDS	5.90	5.90	A-1	SDS	2	0.0625	0.6875	1.315	0.25	7.0	3 5V 590 SDS	A-1	SDS	2	0.4375	1.0625	1.315	0.5625	8.5
2 5V 630 SK	6.30	6.30	C-1	SK	2.625	0.25	0.4375	1.875	–	8.0	3 5V 630 SK	A-1	SK	2.625	0.375	1.0625	1.875	0.0625	11.0
2 5V 670 SK	6.70	6.70	C-1	SK	2.625	0.25	0.4375	1.875	–	10.0	3 5V 670 SK	A-1	SK	2.625	0.375	1.0625	1.875	0.0625	11.5
2 5V 710 SK	7.10	7.10	C-1	SK	2.625	0.25	0.4375	1.875	–	11.0	3 5V 710 SF	A-1	SF	2.9375	0.3125	1	2	–	13.0
2 5V 750 SK	7.5	7.5	C-1	SK	2.625	0.25	0.4375	1.875	–	13.0	3 5V 750 SF	A-1	SF	2.9375	0.3125	1	2	–	14.0
2 5V 800 SK	8	8	C-1	SK	2.625	0.25	0.4375	1.875	–	14.0	3 5V 800 SF	A-1	SF	2.9375	0.3125	1	2	–	15.0
2 5V 850 SK	8.5	8.5	C-1	SK	2.625	0.25	0.4375	1.875	–	15.0	3 5V 850 SF	A-1	SF	2.9375	0.3125	1	2	–	16.0
2 5V 900 SK	9	9	C-2	SK	2.625	0.25	0.4375	1.875	–	16.0	3 5V 900 SF	A-2	SF	2.9375	0.3125	1	2	–	17.0
2 5V 925 SK	9.25	9.25	C-2	SK	2.625	0.25	0.4375	1.875	–	16.5	3 5V 925 SF	A-2	SF	2.9375	0.3125	1	2	–	18.0
2 5V 975 SK	9.75	9.75	C-3	SK	2.625	0.25	0.4375	1.875	–	17.0	3 5V 975 SF	A-2	SF	2.9375	0.3125	1	2	–	19.0
2 5V 1030 SK	10.30	10.30	C-3	SK	2.625	0.25	0.4375	1.875	–	18.0	3 5V 1030 SF	A-2	SF	2.9375	0.3125	1	2	–	22.0
2 5V 1090 SK	10.90	10.90	C-3	SK	2.625	0.25	0.4375	1.875	–	19.0	3 5V 1090 SF	A-2	SF	2.9375	0.3125	1	2	–	25.0
2 5V 1130 SK	11.30	11.30	C-3	SK	2.625	0.25	0.4375	1.875	–	19.5	3 5V 1130 SF	A-2	SF	2.9375	0.3125	1	2	–	25.0
2 5V 1180 SK	11.80	11.80	C-3	SK	2.625	0.25	0.4375	1.875	–	20.0	3 5V 1180 SF	A-2	SF	2.9375	0.3125	1	2	–	29.0
2 5V 1250 SF	12.5	12.5	C-3	SF	2.9375	0.25	0.4375	2	0.125	25.0	3 5V 1250 E	C-2	E	3.5	0.125	0.75	2.625	0.125	32.0
2 5V 1320 SF	13.20	13.20	C-3	SF	2.9375	0.25	0.4375	2	0.125	27.0	3 5V 1320 E	C-3	E	3.5	0.125	0.75	2.625	0.125	38.0
2 5V 1400 SF	14	14	C-3	SF	2.9375	0.25	0.4375	2	0.125	28.0	3 5V 1400 E	C-3	E	3.5	0.125	0.75	2.625	0.125	43.0
2 5V 1500 SF	15	15	C-3	SF	2.9375	0.25	0.4375	2	0.125	30.0	3 5V 1500 E	C-3	E	3.5	0.125	0.75	2.625	0.125	44.0
2 5V 1600 SF	16	16	C-3	SF	2.9375	0.25	0.4375	2	0.125	34.0	3 5V 1600 E	C-3	E	3.5	0.125	0.75	2.625	0.125	46.0
2 5V 1870 SF	18.70	18.70	C-3	SF	2.9375	0.25	0.4375	2	0.125	49.0	3 5V 1870 E	C-3	E	3.5	0.125	0.75	2.625	0.125	60.0
2 5V 2120 SF	21.20	21.20	C-3	SF	2.9375	0.25	0.4375	2	0.125	50.0	3 5V 2120 E	C-3	E	3.5	0.125	0.75	2.625	0.125	68.0
2 5V 2360 E	23.60	23.60	C-3	E	3.5	0.625	0.25	2.625	0.3125	72.0	3 5V 2360 E	C-3	E	3.5	0.125	0.75	2.625	0.125	80.0
2 5V 2800 E	28	28	C-3	E	3.5	0.625	0.25	2.625	0.3125	80.0	3 5V 2800 E	C-3	E	3.5	0.125	0.75	2.625	0.125	92.0
–	31.5	31.5	–	–	–	–	–	–	–	–	3 5V 3150 F	C-3	F	3.9375	0.4375	0.5625	3.625	0.8125	136.0
–	37.5	37.5	–	–	–	–	–	–	–	–	3 5V 3750 F	C-3	F	3.9375	0.4375	0.5625	3.625	0.8125	156.0
–	50	50	–	–	–	–	–	–	–	–	3 5V 5000 F	C-3	F	3.9375	0.4375	0.5625	3.625	0.8125	210.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-3 and B-4 for additional bushing dimensions.
★ E and M dimensions are nominal and will vary depending on shaft tolerances. Type E sheaves are drilled for reverse mounting only.

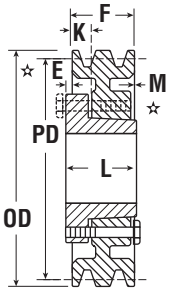
Hi-Cap Wedge Stock QD Sheaves 5V



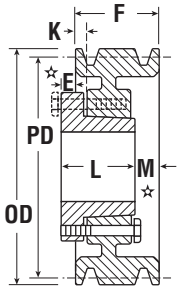
Type A



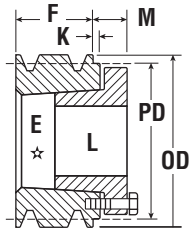
Type B



Type C



Type D



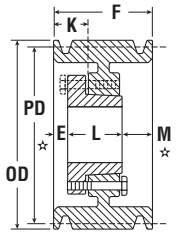
Type E

QD Sheaves – 5V

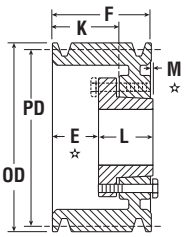
4 Grooves F = 3 1/16											5 Grooves F = 3 3/4								
Part Number	OD	PD 5V Belt	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
4 5V 440 SD	4.40	4.40	E-1	SD	2	1.875	–	1.815	0.625	5.0	5 5V 440 SD	E-1	SD	2	2.5625	-	1.8125	0.625	6.0
4 5V 465 SD	4.65	4.65	E-1	SD	2	1.875	–	1.815	0.625	6.0	5 5V 465 SD	E-1	SD	2	2.5625	1.3125	1.8125	0.625	7.0
4 5V 490 SD	4.90	4.90	A-1	SD	2	0.6875	1.3125	1.815	0.5625	7.0	5 5V 490 SD	A-1	SD	2	0.6875	1.3125	1.8125	1.25	8.0
4 5V 520 SD	5.20	5.20	A-1	SD	2	0.6875	1.3125	1.815	0.5625	8.0	5 5V 520 SD	A-1	SD	2	0.6875	1.3125	1.8125	1.25	9.0
4 5V 550 SD	5.5	5.5	A-1	SD	2	0.6875	1.3125	1.815	0.5625	9.0	5 5V 550 SD	A-1	SD	2	0.6875	1.3125	1.8125	1.25	10.0
4 5V 590 SD	5.90	5.90	A-1	SD	2	0.6875	1.3125	1.815	0.5625	10.8	5 5V 590 SK	A-1	SK	2.625	0.625	1.3125	1.9375	1.1875	11.0
4 5V 630 SK	6.30	6.30	A-1	SK	2.625	0.625	1.3125	1.875	0.5	12.0	5 5V 630 SK	A-1	SK	2.625	0.625	1.3125	1.9375	1.1875	12.0
4 5V 670 SK	6.70	6.70	A-1	SK	2.625	0.625	1.3125	1.875	0.5	14.0	5 5V 670 SF	A-1	SF	2.9375	0.625	1.3125	2.0625	1.0625	13.0
4 5V 710 SF	7.10	7.10	A-1	SF	2.9375	0.375	1.0625	2	0.625	15.0	5 5V 710 SF	A-1	SF	2.9375	0.6875	1.375	2.0625	1	14.0
4 5V 750 SF	7.5	7.5	A-1	SF	2.9375	0.375	1.0625	2	0.625	16.0	5 5V 750 SF	A-1	SF	2.9375	0.6875	1.375	2.0625	1	16.0
4 5V 800 E	8	8	B-1	E	3.5	0.5625	1.4375	2.625	0.125	19.0	5 5V 800 E	A-1	E	3.5	0.875	1.75	2.625	0.25	19.0
4 5V 850 E	8.5	8.5	B-1	E	3.5	0.5625	1.4375	2.625	0.125	23.0	5 5V 850 E	A-1	E	3.5	0.875	1.75	2.625	0.25	22.0
4 5V 900 E	9	9	B-1	E	3.5	0.5625	1.4375	2.625	0.125	25.0	5 5V 900 E	A-1	E	3.5	0.875	1.75	2.625	0.25	26.0
4 5V 925 E	9.25	9.25	B-1	E	3.5	0.5625	1.4375	2.625	0.125	26.0	5 5V 925 E	A-1	E	3.5	0.875	1.75	2.625	0.25	28.0
4 5V 975 E	9.75	9.75	B-1	E	3.5	0.5625	1.4375	2.625	0.125	28.0	5 5V 975 E	A-1	E	3.5	0.875	1.75	2.625	0.25	30.0
4 5V 1030 E	10.30	10.30	B-1	E	3.5	0.5625	1.4375	2.625	0.125	30.0	5 5V 1030 E	A-1	E	3.5	0.875	1.75	2.625	0.25	33.0
4 5V 1090 E	10.90	10.90	B-2	E	3.5	0.5625	1.4375	2.625	0.125	39.0	5 5V 1090 E	A-1	E	3.5	0.875	1.75	2.625	0.25	41.0
4 5V 1130 E	11.30	11.30	B-2	E	3.5	0.5625	1.4375	2.625	0.125	40.0	5 5V 1130 E	A-1	E	3.5	0.875	1.75	2.625	0.25	42.0
4 5V 1180 E	11.80	11.80	B-2	E	3.5	0.5625	1.4375	2.625	0.125	41.0	5 5V 1180 E	A-1	E	3.5	0.875	1.75	2.625	0.25	44.0
4 5V 1250 E	12.5	12.5	B-3	E	3.5	0.5625	1.4375	2.625	0.125	43.0	5 5V 1250 E	A-3	E	3.5	0.875	1.75	2.625	0.25	45.0
4 5V 1320 E	13.20	13.20	B-3	E	3.5	0.5625	1.4375	2.625	0.125	45.0	5 5V 1320 E	A-3	E	3.5	0.875	1.75	2.625	0.25	46.0
4 5V 1400 E	14	14	B-3	E	3.5	0.5625	1.4375	2.625	0.125	46.0	5 5V 1400 E	A-3	E	3.5	0.875	1.75	2.625	0.25	47.0
4 5V 1500 E	15	15	B-3	E	3.5	0.5625	1.4375	2.625	0.125	47.0	5 5V 1500 E	A-3	E	3.5	0.875	1.75	2.625	0.25	53.0
4 5V 1600 E	16	16	B-3	E	3.5	0.5625	1.4375	2.625	0.125	49.0	5 5V 1600 E	A-3	E	3.5	0.875	1.75	2.625	0.25	56.0
4 5V 1870 E	18.7	18.7	A-3	E	3.5	0.375	1.25	2.625	0.0625	71.0	5 5V 1870 F	B-3	F	3.9375	0.3125	1.3125	3.625	0.1875	96.0
4 5V 2120 E	21.20	21.20	A-3	E	3.5	0.375	1.25	2.625	0.0625	72.0	5 5V 2120 F	B-3	F	3.9375	0.3125	1.3125	3.625	0.1875	98.0
4 5V 2360 F	23.60	23.60	C-3	F	3.9375	0.125	0.875	3.625	0.4375	111.0	5 5V 2360 F	B-3	F	3.9375	0.3125	1.3125	3.625	0.1875	120.0
4 5V 2800 F	28	28	C-3	F	3.9375	0.125	0.875	3.625	0.4375	118.0	5 5V 2800 F	B-3	F	3.9375	0.3125	1.3125	3.625	0.1875	135.0
4 5V 3150 F	31.5	31.5	C-3	F	3.9375	0.125	0.875	3.625	0.4375	146.7	5 5V 3150 J	C-3	J	4.5	0.1875	1	4.5	0.5625	188.0
4 5V 3750 F	37.5	37.5	C-3	F	3.9375	0.125	0.875	3.625	0.4375	178.0	5 5V 3750 J	C-3	J	4.5	0.1875	1	4.5	0.5625	224.0
4 5V 5000 J	50	50	C-3	J	4.5	0.5	0.6875	4.5	0.9375	266.0	5 5V 5000 J	C-3	J	4.5	0.1875	1	4.5	0.5625	308.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-3 and B-4 for additional bushing dimensions.
★ E and M dimensions are nominal and will vary depending on shaft tolerances. Type E sheaves are drilled for reverse mounting only.

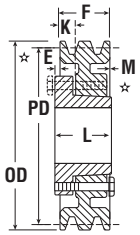
5V Hi-Cap Wedge Stock QD Sheaves



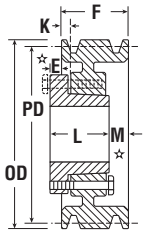
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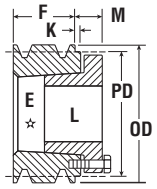
Type B



Type C



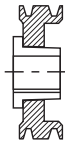
Type D

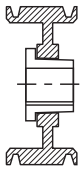


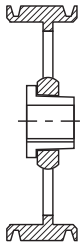
Type E



5V


1 = Solid


2 = Web


3 = Arm/Spoke

QD Sheaves – 5V

6 Grooves F = 4 7/16											7 Grooves F = 5 1/8								
Part Number	OD	PD 5V Belt	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
6 5V 440 SD	4.40	4.40	E-1	SD	2	3.25	–	1.8125	0.625	7.0	–	–	–	–	–	–	–	–	–
6 5V 465 SD	4.65	4.65	E-1	SD	2	3.25	–	1.8125	0.625	7.8	–	–	–	–	–	–	–	–	–
6 5V 490 SD	4.90	4.90	A-1	SD	2	0.6875	1.3125	1.8125	1.9375	9.0	–	–	–	–	–	–	–	–	–
6 5V 520 SD	5.20	5.20	A-1	SD	2	0.6875	1.3125	1.8125	1.9375	10.8	–	–	–	–	–	–	–	–	–
6 5V 550 SD	5.5	5.5	A-1	SD	2	0.6875	1.3125	1.8125	1.9375	11.3	–	–	–	–	–	–	–	–	–
6 5V 590 SK	5.90	5.90	A-1	SK	2.625	0.625	1.3125	1.875	1.875	12.0	–	–	–	–	–	–	–	–	–
6 5V 630 SK	6.30	6.30	A-1	SK	2.625	0.625	1.3125	1.875	1.875	13.0	–	–	–	–	–	–	–	–	–
6 5V 670 SF	6.70	6.70	A-1	SF	2.9375	0.9375	1.625	2	1.4375	14.0	–	–	–	–	–	–	–	–	–
6 5V 710 SF	7.10	7.10	A-1	SF	2.9375	0.9375	1.625	2	1.4375	15.0	7 5V 710 SF	A–1	SF	2.9375	0.9375	1.625	2	2.125	17.0
6 5V 750 SF	7.5	7.5	A-1	SF	2.9375	0.9375	1.625	2	1.4375	17.0	7 5V 750 SF	A–1	SF	2.9375	0.9375	1.625	2	2.125	19.0
6 5V 800 E	8	8	A-1	E	3.5	1.125	2	2.625	0.6875	20.0	7 5V 800 E	A–1	E	3.5	1.125	2	2.625	1.375	22.0
6 5V 850 E	8.5	8.5	A-1	E	3.5	1.125	2	2.625	0.6875	25.0	7 5V 850 E	A–1	E	3.5	1.125	2	2.625	1.375	26.0
6 5V 900 E	9	9	A-1	E	3.5	1.125	2	2.625	0.6875	28.0	7 5V 900 E	A–1	E	3.5	1.125	2	2.625	1.375	29.0
6 5V 925 E	9.25	9.25	A-1	E	3.5	1.125	2	2.625	0.6875	29.0	7 5V 925 E	A–1	E	3.5	1.125	2	2.625	1.375	33.0
6 5V 975 E	9.75	9.75	A-1	E	3.5	1.125	2	2.625	0.6875	31.0	7 5V 975 E	A–1	E	3.5	1.125	2	2.625	1.375	37.0
6 5V 1030 E	10.30	10.30	A-1	E	3.5	1.125	2	2.625	0.6875	33.0	7 5V 1030 F	B–1	F	3.9375	1.625	2.5625	3.625	0.125	49.0
6 5V 1090 E	10.90	10.90	A-1	E	3.5	1.125	2	2.625	0.6875	38.0	7 5V 1090 F	B–1	F	3.9375	1.625	2.5625	3.625	0.125	56.0
6 5V 1130 E	11.30	11.30	A-1	E	3.5	1.125	2	2.625	0.6875	41.0	7 5V 1130 F	B–1	F	3.9375	1.625	2.5625	3.625	0.125	61.0
6 5V 1180 E	11.80	11.80	A-1	E	3.5	1.125	2	2.625	0.6875	43.0	7 5V 1180 F	B–2	F	3.9375	1.625	2.5625	3.625	0.125	56.0
6 5V 1250 F	12.5	12.5	B-3	F	3.9375	1.0625	2.0625	3.625	0.25	45.0	7 5V 1250 F	B–3	F	3.9375	1.625	2.5625	3.625	0.125	53.0
6 5V 1320 F	13.20	13.20	B-3	F	3.9375	1.0625	2.0625	3.625	0.25	48.0	7 5V 1320 F	B–3	F	3.9375	1.625	2.5625	3.625	0.125	52.0
6 5V 1400 F	14	14	B-3	F	3.9375	1.0625	2.0625	3.625	0.25	59.0	7 5V 1400 F	B–3	F	3.9375	1.625	2.5625	3.625	0.125	62.0
6 5V 1500 F	15	15	B-3	F	3.9375	1.0625	2.0625	3.625	0.25	64.0	7 5V 1500 F	B–3	F	3.9375	1.625	2.5625	3.625	0.125	67.0
6 5V 1600 F	16	16	B-3	F	3.9375	1.0625	2.0625	3.625	0.25	68.0	7 5V 1600 F	B–3	F	3.9375	1.625	2.5625	3.625	0.125	77.0
6 5V 1870 F	18.70	18.70	A-3	F	3.9375	0.3125	1.3125	3.625	0.5	83.8	7 5V 1870 F	A–3	F	3.9375	0.375	1.3125	3.625	1.125	99.0
6 5V 2120 F	21.20	21.20	A-3	F	3.9375	0.3125	1.3125	3.625	0.5	110.0	7 5V 2120 J	C–3	J	4.5	0.1875	1.3125	4.5	0.4375	138.0
6 5V 2360 J	23.60	23.60	B-3	J	4.5	0.125	1.3125	4.5	0.1875	148.0	7 5V 2360 J	C–3	J	4.5	0.1875	1.3125	4.5	0.4375	174.0
6 5V 2800 J	28	28	B-3	J	4.5	0.125	1.3125	4.5	0.1875	169.0	7 5V 2800 J	C–3	J	4.5	0.1875	1.3125	4.5	0.4375	169.0
6 5V 3150 J	31.5	31.5	B-3	J	4.5	0.125	1.3125	4.5	0.1875	206.0	7 5V 3150 J	C–3	J	4.5	0.1875	1.3125	4.5	0.4375	241.0
6 5V 3750 J	37.5	37.5	B-3	J	4.5	0.125	1.3125	4.5	0.1875	241.0	7 5V 3750 M	C–3	M	5.5	0.5625	1.9375	6.75	2.1875	300.0
6 5V 5000 M	50	50	C-3	M	5.5	0.125	0.5	6.75	1.375	388.0	7 5V 5000 M	C–3	M	5.5	0.875	0.5	6.75	0.75	408.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-3 and B-4 for additional bushing dimensions.
★ E and M dimensions are nominal and will vary depending on shaft tolerances. Type E sheaves are drilled for reverse mounting only.

QD Sheaves – 5V

8 Grooves											9 Grooves								
F = 5 13/16											F = 6 ½								
Part Number	OD	PD 5V Belt	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
8 5V 710 SF	7.10	7.10	A-1	SF	2.9375	1.4375	2.125	2	2.3125	19.0	–	–	–	–	–	–	–	–	–
8 5V 750 SF	7.5	7.5	A-1	SF	2.9375	1.4375	2.125	2	2.3125	20.0	–	–	–	–	–	–	–	–	–
8 5V 800 E	8	8	A-1	E	3.5	1.625	2.5	2.625	1.5625	25.0	9 5V 800 E	A-1	E	3.5	1.625	2.5	2.625	2.25	26.0
8 5V 850 E	8.5	8.5	A-1	E	3.5	1.625	2.5	2.625	1.5625	29.0	9 5V 850 E	A-1	E	3.5	1.625	2.5	2.625	2.25	30.0
8 5V 900 E	9	9	A-1	E	3.5	1.625	2.5	2.625	1.5625	32.0	9 5V 900 E	A-1	E	3.5	1.625	2.5	2.625	2.25	33.0
8 5V 925 F	9.25	9.25	A-1	F	3.5	1.5625	2.5625	3.625	0.625	39.0	9 5V 925 F	A-1	F	3.9375	1.625	2.5625	3.625	1.25	33.0
8 5V 975 F	9.75	9.75	A-1	F	3.9375	1.5625	2.5625	3.625	0.625	42.0	9 5V 975 F	A-1	F	3.9375	1.625	2.5625	3.625	1.25	45.0
8 5V 1030 F	10.30	10.30	A-1	F	3.9375	1.5625	2.5625	3.625	0.625	52.0	9 5V 1030 F	A-1	F	3.9375	1.625	2.5625	3.625	1.25	54.0
8 5V 1090 F	10.90	10.90	A-1	F	3.9375	1.5625	2.5625	3.625	0.625	59.0	9 5V 1090 F	A-1	F	3.9375	1.625	2.5625	3.625	1.25	62.0
8 5V 1130 F	11.30	11.30	A-1	F	3.9375	1.5625	2.5625	3.625	0.625	62.0	9 5V 1130 F	A-1	F	3.9375	1.625	2.5625	3.625	1.25	67.0
8 5V 1180 F	11.80	11.80	A-1	F	3.9375	1.5625	2.5625	3.625	0.625	64.0	9 5V 1180 F	A-1	F	3.9375	1.625	2.5625	3.625	1.25	73.0
8 5V 1250 F	12.5	12.5	A-3	F	3.9375	1.5625	2.5625	3.625	0.625	66.0	9 5V 1250 F	A-3	F	3.9375	1.625	2.5625	3.625	1.25	61.0
8 5V 1320 F	13.20	13.20	A-3	F	3.9375	1.5625	2.5625	3.625	0.625	68.0	9 5V 1320 F	A-3	F	3.9375	1.625	2.5625	3.625	1.25	60.0
8 5V 1400 F	14	14	A-3	F	3.9375	1.5625	2.5625	3.625	0.625	70.0	9 5V 1400 F	A-3	F	3.9375	1.625	2.5625	3.625	1.25	70.0
8 5V 1500 F	15	15	A-3	F	3.9375	1.5625	2.5625	3.625	0.625	73.0	9 5V 1500 J	B-2	J	4.5	2.4375	3.5625	4.5	0.4375	95.0
8 5V 1600 F	16	16	A-3	F	3.9375	1.5625	1.5625	3.625	0.625	89.0	9 5V 1600 J	B-2	J	4.5	2.4375	3.5625	4.5	0.4375	103.0
8 5V 1870 J	18.70	18.70	A-3	J	4.5	0.375	1.5625	4.5	0.9375	132.0	9 5V 1870 J	A-3	J	4.5	0.4375	1.5625	4.5	1.5625	140.0
8 5V 2120 J	21.20	21.20	A-3	J	4.5	0.375	1.5625	4.5	0.9375	150.0	9 5V 2120 J	A-3	J	4.5	0.4375	1.5625	4.5	1.5625	152.0
8 5V 2360 J	23.60	23.60	A-3	J	4.5	0.375	1.5625	4.5	0.9375	162.0	9 5V 2360 J	A-3	J	4.5	0.4375	1.5625	4.5	1.5625	176.0
8 5V 2800 J	28	28	A-3	J	4.5	0.375	1.5625	4.5	0.9375	191.0	9 5V 2800 M	B-3	M	5.5	0.5625	1.9375	6.75	0.8125	265.0
8 5V 3150 M	31.5	31.5	B-3	M	5.5	0.5	1.9375	6.75	1.4375	298.0	9 5V 3150 M	B-3	M	5.5	0.5625	1.9375	6.75	0.8125	313.0
8 5V 3750 M	37.5	37.5	B-3	M	5.5	0.5	1.9375	6.75	1.4375	319.0	9 5V 3750 M	B-3	M	5.5	0.5625	1.9375	6.75	0.8125	409.0
8 5V 5000 M	50	50	B-3	M	5.5	0.5	1.9375	6.75	1.4375	497.0	9 5V 5000 M	B-3	M	5.5	0.5625	1.9375	6.75	0.8125	483.0

10 Grooves										
F = 7 3/16										
Part Number	OD	PD 5V Belt	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
10 5V 800 E	8	8	A-1	E	3.5	2.375	3.25	2.625	2.1875	27.0
10 5V 850 E	8.5	8.5	A-1	E	3.5	2.375	3.25	2.625	2.1875	32.0
10 5V 900 F	9	9	A-1	F	3.9375	2.3125	3.3125	3.625	1.25	41.0
10 5V 925 F	9.25	9.25	A-1	F	3.9375	2.3125	3.3125	3.625	1.25	47.0
10 5V 975 F	9.75	9.75	A-1	F	3.9375	2.3125	3.3125	3.625	1.25	58.0
10 5V 1030 F	10.30	10.30	A-1	F	3.9375	2.3125	3.3125	3.625	1.25	66.0
10 5V 1090 F	10.90	10.90	A-1	F	3.9375	2.3125	3.3125	3.625	1.25	75.0
10 5V 1130 F	11.30	11.30	A-1	F	3.9375	2.3125	3.3125	3.625	1.25	79.0
10 5V 1180 F	11.80	11.80	A-1	F	3.9375	2.3125	3.3125	3.625	1.25	80.0
10 5V 1250 J	12.5	12.5	A-1	J	4.5	2.375	3.5625	4.5	0.3125	82.0
10 5V 1320 J	13.20	13.20	A-1	J	4.5	2.375	3.5625	4.5	0.3125	85.0
10 5V 1400 J	14	14	A-1	J	4.5	2.375	3.5625	4.5	0.3125	90.0
10 5V 1500 J	15	15	A-2	J	4.5	2.375	3.5625	4.5	0.3125	92.0
10 5V 1600 J	16	16	A-1	J	4.5	2.375	3.5625	4.5	0.3125	102.0
10 5V 1870 J	18.70	18.70	A-3	J	4.5	0.375	1.5625	4.5	2.1875	150.0
10 5V 2120 J	21.20	21.20	A-3	J	4.5	0.375	1.5625	4.5	2.1875	164.0
10 5V 2360 M	23.60	23.60	B-3	M	5.5	0.5	1.9375	6.75	0.0625	258.0
10 5V 2800 M	28	28	B-3	M	5.5	0.5	1.9375	6.75	0.0625	278.0
10 5V 3150 M	31.5	31.5	B-3	M	5.5	0.5	1.9375	6.75	0.0625	318.0
10 5V 3750 M	37.5	37.5	B-3	M	5.5	0.5	1.9375	6.75	0.0625	340.0
10 5V 5000 M	50	50	B-3	M	5.5	0.5	1.9375	6.75	0.0625	538.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-3 and B-4 for additional bushing dimensions.
★ E and M dimensions are nominal and will vary depending on shaft tolerances. Type E sheaves are drilled for reverse mounting only.

8V Hi-Cap Wedge Stock QD Sheaves

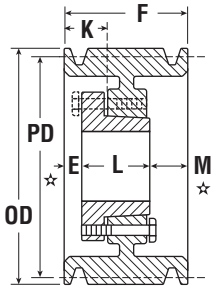
QD Sheaves – 8V

4 Grooves F = 4 7/8											5 Grooves F = 6								
Part Number	OD	PD 8V Belt	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
4 8V 1250 F	12.5	12.5	A-1	F	3.9375	0.1875	1.1875	3.625	1.0625	63.0	5 8V 1250 F	A-1	F	3.9375	1.3125	2.3125	3.625	1.0625	68.0
4 8V 1320 F	13.2	13.2	A-2	F	3.9375	0.1875	1.1875	3.625	1.0625	66.0	5 8V 1320 F	A-2	F	3.9375	1.3125	2.3125	3.625	1.0625	75.0
4 8V 1400 F	14	14	A-2	F	3.9375	0.1875	1.1875	3.625	1.0625	70.0	5 8V 1400 F	A-2	F	3.9375	1.3125	2.3125	3.625	1.0625	78.0
4 8V 1500 F	15	15	A-2	F	3.9375	0.1875	1.1875	3.625	1.0625	74.0	5 8V 1500 F	A-2	F	3.9375	1.3125	2.3125	3.625	1.0625	94.0
4 8V 1600 F	16	16	A-2	F	3.9375	0.1875	1.1875	3.625	1.0625	82.0	5 8V 1600 F	A-2	F	3.9375	1.3125	2.3125	3.625	1.0625	101.0
4 8V 1700 F	17	17	A-3	F	3.9375	0.1875	1.1875	3.625	1.0625	94.0	5 8V 1700 J	A-3	J	4.5	0.8125	2	4.5	0.6875	111.0
4 8V 1800 F	18	18	A-3	F	3.9375	0.1875	1.1875	3.625	1.0625	99.0	5 8V 1800 J	A-3	J	4.5	0.8125	2	4.5	0.6875	130.0
4 8V 1900 F	19	19	A-3	F	3.9375	0.1875	1.1875	3.625	1.0625	105.0	5 8V 1900 J	A-3	J	4.5	0.8125	2	4.5	0.6875	135.0
4 8V 2000 J	20	20	A-3	J	4.5	0.25	1.4375	4.5	0.125	141.0	5 8V 2000 J	A-3	J	4.5	0.8125	2	4.5	0.6875	152.0
4 8V 2120 J	21.2	21.2	A-3	J	4.5	0.25	1.4375	4.5	0.125	150.0	5 8V 2120 J	A-3	J	4.5	0.8125	2	4.5	0.6875	153.0
4 8V 2240 J	22.4	22.4	A-3	J	4.5	0.25	1.4375	4.5	0.125	177.0	5 8V 2240 M	B-3	M	5.5	0.5	1.9375	6.75	1.25	223.0
4 8V 2480 M	24.8	24.8	C-3	M	5.5	0.625	0.8125	6.75	1.25	223.0	5 8V 2480 M	B-3	M	5.5	0.5	1.9375	6.75	1.25	234.0
4 8V 3000 M	30	30	C-3	M	5.5	0.625	0.8125	6.75	1.25	285.0	5 8V 3000 M	B-3	M	5.5	0.5	1.9375	6.75	1.25	294.0
4 8V 3550 M	35.5	35.5	C-3	M	5.5	0.625	0.8125	6.75	1.25	305.0	5 8V 3550 M	B-3	M	5.5	0.5	1.9375	6.75	1.25	325.0
4 8V 4000 M	40	40	C-3	M	5.5	0.625	0.8125	6.75	1.25	355.0	5 8V 4000 M	B-3	M	5.5	0.5	1.9375	6.75	1.25	430.0
4 8V 4450 M	44.5	44.5	C-3	M	5.5	0.625	0.8125	6.75	1.25	369.0	5 8V 4450 N	C-3	N	6	0.8125	0.9375	8.125	1.3125	485.0
4 8V 5300 M	53	53	C-3	M	5.5	0.375	0.8125	6.75	1.25	478.0	5 8V 5300 N	C-3	N	6	0.8125	0.9375	8.125	1.3125	672.0

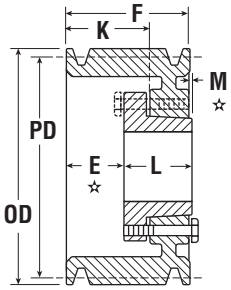
6 Grooves F = 7 1/8											8 Grooves F = 9 3/16								
Part Number	OD	PD 8V Belt	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
6 8V 1250 F	12.5	12.5	A-1	F	3.9375	1.3125	2.3125	3.625	2.1875	86.0	8 8V 1250 J	A-1	J	4.5	2.375	3.5625	4.5	2.5	108.0
6 8V 1320 F	13.2	13.2	A-1	F	3.9375	1.3125	2.3125	3.625	2.1875	94.0	8 8V 1320 J	A-1	J	4.5	2.375	3.5625	4.5	2.5	118.0
6 8V 1400 F	14	14	A-1	F	3.9375	1.3125	2.3125	3.625	2.1875	108.0	8 8V 1400 J	A-1	J	4.5	2.375	3.5625	4.5	2.5	131.0
6 8V 1500 J	15	15	A-1	J	4.5	1.375	2.5625	4.5	1.25	138.0	8 8V 1500 J	A-1	J	4.5	2.375	3.5625	4.5	2.5	151.0
6 8V 1600 J	16	16	A-1	J	4.5	1.375	2.5625	4.5	1.25	142.0	8 8V 1600 J	A-1	J	4.5	2.375	3.5625	4.5	2.5	155.0
6 8V 1700 J	17	17	A-2	J	4.5	1.375	2.5625	4.5	1.25	144.0	8 8V 1700 M	A-2	M	5.5	2.5	3.9375	6.75	0.125	188.0
6 8V 1800 J	18	18	A-2	J	4.5	1.375	2.5625	4.5	1.25	160.0	8 8V 1800 M	A-2	M	5.5	2.5	3.9375	6.75	0.125	202.0
6 8V 1900 J	19	19	A-2	J	4.5	1.375	2.5625	4.5	1.25	172.0	8 8V 1900 M	A-2	M	5.5	2.5	3.9375	6.75	0.125	221.0
6 8V 2000 M	20	20	B-2	M	5.5	1.5	2.9375	6.75	1.125	204.0	8 8V 2000 M	A-2	M	5.5	2.5	3.9375	6.75	0.125	236.0
6 8V 2120 M	21.2	21.2	B-2	M	5.5	1.5	2.9375	6.75	1.125	226.0	8 8V 2120 M	A-2	M	5.5	2.5	3.9375	6.75	0.125	267.0
6 8V 2240 M	22.4	22.4	B-3	M	5.5	1.5	2.9375	6.75	1.125	235.0	8 8V 2240 M	A-3	M	5.5	2.5	3.9375	6.75	0.125	284.0
6 8V 2480 M	24.8	24.8	B-3	M	5.5	0.5	1.9375	6.75	0.125	246.0	8 8V 2480 N	A-2	N	6	0.5	2.25	8.125	0.75	418.0
6 8V 3000 M	30	30	B-3	M	6	0.5	1.9375	6.75	0.125	306.0	8 8V 3000 N	A-3	N	6	0.5	2.25	8.125	0.75	447.0
6 8V 3550 N	35.5	35.5	C-3	N	6	0.625	1.125	8.125	0.375	466.0	8 8V 3550 N	A-3	N	6	0.5	2.25	8.125	0.75	553.0
6 8V 4000 N	40	40	C-3	N	6	0.625	1.125	8.125	0.375	548.0	8 8V 4000 N	A-3	N	6	0.5	2.25	8.125	0.75	648.0
6 8V 4450 N	44.5	44.5	C-3	N	6	0.625	1.125	8.125	0.375	590.0	8 8V 4450 P	B-3	P	6.75	0.625	2.625	9.375	0.625	679.0
6 8V 5300 N	53	53	C-3	N	6	0.625	1.125	8.125	0.375	658.0	8 8V 5300 P	B-3	P	6.75	0.625	2.625	9.375	0.625	946.0
6 8V 6300 P	63	63	C-3	P	6.75	-	2	9.375	1.875	860.0	8 8V 6300 P	B-3	P	6.75	0.625	2.625	9.375	0.25	1372.0
6 8V 7100 P	71	71	B-3	P	6.75	-	2	9.375	1.875	1272.0	8 8V 7100 W	C-3	W	8.5	0.875	1.375	11.375	0.75	1680.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-3 and B-4 for additional bushing dimensions.
★ E and M dimensions are nominal and will vary depending on shaft tolerances. Type E sheaves are drilled for reverse mounting only.

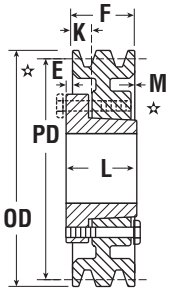
Hi-Cap Wedge Stock QD Sheaves 8V



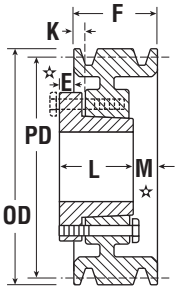
Type A



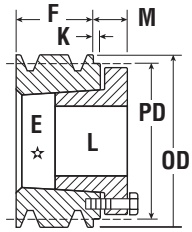
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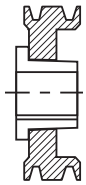
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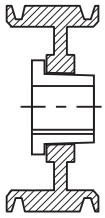


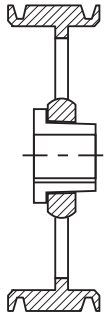
Type D



Type E


1 = Solid


2 = Web

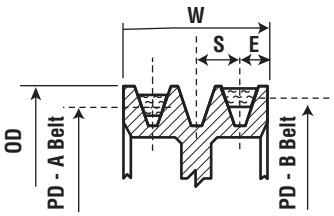

3 = Arm/Spoke

QD Sheaves – 8V

10 Grooves F = 11 5/8											12 Grooves F = 14								
Part Number	OD	PD 8V Belt	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
10 8V 1250 J	12.5	12.5	A-1	J	4.5	2.375	3.5625	4.5	4.75	122.0	12 8V 1250 M	A-1	M	5.5	2.5	3.9375	6.75	4.625	161.0
10 8V 1320 J	13.2	13.2	A-1	J	4.5	2.375	3.5625	4.5	4.75	140.0	12 8V 1320 M	A-1	M	5.5	2.5	3.9375	6.75	4.625	185.0
10 8V 1400 J	14	14	A-1	J	4.5	2.375	3.5625	4.5	4.75	152.0	12 8V 1400 M	A-1	M	5.5	2.5	3.9375	6.75	4.625	211.0
10 8V 1500 M	15	15	A-1	M	5.5	2.5	3.9375	6.75	2.375	212.0	12 8V 1500 M	A-1	M	5.5	2.5	3.9375	6.75	4.625	234.0
10 8V 1600 M	16	16	A-1	M	5.5	2.5	3.9375	6.75	2.375	219.0	12 8V 1600 M	A-1	M	5.5	2.5	3.9375	6.75	4.625	285.0
10 8V 1700 M	17	17	A-2	M	5.5	2.5	3.9375	6.75	2.375	228.0	12 8V 1700 M	A-1	M	5.5	2.5	3.9375	6.75	4.625	324.0
10 8V 1800 M	18	18	A-2	M	5.5	2.5	3.9375	6.75	2.375	236.0	12 8V 1800 M	A-2	M	5.5	2.5	3.9375	6.75	4.625	330.0
10 8V 1900 M	19	19	A-2	M	5.5	2.5	3.9375	6.75	2.375	260.0	12 8V 1900 N	A-2	N	6	0.5	2.25	8.125	5.25	338.0
10 8V 2000 M	20	20	A-2	M	5.5	2.5	3.9375	6.75	2.375	280.0	12 8V 2000 N	A-2	N	6	0.5	2.25	8.125	5.25	365.0
10 8V 2120 M	21.2	21.2	A-2	M	5.5	2.5	3.9375	6.75	2.375	298.0	12 8V 2120 N	A-2	N	6	0.5	2.25	8.125	5.25	382.0
10 8V 2240 N	22.4	22.4	A-2	N	6	0.5	2.25	8.125	3	366.0	12 8V 2240 N	A-2	N	6	0.5	2.25	8.125	5.25	399.0
10 8V 2480 N	24.8	24.8	A-2	N	6	0.5	2.25	8.125	3	454.0	12 8V 2480 N	A-2	N	6	0.5	2.25	8.125	5.25	454.0
10 8V 3000 N	30	30	A-3	N	6	0.5	2.25	8.125	3	468.0	12 8V 3000 P	A-3	P	6.75	0.625	2.625	9.375	3.875	605.0
10 8V 3550 P	35.5	35.5	A-3	P	6.75	0.625	2.625	9.375	1.625	784.0	12 8V 3550 P	A-3	P	6.75	0.625	2.625	9.375	3.875	706.0
10 8V 4000 P	40	40	A-3	P	6.75	0.625	2.625	9.375	1.625	826.0	12 8V 4000 P	A-3	P	6.75	0.625	2.625	9.375	3.875	766.0
10 8V 4450 P	44.5	44.5	A-3	P	6.75	0.625	2.625	9.375	1.625	996.0	12 8V 4450 P	A-3	P	6.75	0.625	2.625	9.375	3.875	910.0
10 8V 5300 P	53	53	A-3	P	6.75	0.625	2.625	9.375	0.25	1010.0	12 8V 5300 W	A-3	W	8.5	0.625	2.875	11.375	2.25	1333.0
10 8V 6300 W	63	63	A-3	W	8.5	0.625	2.875	11.375	–	1443.0	12 8V 6300 W	A-3	W	8.5	0.625	2.875	11.375	2.25	1777.0
10 8V 7100 W	71	71	A-3	W	8.5	0.625	2.875	11.375	–	1842.0	12 8V 7100 W	A-3	W	8.5	0.625	2.875	11.375	2.25	2002.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-3 and B-4 for additional bushing dimensions.
★ E and M dimensions are nominal and will vary depending on shaft tolerances. Type E sheaves are drilled for reverse mounting only.

A-B Combination Groove Conventional Stock QD Sheaves



Drawing shows position of A and B belts in groove when used in QD Sheaves

Combination Groove Dimensions

Belt Selection	E	S	OD
AB	.5	.75	PD B + .35

W = S (N-1) + 2E
N = No. of Grooves

Drawing shows position of "A" and "B" belts in groove.



½ × 5⁄16

A



21⁄32 × 13⁄32

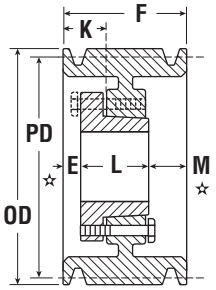
B

QD Sheaves – A-B

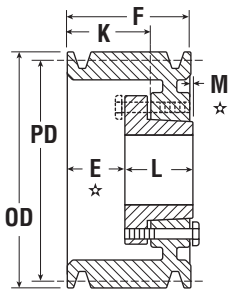
1 Groove F = 7/8 thru 1 B 68 SDS / F = 1 others												2 Grooves F = 1¾								
Part Number	PD		OD	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
	A Belt	B Belt																		
1 B 34 SH	3.0	3.4	3.75	D-1	SH	1.6875	0.5625	–	1.25	0.125	1.4	2 B 34 SH	E-1	SH	1.25	1	–	1.3125	0.5625	2.8
1 B 36 SH	3.2	3.6	3.95	D-1	SH	1.6875	0.5625	–	1.25	0.125	1.6	2 B 36 SH	D-1	SH	1.25	0.375	0.1875	1.3125	0.8125	2.8
1 B 38 SH	3.4	3.8	4.15	D-1	SH	1.6875	0.5625	–	1.25	0.125	1.2	2 B 38 SH	D-1	SH	1.25	0.375	0.1875	1.3125	0.8125	3.3
1 B 40 SH	3.6	4.0	4.35	C-1	SH	1.6875	0.25	0.3125	1.25	0.1875	2.2	2 B 40 SH	A-1	SH	1.25	0.125	0.6875	1.3125	0.3125	3.4
1 B 42 SH	3.8	4.2	4.55	C-1	SH	1.6875	0.25	0.3125	1.25	0.1875	6.9	2 B 42 SH	A-1	SH	1.25	0.125	0.6875	1.3125	0.3125	3.8
1 B 44 SH	4.0	4.4	4.75	C-1	SH	1.6875	0.25	0.3125	1.25	0.1875	2.9	2 B 44 SH	A-1	SH	1.25	0.125	0.6875	1.3125	0.3125	4.6
1 B 46 SDS	4.2	4.6	4.95	C-1	SDS	2	0.3125	0.3125	1.315	0.1875	2.6	2 B 46 SDS	A-2	SDS	1.315	0.0625	0.6875	1.375	0.3125	4.3
1 B 48 SDS	4.4	4.8	5.15	C-1	SDS	2	0.3125	0.3125	1.315	0.1875	3.1	2 B 48 SDS	A-2	SDS	1.315	0.0625	0.6875	1.375	0.3125	4.8
1 B 50 SDS	4.6	5.0	5.35	C-1	SDS	2	0.3125	0.3125	1.315	0.1875	3.5	2 B 50 SDS	A-2	SDS	1.315	0.0625	0.6875	1.375	0.3125	5.5
1 B 52 SDS	4.8	5.2	5.55	C-1	SDS	2	0.3125	0.3125	1.315	0.1875	3.7	2 B 52 SDS	A-2	SDS	1.315	0.0625	0.6875	1.375	0.3125	5.8
1 B 54 SDS	5.0	5.4	5.75	C-1	SDS	2	0.3125	0.3125	1.315	0.1875	4.0	2 B 54 SDS	A-2	SDS	1.315	0.0625	0.6875	1.375	0.3125	6.1
1 B 56 SDS	5.2	5.6	5.95	C-1	SDS	2	0.3125	0.3125	1.315	0.1875	4.2	2 B 56 SDS	A-2	SDS	1.315	0.0625	0.6875	1.375	0.3125	6.6
1 B 58 SDS	5.4	5.8	6.15	C-1	SDS	2	0.3125	0.3125	1.315	0.1875	4.5	2 B 58 SDS	A-1	SDS	1.315	0.0625	0.6875	1.375	0.3125	7.2
1 B 60 SDS	5.6	6.0	6.35	C-1	SDS	2	0.3125	0.3125	1.315	0.1875	4.9	2 B 60 SDS	A-2	SDS	1.315	0.0625	0.6875	1.375	0.3125	7.6
1 B 62 SDS	5.8	6.2	6.55	C-2	SDS	2	0.3125	0.3125	1.315	0.1875	5.5	2 B 62 SDS	A-2	SDS	1.315	0.0625	0.6875	1.375	0.3125	7.0
1 B 64 SDS	6.0	6.4	6.75	C-2	SDS	2	0.3125	0.3125	1.315	0.1875	5.7	2 B 64 SDS	A-2	SDS	1.315	0.0625	0.6875	1.375	0.3125	7.0
1 B 66 SDS	6.2	6.6	6.95	C-2	SDS	2	0.3125	0.3125	1.315	0.1875	5.9	2 B 66 SDS	A-2	SDS	1.315	0.0625	0.6875	1.375	0.3125	9.0
1 B 68 SDS	6.4	6.8	7.15	C-2	SDS	2	0.3125	0.3125	1.315	0.1875	4.8	2 B 68 SDS	A-2	SDS	1.315	0.0625	0.6875	1.375	0.3125	9.2
1 B 70 SDS	6.6	7.0	7.35	C-2	SDS	2	0.5	0.125	1.315	0.125	5.8	2 B 70 SK	D-2	SK	2.625	0.25	0.4375	1.9375	0.0625	8.8
1 B 74 SDS	7.0	7.4	7.75	C-2	SDS	2	0.5	0.125	1.315	0.125	6.4	2 B 74 SK	D-2	SK	2.625	0.25	0.4375	1.9375	0.0625	11.0
1 B 80 SDS	7.6	8.0	8.35	C-3	SDS	2	0.5	0.125	1.315	0.125	6.8	2 B 80 SK	D-2	SK	2.625	0.25	0.4375	1.9375	0.0625	12.6
1 B 86 SDS	8.2	8.6	8.95	C-3	SDS	2	0.5	0.125	1.315	0.125	7.2	2 B 86 SK	D-2	SK	2.625	0.25	0.4375	1.9375	0.0625	12.0
1 B 94 SDS	9.0	9.4	9.75	C-3	SDS	2	0.5	0.125	1.315	0.125	8.0	2 B 94 SK	D-1	SK	2.625	0.25	0.4375	1.9375	0.0625	13.4
1 B 110 SDS	10.6	11.0	11.35	C-3	SDS	2	0.5	0.125	1.315	0.125	9.0	2 B 110 SK	D-3	SK	2.625	0.25	0.4375	1.9375	0.0625	16.4
1 B 124 SDS	12.0	12.4	12.75	C-3	SDS	2	0.5	0.125	1.315	0.125	11.0	2 B 124 SK	D-3	SK	2.625	0.25	0.4375	1.9375	0.0625	19.2
1 B 136 SDS	13.2	13.6	13.95	C-3	SDS	2	0.5	0.125	1.315	0.125	12.0	2 B 136 SK	D-3	SK	2.625	0.25	0.4375	1.9375	0.0625	19.0
1 B 154 SK	15.0	15.4	15.75	C-3	SK	2.625	0.5625	0.125	1.875	0.375	13.0	2 B 154 SK	D-3	SK	2.625	0.25	0.4375	1.9375	0.0625	22.0
1 B 160 SK	15.6	16.0	16.35	C-3	SK	2.625	0.5625	0.125	1.875	0.375	15.0	2 B 160 SK	D-3	SK	2.625	0.25	0.4375	1.9375	0.0625	26.0
1 B 184 SK	18.0	18.4	18.75	C-3	SK	2.625	0.5625	0.125	1.875	0.375	19.0	2 B 184 SK	D-3	SK	2.625	0.25	0.4375	1.9375	0.0625	30.0
1 B 200 SK	19.6	20.0	20.35	C-3	SK	2.625	0.5625	0.125	1.875	0.375	25.0	2 B 200 SF	D-3	SF	2.9375	0.3125	0.375	2.0625	–	35.0
–	24.6	25.0	25.35	–	–	–	–	–	–	–	–	2 B 250 SF	D-3	SF	2.9375	0.3125	0.375	2.0625	–	57.0
–	29.6	30.0	30.35	–	–	–	–	–	–	–	–	2 B 300 SF	D-3	SF	2.9375	0.3125	0.375	2.0625	–	80.0
–	37.6	38.0	38.35	–	–	–	–	–	–	–	–	2 B 380 SF	D-3	SF	2.9375	0.3125	0.375	2.0625	–	99.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-3 and B-4 for additional bushing dimensions.
★ E and M dimensions are nominal and will vary depending on shaft tolerances. Type E sheaves are drilled for reverse mounting only.

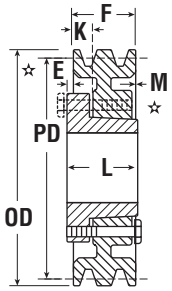
Combination Groove Conventional Stock QD Sheaves A-B



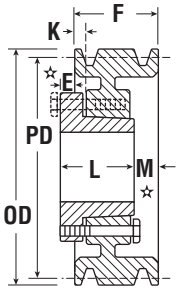
Type A



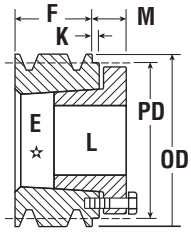
Type B



Type C



Type D



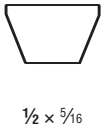
Type E

QD Sheaves – A-B

3 Grooves F = 2½												4 Grooves F = 3¼								
Part Number	PD A Belt	PD B Belt	OD	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
3 B 34 SH	3.0	3.4	3.75	E-1	SH	1.6875	1.75	–	1.25	0.5625	3.4	4 B 34 SD	E-1	SD	2	2.375	0.3125	1.815	0.9375	4.0
3 B 36 SH	3.2	3.6	3.95	E-1	SH	1.6875	0.375	0.1875	1.25	1.1875	3.8	4 B 36 SD	E-1	SD	2	2.375	0.3125	1.815	0.9375	5.0
3 B 38 SH	3.4	3.8	4.15	E-1	SH	1.6875	0.375	0.1875	1.25	1.1875	4.0	4 B 38 SD	E-1	SD	2	2.375	0.3125	1.815	0.9375	5.5
3 B 40 SH	3.6	4.0	4.35	A-1	SH	1.6875	0.5	0.6875	1.25	0.6875	4.5	4 B 40 SD	E-1	SD	2	2.0625	–	1.815	0.625	6.0
3 B 42 SH	3.8	4.2	4.55	A-1	SH	1.6875	0.5	0.6875	1.25	0.6875	5.0	4 B 42 SD	E-1	SD	2	2.0625	–	1.815	0.625	7.0
3 B 44 SH	4.0	4.4	4.75	A-1	SH	1.6875	0.5	0.6875	1.25	0.6875	5.5	4 B 44 SD	E-1	SD	2	2.0625	–	1.815	0.625	7.3
3 B 46 SD	4.2	4.6	4.95	A-1	SD	2	0.438	0.6875	1.815	0.25	6.0	4 B 46 SD	A-1	SD	2	0.6875	0.9375	1.815	0.75	7.6
3 B 48 SD	4.4	4.8	5.15	A-1	SD	2	0.438	0.6875	1.815	0.25	6.5	4 B 48 SD	A-1	SD	2	0.6875	0.9375	1.815	0.75	8.0
3 B 50 SD	4.6	5.0	5.35	A-1	SD	2	0.438	0.6875	1.815	0.25	7.0	4 B 50 SD	A-1	SD	2	0.6875	0.9375	1.815	0.75	9.0
3 B 52 SD	4.8	5.2	5.55	A-1	SD	2	0.438	0.6875	1.815	0.25	8.0	4 B 52 SD	A-1	SD	2	0.6875	0.9375	1.815	0.75	10.0
3 B 54 SD	5.0	5.4	5.75	A-1	SD	2	0.438	0.6875	1.815	0.25	8.5	4 B 54 SD	A-1	SD	2	0.6875	0.9375	1.815	0.75	10.5
3 B 56 SD	5.2	5.6	5.95	A-1	SD	2	0.438	0.6875	1.815	0.25	9.0	4 B 56 SD	A-1	SD	2	0.6875	0.9375	1.815	0.75	11.0
3 B 58 SD	5.4	5.8	6.15	A-1	SD	2	0.438	0.6875	1.815	0.25	10.0	4 B 58 SD	A-1	SD	2	0.6875	0.9375	1.815	0.75	12.0
3 B 60 SD	5.6	6.0	6.35	A-1	SD	2	0.438	0.6875	1.815	0.25	11.0	4 B 60 SD	A-1	SD	2	0.6875	0.9375	1.815	0.75	12.5
3 B 62 SD	5.8	6.2	6.55	A-1	SD	2	0.438	0.6875	1.815	0.25	12.0	4 B 62 SD	A-1	SD	2	0.6875	0.9375	1.815	0.75	13.0
3 B 64 SD	6.0	6.4	6.75	A-1	SD	2	0.438	0.6875	1.815	0.25	12.3	4 B 64 SD	A-1	SD	2	0.6875	0.9375	1.815	0.75	14.0
3 B 66 SD	6.2	6.6	6.95	A-1	SD	2	0.438	0.6875	1.815	0.25	12.6	4 B 66 SD	A-1	SD	2	0.6875	0.9375	1.815	0.75	14.5
3 B 68 SD	6.4	6.8	7.15	A-1	SD	2	0.438	0.6875	1.815	0.25	13.0	4 B 68 SD	A-1	SD	2	0.6875	0.9375	1.815	0.75	15.0
3 B 70 SK	6.6	7.0	7.35	A-1	SK	2.625	–	0.6875	1.875	0.56	14.0	4 B 70 SK	A-1	SK	2.625	0.3125	1	1.875	1	15.5
3 B 74 SK	7.0	7.4	7.75	A-1	SK	2.625	–	0.6875	1.875	0.56	15.0	4 B 74 SK	A-1	SK	2.625	0.3125	1	1.875	1	16.0
3 B 80 SK	7.6	8.0	8.35	A-1	SK	2.625	–	0.6875	1.875	0.56	16.0	4 B 80 SK	A-1	SK	2.625	0.3125	1	1.875	1	17.0
3 B 86 SK	8.2	8.6	8.95	A-1	SK	2.625	–	0.6875	1.875	0.56	17.0	4 B 86 SK	A-3	SK	2.625	0.3125	1	1.875	1	18.0
3 B 94 SK	9.0	9.4	9.75	A-1	SK	2.625	–	0.6875	1.875	0.56	18.0	4 B 94 SK	A-3	SK	2.625	0.3125	1	1.875	1	19.0
3 B 110 SK	10.6	11.0	11.35	A-3	SK	2.625	–	0.6875	1.875	0.56	19.0	4 B 110 SK	A-3	SK	2.625	0.3125	1	1.875	1	24.0
3 B 124 SK	12.0	12.4	12.75	A-3	SK	2.625	–	0.6875	1.875	0.56	23.0	4 B 124 SK	A-3	SK	2.625	0.3125	1	1.875	1	26.0
3 B 136 SK	13.2	13.6	13.95	A-3	SK	2.625	–	0.6875	1.875	0.56	24.1	4 B 136 SK	A-3	SK	2.625	0.3125	1	1.875	1	28.0
3 B 154 SK	15.0	15.4	15.75	A-3	SK	2.625	–	0.6875	1.875	0.56	28.0	4 B 154 SF	A-3	SF	2.9375	0.3125	1	2	0.875	41.0
3 B 160 SK	15.6	16.0	16.35	A-3	SK	2.625	–	0.6875	1.875	0.56	29.0	4 B 160 SF	A-3	SF	2.9375	0.3125	1	2	0.875	42.0
3 B 184 SK	18.0	18.4	18.75	A-3	SK	2.625	–	0.6875	1.875	0.56	37.0	4 B 184 SF	A-3	SF	2.9375	0.3125	1	2	0.875	48.0
3 B 200 SF	19.6	20.0	20.35	D-3	SF	2.9375	0.0625	0.625	2	0.5	39.0	4 B 200 SF	A-3	SF	2.9375	0.3125	1	2	0.875	58.0
3 B 250 SF	24.6	25.0	25.35	D-3	SF	2.9375	0.0625	0.625	2	0.5	67.0	4 B 250 E	A-3	E	3.5	0.125	1	2.6250	0.5	78.0
3 B 300 SF	29.6	30.0	30.35	D-3	SF	2.9375	0.0625	0.625	2	0.5	74.0	4 B 300 E	A-3	E	3.5	0.125	1	2.6250	0.5	93.0
3 B 380 E	37.6	38.0	38.35	D-3	E	3.5	0.25	0.625	2.625	0.125	122.0	4 B 380 E	A-3	E	3.5	0.125	1	2.6250	0.5	138.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-3 and B-4 for additional bushing dimensions.
★ E and M dimensions are nominal and will vary depending on shaft tolerances. Type E sheaves are drilled for reverse mounting only.

A-B Combination Groove Conventional Stock QD Sheaves



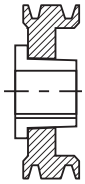
½ × 5⁄16

A

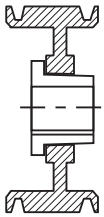


21⁄32 × 13⁄32

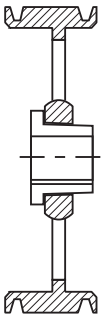
B



1 = Solid



2 = Web



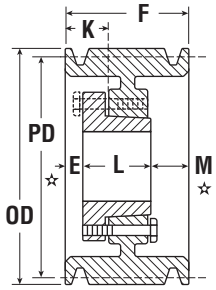
3 = Arm/Spoke

QD Sheaves – A-B

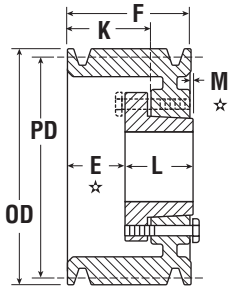
5 Grooves F = 4												6 Grooves F = 4 ¾								
Part Number	PD A Belt	PD B Belt	OD	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
5 B 34 SD	3.0	3.4	3.75	E-1	SD	2	3.25	0.4375	1.815	1.0625	5.0	6 B 34 SD	E-1	SD	2	3.875	0.3125	1.815	0.9375	6.0
5 B 36 SD	3.2	3.6	3.95	E-1	SD	2	3.25	0.4375	1.815	1.0625	6.0	6 B 36 SD	E-1	SD	2	3.875	0.3125	1.815	0.8125	7.0
5 B 38 SD	3.4	3.8	4.15	E-1	SD	2	3.125	0.3125	1.815	1.3125	6.5	6 B 38 SD	E-1	SD	2	3.875	0.3125	1.815	0.8125	7.5
5 B 40 SD	3.6	4.0	4.35	E-1	SD	2	2.813	–	1.815	0.625	7.0	6 B 40 SD	E-1	SD	2	3.5625	–	1.815	0.625	8.0
5 B 42 SD	3.8	4.2	4.55	E-1	SD	2	2.8125	–	1.815	0.625	7.5	6 B 42 SD	E-1	SD	2	3.5625	–	1.815	0.625	9.0
5 B 44 SD	4.0	4.4	4.75	E-1	SD	2	2.8125	–	1.815	0.625	8.0	6 B 44 SD	E-1	SD	2	3.5625	–	1.815	0.625	9.5
5 B 46 SD	4.2	4.6	4.95	A-1	SD	2	0.6875	1.3125	1.815	1.5	9.0	6 B 46 SD	A-1	SD	2	3.5625	1.1875	1.815	2.375	10.0
5 B 48 SD	4.4	4.8	5.15	A-1	SD	2	0.6875	1.3125	1.815	1.5	9.5	6 B 48 SD	A-1	SD	2	2.25	1.1875	1.815	2.375	10.5
5 B 50 SD	4.6	5.0	5.35	A-1	SD	2	0.6875	1.3125	1.815	1.5	10.0	6 B 50 SD	A-1	SD	2	2.25	1.1875	1.815	2.375	11.0
5 B 52 SD	4.8	5.2	5.55	A-1	SD	2	0.6875	1.3125	1.815	1.5	10.5	6 B 52 SD	A-1	SD	2	2.25	1.1875	1.815	2.375	11.5
5 B 54 SK	5.0	5.4	5.75	A-1	SK	2.625	0.625	1.3125	1.875	1.4375	11.0	6 B 54 SK	A-1	SK	2.63	0.625	1.3125	1.875	2.1875	12.0
5 B 56 SK	5.2	5.6	5.95	A-1	SK	2.625	0.625	1.3125	1.875	1.4375	11.5	6 B 56 SK	A-1	SK	2.63	0.625	1.3125	1.875	2.1875	13.0
5 B 58 SK	5.4	5.8	6.15	A-1	SK	2.625	0.625	1.3125	1.875	1.4375	12.0	6 B 58 SK	A-1	SK	2.63	0.625	1.3125	1.875	2.1875	14.0
5 B60 SK	5.6	6.0	6.35	A-1	SK	2.625	0.625	1.3125	1.875	1.4375	13.0	6 B60 SK	A-1	SK	2.63	0.625	1.3125	1.875	2.1875	15.0
5 B62 SK	5.8	6.2	6.55	A-1	SK	2.625	0.625	1.3125	1.875	1.4375	14.0	6 B62 SK	A-1	SK	2.63	0.625	1.3125	1.875	2.1875	16.0
5 B64 SK	6.0	6.4	6.75	A-1	SK	2.625	0.625	1.3125	1.875	1.4375	15.0	6 B64 SK	A-1	SK	2.63	0.625	1.3125	1.875	2.1875	17.0
5 B66 SK	6.2	6.6	6.95	A-1	SK	2.625	0.625	1.3125	1.875	1.4375	16.0	6 B66 SK	A-1	SK	2.63	0.625	1.3125	1.875	2.1875	18.0
5 B68 SK	6.4	6.8	7.15	A-1	SK	2.625	0.625	1.3125	1.875	1.4375	17.0	6 B68 SK	A-1	SK	2.63	0.625	1.3125	1.875	2.1875	19.0
5 B 70 SF	6.6	7.0	7.35	A-1	SF	2.9375	0.625	1.3125	2	1.3125	18.0	6 B 70 SF	A-1	SF	2.94	1	1.6875	2	1.6875	19.5
5 B 74 SF	7.0	7.4	7.75	A-1	SF	2.9375	0.625	1.3125	2	1.3125	20.0	6 B 74 SF	A-1	SF	2.94	1	1.6875	2	1.6875	22.0
5 B 80 SF	7.6	8.0	8.35	A-1	SF	2.9375	0.625	1.3125	2	1.3125	23.0	6 B 80 SF	A-1	SF	2.94	1	1.6875	2	1.6875	25.0
5 B 86 SF	8.2	8.6	8.95	A-2	SF	2.9375	0.625	1.3125	2	1.3125	24.0	6 B 86 SF	A-2	SF	2.94	1	1.6875	2	1.6875	28.0
5 B 94 SF	9.0	9.4	9.75	A-2	SF	2.9375	0.625	1.3125	2	1.3125	26.0	6 B 94 SF	A-2	SF	2.94	1	1.6875	2	1.6875	29.0
5 B 110 SF	10.6	11.0	11.35	A-2	SF	2.9375	0.625	1.3125	2	1.3125	32.0	6 B 110 SF	A-2	SF	2.94	1	1.6875	2	1.6875	30.0
5 B 124 SF	12.0	12.4	12.75	A-3	SF	2.9375	0.625	1.3125	2	1.3125	35.0	6 B 124 SF	A-3	SF	2.94	1	1.6875	2	1.6875	40.0
5 B 136 SF	13.2	13.6	13.95	A-3	SF	2.9375	0.625	1.3125	2	1.3125	36.0	6 B 136 SF	A-3	SF	2.94	1	1.6875	2	1.6875	45.0
5 B 154 SF	15.0	15.4	15.75	A-3	SF	2.9375	0.625	1.3125	2	1.3125	46.0	6 B 154 SF	A-3	SF	2.94	1	1.6875	2	1.6875	46.0
5 B 160 SF	15.6	16.0	16.35	A-3	SF	2.9375	0.625	1.3125	2	1.3125	48.0	6 B 160 SF	A-3	SF	2.94	1	1.6875	2	1.6875	50.0
5 B 184 SF	18.0	18.4	18.75	A-3	SF	2.9375	0.625	1.3125	2	1.3125	50.0	6 B 184 SF	A-3	SF	2.94	1	1.6875	2	1.6875	60.0
5 B 200 E	19.6	20.0	20.35	A-3	E	3.5	0.375	1.250	2.625	1	72.0	6 B 200 E	A-3	E	3.5	0.5	1.375	2.625	1.625	78.0
5 B 250 E	24.6	25.0	25.35	A-3	E	3.5	0.375	1.250	2.625	1	90.0	6 B 250 E	A-3	E	3.5	0.5	1.375	2.625	1.625	98.0
5 B 300 E	29.6	30.0	30.35	A-3	E	3.5	0.375	1.250	2.625	1	108.0	6 B 300 E	A-3	E	3.5	0.5	1.375	2.625	1.625	109.0
5 B 380 E	37.6	38.0	38.35	A-3	E	3.5	0.375	1.250	2.625	1	145.0	6 B 380 E	A-3	E	3.5	0.5	1.375	2.625	1.625	173.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-3 and B-4 for additional bushing dimensions.
★ E and M dimensions are nominal and will vary depending on shaft tolerances. Type E sheaves are drilled for reverse mounting only.

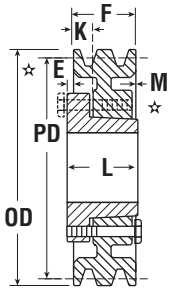
Combination Groove Conventional Stock QD Sheaves A-B



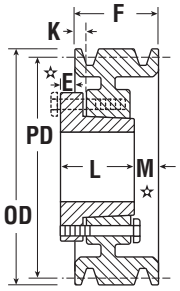
Type A



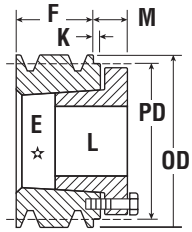
Type B



Type C



Type D



Type E



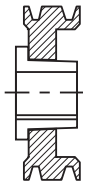
½ × 5⁄16

A

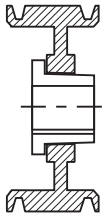


21⁄32 × 13⁄32

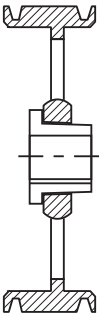
B



1 = Solid



2 = Web



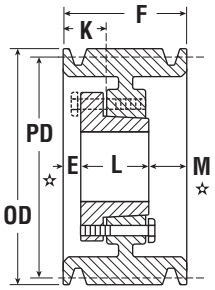
3 = Arm/Spoke

QD Sheaves – A-B

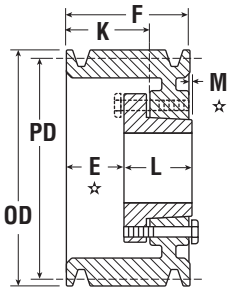
8 Grooves F = 6 ¼												10 Grooves F = 7 ¾								
Part Number	PD A Belt	PD B Belt	OD	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
8 B 54 SK	5.0	5.4	5.75	A-1	SK	2.625	1.125	1.8125	1.875	3.1875	14.0	10 B 54 SK	A-1	SK	2.625	1.875	2.5625	1.875	3.9375	15.0
8 B 56 SK	5.2	5.6	5.95	A-1	SK	2.625	1.125	1.8125	1.875	3.1875	16.0	10 B 56 SK	A-1	SK	2.625	1.875	2.5625	1.875	3.9375	18.0
8 B 58 SK	5.4	5.8	6.15	A-1	SK	2.625	1.125	1.8125	1.875	3.1875	16.5	10 B 58 SK	A-1	SK	2.625	1.875	2.5625	1.875	3.9375	20.0
8 B 60 SF	5.6	6.0	6.35	A-1	SF	2.9375	1.125	1.8125	2	3.0625	17.0	10 B 60 SF	A-1	SF	2.9375	1.875	2.5625	2	3.8125	22.0
8 B 62 SF	5.8	6.2	6.55	A-1	SF	2.9375	1.125	1.8125	2	3.0625	18.0	10 B 62 SF	A-1	SF	2.9375	1.875	2.5625	2	3.8125	24.0
8 B 64 SF	6.0	6.4	6.75	A-1	SF	2.9375	1.125	1.8125	2	3.0625	18.5	10 B 64 SF	A-1	SF	2.9375	1.875	2.5625	2	3.8125	25.0
8 B 66 SF	6.2	6.6	6.95	A-1	SF	2.9375	1.125	1.8125	2	3.0625	21.0	10 B 66 SF	A-1	SF	2.9375	1.875	2.5625	2	3.8125	26.0
8 B 68 SF	6.4	6.8	7.15	A-1	SF	2.9375	1.125	1.8125	2	3.0625	22.0	10 B 68 SF	A-1	SF	2.9375	1.875	2.5625	2	3.8125	27.0
8 B 70 SF	6.6	7.0	7.35	A-1	SF	2.9375	1.125	1.8125	2	3.0625	22.5	10 B 70 SF	A-1	SF	2.9375	1.875	2.5625	2	3.8125	28.0
8 B 74 SF	7.0	7.4	7.75	A-1	SF	2.9375	1.125	1.8125	2	3.0625	25.0	10 B 74 SF	A-1	SF	2.9375	1.875	2.5625	2	3.8125	31.0
8 B 80 SF	7.6	8.0	8.35	A-1	SF	2.9375	1.125	1.8125	2	3.0625	29.0	10 B 80 SF	A-1	SF	2.9375	1.875	2.5625	2	3.8125	35.0
8 B 86 E	8.2	8.6	8.95	A-1	E	3.5	1.5	2.375	2.625	2.125	34.0	10 B 86 E	A-1	E	3.5	2.25	3.125	2.625	2.875	38.0
8 B 94 E	9.0	9.4	9.75	A-1	E	3.5	1.5	2.375	2.625	2.125	40.0	10 B 94 E	A-1	E	3.5	2.25	3.125	2.625	2.875	45.0
8 B 110 E	10.6	11.0	11.35	A-2	E	3.5	1.5	2.375	2.625	2.125	47.0	10 B 110 E	A-2	E	3.5	2.25	3.125	2.625	2.875	53.0
8 B 124 E	12.0	12.4	12.75	A-3	E	3.5	1.5	2.375	2.625	2.125	52.0	10 B 124 E	A-3	E	3.5	2.25	3.125	2.625	2.875	63.0
8 B 136 E	13.2	13.6	13.95	A-3	E	3.5	1.5	2.375	2.625	2.125	60.0	10 B 136 F	A-3	F	3.9375	1.0625	2.0625	3.625	3.0625	78.0
8 B 154 E	15.0	15.4	15.75	A-3	E	3.5	1.5	2.375	2.625	2.125	82.0	10 B 154 F	A-3	F	3.9375	1.0625	2.0625	3.625	3.0625	90.0
8 B 160 E	15.6	16.0	16.35	A-3	E	3.5	1.5	2.375	2.625	2.125	90.0	10 B 160 F	A-3	F	3.9375	1.0625	2.0625	3.625	3.0625	96.0
8 B 184 F	18.0	18.4	18.75	A-3	F	3.9375	0.3125	1.3125	3.625	2.3125	110.0	10 B 184 F	A-3	F	3.9375	1.0625	2.0625	3.625	3.0625	113.0
8 B 200 F	19.6	20.0	20.35	A-3	F	3.9375	0.3125	1.3125	3.625	2.3125	122.0	10 B 200 F	A-3	F	3.9375	1.0625	2.0625	3.625	3.0625	114.0
8 B 250 F	24.6	25.0	25.35	A-3	F	3.9375	0.3125	1.3125	3.625	2.3125	138.0	10 B 250 F	A-3	F	3.9375	1.0625	2.0625	3.625	3.0625	138.0
8 B 300 F	29.6	30.0	30.35	A-3	F	3.9375	0.3125	1.3125	3.625	2.3125	168.0	10 B 300 F	A-3	F	3.9375	1.0625	2.0625	3.625	3.0625	200.0
8 B 380 F	37.6	38.0	38.35	A-3	F	3.9375	0.3125	1.3125	3.625	2.3125	222.0	10 B 380 J	A-3	J	4.5	0.375	1.5625	4.5	2.875	279.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-3 and B-4 for additional bushing dimensions.
★ E and M dimensions are nominal and will vary depending on shaft tolerances. Type E sheaves are drilled for reverse mounting only.

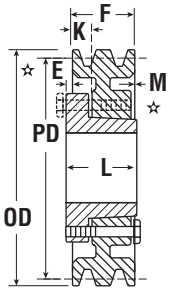
C Conventional Stock QD Sheaves



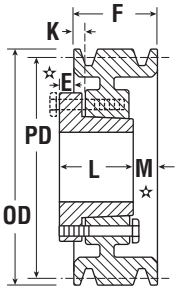
Type A



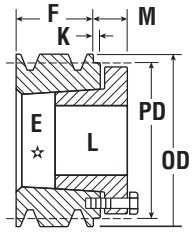
Type B



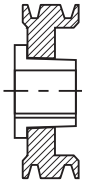
Type C

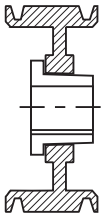


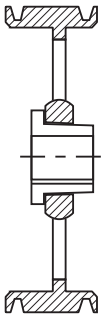
Type D

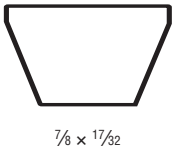


Type E


1 = Solid


2 = Web


3 = Arm/Spoke



C

QD Sheaves – C

1 Groove F =1 3/8											2 Grooves F = 2 3/8								
Part Number	PD C Belt	OD	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
1 C 60 SK	6.0	6.4	C-1	SK	2.625	0.5625	0.125	1.875	0	9.4	2 C 60 SF	A-1	SF	2.9375	0.188	0.875	2	0.125	8.0
1 C 70 SF	7.0	7.4	C-1	SF	2.9375	0.5625	0.125	2	0.125	9.8	2 C 70 SF	A-1	SF	2.9375	0.125	0.8125	2	0.1875	12.0
1 C 75 SF	7.5	7.9	C-1	SF	2.9375	0.5625	0.125	2	0.125	11.0	2 C 75 SF	A-1	SF	2.9375	0.125	0.8125	2	0.1875	15.0
1 C 80 SF	8.0	8.4	C-1	SF	2.9375	0.5625	0.125	2	0.125	13.0	2 C 80 SF	A-1	SF	2.9375	0.125	0.8125	2	0.1875	16.0
1 C 85 SF	8.5	8.9	C-1	SF	2.9375	0.5625	0.125	2	0.125	13.3	2 C 85 SF	A-1	SF	2.9375	0.125	0.8125	2	0.1875	19.0
1 C 90 SF	9.0	9.4	C-3	SF	2.9375	0.5625	0.125	2	0.125	13.5	2 C 90 SF	A-2	SF	2.9375	0.125	0.8125	2	0.1875	19.5
1 C 95 SF	9.5	9.9	C-3	SF	2.9375	0.5625	0.125	2	0.125	13.8	2 C 95 SF	A-2	SF	2.9375	0.125	0.8125	2	0.1875	21.0
1 C 100 SF	10.0	10.4	C-3	SF	2.9375	0.5625	0.125	2	0.125	14.0	2 C 100 SF	A-2	SF	2.9375	0.125	0.8125	2	0.1875	22.0
1 C 105 SF	10.5	10.9	C-3	SF	2.9375	0.5625	0.125	2	0.125	15.0	2 C 105 SF	A-2	SF	2.9375	0.125	0.8125	2	0.1875	25.0
1 C 110 SF	11.0	11.4	C-3	SF	2.9375	0.5625	0.125	2	0.125	15.8	2 C 110 SF	A-3	SF	2.9375	0.125	0.8125	2	0.1875	26.0
1 C 120 SF	12.0	12.4	C-3	SF	2.9375	0.5625	0.125	2	0.125	17.0	2 C 120 SF	D-3	SF	2.9375	0.125	0.5625	2	0.4375	29.0
1 C 130 SF	13.0	13.4	C-3	SF	2.9375	0.5625	0.125	2	0.125	18.0	2 C 130 SF	D-3	SF	2.9375	0.125	0.5625	2	0.4375	31.0
1 C 140 SF	14.0	14.4	C-3	SF	2.9375	0.5625	0.125	2	0.125	20.0	2 C 140 SF	D-3	SF	2.9375	0.125	0.5625	2	0.4375	35.0
1 C 150 SF	15.0	15.4	C-3	SF	2.9375	0.5625	0.125	2	0.125	21.0	2 C 150 SF	D-3	SF	2.9375	0.125	0.5625	2	0.4375	39.0
1 C 160 SF	16.0	16.4	C-3	SF	2.9375	0.5625	0.125	2	0.125	24.0	2 C 160 SF	D-3	SF	2.9375	0.125	0.5625	2	0.4375	43.0
1 C 180 SF	18.0	18.4	C-3	SF	2.9375	0.5625	0.125	2	0.125	27.0	2 C 180 SF	D-3	SF	2.9375	0.125	0.5625	2	0.4375	48.0
1 C 200 SF	20.0	20.4	C-3	SF	2.9375	0.5625	0.125	2	0.125	31.0	2 C 200 SF	D-3	SF	2.9375	0.125	0.5625	2	0.4375	55.0
1 C 240 SF	24.0	24.4	C-3	SF	2.9375	0.5625	0.125	2	0.125	37.0	2 C 240 SF	D-3	SF	2.9375	0.125	0.5625	2	0.4375	65.0
–	27.0	27.4	–	–	–	–	–	–	–	–	2 C 270 F	C-3	F	3.9375	0.6875	0.3125	3.625	0.5625	107.0
–	30.0	30.4	–	–	–	–	–	–	–	–	2 C 300 F	C-3	F	3.9375	0.6875	0.3125	3.625	0.5625	115.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-3 and B-4 for additional bushing dimensions.
★ E and M dimensions are nominal and will vary depending on shaft tolerances. Type E sheaves are drilled for reverse mounting only.

3 Grooves

F =3 3/8

Part Number	PD C Belt	OD	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
3 C 50 SD	5.0	5.4	A-1	SD	2	0.63	1.250	1.815	1	8.0
3 C 54 SD	5.4	5.8	A-1	SD	2	0.7	1.3	1.815	0.9	9.0
3 C 55 SD	5.5	5.9	A-1	SD	2	0.7	1.3	1.815	0.9	10.0
3 C 56 SD	5.6	6.0	A-1	SD	2	0.7	1.3	1.815	0.9	11.0
3 C 60 SF	6.0	6.4	A-1	SF	2.9375	0.2	0.9	2	1.1	12.0
3 C 70 SF	7.0	7.4	A-1	SF	2.9375	0.6	1.3	2	0.7	14.0
3 C 75 SF	7.5	7.9	A-1	SF	2.9375	0.6	1.3	2	0.7	17.0
3 C 80 E	8.0	8.4	B-1	E	3.5	0.9	1.8	2.625	0.1	19.0
3 C 85 E	8.5	8.9	B-1	E	3.5	0.9	1.8	2.625	0.1	22.0
3 C 90 E	9.0	9.4	B-1	E	3.5	0.9	1.8	2.625	0.1	26.0
3 C 95 E	9.5	9.9	B-1	E	3.5	0.9	1.8	2.625	0.1	29.0
3 C 100 E	10.0	10.4	B-1	E	3.5	0.9	1.8	2.625	0.1	27.0
3 C 105 E	10.5	10.9	B-2	E	3.5	0.9	1.8	2.625	0.1	31.0
3 C 110 E	11.0	11.4	B-2	E	3.5	0.9	1.8	2.625	0.1	38.0
3 C 120 E	12.0	12.4	B-3	E	3.5	0.9	1.8	2.625	0.1	40.0
3 C 130 E	13.0	13.4	B-3	E	3.5	0.9	1.8	2.625	0.1	43.0
3 C 140 E	14.0	14.4	B-3	E	3.5	0.9	1.8	2.625	0.1	46.0
3 C 150 E	15.0	15.4	B-3	E	3.5	0.9	1.8	2.625	0.1	52.0
3 C 160 E	16.0	16.4	B-3	E	3.5	0.9	1.8	2.625	0.1	58.0
3 C 180 E	18.0	18.4	B-3	E	3.5	0.9	1.8	2.625	0.1	67.0
3 C 200 E	20.0	20.4	A-3	E	3.5	0.1	1.0	2.625	0.6	70.0
3 C 240 E	24.0	24.4	A-3	E	3.5	0.1	1.0	2.625	0.6	90.0
3 C 270 F	27.0	27.4	C-3	F	3.94	0.2	1.2	3.625	0.1	124.0
3 C 300 F	30.0	30.4	C-3	F	3.94	0.2	1.2	3.625	0.1	130.0
3 C 360 F	36.0	36.4	C-3	F	3.94	0.2	1.2	3.625	0.1	166.0
3 C 440 F	44.0	44.4	C-3	F	3.94	0.2	1.2	3.625	0.1	208.0
3 C 500 F	50.0	50.4	C-3	F	3.94	0.2	1.2	3.625	0.1	250.0

4 Grooves

F = 4 3/8

Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
4 C 50 SD	A-1	SD	2	0.625	1.25	1.815	1.9375	10.0
4 C 54 SD	A-1	SD	2	0.6875	1.3125	1.815	1.875	12.0
4 C 55 SD	A-1	SD	2	0.6875	1.3125	1.815	1.875	12.4
4 C 56 SD	A-1	SD	2	0.6875	1.3125	1.815	1.875	12.4
4 C 60 SF	A-1	SF	2.9375	0.1875	0.875	2	2.125	12.6
4 C 70 SF	A-2	SF	2.9375	0.875	1.1875	2	1.4375	13.0
4 C 75 SF	A-2	SF	2.9375	0.875	1.1875	2	1.4375	19.0
4 C 80 E	A-2	E	3.5	1.125	2	2.625	0.625	24.0
4 C 85 E	A-1	E	3.5	1.125	2	2.625	0.625	27.0
4 C 90 E	A-1	E	3.5	1.125	2	2.625	0.625	30.0
4 C 95 E	A-1	E	3.5	1.125	2	2.625	0.625	33.0
4 C 100 E	A-1	E	3.5	1.125	2	2.625	0.625	35.0
4 C 105 E	A-2	E	3.5	1.125	2	2.625	0.625	40.0
4 C 110 E	A-1	E	3.5	1.125	2	2.625	0.625	45.0
4 C 120 E	A-1	E	3.5	1.125	2	2.625	0.625	48.0
4 C 130 E	A-3	E	3.5	1.125	2	2.625	0.625	49.0
4 C 140 E	A-3	E	3.5	1.125	2	2.625	0.625	56.0
4 C 150 E	A-3	E	3.5	1.125	2	2.625	0.625	62.0
4 C 160 E	A-3	E	3.5	1.125	2	2.625	0.625	68.0
4 C 180 E	A-3	E	3.5	1.125	2	2.625	0.625	74.0
4 C 200 E	A-3	E	3.5	0.625	2	2.625	1.125	81.0
4 C 240 F	A-3	F	3.9375	0.3125	1.3125	3.625	0.4375	120.0
4 C 270 F	A-3	F	3.9375	0.3125	1.3125	3.625	0.4375	138.0
4 C 300 F	A-3	F	3.9375	0.3125	1.3125	3.625	0.4375	166.0
4 C 360 F	A-3	F	3.9375	0.3125	1.3125	3.625	0.4375	176.0
4 C 440 J	B-3	J	4.5	0.375	1.5625	4.5	0.5	254.0
4 C 500 J	B-3	J	4.5	0.375	1.5625	4.5	0.5	318.0

5 Grooves

F =5 3/8

Part Number	PD C Belt	OD	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
5 C 60 SF	6.0	6.4	A-1	SF	2.9375	0.375	0.875	2	3.125	14.0
5 C 70 SF	7.0	7.4	A-1	SF	2.9375	1.25	1.9375	2	2.0625	19.0
5 C 75 SF	7.5	7.9	A-1	SF	2.9375	1.25	1.9375	2	2.0625	22.0
5 C 80 E	8.0	8.4	A-1	E	3.5	1.5	2.375	2.625	1.25	28.0
5 C 85 E	8.5	8.9	A-1	E	3.5	1.5	2.375	2.625	1.25	31.0
5 C 90 E	9.0	9.4	A-1	E	3.5	1.5	2.375	2.625	1.25	32.0
5 C 95 E	9.5	9.9	A-1	E	3.5	1.5	2.375	2.625	1.25	36.0
5 C 100 E	10	10.4	A-2	E	3.5	1.5	2.375	2.625	1.25	38.0
5 C 105 E	10.5	10.9	A-2	E	3.5	1.5	2.375	2.625	1.25	43.0
5 C 110 E	11	11.4	A-1	E	3.5	1.5	2.375	2.625	1.25	50.0
5 C 120 E	12	12.4	A-1	E	3.5	1.5	2.375	2.625	1.25	55.0
5 C 130 E	13	13.4	A-3	E	3.5	1.5	2.375	2.625	1.25	58.0
5 C 140 E	14	14.4	A-3	E	3.5	1.5	2.375	2.625	1.25	61.0
5 C 150 E	15	15.4	A-3	E	3.5	1.5	2.375	2.625	1.25	69.0
5 C 160 E	16	16.4	A-3	E	3.5	1.5	2.375	2.625	1.25	75.0
5 C 180 E	18	18.4	A-3	E	3.5	1.5	2.375	2.625	1.25	85.0
5 C 200 F	20	20.4	A-3	F	3.9375	0.3125	1.3125	3.625	1.4375	108.0
5 C 240 F	24	24.4	A-3	F	3.9375	0.3125	1.3125	3.625	1.4375	124.0
5 C 270 F	27	27.4	A-3	F	3.9375	0.3125	1.3125	3.625	1.4375	154.0
5 C 300 F	30	30.4	A-3	F	3.9375	0.3125	1.3125	3.625	1.4375	174.0
5 C 360 J	36	36.4	A-3	J	4.5	0.375	1.5625	4.5	0.5	226.0
5 C 440 J	44	44.4	A-3	J	4.5	0.375	1.5625	4.5	0.5	289.0
5 C 500 J	50	50.4	A-3	J	4.5	0.375	1.5625	4.5	0.5	316.0

6 Grooves

F = 6 3/8

Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
6 C 60 SF	A-1	SF	2.9375	0.1875	0.875	2	4.125	16.0
6 C 70 SF	A-1	SF	2.9375	1.25	1.9375	2	3.0625	22.0
6 C 75 SF	A-1	SF	2.9375	1.25	1.9375	2	3.0625	25.0
6 C 80 E	A-1	E	3.5	1.5	2.3750	2.625	2.25	31.0
6 C 85 E	A-1	E	3.5	1.5	2.3750	2.625	2.25	35.0
6 C 90 F	A-1	F	3.9375	1.4375	2.4375	3.625	1.3125	40.0
6 C 95 F	A-1	F	3.9375	1.4375	2.4375	3.625	1.3125	44.0
6 C 100 F	A-1	F	3.9375	1.4375	2.4375	3.625	1.3125	50.0
6 C 105 F	A-1	F	3.9375	1.4375	2.4375	3.625	1.3125	56.0
6 C 110 F	A-1	F	3.9375	1.4375	2.4375	3.625	1.3125	60.0
6 C 120 F	A-1	F	3.9375	1.4375	2.4375	3.625	1.3125	65.0
6 C 130 F	A-3	F	3.9375	1.4375	2.4375	3.625	1.3125	67.0
6 C 140 F	A-3	F	3.9375	1.4375	2.4375	3.625	1.3125	75.0
6 C 150 F	A-3	F	3.9375	1.4375	2.4375	3.625	1.3125	91.0
6 C 160 F	A-3	F	3.9375	1.4375	2.4375	3.625	1.3125	93.0
6 C 180 F	A-3	F	3.9375	1.4375	2.4375	3.625	1.3125	106.0
6 C 200 F	A-3	F	3.9375	1.3125	1.9375	3.625	1.8125	125.0
6 C 240 F	A-3	F	3.9375	1.3125	1.9375	3.625	1.8125	162.0
6 C 270 J	A-3	J	3.9375	0.375	1.5625	4.5	1.5	190.0
6 C 300 J	A-3	J	4.5	0.375	1.5625	4.5	1.5	229.0
6 C 360 J	A-3	J	4.5	0.375	1.5625	4.5	1.5	270.0
6 C 440 J	A-3	J	4.5	0.375	1.5625	4.5	1.5	301.0
6 C 500 M	B-3	M	5.5	0.5	1.9375	6.75	0.875	444.0

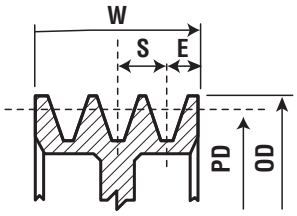
C Conventional Stock QD Sheaves

QD Sheaves – C

8 Grooves F =8 3/8											10 Grooves F = 10 3/8								
Part Number	PD C Belt	OD	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
8 C 70 SF	7	7.4	A-1	SF	2.9375	2.3125	3	2	4	35.0	–	–	–	–	–	–	–	–	–
8 C 80 E	8	8.4	A-1	E	3.5	2.375	3.25	2.625	3.375	36.6	10 C 80 E	A-1	E	4	2.375	3.25	2.625	5.375	42.8
8 C 85 E	8.5	8.9	A-1	E	3.5	2.375	3.25	2.625	3.375	41.0	10 C 85 E	A-1	E	4	2.375	3.25	2.625	5.375	48.5
8 C 90 F	9	9.4	A-1	F	3.9375	2.3125	3.3125	3.625	2.4375	50.0	10 C 90 J	A-1	J	5	2.375	3.5625	4.5	3.5	54.0
8 C 95 F	9.5	9.9	A-1	F	3.9375	2.3125	3.3125	3.625	2.4375	51.0	10 C 95 J	A-1	J	4.5	2.375	3.5625	4.5	3.5	60.0
8 C 100 F	10	10.4	A-1	F	3.9375	2.3125	3.3125	3.625	2.4375	60.0	10 C 100 J	A-1	J	4.5	2.375	3.5625	4.5	3.5	68.0
8 C 105 F	10.5	10.9	A-1	F	3.9375	2.3125	3.3125	3.625	2.4375	67.0	10 C 105 J	A-1	J	4.5	2.375	3.5625	4.5	3.5	75.0
8 C 110 F	11	11.4	A-1	F	3.9375	2.3125	3.3125	3.625	2.4375	74.0	10 C 110 J	A-1	J	4.5	2.375	4	4.5	3.5	90.0
8 C 120 F	12	12.4	A-1	F	3.9375	2.3125	3.3125	3.625	2.4375	87.0	10 C 120 J	A-1	J	4.5	2.375	4	4.5	3.5	106.0
8 C 130 F	13	13.4	A-3	F	3.9375	2.3125	3.3125	3.625	2.4375	94.0	10 C 130 J	A-2	J	4.5	2.375	4	4.5	3.5	110.0
8 C 140 F	14	14.4	A-3	F	3.9375	2.3125	3.3125	3.625	2.4375	99.0	10 C 140 J	A-2	J	4.5	2.375	4	4.5	3.5	124.0
8 C 150 F	15	15.4	A-2	F	3.9375	2.3125	3.3125	3.625	2.4375	111.0	10 C 150 J	A-2	J	4.5	2.375	4	4.5	3.5	138.0
8 C 160 F	16	16.4	A-3	F	3.9375	2.3125	3.3125	3.625	2.4375	112.0	10 C 160 J	A-3	J	4.5	2.375	4	4.5	3.5	139.0
8 C 180 F	18	18.4	A-3	F	3.9375	2.3125	3.3125	3.625	2.4375	116.0	10 C 180 J	A-3	J	4.5	2.375	4	4.5	3.5	168.0
8 C 200 J	20	20.4	A-3	J	4.5	0.375	1.5625	4.5	3.5	146.0	10 C 200 J	A-3	J	4.5	2.375	4	4.5	3.5	182.0
8 C 240 J	24	24.4	A-3	J	4.5	0.375	1.5625	4.5	3.5	195.0	10 C 240 M	A-3	M	5.5	0.500	2	6.75	3.125	272.0
8 C 270 J	27	27.4	A-3	J	4.5	0.375	1.5625	4.5	3.5	216.0	–	–	–	–	–	–	–	–	–
8 C 300 J	30	30.4	A-3	J	4.5	0.375	1.5625	4.5	3.5	268.0	10 C 300 M	A-3	M	5.5	0.500	2	6.75	3.125	355.0
8 C 360 M	36	36.4	A-3	M	5.5	0.5	1.9375	6.75	1.125	364.0	10 C 360 M	A-3	M	5.5	0.500	2	6.75	3.125	455.0
8 C 440 M	44	44.4	A-3	M	5.5	0.5	1.9375	6.75	1.125	413.0	10 C 440 M	A-3	M	5.5	0.500	2	6.75	3.125	544.0
8 C 500 M	50	50.4	A-3	M	5.5	0.5	1.9375	6.75	1.125	474.0	10 C 500 M	A-3	M	5.5	0.500	2	6.75	3.125	622.0

12 Grooves F =12 3/8										
Part Number	PD C Belt	OD	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
12 C 90 J	9	9.4	A-1	J	4.5	2.875	4.0625	4.5	5	63.0
12 C 95 J	9.5	9.9	A-1	J	4.5	2.875	4.0625	4.5	5	75.0
12 C 100 J	10	10.4	A-1	J	4.5	2.875	4.0625	4.5	5	84.0
12 C 105 J	10.5	10.9	A-1	J	4.5	2.875	4.0625	4.5	5	86.0
12 C 110 J	11	11.4	A-1	J	4.5	2.875	4.0625	4.5	5	97.0
12 C 120 J	12	12.4	A-1	J	4.5	2.875	4.0625	4.5	5	119.0
12 C 130 J	13	13.4	A-2	J	4.5	2.875	4.0625	4.5	5	125.0
12 C 140 J	14	14.4	A-2	J	4.5	2.875	4.0625	4.5	5	139.0
12 C 150 J	15	15.4	A-2	J	4.5	2.875	4.0625	4.5	5	156.0
12 C 160 J	16	16.4	A-3	J	4.5	2.875	4.0625	4.5	5	175.0
12 C 180 J	18	18.4	A-3	J	4.5	2.875	4.0625	4.5	5	185.0
12 C 200 M	20	20.4	A-3	M	5.5	0.5	1.9375	6.75	5.125	228.0
12 C 240 M	24	24.4	A-3	M	5.5	0.5	1.9375	6.75	5.125	287.0
12 C 300 M	30	30.4	A-3	M	5.5	0.5	1.9375	6.75	5.125	350.0
12 C 360 M	36	36.4	A-3	M	5.5	0.5	1.9375	6.75	5.125	430.0
12 C 440 M	44	44.4	A-3	M	5.5	0.5	1.9375	6.75	5.125	565.0
12 C 500 M	50	50.4	A-3	M	5.5	0.5	1.9375	6.75	5.125	595.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-3 and B-4 for additional bushing dimensions.



Combination Groove Dimensions

Belt Selection	E	S	OD
C	.6875	1	PD B + .40

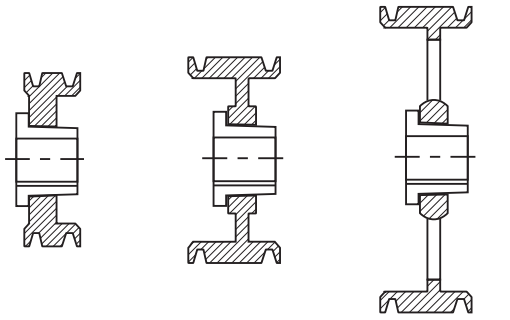
W = S(N-1) + 2E
N = No. of Grooves

QD Sheaves – D

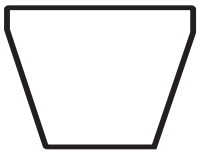
3 Grooves F =4 5/8											4 Grooves F = 6 3/16								
Part Number	PD D Belt	OD	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
3 D 120 F	12	12.6	A-2	F	3.9375	0.5	1.5	3.625	0.5	58.0	4 D 120 F	A-2	F	3.9375	1.3125	2.3125	3.625	1.125	68.0
3 D 130 F	13	13.6	A-2	F	3.9375	0.5	1.5	3.625	0.5	63.0	4 D 130 F	A-2	F	3.9375	1.3125	2.3125	3.625	1.125	78.0
3 D 135 F	13.5	14.1	A-2	F	3.9375	0.5	1.5	3.625	0.5	68.0	4 D 135 F	A-2	F	3.9375	1.3125	2.3125	3.625	1.125	82.0
3 D 140 F	14	14.6	A-2	F	3.9375	0.5	1.5	3.625	0.5	71.0	4 D 140 F	A-2	F	3.9375	1.3125	2.3125	3.625	1.125	91.0
3 D 145 F	14.5	15.1	A-2	F	3.9375	0.5	1.5	3.625	0.5	82.0	4 D 145 F	A-2	F	3.9375	1.3125	2.3125	3.625	1.125	93.0
3 D 150 F	15	15.6	A-2	F	3.9375	0.5	1.5	3.625	0.5	86.0	4 D 150 F	A-2	F	3.9375	1.3125	2.3125	3.625	1.125	99.0
3 D 155 F	15.5	16.1	A-2	F	3.9375	0.5	1.5	3.625	0.5	93.0	4 D 155 F	A-2	F	3.9375	1.3125	2.3125	3.625	1.125	111.0
3 D 160 F	16	16.6	A-2	F	3.9375	0.5	1.5	3.625	0.5	95.0	4 D 160 F	A-2	F	3.9375	1.3125	2.3125	3.625	1.125	122.0
–	–	–	–	–	–	–	–	–	–	–	4 D 170 J	A-2	J	4.5	1.375	2.3125	4.5	0.1875	136.0
3 D 180 J	18	18.6	A-3	J	4.5	–	1.1875	4.5	0.125	105.0	4 D 180 J	A-3	J	4.5	1.375	2.3125	4.5	0.1875	141.0
3 D 200 J	20	20.6	A-2	J	4.5	–	1.1875	4.5	0.125	148.0	4 D 200 J	A-2	J	4.5	0.375	1.5625	4.5	1.1875	167.0
3 D 220 J	22	22.6	A-3	J	4.5	–	1.1875	4.5	0.125	164.0	4 D 220 J	A-3	J	4.5	0.375	1.5625	4.5	1.1875	183.0
3 D 270 J	27	27.6	A-3	J	4.5	–	1.1875	4.5	0.125	180.0	4 D 270 J	A-3	J	4.5	0.375	1.5625	4.5	1.1875	222.0
3 D 330 J	33	33.6	A-3	J	4.5	–	1.1875	4.5	0.125	195.0	4 D 330 M	B-3	M	5.5	0.5	1.9375	6.75	1.1875	315.0
3 D 400 J	40	40.6	A-3	J	4.5	–	1.1875	4.5	0.125	260.0	4 D 400 M	B-3	M	5.5	0.5	1.9375	6.75	1.1875	337.0

5 Grooves F =7 1/2										
Part Number	PD D Belt	OD	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
5 D 120 F	12	12.6	A-2	F	3.9375	2.0625	3.0625	3.625	1.8125	87.0
5 D 130 F	13	13.6	A-2	F	3.9375	2.0625	3.0625	3.625	1.8125	88.0
5 D 135 F	13.5	14.1	A-2	F	3.9375	2.0625	3.0625	3.625	1.8125	92.0
5 D 140 F	14	14.6	A-2	F	3.9375	2.0625	3.0625	3.625	1.8125	96.0
5 D 145 F	14.5	15.1	A-2	F	3.9375	2.0625	3.0625	3.625	1.8125	111.0
5 D 150 F	15	15.6	A-2	F	3.9375	2.0625	3.0625	3.625	1.8125	115.0
5 D 155 F	15.5	16.1	A-2	F	3.9375	2.0625	3.0625	3.625	1.8125	121.0
5 D 160 F	16	16.6	A-2	F	3.9375	2.0625	3.0625	3.625	1.8125	128.0
5 D 170 J	17	17.6	A-2	J	4.5	0.375	1.5625	4.5	2.625	135.0
5 D 180 J	18	18.6	A-3	J	4.5	0.375	1.5625	4.5	2.625	148.0
5 D 200 J	20	20.6	A-3	J	4.5	0.375	1.5625	4.5	2.625	184.0
5 D 220 J	22	22.6	A-3	J	4.5	0.38	1.5625	4.5	2.625	202.0
5 D 270 M	27	27.6	A-3	M	5.5	0.5	1.9375	6.75	0.25	250.0
5 D 330 M	33	33.6	A-3	M	5.5	0.5	1.9375	6.75	0.25	280.0
5 D 400 M	40	40.6	A-3	M	5.5	0.5	1.9375	6.75	0.25	380.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-3 and B-4 for additional bushing dimensions.

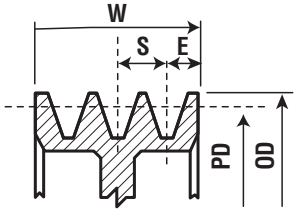


1 = Solid **2 = Web** **3 = Arm/Spoke**



1¼ × ¾

D

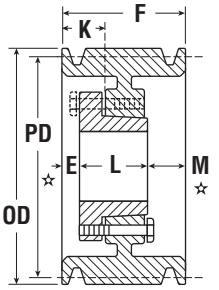


Combination Groove Dimensions

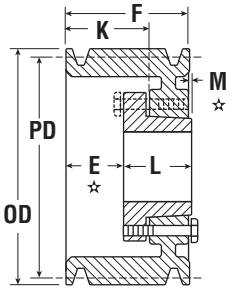
Belt Selection	E	S	OD
C	.6875	1	PD B + .40

W = S(N-1) + 2E
N = No. of Grooves

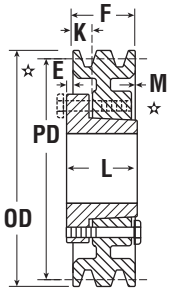
D Conventional Stock QD Sheaves



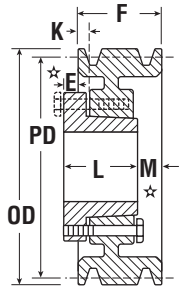
Type A



Type B



Type C



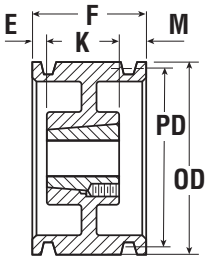
Type D

QD Sheaves – D

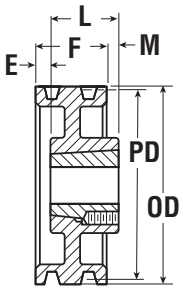
6 Grooves F =8 15/16											8 Grooves F = 11 13/16								
Part Number	PD / D Belt	OD	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
6 D 120 J	12	12.6	A-1	J	4.5	2.125	3.3125	4.5	2.3125	104.0	8 D 120 J	A-1	J	4.5	2.375	3.5625	4.5	4.9375	126.0
6 D 130 J	13	13.6	A-1	J	4.5	2.125	3.3125	4.5	2.3125	122.0	8 D 130 J	A-1	J	4.5	2.375	3.5625	4.5	4.9375	147.0
6 D 135 J	13.5	14.1	A-1	J	4.5	2.125	3.3125	4.5	2.3125	125.0	8 D 135 J	A-1	J	4.5	2.375	3.5625	4.5	4.9375	150.0
6 D 140 J	14	14.6	A-2	J	4.5	2.125	3.3125	4.5	2.3125	128.0	8 D 140 J	A-1	J	4.5	2.375	3.5625	4.5	4.9375	155.0
6 D 145 J	14.5	15.1	A-2	J	4.5	2.125	3.3125	4.5	2.3125	130.0	8 D 145 J	A-1	J	4.5	2.375	3.5625	4.5	4.9375	160.0
6 D 150 J	15	15.6	A-2	J	4.5	2.125	3.3125	4.5	2.3125	136.0	8 D 150 J	A-2	J	4.5	2.375	3.5625	4.5	4.9375	176.0
6 D 155 J	15.5	16.1	A-2	J	4.5	2.125	3.3125	4.5	2.3125	139.0	8 D 155 J	A-2	J	4.5	2.375	3.5625	4.5	4.9375	180.0
6 D 160 J	16	16.6	A-2	J	4.5	2.125	3.3125	4.5	2.3125	141.0	8 D 160 J	A-2	J	4.5	2.375	3.5625	4.5	4.9375	200.0
6 D 170 J	17	17.6	A-2	J	4.5	2.125	3.3125	4.5	2.3125	154.0	8 D 170 M	A-1	M	5.5	2.5	3.9375	6.75	2.5625	225.0
6 D 180 J	18	18.6	A-2	J	4.5	2.125	3.3125	4.5	2.3125	172.0	8 D 180 M	A-2	M	5.5	2.5	3.9375	6.75	2.5625	250.0
6 D 200 J	20	20.6	A-2	J	4.5	2.125	3.3125	4.5	2.3125	183.0	8 D 200 M	A-2	M	5.5	2.5	3.9375	6.75	2.5625	270.0
6 D 220 M	22	22.6	A-2	M	5.5	0.5	1.9375	6.75	1.6875	272.0	8 D 220 M	A-2	M	5.5	0.5	1.9375	6.75	4.5625	316.0
6 D 270 M	27	27.6	A-3	M	5.5	0.5	1.9375	6.75	1.6875	280.0	8 D 270 M	A-3	M	5.5	0.5	1.9375	6.75	4.5625	440.0
6 D 330 M	33	33.6	A-3	M	5.5	0.5	1.9375	6.75	1.6875	356.0	8 D 330 M	A-3	M	5.5	0.5	1.9375	6.75	4.5625	458.0
6 D 400 M	40	40.6	A-3	M	5.5	0.5	1.9375	6.75	1.6875	415.0	8 D 400 N	A-3	N	5.5	0.5	2.25	8.125	3.1875	638.0
6 D 440 M	44	44.6	A-3	M	5.5	0.5	1.9375	6.75	1.6875	536.0	8 D 440 N	A-3	N	6	0.5	2.25	8.125	3.1875	616.0
6 D 480 M	48	48.6	A-3	M	5.5	0.5	1.9375	6.75	1.6875	572.0	8 D 480 N	A-3	N	6	0.5	2.25	8.125	3.1875	755.0
6 D 580 N	58	58.6	A-3	N	6	0.5	2.25	8.125	0.3125	1006.0	8 D 580 N	A-3	N	6	0.5	2.25	8.125	3.1875	1112.0

10 Grooves F = 14 11/16											12 Grooves F = 17 9/16								
Part Number	PD / D Belt	OD	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E ★	K	L Length Thru Bore	M ★	Wt. Less Bush
10 D 120 M	12	12.6	A-1	M	5.5	2.5	3.9375	6.75	5.4375	158.0	12 D 120 M	A-1	M	5.5	3.5	4.9375	6.75	7.3125	158.0
10 D 125 M	12.5	13.1	A-1	M	5.5	2.5	3.9375	6.75	5.4375	178.0	–	–	–	–	–	–	–	–	–
10 D 130 M	13	13.6	A-1	M	5.5	2.5	3.9375	6.75	5.4375	196.0	12 D 130 M	A-1	M	5.5	3.5	4.9375	6.75	7.3125	219.0
10 D 135 M	13.5	14.1	A-1	M	5.5	2.5	3.9375	6.75	5.4375	207.0	12 D 135 M	A-1	M	5.5	3.5	4.9375	6.75	7.3125	242.0
10 D 140 M	14	14.6	A-1	M	5.5	2.5	3.9375	6.75	5.4375	225.0	12 D 140 M	A-1	M	5.5	3.5	4.9375	6.75	7.3125	246.0
10 D 145 M	14.5	15.1	A-1	M	5.5	2.5	3.9375	6.75	5.4375	238.0	12 D 145 M	A-1	M	5.5	3.5	4.9375	6.75	7.3125	266.0
10 D 150 M	15	15.6	A-1	M	5.5	2.5	3.9375	6.75	5.4375	260.0	12 D 150 M	A-1	M	5.5	3.5	4.9375	6.75	7.3125	287.0
10 D 155 M	15.5	16.1	A-1	M	5.5	2.5	3.9375	6.75	5.4375	279.0	12 D 155 M	A-1	M	5.5	3.5	4.9375	6.75	7.3125	308.0
10 D 160 M	16	16.6	A-1	M	5.5	2.5	3.9375	6.75	5.4375	292.0	12 D 160 M	A-1	M	5.5	3.5	4.9375	6.75	7.3125	325.0
10 D 170 M	17	17.6	A-1	M	5.5	2.5	3.9375	6.75	5.4375	330.0	12 D 170 M	A-1	M	5.5	3.5	4.9375	6.75	7.3125	330.0
10 D 180 M	18	18.6	A-1	M	5.5	2.5	3.9375	6.75	5.4375	340.0	12 D 180 M	A-1	M	5.5	3.5	4.9375	6.75	7.3125	340.0
10 D 200 M	20	20.6	A-2	M	5.5	2.5	3.9375	6.75	5.4375	355.0	12 D 200 M	A-2	M	5.5	3.5	4.9375	6.75	7.3125	355.0
10 D 220 M	22	22.6	A-3	M	5.5	1.5	2.9375	6.75	6.4375	348.0	12 D 220 M	A-2	M	5.5	2.5	3.9375	6.75	8.3125	392.0
10 D 270 M	27	27.6	A-3	M	5.5	1.5	2.9375	6.75	6.4375	434.0	12 D 270 M	A-3	N	6	2.5	4.25	8.125	6.9375	505.0
10 D 330 N	33	33.6	A-3	N	6	1.5	3.25	8.125	5.0625	502.0	12 D 330 M	A-3	N	6	2.5	4.25	8.125	6.9375	619.0
10 D 400 N	40	40.6	A-3	N	6	1.5	3.25	8.125	5.0625	727.0	12 D 400 P	A-3	P	6.75	0.625	2.625	9.375	7.5625	946.0
10 D 480 P	48	48.6	A-3	P	6.75	0.625	2.625	9.375	4.6875	755.0	12 D 480 P	A-3	P	6.75	0.625	2.625	9.375	7.5625	1155.0
10 D 580 P	58	58.6	A-3	P	6.75	0.625	2.625	9.375	4.6875	1286.0	12 D 580 P	A-3	P	6.75	0.625	2.625	9.375	7.8125	1576.0

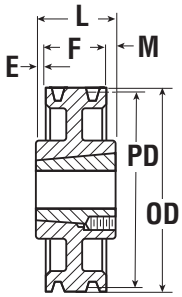
Hi-Cap Wedge Stock Taper Bushed Sheaves 3V



Type A



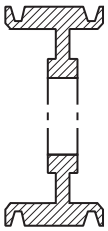
Type B



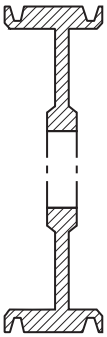
Type C



1 = Solid



2 = Web



3 = Arm/Spoke



$^{3}/_{8} \times {}^{5}/_{16}$

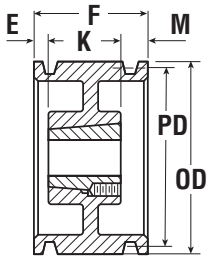
3V

Taper Bushed Sheaves – 3V

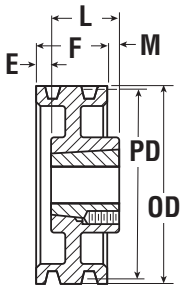
1 Groove F = $^{11}/_{16}$ *										2 Grooves F = 1 $^{3}/_{32}$							
Part Number	Diameter OD	Diameter Pitch 3V	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush
1 3V 265 TB	2.65	2.65	A-1	1108	1.125	0.21875	0.875	–	0.8	2 3V 265 TB	A-1	1108	1.125	0.21875	0.875	–	0.8
1 3V 280 TB	2.8	2.8	A-1	1108	1.125	0.21875	0.875	–	0.9	2 3V 280 TB	A-1	1108	1.125	0.21875	0.875	–	0.9
1 3V 300 TB	3	3	A-1	1108	1.125	0.21875	0.875	–	1.0	2 3V 300 TB	A-1	1210	1.25	0.5	1	–	1.4
1 3V 315 TB	3.15	3.15	A-1	1108	1.125	0.21875	0.875	–	1.3	2 3V 315 TB	A-1	1210	1.25	0.5	1	–	1.6
1 3V 335 TB	3.35	3.35	A-1	1610	1.625	–	1	–	1.5	2 3V 335 TB	A-1	1610	1.625	0.5	1	–	1.7
1 3V 365 TB	3.65	3.65	A-1	1610	1.625	–	1	–	2.0	2 3V 365 TB	A-1	1610	1.625	0.5	1.5	–	2.0
1 3V 412 TB	4.12	4.12	B-1	1610	1.625	–	1	0.40625	2.3	2 3V 412 TB	A-1	1610	1.625	–	1	–	2.1
1 3V 450 TB	4.5	4.5	B-1	1610	1.625	–	1	0.40625	3.0	2 3V 450 TB	A-1	1610	1.625	–	1	–	2.7
1 3V 475 TB	4.75	4.75	B-1	1610	1.625	–	1	0.40625	3.3	2 3V 475 TB	A-1	1610	1.625	–	1	–	3.0
1 3V 500 TB	5	5	B-1	1610	1.625	–	1	0.40625	3.5	2 3V 500 TB	A-1	1610	1.625	–	1	–	4.0
1 3V 530 TB	5.3	5.3	B-1	1610	1.625	–	1	0.40625	3.8	2 3V 530 TB	A-1	1610	1.625	–	1	–	5.0
1 3V 560 TB	5.6	5.6	B-1	1610	1.625	–	1	0.40625	4.0	2 3V 560 TB	A-1	1610	1.625	–	1	–	6.0
1 3V 600 TB	6	6	B-1	1610	1.625	–	1	0.40625	5.0	2 3V 600 TB	A-1	1610	1.625	–	1	–	7.0
1 3V 650 TB	6.5	6.5	B-1	1610	1.625	–	1	0.40625	6.0	2 3V 650 TB	A-1	1610	1.625	–	1	–	8.0
1 3V 690 TB	6.9	6.9	B-1	1610	1.625	–	1	0.40625	7.0	2 3V 690 TB	A-1	1610	1.625	–	1	–	9.0
1 3V 800 TB	8	8	B-2	2517	2.5	–	1.75	1.0625	9.0	2 3V 800 TB	B-2	2517	2.5	–	1.75	0.65625	10.0
1 3V 1060 TB	10.6	10.6	B-2	2517	2.5	–	1.75	1.0625	13.0	2 3V 1060 TB	B-2	2517	2.5	–	1.75	0.65625	14.0
1 3V 1400 TB*	14	14	B-3	2517	2.5	–	1.75	0.9375	15.0	2 3V 1400 TB	B-3	2517	2.5	–	1.75	0.65625	18.0
1 3V 1900 TB*	19	19	B-3	3020	3	–	2	1.1875	27.0	2 3V 1900 TB	B-3	3020	3	–	2	0.65625	32.0
–	25	25	–	–	–	–	–	–	–	2 3V 2500 TB	C-3	3020	3	0.125	2	0.65625	45.0

* F= 11/16" thru 1 3V 1400 TB
F= 13/16" thru 1 3V 1400 TB and 1 3V 1900 TB

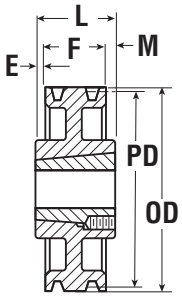
3V Hi-Cap Wedge Stock Taper Bushed Sheaves



Type A



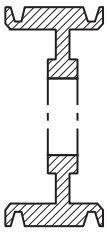
Type B



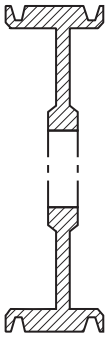
Type C



1 = Solid



2 = Web



3 = Arm/Spoke

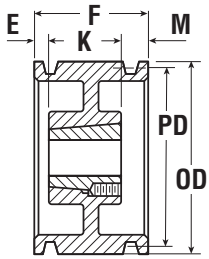


3V

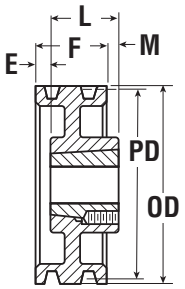
Taper Bushed Sheaves – 3V

3 Grooves F = 1 ½										4 Grooves F = 1 29/32							
Part Number	Diameter OD	Diameter Pitch 3V	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush
3 3V 265 TB	2.65	2.6	A-1	1108	1.125	.625	.875	–	1.0	4 3V 265 TB	A-1	1108	1.125	1.0313	.875	–	1.2
3 3V 280 TB	2.8	2.75	A-1	1108	1.125	.625	.875	–	1.1	4 3V 280 TB	A-1	1108	1.125	1.0313	.875	–	1.3
3 3V 300 TB	3	2.95	A-1	1210	1.25	.9063	1	–	1.8	4 3V 300 TB	A-1	1210	1.25	1.3125	1	–	2.1
3 3V 315 TB	3.15	3.1	A-1	1210	1.25	.9063	1	–	2.0	4 3V 315 TB	A-1	1210	1.25	1.3125	1	–	2.2
3 3V 335 TB	3.35	3.3	A-1	1610	1.625	.9063	1	–	2.3	4 3V 335 TB	A-1	1610	1.625	1.3125	1	–	2.4
3 3V 365 TB	3.65	3.6	A-1	1610	1.625	.9063	1	–	2.6	4 3V 365 TB	A-1	1610	1.625	.9063	1	–	2.8
3 3V 412 TB	4.12	4.07	A-1	1610	1.625	.5	1	–	3.0	4 3V 412 TB	A-1	1610	1.625	.9063	1	–	3.0
3 3V 450 TB	4.5	4.45	A-1	1610	1.625	.5	1	–	3.2	4 3V 450 TB	A-1	1610	1.625	.9063	1	–	4.0
3 3V 475 TB	4.75	4.7	A-1	1610	1.625	.5	1	–	4.0	4 3V 475 TB	A-1	1610	1.625	.9063	1	–	5.0
3 3V 500 TB	5	4.95	A-1	1610	1.625	.5	1	–	4.5	4 3V 500 TB	A-1	1610	1.625	.9063	1	–	5.5
3 3V 530 TB	5.3	5.25	A-1	1610	1.625	.5	1	–	5.0	4 3V 530 TB	A-1	1610	1.625	.9063	1	–	6.0
3 3V 560 TB	5.6	5.55	A-1	1610	1.625	.5	1	–	6.0	4 3V 560 TB	A-1	1610	1.625	.9063	1	–	7.0
3 3V 600 TB	6.0	5.95	B-1	2517	2.5	.1563	1.75	.4063	7.0	4 3V 600 TB	A-1	2517	2.5	.1563	1.75	–	8.0
3 3V 650 TB	6.5	6.45	B-1	2517	2.5	.1563	1.75	.4063	9.0	4 3V 650 TB	A-1	2517	2.5	.1563	1.75	–	10.0
3 3V 690 TB	6.9	6.85	B-1	2517	2.5	.1563	1.75	.4063	10.0	4 3V 690 TB	A-1	2517	2.5	.1563	1.75	–	12.0
3 3V 800 TB	8	7.95	B-1	2517	2.5	.1563	1.75	.4063	15.0	4 3V 800 TB	A-1	2517	2.5	.1563	1.75	–	18.0
3 3V 1060 TB	10.6	10.55	B-2	2517	2.5	-	1.75	.25	18.0	4 3V 1060 TB	A-2	2517	2.5	.1563	1.75	–	19.0
3 3V 1400 TB	14	13.95	B-3	2517	2.5	-	1.75	.25	20.0	4 3V 1400 TB	A-3	2517	2.5	-	1.75	0.1563	22.0
3 3V 1900 TB	19	18.95	B-3	3020	3	-	2	.5	36.0	4 3V 1900 TB	C-3	3020	3	-	2	0.0938	45.0
3 3V 2500 TB	25	24.95	B-3	3020	3	-	2	.5	47.0	4 3V 2500 TB	C-3	3020	3	-	2	0.0938	63.0
3 3V 3350 TB	33.5	33.45	B-3	3020	3	.2500	2	.25	76.0	4 3V 3350 TB	C-3	3030	3	.5469	3	0.5469	80.0

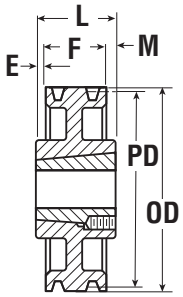
Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-8 thru B-10 for additional bushing dimensions.



Type A



Type B



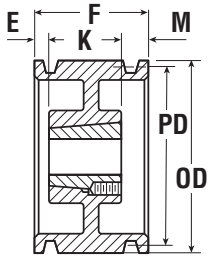
Type C

Taper Bushed Sheaves – 3V

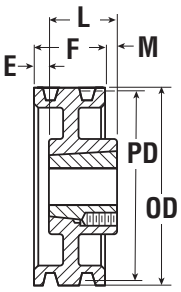
5 Grooves F = 2 5/16										6 Grooves F = 2 23/32							
Part Number	Diameter OD	Diameter Pitch 3V	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush
5 3V 450 TB	4.50	4.50	A-1	1615	1.63	–	1.5	.8125	4.0	–	–	–	–	–	–	–	–
5 3V 475 TB	4.75	4.75	A-1	2517	2.5	.5625	1.75	–	4.0	6 3V 475 TB	A-1	2517	2.5	.9688	1.75	–	4.4
5 3V 500 TB	5.00	5.00	A-1	2517	2.5	.5625	1.75	–	4.8	6 3V 500 TB	A-1	2517	2.5	.9688	1.75	–	5.4
5 3V 530 TB	5.30	5.30	A-1	2517	2.5	.5625	1.75	–	5.9	6 3V 530 TB	A-1	2517	2.5	.9688	1.75	–	6.5
5 3V 560 TB	5.60	5.60	A-1	2517	2.5	.5625	1.75	–	7.0	6 3V 560 TB	A-1	2517	2.5	.9688	1.75	–	7.7
5 3V 600 TB	6.00	6.00	A-1	2517	2.5	.5625	1.75	–	8.0	6 3V 600 TB	A-1	2517	2.5	.9688	1.75	–	9.5
5 3V 650 TB	6.50	6.50	A-1	2517	2.5	.5625	1.75	–	11.0	6 3V 650 TB	A-1	2517	2.5	.9688	1.75	–	12.0
5 3V 690 TB	6.90	6.90	A-1	2517	2.5	.5625	1.75	–	13.0	6 3V 690 TB	A-1	2517	2.5	.9688	1.75	–	13.0
5 3V 800 TB	8.00	8.00	A-1	2517	2.5	.5625	1.75	–	19.0	6 3V 800 TB	A-1	2517	2.5	.9688	1.75	–	2.0
5 3V 1060 TB	10.60	10.60	A-2	2517	2.5	.5625	1.75	–	21.0	6 3V 1060 TB	A-2	2517	2.5	.9688	1.75	–	21.0
5 3V 1400 TB	14.00	14.00	A-3	2517	2.5	–	1.75	.5625	3.0	6 3V 1400 TB	A-3	2517	2.5	.2188	1.75	–	3.0
5 3V 1900 TB	19.00	19.00	A-3	3030	3	–	2	.3125	51.0	6 3V 1900 TB	B-3	3020	3	–	2	.7188	51.0
5 3V 2500 TB	25.00	25.00	B-3	3030	3	–	3	.6875	76.0	6 3V 2500 TB	B-3	3030	3	–	3	.2813	81.0
5 3V 3350 TB	33.50	33.50	C-3	3030	3	.3438	3	.3438	97.0	6 3V 3350 TB	C-3	3030	3	.1406	3	.1406	11.0

8 Grooves F = 3 17/32										10 Grooves F = 4 11/32							
Part Number	Diameter OD	Diameter Pitch 3V	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush
8 3V 475 TB	4.75	4.75	A-1	2517	2.5	1.78	1.75	–	5.0	10 3V 475 TB	A-1	2517	2.5	2.5938	1.75	–	6.0
8 3V 5 TB	5	5	A-1	2517	2.5	1.78	1.75	–	6.0	10 3V 5 TB	A-1	2517	2.5	2.5938	1.75	–	7.0
8 3V 530 TB	5.3	5.3	A-1	2517	2.5	1.03	1.75	.75	7.8	10 3V 530 TB	A-1	2517	2.5	1.8438	1.75	.75	8.0
8 3V 560 TB	5.6	5.6	A-1	2517	2.5	.25	1.75	1.5313	9.0	10 3V 560 TB	A-1	2517	2.5	.5	1.75	.7188	9.0
8 3V 6 TB	6	6	A-1	2517	2.5	.25	1.75	1.5313	11.0	10 3V 6 TB	A-1	2517	2.5	.5	1.75	.7188	12.0
8 3V 650 TB	6.5	6.5	A-1	2517	2.5	.25	1.75	1.5313	13.0	10 3V 650 TB	A-1	2517	2.5	.5	1.75	.7188	14.0
8 3V 690 TB	6.9	6.9	A-1	2517	2.5	.25	1.75	1.5313	15.0	10 3V 690 TB	A-1	2517	2.5	.5	1.75	.7188	17.0
8 3V 8 TB	8	8	A-1	3020	3	.5	2	1.0313	19.0	10 3V 8 TB	A-1	3020	3	.25	2	.7188	22.0
8 3V 1060 TB	10.6	10.6	A-2	3020	3	.5	2	1.0313	26.0	10 3V 1060 TB	A-2	3020	3	.8438	2	1.5	32.0
8 3V 14 TB	14	14	A-3	3020	3	.6563	2	0.875	52.0	10 3V 14 TB	A-2	3535	3.5	–	3.5	.8438	59.0
8 3V 19 TB	19	19	A-3	3535	3.5	–	3.5	0.0313	63.0	10 3V 19 TB	A-3	3535	3.5	–	3.5	.8438	71.0
8 3V 25 TB	25	25	A-3	3535	3.5	–	3.5	0.0313	89.0	10 3V 25 TB	A-3	4040	4	–	4	.3438	121.0
8 3V 3350 TB	33.5	33.5	C-3	4040	4	.2344	4	0.2344	131.0	10 3V 3350 TB	A-3	4040	4	.1719	4	.3438	172.0

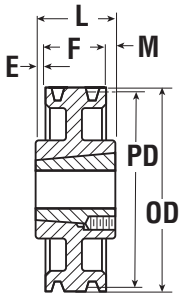
5V Hi-Cap Wedge Stock Taper Bushed Sheaves



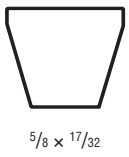
Type A



Type B



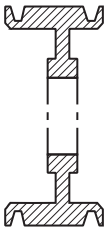
Type C



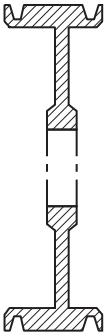
5V



1=SOLID



2=WEB



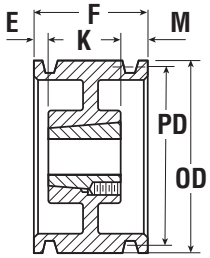
3=ARM/SPOKE

Taper Bushed Sheaves – 5V

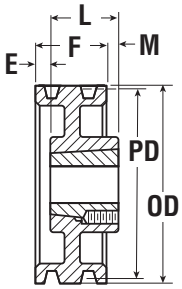
2 Grooves F = 1 11/16										3 Grooves F = 2 3/8							
Part Number	Diameter OD	Diameter Pitch 5V	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush
*2 5V 440 TB	4.4	4.4	A–1	1610	1.625	.0625	1	.625	3.0	*3 5V 440 TB	A–1	1610	1.625	1.375	1	–	4.0
*2 5V 465 TB	4.65	4.65	A–1	1610	1.625	.0625	1	.625	3.0	*3 5V 465 TB	A–1	1610	1.625	.0625	1	1.3125	5.0
*2 5V 490 TB	4.9	4.9	A–1	1610	1.625	.0625	1	.625	4.0	*3 5V 490 TB	A–1	1610	1.625	.0625	1	1.3125	5.0
*2 5V 520 TB	5.2	5.2	A–1	1610	1.625	.0625	1	.625	4.2	*3 5V 520 TB	A–1	1610	1.625	.0625	1	1.3125	6.0
*2 5V 550 TB	5.5	5.5	A–1	1610	1.625	.0625	1	.625	5.2	*3 5V 550 TB	A–1	1610	1.625	.0625	1	1.3125	6.0
*2 5V 590 TB	5.9	5.9	A–1	1610	1.625	.0625	1	.625	5.6	*3 5V 590 TB	A–1	2517	2.5	–	1.75	.625	7.0
*2 5V 630 TB	6.3	6.3	A–1	1610	1.625	–	1	.6875	7.6	*3 5V 630 TB	A–1	2517	2.5	–	1.75	.625	9.0
*2 5V 670 TB	6.7	6.7	A–1	1610	1.625	–	1	.6875	9.4	*3 5V 670 TB	A–1	2517	2.5	–	1.75	.625	10.0
2 5V 710 TB	7.1	7.1	B–1	2517	2.5	.0625	1.75	–	10.0	3 5V 710 TB	A–1	2517	2.5	.625	1.75	–	11.0
2 5V 750 TB	7.5	7.5	B–1	2517	2.5	.0625	1.75	–	13.0	3 5V 750 TB	A–1	2517	2.5	.625	1.75	–	14.0
2 5V 800 TB	8	8	B–1	2517	2.5	.0625	1.75	–	14.0	3 5V 800 TB	A–1	2517	2.5	.625	1.75	–	16.0
2 5V 850 TB	8.5	8.5	B–2	2517	2.5	.0625	1.75	–	15.0	3 5V 850 TB	A–2	2517	2.5	.625	1.75	–	17.0
2 5V 900 TB	9	9	B–2	2517	2.5	.0625	1.75	–	16.0	3 5V 900 TB	A–2	2517	2.5	.625	1.75	–	19.0
2 5V 925 TB	9.25	9.25	B–2	3020	3	–	2	.3125	17.0	3 5V 925 TB	A–1	3020	3	–	2	.375	23.0
2 5V 975 TB	9.75	9.75	B–2	3020	3	–	2	.3125	18.0	3 5V 975 TB	A–1	3020	3	–	2	.375	24.0
2 5V 1030 TB	10.3	10.3	B–2	3020	3	–	2	.3125	20.0	3 5V 1030 TB	A–2	3020	3	–	2	.375	27.0
2 5V 1090 TB	10.9	10.9	B–2	3020	3	–	2	.3125	22.0	3 5V 1090 TB	A–2	3020	3	–	2	.375	28.0
2 5V 1130 TB	11.3	11.3	B–2	3020	3	–	2	.3125	25.0	3 5V 1130 TB	A–2	3020	3	–	2	.375	30.0
2 5V 1180 TB	11.8	11.8	B–2	3020	3	–	2	.3125	26.0	3 5V 1180 TB	A–2	3020	3	–	2	.375	32.0
2 5V 1250 TB	12.5	12.5	B–2	3020	3	–	2	.3125	28.0	3 5V 1250 TB	A–2	3020	3	–	2	.375	34.0
2 5V 1320 TB	13.2	13.2	B–3	3020	3	–	2	.3125	29.0	3 5V 1320 TB	A–3	3020	3	–	2	.375	36.0
2 5V 1400 TB	14	14	B–3	3020	3	–	2	.3125	33.0	3 5V 1400 TB	A–3	3020	3	–	2	.375	41.0
2 5V 1500 TB	15	15	B–3	3020	3	–	2	.3125	35.0	3 5V 1500 TB	A–3	3020	3	–	2	.375	50.0
2 5V 1600 TB	16	16	B–3	3020	3	–	2	.3125	45.0	3 5V 1600 TB	A–3	3020	3	–	2	.375	52.0
2 5V 1870 TB	18.7	18.7	C–3	3020	3	–	2	.3125	50.1	3 5V 1870 TB	B–3	3535	3.5	–	3.5	1.125	65.0
2 5V 2120 TB	21.2	21.2	C–3	3535	3.5	.375	3.5	1.4375	60.0	3 5V 2120 TB	C–3	3535	3.5	–	3.5	1.125	68.0
2 5V 2360 TB	23.6	23.6	C–3	3535	3.5	1/4	3.5	1.5625	68.0	3 5V 2360 TB	B–3	3535	3.5	–	3.5	1.125	99.0
2 5V 2800 TB	28	28	C–3	3535	3.5	.375	3.5	1.4375	96.0	3 5V 2800 TB	C–3	3535	3.5	.3438	3.5	25/32	96.0
–	–	–	–	–	–	–	–	–	–	3 5V 3750 TB	C–3	4040	4	.5	4	1.125	172.0
–	–	–	–	–	–	–	–	–	–	3 5V 5000 TB	C–3	4040	4	.5	4	1.125	201.0

Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-8 thru B-10 for additional bushing dimensions.
* 5VX Belts only on these sizes.

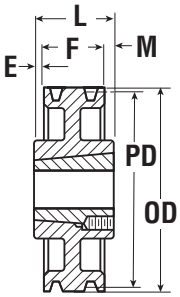
Hi-Cap Wedge Stock Taper Bushed Sheaves 5V



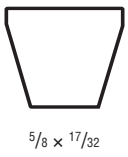
Type A



Type B



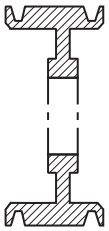
Type C



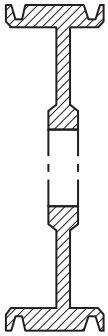
5V



1=SOLID



2=WEB



3=ARM/SPOKE

Taper Bushed Sheaves – 5V

4 Grooves F = 3 1/16										5 Grooves F = 3 3/4							
Part Number	Diameter OD	Diameter Pitch 5V	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush
*4 5V 440 TB	4.4	4.4	A–1	1610	1.625	2.0625	1	–	6.0	–	–	–	–	–	–	–	–
*4 5V 465 TB	4.65	4.65	A–1	1610	1.625	2.0625	1	–	6.0	–	–	–	–	–	–	–	–
*4 5V 490 TB	4.9	4.9	A–1	1610	1.625	2.0625	1	–	6.0	–	–	–	–	–	–	–	–
*4 5V 520 TB	5.2	5.2	A–1	1610	1.625	2.0625	1	–	7.0	–	–	–	–	–	–	–	–
*4 5V 550 TB	5.5	5.5	A–1	2517	2.5	1.3125	1.75	–	8.0	–	–	–	–	–	–	–	–
*4 5V 590 TB	5.9	5.9	A–1	2517	2.5	1.3125	1.75	–	10.0	*5 5V 590 TB	A–1	2517	2.5	.5625	1.75	1.4375	11.0
*4 5V 630 TB	6.3	6.3	A–1	2517	2.5	–	1.75	1.3125	11.0	* 5 5V 630 TB	A–1	2517	2.5	.5625	1.75	1.4375	12.0
*4 5V 670 TB	6.7	6.7	A–1	2517	2.5	–	1.75	1.3125	12.0	* 5 5V 670 TB	A–1	2517	2.5	.5625	1.75	1.4375	13.0
4 5V 710 TB	7.1	7.1	A–1	2517	2.5	1.3125	1.75	–	14.0	5 5V 710 TB	A–1	3020	3	.5	2	1.25	15.0
4 5V 750 TB	7.5	7.5	A–1	2517	2.5	1.3125	1.75	–	16.0	5 5V 750 TB	A–1	3020	3	.5	2	1.25	17.0
4 5V 800 TB	8	8	A–1	2517	2.5	1.3125	1.75	–	17.0	5 5V 800 TB	A–1	3020	3	.5	2	1.25	20.0
4 5V 850 TB	8.5	8.5	A–2	2517	2.5	1.3125	1.75	–	18.0	5 5V 850 TB	A–1	3020	3	.5	2	1.25	22.0
4 5V 900 TB	9	9	A–2	2517	2.5	1.3125	1.75	–	19.0	5 5V 900 TB	A–1	3020	3	.5	2	1.25	30.0
4 5V 925 TB	9.25	9.25	A–1	3020	3	.5	2	.5625	22.0	5 5V 925 TB	A–1	3020	3	.5	2	1.25	36.0
4 5V 975 TB	9.75	9.75	A–1	3020	3	.5	2	.5625	27.0	5 5V 975 TB	A–1	3020	3	.5	2	1.25	37.0
4 5V 1030 TB	10.3	10.3	A–2	3020	3	.5	2	.5625	28.0	5 5V 1030 TB	A–2	3020	3	.5	2	1.25	38.0
4 5V 1090 TB	10.9	10.9	A–2	3020	3	.5	2	.5625	31.0	5 5V 1090 TB	A–2	3020	3	.5	2	1.25	39.0
4 5V 1130 TB	11.3	11.3	A–1	3020	3	–	2	1.0625	32.0	5 5V 1130 TB	A–1	3020	3	.5	2	1.25	38.0
4 5V 1180 TB	11.8	11.8	A–2	3020	3	.5	2	.5625	35.0	5 5V 1180 TB	A–2	3020	3	.5	2	1.25	40.0
4 5V 1250 TB	12.5	12.5	A–2	3020	3	–	2	1.0625	44.0	5 5V 1250 TB	A–2	3535	3.5	–	3.5	.25	50.0
4 5V 1320 TB	13.2	13.2	A–3	3020	3	–	2	1.0625	42.0	5 5V 1320 TB	A–2	3535	3.5	–	3.5	.25	56.0
4 5V 1400 TB	14	14	B–3	3535	3.5	–	3.5	.4375	53.0	5 5V 1400 TB	A–3	3535	3.5	–	3.5	.25	58.0
4 5V 1500 TB	15	15	B–3	3535	3.5	–	3.5	.4375	54.0	5 5V 1500 TB	A–3	3535	3.5	–	3.5	.25	65.0
4 5V 1600 TB	16	16	B–3	3535	3.5	–	3.5	.4375	60.0	5 5V 1600 TB	A–3	3535	3.5	–	3.5	.25	70.0
4 5V 1870 TB	18.7	18.7	C–3	3535	3.5	.4375	3.5	–	63.0	5 5V 1870 TB	A–3	3535	3.5	–	3.5	.25	84.0
4 5V 2120 TB	21.2	21.2	B–3	3535	3.5	–	3.5	.4375	72.0	5 5V 2120 TB	B–3	4040	4	–	4	.25	115.0
4 5V 2360 TB	23.6	23.6	C–3	3535	3.5	–	3.5	.4375	79.0	5 5V 2360 TB	C–3	4040	4	–	4	.25	92.0
4 5V 2800 TB	28	28	B–3	3535	3.5	–	3.5	.4375	125.0	5 5V 2800 TB	B–3	4040	4	–	4	.25	160.0
4 5V 3150 TB	31.5	31.5	C–3	3535	3.5	–	3.5	.4375	114.0	5 5V 3150 TB	A–3	4040	4	–	4	.25	155.0
4 5V 3750 TB	37.5	37.5	B-3	4040	4	-	4	.9375	189.0	5 5V 3750 TB	B-3	4040	4	-	4	.25	182.0
4 5V 5000 TB	50	50	B-3	4040	4	-	4	.9375	371.0	5 5V 5000 TB	B-3	4545	4.5	-	4.5	.75	288.0

Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-8 thru B-10 for additional bushing dimensions.
* 5VX Belts only on these sizes.

5V Hi-Cap Wedge Stock Taper Bushed Sheaves

6 Grooves F = 4 7/16										8 Grooves F = 5 13/16							
Part Number	Diameter OD	Diameter Pitch 5V	Type	Bush	Bush Max Bore	E	L LTB	M	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E	L LTB	M	Wt. Less Bush
*6 5V 590 TB	5.9	5.9	A–1	2517	2.5	1.125	1.75	1.5625	13.0	–	–	–	–	–	–	–	–
*6 5V 630 TB	6.3	6.3	A–1	2517	2.5	.8125	1.75	1.875	13.0	–	–	–	–	–	–	–	–
*6 5V 670 TB	6.7	6.7	A–1	2517	2.5	.8125	1.75	1.875	15.0	–	–	–	–	–	–	–	–
6 5V 710 TB	7.1	7.1	A–1	3020	3	.75	2	1.6875	17.0	8 5V 710 TB	A–1	3030	3	1	3	1.8125	24.0
6 5V 750 TB	7.5	7.5	A–1	3020	3	.75	2	1.6875	20.0	8 5V 750 TB	A–1	3030	3	1	3	1.8125	27.0
6 5V 800 TB	8	8	A–1	3020	3	.75	2	1.6875	24.0	8 5V 800 TB	A–1	3030	3	1	3	1.8125	33.0
6 5V 850 TB	8.5	8.5	A–1	3020	3	.75	2	1.6875	28.0	8 5V 850 TB	A–1	3030	3	1	3	1.8125	39.0
6 5V 900 TB	9	9	A–1	3020	3	.75	2	1.6875	32.0	8 5V 900 TB	A–1	3535	3.5	1	3.5	1.3125	44.0
6 5V 925 TB	9.25	9.25	A–1	3535	3.5	–	3.5	.9375	39.0	8 5V 925 TB	A–1	3535	3.5	1	3.5	1.3125	48.0
6 5V 975 TB	9.75	9.75	A–1	3535	3.5	–	3.5	.9375	50.0	8 5V 975 TB	A–1	3535	3.5	1	3.5	1.3125	55.0
6 5V 1030 TB	10.3	10.3	A–1	3535	3.5	–	3.5	.9375	58.0	8 5V 1030 TB	A–1	3535	3.5	1	3.5	1.3125	64.0
6 5V 1090 TB	10.9	10.9	A–1	3535	3.5	–	3.5	.9375	60.0	8 5V 1090 TB	A–1	3535	3.5	1	3.5	1.3125	68.0
–	11.3	11.3	–	–	–	–	–	–	–	8 5V 1130 TB	A–1	3535	3.5	1	3.5	1.3125	57.0
6 5V 1180 TB	11.8	11.8	A–2	3535	3.5	–	3.5	.9375	62.0	8 5V 1180 TB	A–1	3535	3.5	1	3.5	1.3125	74.0
6 5V 1250 TB	12.5	12.5	A–2	3535	3.5	–	3.5	.9375	65.0	8 5V 1250 TB	A–1	4040	4	.25	4	1.5625	82.0
6 5V 1320 TB	13.2	13.2	A–2	3535	3.5	–	3.5	.9375	68.0	8 5V 1320 TB	A–1	4040	4	.25	4	1.5625	87.0
6 5V 1400 TB	14	14	A–2	3535	3.5	–	3.5	.9375	72.0	8 5V 1400 TB	A–2	4040	4	.25	4	1.5625	90.0
6 5V 1500 TB	15	15	A–2	4040	4	–	4	.4375	91.0	8 5V 1500 TB	A–2	4040	4	.25	4	1.5625	97.0
6 5V 1600 TB	16	16	A–3	4040	4	–	4	.4375	97.0	8 5V 1600 TB	A–3	4040	4	.25	4	1.5625	106.0
6 5V 1870 TB	18.7	18.7	A–2	4040	4	–	4	.4375	97.0	8 5V 1870 TB	A–3	4040	4	.25	4	1.5625	112.0
6 5V 2120 TB	21.2	21.2	A–3	4040	4	–	4	.4375	123.0	8 5V 2120 TB	A–3	4040	4	.25	4	1.5625	144.0
6 5V 2360 TB	23.6	23.6	A–3	4040	4	–	4	.4375	124.0	8 5V 2360 TB	A–3	4040	4	.25	4	1.5625	145.0
6 5V 2800 TB	28	28	A–3	4040	4	–	4	.4375	176.0	8 5V 2800 TB	A–3	4545	4.5	.25	4.5	1.0625	206.0
6 5V 3150 TB	31.5	31.5	A–3	4040	4	–	4	.4375	171.0	8 5V 3150 TB	A–3	4545	4.5	.25	4.5	1.0625	228.0
6 5V 3750 TB	37.5	37.5	B–3	4545	4.5	–	4.5	.0625	254.0	8 5V 3750 TB	A–3	4545	4.5	.25	4.5	1.0625	271.0
6 5V 5000 TB	50	50	B–3	4545	4.5	–	4.5	.0625	386.0	8 5V 5000 TB	A–3	4545	4.5	.25	4.5	1.0625	458.0

10 Grooves F = 7 3/16									
Part Number	Diameter OD	Diameter Pitch 5V	Type	Bush	Bush Max Bore	E	L LTB	M	Wt. Less Bush
10 5V 800 TB	8	8	A-1	3030	3	1	3	3.1875	36.0
10 5V 850 TB	8.5	8.5	A-1	3030	3	1	3	3.1875	42.0
10 5V 900 TB	9	9	A-1	3535	3.5	1	3.5	2.6575	47.0
10 5V 925 TB	9.25	9.25	A-1	4040	4	1	4	2.1875	50.0
10 5V 975 TB	9.75	9.75	A-1	4040	4	1	4	2.1875	58.0
10 5V 1030 TB	10.3	10.3	A-1	4040	4	1	4	2.1875	69.0
10 5V 1090 TB	10.9	10.9	A-1	4040	4	1	4	2.1875	79.0
10 5V 1130 TB	11.3	11.3	A-1	4040	4	1	4	2.1875	80.0
10 5V 1180 TB	11.8	11.8	A-1	4040	4	1	4	2.1875	96.0
10 5V 1250 TB	12.5	12.5	A-2	4040	4	.75	4	2.4375	116.0
10 5V 1320 TB	13.2	13.2	A-2	4040	4	.75	4	2.4375	130.0
10 5V 1400 TB	14	14	A-2	4545	4.5	.75	4.5	1.9375	150.0
10 5V 1500 TB	15	15	A-2	4545	4.5	.75	4.5	1.9375	155.0
10 5V 1600 TB	16	16	A-2	4545	4.5	.75	4.5	1.9375	160.0
10 5V 1870 TB	18.7	18.7	A-2	4545	4.5	.5	4.5	2.1875	116.0
10 5V 2120 TB	21.2	21.2	A-3	4545	4.5	.75	4.5	1.9375	210.0
10 5V 2360 TB	23.6	23.6	A-2	4545	4.5	.5	4.5	2.1875	191.0
10 5V 2800 TB	28	28	A-3	4545	4.5	.75	4.5	1.9375	248.0
10 5V 3150 TB	31.5	31.5	A-3	4545	4.5	.75	4.5	1.9375	259.0
10 5V 3750 TB	37.5	37.5	A-3	4545	4.5	.75	4.5	1.9375	375.0
10 5V 5000 TB	50	50	A-3	5050	5	.75	5	1.4375	502.0

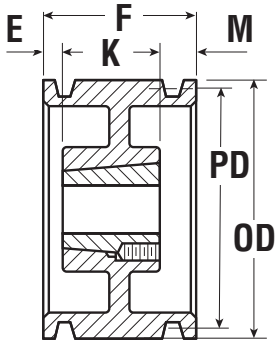


5/8 × 17/32

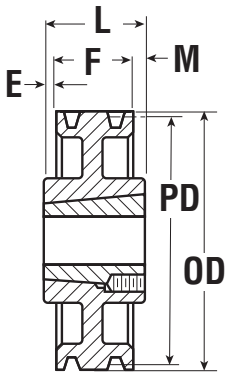
5V

Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-8 thru B-10 for additional bushing dimensions.
* 5VX Belts only on these sizes.

Hi-Cap Wedge Stock Taper Bushed Sheaves 8V



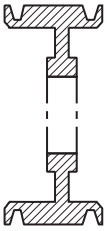
Type A



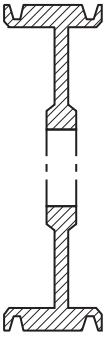
Type C



1=SOLID



2=WEB



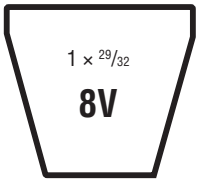
3=ARM/SPOKE

Taper Bushed Sheaves – 8V

4 Grooves F = 4 7/8										5 Grooves F = 6							
Part Number	Diameter OD	Diameter Pitch 8V	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush
4 8V 1250 TB	12.5	12.5	A-1	4040	4	–	4	.875	88.0	5 8V 1250 TB	A-1	4040	4	.1875	4	1.8125	100.0
4 8V 1320 TB	13.2	13.2	A-1	4040	4	–	4	.875	102.0	5 8V 1320 TB	A-1	4040	4	.1875	4	1.8125	115.0
4 8V 1400 TB	14	14	A-1	4040	4	–	4	.875	123.0	5 8V 1400 TB	A-1	4040	4	.1875	4	1.8125	133.0
4 8V 1500 TB	15	15	A-1	4040	4	–	4	.875	145.0	5 8V 1500 TB	A-1	4040	4	.1875	4	1.8125	156.0
4 8V 1600 TB	16	16	A-2	4040	4	–	4	.875	111.0	5 8V 1600 TB	A-1	4040	4	.5	4	1.5	181.0
4 8V 1700 TB	17	17	A-2	4040	4	–	4	.875	120.0	5 8V 1700 TB	A-2	4545	4.5	–	4.5	1.5	146.0
4 8V 1800 TB	18	18	A-2	4040	4	–	4	.875	130.0	5 8V 1800 TB	A-2	4545	4.5	–	4.5	1.5	156.0
4 8V 1900 TB	19	19	A-2	4040	4	–	4	.875	140.0	5 8V 1900 TB	A-2	4545	4.5	–	4.5	1.5	176.0
4 8V 2000 TB	20	20	A-2	4545	4.5	–	4.5	.375	151.0	5 8V 2000 TB	A-2	4545	4.5	–	4.5	1.5	186.0
4 8V 2120 TB	21.2	21.2	A-3	4545	4.5	–	4.5	.375	154.0	5 8V 2120 TB	A-3	4545	4.5	–	4.5	1.5	195.0
4 8V 2240 TB	22.4	22.4	A-3	4545	4.5	–	4.5	.375	185.0	5 8V 2240 TB	A-3	4545	4.5	–	4.5	1.5	200.0
4 8V 2480 TB	24.8	24.8	D-3	5050	5	.9375	5	.8125	191.0	5 8V 2480 TB	A-3	5050	5	–	5	1.5	206.0
4 8V 3000 TB	30	30	C-3	5050	5	–	5	.125	246.0	5 8V 3000 TB	A-3	5050	5	–	5	1	278.0
4 8V 3550 TB	35.5	35.5	D-3	5050	5	1.125	5	1	278.0	5 8V 3550 TB	A-3	5050	5	–	5	1	399.0
4 8V 4000 TB	40	40	B-3	5050	5	–	5	.125	292.0	5 8V 4000 TB	A-3	5050	5	–	5	1	350.0
4 8V 4450 TB	44.5	44.5	D-3	5050	5	.25	5	.125	367.0	5 8V 4450 TB	A-3	5050	5	–	5	1	572.0
4 8V 5300 TB	53	53	B-3	5050	5	–	5	.125	573.0	5 8V 5300 TB	A-3	5050	5	–	5	1	565.0

Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-8 thru B-10 for additional bushing dimensions.

8V Hi-Cap Wedge Stock Taper Bushed Sheaves



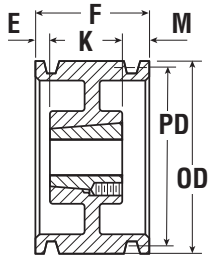
Taper Bushed Sheaves – 8V

6 Grooves F = 7 1/8										8 Grooves F = 9 3/8							
Part Number	Diameter OD	Diameter Pitch 8V	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush
6 8V 1250 TB	12.5	12.5	A-1	4040	4	1	4	2.125	100.0	8 8V 1250 TB	A-1	4545	4.5	1.5	4.5	3.375	125.0
6 8V 1320 TB	13.2	13.2	A-1	4040	4	1	4	2.125	124.0	8 8V 1320 TB	A-1	4545	4.5	1.5	4.5	3.375	135.0
6 8V 1400 TB	14	14	A-1	4040	4	1	4	2.125	142.0	8 8V 1400 TB	A-1	4545	4.5	1.5	4.5	3.375	156.0
6 8V 1500 TB	15	15	A-1	4545	4.5	.5	4.5	2.125	153.0	8 8V 1500 TB	A-1	4545	4.5	1.5	4.5	3.375	160.0
6 8V 1600 TB	16	16	A-2	4545	4.5	.5	4.5	2.125	170.0	8 8V 1600 TB	A-2	4545	4.5	1.5	4.5	3.375	166.0
6 8V 1700 TB	17	17	A-2	4545	4.5	.5	4.5	2.125	175.0	8 8V 1700 TB	A-2	5050	5	1	5	3.375	265.0
6 8V 1800 TB	18	18	A-2	4545	4.5	.5	4.5	2.125	180.0	8 8V 1800 TB	A-2	5050	5	1	5	3.375	204.0
6 8V 1900 TB	19	19	A-2	4545	4.5	.5	4.5	2.125	182.0	8 8V 1900 TB	A-2	5050	5	1	5	3.375	228.0
6 8V 2000 TB	20	20	A-2	5050	5	.5	5	1.625	226.0	8 8V 2000 TB	A-2	5050	5	1	5	3.375	234.0
6 8V 2120 TB	21.2	21.2	A-3	5050	5	.5	5	1.625	246.0	8 8V 2120 TB	A-3	5050	5	1	5	3.375	246.0
6 8V 2240 TB	22.4	22.4	A-3	5050	5	.5	5	1.625	267.0	8 8V 2240 TB	A-3	5050	5	1	5	3.375	300.0
6 8V 2480 TB	24.8	24.8	D-3	5050	5	.125	5	2.25	236.0	8 8V 2480 TB	A-3	5050	5	2.125	5	2.25	285.0
6 8V 3000 TB	30	30	A-3	5050	5	.5	5	1.625	398.0	8 8V 3000 TB	A-3	5050	5	1	5	3.375	384.0
6 8V 3550 TB	35.5	35.5	A-3	5050	5	.5	5	1.625	363.0	8 8V 3550 TB	A-3	5050	5	1	5	3.375	441.0
6 8V 4000 TB	40	40	A-3	5050	5	.5	5	1.625	468.0	8 8V 4000 TB	A-3	5050	5	1	5	3.375	556.0
6 8V 4450 TB	44.5	44.5	A-3	5050	5	.5	5	1.625	485.0	8 8V 4450 TB	A-3	5050	5	1	5	3.375	596.0
6 8V 5300 TB	53	53	A-3	5050	5	.5	5	1.625	658.0	8 8V 5300 TB	A-3	6050	6	1	5	3.375	1040.0

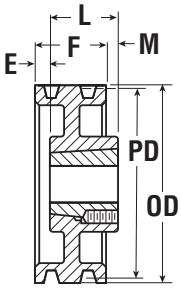
10 Grooves F = 11 5/8										12 Grooves F = 13 7/8							
Part Number	Diameter OD	Diameter Pitch 8V	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush
–	–	–	–	–	–	–	–	–	–	12 8V 1250 TB	A-1	5050	5	3.1875	5	5.6875	153.0
10 8V 1320 TB	13.2	13.2	A-1	4545	4.5	1	4.5	6.125	150.0	12 8V 1320 TB	A-1	5050	5	3	5	5.875	180.0
10 8V 1400 TB	14	14	A-1	4545	4.5	1	4.5	6.125	180.0	12 8V 1400 TB	A-1	5050	5	3.1875	5	5.6875	186.0
10 8V 1500 TB	15	15	A-1	5050	5	1	5	5.625	211.0	12 8V 1500 TB	A-2	5050	5	1.875	5	7	221.0
10 8V 1600 TB	16	16	A-1	5050	5	1	5	5.625	220.0	12 8V 1600 TB	A-2	5050	5	1.875	5	7	247.0
10 8V 1700 TB	17	17	A-2	5050	5	2.25	5	4.375	228.0	12 8V 1700 TB	A-2	5050	5	3.5	5	5.375	267.0
10 8V 1800 TB	18	18	A-2	5050	5	2.25	5	4.375	244.0	12 8V 1800 TB	A-2	5050	5	3.5313	5	5.3438	274.0
10 8V 1900 TB	19	19	A-2	5050	5	2.25	5	4.375	260.0	12 8V 1900 TB	A-2	5050	5	2.25	5	6.625	306.0
10 8V 2000 TB	20	20	A-2	5050	5	2.25	5	4.375	270.0	12 8V 2000 TB	A-3	5050	5	2.25	5	6.625	249.0
10 8V 2120 TB	21.2	21.2	A-2	5050	5	2.25	5	4.375	282.0	12 8V 2120 TB	A-3	5050	5	2.25	5	6.625	294.0
10 8V 2240 TB	22.4	22.4	A-3	5050	5	2.25	5	4.375	312.0	12 8V 2240 TB	A-3	5050	5	2.25	5	6.625	337.0
10 8V 2480 TB	24.8	24.8	A-3	5050	5	2.375	5	4.25	328.0	12 8V 2480 TB	A-3	5050	5	5.375	5	3.5	380.0
10 8V 3000 TB	30	30	A-3	5050	5	2.25	5	4.375	448.0	12 8V 3000 TB	A-3	6050	6	4	5	4.875	482.0
10 8V 3550 TB	35.5	35.5	A-3	6050	6	2.25	5	4.375	517.0	12 8V 3550 TB	A-3	6050	6	4	5	4.875	597.0
10 8V 4000 TB	40	40	A-3	6050	6	2.25	5	4.375	550.0	12 8V 4000 TB	A-3	6050	6	4	5	4.875	911.5
10 8V 4450 TB	44.5	44.5	A-3	6050	6	2.25	5	4.375	701.0	12 8V 4450 TB	A-3	6050	6	4	5	4.875	814.0
10 8V 5300 TB	53	53	A-3	6050	6	2.25	5	4.375	870.0	12 8V 5300 TB	A-3	7060	6	5	5	2.875	1077.0

Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-8 thru B-10 for additional bushing dimensions.

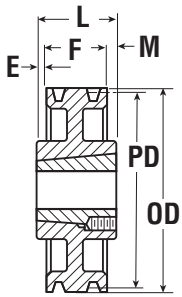
Combination Groove Conventional Taper Bushed Stock Sheaves A-B



Type A



Type B



Type C

Taper Bushed Sheaves – A-B

1 Groove F = 1*											2 Grooves F = 1 ¾							
Part Number	Diameter A Belt	Diameter B Belt	OD	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush
1 B 34 TB	3	3.4	3.75	A-1	1210	1.25	–	1	–	2.2	2 B 34 TB	A-1	1210	1.25	.75	1	–	2.2
1 B 36 TB	3.2	3.6	3.95	A-1	1210	1.25	–	1	–	2.6	2 B 36 TB	A-1	1210	1.25	.75	1	–	2.6
1 B 38 TB	3.4	3.8	4.15	A-1	1610	1.625	–	1	–	2.8	2 B 38 TB	A-1	1610	1.625	.75	1	–	2.8
1 B 40 TB	3.6	4	4.35	A-1	1610	1.625	–	1	–	3.0	2 B 40 TB	A-1	1610	1.625	.75	1	–	3.0
1 B 42 TB	3.8	4.2	4.55	A-1	1610	1.625	–	1	–	3.5	2 B 42 TB	A-1	1610	1.625	.75	1	–	4.0
1 B 44 TB	4	4.4	4.75	A-1	1610	1.625	–	1	–	3.8	2 B 44 TB	A-1	1610	1.625	.75	1	–	4.5
1 B 46 TB	4.2	4.6	4.95	A-1	1610	1.625	–	1	–	4.0	2 B 46 TB	A-1	1610	1.625	.75	1	–	5.0
1 B 48 TB	4.4	4.8	5.15	A-1	1610	1.625	–	1	–	4.5	2 B 48 TB	A-1	1610	1.625	.75	1	–	5.5
1 B 50 TB	4.6	5	5.35	A-1	1610	1.625	–	1	–	4.8	2 B 50 TB	A-1	1610	1.625	.75	1	–	6.0
1 B 52 TB	4.8	5.2	5.55	A-1	1610	1.625	–	1	–	5.0	2 B 52 TB	A-1	1610	1.625	.75	1	–	6.5
1 B 54 TB	5	5.4	5.75	A-1	1610	1.625	–	1	–	5.5	2 B 54 TB	A-1	1610	1.625	.75	1	–	7.0
1 B 56 TB	5.2	5.6	5.95	A-1	1610	1.625	–	1	–	6.0	2 B 56 TB	A-1	1610	1.625	.75	1	–	8.2
1 B 58 TB	5.4	5.8	6.15	A-1	1610	1.625	–	1	–	6.3	2 B 58 TB	A-1	1610	1.625	.75	1	–	8.6
1 B 60 TB	5.6	6	6.35	A-1	1610	1.625	–	1	–	6.7	2 B 60 TB	A-1	1610	1.625	.75	1	–	8.8
1 B 62 TB	5.8	6.2	6.55	A-1	1610	1.625	–	1	–	7.0	2 B 62 TB	A-1	1610	1.625	.75	1	–	9.0
1 B 64 TB	6	6.4	6.75	A-1	1610	1.625	–	1	–	8.0	2 B 64 TB	A-1	1610	1.625	.75	1	–	10.0
1 B 66 TB	6.2	6.6	6.95	A-1	1610	1.625	–	1	–	8.5	2 B 66 TB	A-1	1610	1.625	.75	1	–	10.5
1 B 68 TB	6.4	6.8	7.15	A-1	1610	1.625	–	1	–	9.0	2 B 68 TB	A-1	1610	1.625	.75	1	–	11.0
1 B 70 TB	6.6	7	7.35	B-1	2517	2.5	–	1.75	.75	8.5	–	–	–	–	–	–	–	–
1 B 74 TB	7	7.4	7.75	B-1	2517	2.5	–	1.75	.75	9.4	2 B 74 TB	A-1	2517	2.5	–	1.75	–	16.0
1 B 86 TB	8.2	8.6	8.95	B-2	2517	2.5	–	1.75	.75	12.0	2 B 86 TB	A-2	2517	2.5	–	1.75	–	18.0
1 B 94 TB	9	9.4	9.75	B-2	2517	2.5	–	1.75	.75	14.0	2 B 94 TB	A-2	2517	2.5	–	1.75	–	20.0
1 B 110 TB	10.6	11	11.35	B-2	2517	2.5	–	1.75	.75	15.6	2 B 110 TB	A-2	2517	2.5	–	1.75	–	25.0
1 B 124 TB	12	12.4	12.75	C-3	2517	2.5	.25	1.75	.5	16.2	2 B 124 TB	A-3	2517	2.5	–	1.75	–	27.0
1 B 136 TB	13.2	13.6	13.95	C-3	2517	2.5	.25	1.75	.5	17.2	2 B 136 TB	C-3	2517	2.5	–	1.75	–	24.0
1 B 154 TB	15	15.4	15.75	C-3	2517	2.5	.25	1.75	.5	18.0	2 B 154 TB	A-3	2517	2.5	–	1.75	–	31.0
1 B 160 TB	16	16.4	16.35	C-3	2517	2.5	.375	1.75	.375	24.1	2 B 160 TB	C-3	2517	2.5	–	1.75	–	26.0
1 B 184 TB	18	18.4	18.75	C-3	2517	2.5	.1875	1.75	.4375	31.2	2 B 184 TB	A-3	2517	2.5	–	1.75	–	33.0
–	19.6	20.0	20.35	–	–	–	–	–	–	–	2 B 200 TB	C-3	3020	3	–	2	.25	49.0
–	24.6	25.0	25.35	–	–	–	–	–	–	–	2 B 250 TB	C-3	3020	3	–	2	.25	65.0
–	29.6	30.0	30.35	–	–	–	–	–	–	–	2 B 300 TB	C-3	3020	3	–	2	.25	75.0
–	37.6	38.0	38.35	–	–	–	–	–	–	–	2 B 380 TB	C-3	3020	3	–	2	.25	112.0

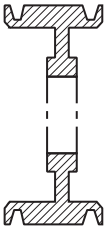
Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-8 thru B-10 for additional bushing dimensions.

* F = 1" 1 B 154 TB
F = 1.125" for 1 B 184 TB

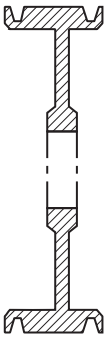
A-B Combination Groove Conventional Taper Bushed Stock Sheaves



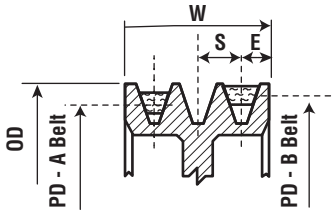
1=SOLID



2=WEB



3=ARM/SPOKE



Combination Groove Dimensions

Belt Selection	E	S	OD
AB	.5	.75	PD B + .35

W = S (N-1) + 2E
N = No. of Grooves

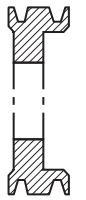
Drawing shows position of "A" and "B" belts in groove.

Taper Bushed Sheaves – A-B

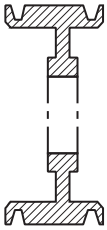
3 Grooves F = 2 ½											4 Grooves F = 3 ¼							
Part Number	Diameter A Belt	Diameter B Belt	OD	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush
3 B 34 TB	3	3.4	3.75	A–1	1210	1.25	1.5	1	–	3.0	4 B 34 TB	A–1	1210	1.25	2.25	1	–	3.0
3 B 36 TB	3.2	3.6	3.95	A–1	1210	1.25	1.5	1	–	3.5	4 B 36 TB	A–1	1210	1.25	2.25	1	–	3.5
3 B 38 TB	3.4	3.8	4.15	A–1	1610	1.625	1.5	1	–	4.0	4 B 38 TB	A–1	1610	1.625	2.25	1	–	4.0
3 B 40 TB	3.6	4	4.35	A–1	1610	1.625	1.5	1	–	5.0	4 B 40 TB	A–1	1610	1.625	2.25	1	–	5.0
3 B 42 TB	3.8	4.2	4.55	A–1	1610	1.625	1.5	1	–	6.0	4 B 42 TB	A–1	1610	1.625	2.25	1	–	5.5
3 B 44 TB	4	4.4	4.75	A–1	1610	1.625	1.5	1	–	6.5	4 B 44 TB	A–1	1610	1.625	2.25	1	–	6.0
3 B 46 TB	4.2	4.6	4.95	A–1	1610	1.625	1.5	1	–	7.0	4 B 46 TB	A–1	1610	1.625	2.25	1	–	7.0
3 B 48 TB	4.4	4.8	5.15	A–1	1610	1.625	1.5	1	–	8.0	4 B 48 TB	A–1	1610	1.625	2.25	1	–	8.0
3 B 50 TB	4.6	5	5.35	A–1	1610	1.625	1.5	1	–	8.5	4 B 50 TB	A–1	2517	2.5	1.5	1.75	–	8.5
3 B 52 TB	4.8	5.2	5.55	A–1	1610	1.625	1.5	1	–	9.0	4 B 52 TB	A–1	2517	2.5	1.5	1.75	–	9.0
3 B 54 TB	5	5.4	5.75	A–1	2517	2.5	1.5	1.75	–	9.5	4 B 54 TB	A–1	2517	2.5	1.5	1.75	–	9.5
3 B 56 TB	5.2	5.6	5.95	A–1	2517	2.5	1.5	1.75	–	10.0	4 B 56 TB	A–1	2517	2.5	1.5	1.75	–	10.0
3 B 58 TB	5.4	5.8	6.15	A–1	2517	2.5	.75	1.75	–	10.5	4 B 58 TB	A–1	2517	2.5	1.5	1.75	–	12.0
3 B 60 TB	5.6	6	6.35	A–1	2517	2.5	.75	1.75	–	11.0	4 B 60 TB	A–1	2517	2.5	1.5	1.75	–	12.5
3 B 62 TB	5.8	6.2	6.55	A–1	2517	2.5	.75	1.75	–	11.5	4 B 62 TB	A–1	2517	2.5	1.5	1.75	–	13.0
3 B 64 TB	6	6.4	6.75	A–1	2517	2.5	.75	1.75	–	12.0	4 B 64 TB	A–1	2517	2.5	1.5	1.75	–	14.0
3 B 66 TB	6.2	6.6	6.95	A–1	2517	2.5	.75	1.75	–	12.3	4 B 66 TB	A–1	2517	2.5	1.5	1.75	–	15.0
3 B 68 TB	6.4	6.8	7.15	A–1	2517	2.5	.75	1.75	–	12.8	4 B 68 TB	A–1	2517	2.5	1.5	1.75	–	16.0
–	–	–	–	–	–	–	–	–	–	–	4 B 70 TB	A–1	2517	2.5	–	1.75	1.5	20.0
3 B 74 TB	7	7.4	7.75	A–1	2517	2.5	.75	1.75	–	16.0	4 B 74 TB	A–1	2517	2.5	1.5	1.75	–	16.0
3 B 80 TB	8	8.4	8.35	A–1	2517	2.5	–	1.75	.75	19.0	4 B 80 TB	A–1	2517	2.5	–	1.75	1.5	21.0
3 B 86 TB	8.2	8.6	8.95	A–2	2517	2.5	.75	1.75	–	19.0	4 B 86 TB	A–2	2517	2.5	1.5	1.75	–	21.0
3 B 94 TB	9	9.4	9.75	A–2	2517	2.5	.75	1.75	–	21.0	4 B 94 TB	A–2	2517	2.5	1.5	1.75	–	23.0
3 B 110 TB	10.6	11	11.35	A–2	2517	2.5	.75	1.75	–	24.0	4 B 110 TB	A–2	2517	2.5	1.5	1.75	–	28.0
3 B 124 TB	12	12.4	12.75	A–3	2517	2.5	–	1.75	.75	28.0	4 B 124 TB	A–3	2517	2.5	.375	1.75	1.125	32.8
3 B 136 TB	13.2	13.6	13.95	A–3	2517	2.5	–	1.75	.75	25.0	4 B 136 TB	A–3	2517	2.5	.375	1.75	1.125	34.0
3 B 154 TB	15	15.4	15.75	A–3	2517	2.5	–	1.75	.75	30.0	4 B 154 TB	A–3	2517	2.5	.375	1.75	1.125	42.0
3 B 160 TB	15.6	16	16.35	A–3	2517	2.5	–	1.75	.75	32.0	4 B 160 TB	A–3	2517	2.5	.375	1.75	1.125	45.1
3 B 184 TB	18	18.4	18.75	A–3	2517	2.5	–	1.75	.75	44.0	4 B 184 TB	A–3	2517	2.5	.5	1.75	1	53.0
3 B 200 TB	19.6	20	20.35	A–3	3020	3	–	2	.5	58.0	4 B 200 TB	A–3	3020	3	.5	2	.75	63.0
3 B 250 TB	24.6	25	25.35	A–3	3020	3	–	2	.5	74.0	4 B 250 TB	A–3	3030	3	–	3	1.25	80.0
3 B 300 TB	29.6	30	30.35	A–3	3020	3	–	2	.5	84.0	4 B 300 TB	A–3	3030	3	–	3	1.25	100.0
3 B 380 TB	37.6	38	38.35	B–3	3020	3	–	3	.5	135.0	4 B 380 TB	A–3	3030	3	–	3	1.25	142.0

Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-8 thru B-10 for additional bushing dimensions.

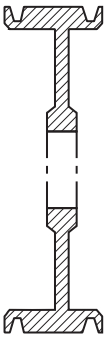
Combination Groove Conventional Taper Bushed Stock Sheaves A-B



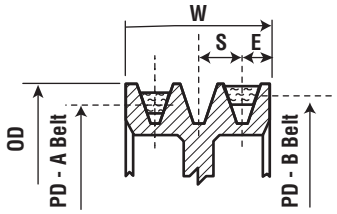
1=SOLID



2=WEB



3=ARM/SPOKE



Combination Groove Dimensions

Belt Selection	E	S	OD
AB	.5	.75	PD B + .35

W = S (N-1) + 2E
N = No. of Grooves

Drawing shows position of "A" and "B" belts in groove.

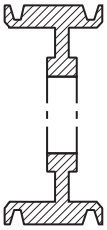
Taper Bushed Sheaves – A-B

5 Grooves F = 4											6 Grooves F = 4 ¾							
Part Number	Diameter A Belt	Diameter B Belt	OD	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush
5 B 34 TB	3.0	3.4	3.75	A-1	1210	1.25	2.5	1.5	0	5.0								
5 B 36 TB	3.2	3.6	3.95	A-1	1210	1.25	2.5	1.5	0	5.5								
5 B 38 TB	3.4	3.8	4.15	A-1	1215	1.625	.875	1.5	1.625	6.0								
5 B 40 TB	3.6	4.0	4.35	A-1	1215	1.625	.875	1.5	1.625	6.5								
5 B 42 TB	3.8	4.2	4.55	A-1	1615	1.625	2.5	1.5	0	7.0	6 B 42 TB	A-1	1615	1.625	3.25	1.5	0	8.0
5 B 44 TB	4.0	4.4	4.75	A-1	1615	1.625	2.5	1.5	0	8.0	6 B 44 TB	A-1	1615	1.625	3.25	1.5	0	9.0
5 B 46 TB	4.2	4.6	4.95	A-1	1615	1.625	2.5	1.5	0	9.0	6 B 46 TB	A-1	1615	1.625	3.25	1.5	0	10.0
5 B 48 TB	4.8	5.2	5.15	A-1	1615	1.625	.875	1.5	1.625	9.4	6 B 48 TB	A-1	1615	1.625	1.25	1.5	2	11.0
5 B 50 TB	4.6	5.0	5.35	A-1	1615	1.625	.875	1.5	0	10.5	6 B 50 TB	A-1	1615	1.625	1.25	1.5	2	11.9
5 B 52 TB	4.8	5.2	5.55	A-1	1615	1.625	.875	1.5	0	11.3	6 B 52 TB	A-1	1615	1.625	1.25	1.5	2	12.8
5 B 54 TB	5.0	5.4	5.75	A-1	2517	2.5	2.25	1.75	0	11.5	6 B 54 TB	A-1	2517	1.625	1.25	1.5	2	13.7
5 B 56 TB	5.2	5.6	5.95	A-1	2517	2.5	2.25	1.75	0	12.0	6 B 56 TB	A-1	2517	1.625	1.25	1.5	2	14.6
5 B 58 TB	5.8	6.2	6.15	A-1	2517	2.5	.8125	1.75	1.4375	13.0	6 B 58 TB	A-1	2517	2.5	1.125	1.75	1.875	14.0
5 B 60 TB	5.6	6.0	6.35	A-1	2517	2.5	2.25	1.75	0	14.0	6 B 60 TB	A-1	2517	2.5	3	1.75	0	16.0
5 B 62 TB	6.2	6.6	6.55	A-1	2517	2.5	.8125	1.75	1.4375	14.0	6 B 62 TB	A-1	2517	2.5	1.125	1.75	1.875	16.0
5 B 64 TB	6.0	6.4	6.75	A-1	2517	2.5	2.25	1.75	0	16.0	6 B 64 TB	A-1	2517	2.5	3	1.75	0	19.5
5 B 66 TB	6.6	7.0	6.95	A-1	2517	2.5	.8125	1.75	1.4375	16.0	6 B 66 TB	A-1	2517	2.5	1.125	1.75	1.875	20.0
5 B 68 TB	6.4	6.8	7.15	A-1	2517	2.5	2.25	1.75	0	18.0	6 B 68 TB	A-1	2517	2.5	3	1.75	0	21.0
5 B 70 TB	7.0	7.4	7.35	A-1	2517	2.5	.75	1.75	1.5	18.0	6 B 70 TB	A-1	2517	2.5	1.5	1.75	1.5	21.0
5 B 74 TB	7.0	7.4	7.75	A-1	2517	2.5	2.25	1.75	0	22.0	6 B 74 TB	A-1	2517	2.5	3	1.75	0	25.0
5 B 80 TB	8.0	8.4	8.35	A-1	2517	2.5	.5	1.75	1.75	23.0	6 B 80 TB	A-1	2517	2.5	1.5	1.75	1.5	26.0
5 B 86 TB	8.2	8.6	8.95	A-2	2517	2.5	2.25	1.75	0	24.0	6 B 86 TB	A-2	2517	2.5	3	1.75	0	27.0
5 B 94 TB	9.0	9.4	9.75	A-2	2517	2.5	2.25	1.75	0	26.0	6 B 94 TB	A-2	2517	2.5	3	1.75	0	28.0
5 B 110 TB	10.6	11.0	11.35	A-2	2517	2.5	2.25	1.75	0	35.0	6 B 110 TB	A-2	2517	2.5	3	1.75	0	34.0
5 B 124 TB	12.0	12.4	12.75	A-3	2517	2.5	.75	1.75	1.5	40.0	6 B 124 TB	A-3	2517	2.5	1.125	1.75	1.875	43.0
5 B 136 TB	13.6	14.0	13.95	A-3	2517	2.5	1	1.75	1.25	38.0	6 B 136 TB	A-3	2517	2.5	1.5	1.75	1.5	42.0
5 B 154 TB	15.0	15.4	15.75	A-3	2517	2.5	.75	1.75	1.5	47.0	6 B 154 TB	A-3	2517	2.5	1.5	1.75	1.5	52.0
5 B 160 TB	16.0	16.4	16.35	A-3	2517	2.5	.75	1.75	1.5	67.0	6 B 160 TB	A-3	2517	2.5	1.5	1.75	1.5	53.0
5 B 184 TB	18.0	18.4	18.75	A-3	2517	2.5	.75	1.75	1.5	52.0	6 B 184 TB	A-3	2517	2.5	1.5	1.75	1.5	62.0
5 B 200 TB	19.6	20.0	20.35	A-3	3030	3	.25	3	.75	75.0	6 B 200 TB	A-3	3030	3	.5	3	1.25	85.0
5 B 250 TB	24.6	25.0	25.35	A-3	3030	3	.25	3	.75	81.0	6 B 250 TB	A-3	3030	3	.5	3	1.25	100.0
5 B 300 TB	29.6	30.0	30.35	A-3	3030	3	.25	3	.75	109.0	6 B 300 TB	A-3	3030	3	.5	3	1.25	137.0
5 B 380 TB	37.6	38.0	38.35	A-3	3030	3	.25	3	.75	158.0	6 B 380 TB	A-3	3030	3	.5	3	1.25	168.0

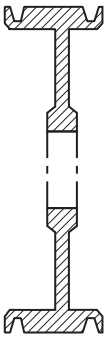
A-B Combination Groove Conventional Taper Bushed Stock Sheaves



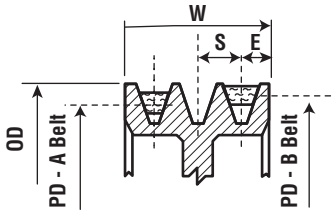
1=SOLID



2=WEB



3=ARM/SPOKE



Combination Groove Dimensions

Belt Selection	E	S	OD
AB	.5	.75	PD B + .35

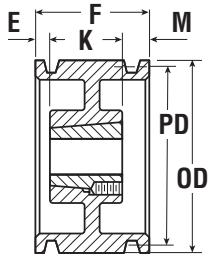
W = S (N-1) + 2E
N = No. of Grooves

Drawing shows position of "A" and "B" belts in groove.

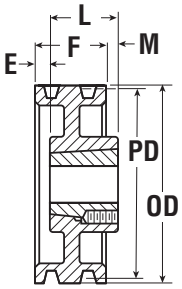
Taper Bushed Sheaves – A-B

8 Grooves F = 6 ¼											10 Grooves F = 7 ¾							
Part Number	Diameter A Belt	Diameter B Belt	OD	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush
8 B 54 TB	5	5.4	5.75	A-1	2517	2.5	1.875	1.75	2.625	16.0	10 B 54 TB	A-1	2517	2.5	3	1.75	3	18.0
8 B 56 TB	5.2	5.6	5.95	A-1	2517	2.5	1.875	1.75	2.625	17.0	10 B 56 TB	A-1	2517	2.5	3	1.75	3	20.0
8 B 60 TB	5.6	6	6.35	A-1	2517	2.5	1.875	1.75	2.625	19.0	10 B 60 TB	A-1	2517	2.5	3	1.75	3	22.0
8 B 64 TB	6	6.4	6.75	A-1	2517	2.5	1.875	1.75	2.625	21.0	10 B 64 TB	A-1	2517	2.5	3	1.75	3	25.5
8 B 68 TB	6.4	6.8	7.15	A-1	2517	2.5	1.875	1.75	2.625	25.0	10 B 68 TB	A-1	2517	2.5	3	1.75	3	28.0
8 B 74 TB	7	7.4	7.75	A-1	2517	2.5	1.875	1.75	2.625	29.0	10 B 74 TB	A-1	2517	2.5	3	1.75	3	35.0
8 B 86 TB	8.2	8.6	8.95	A-1	3030	3	1	3	2.25	37.0	10 B 86 TB	A-1	3030	3	2	3	2.75	43.0
8 B 94 TB	9	9.4	9.95	A-2	3030	3	1	3	2.25	41.0	10 B 94 TB	A-2	3030	3	2	3	2.75	46.0
8 B 110 TB	10.6	11	11.35	A-2	3030	3	1	3	2.25	51.0	10 B 110 TB	A-2	3030	3	2	3	2.75	52.0
8 B 124 TB	12	12.4	12.75	A-3	3030	3	1	3	2.25	56.0	–	–	–	–	–	–	–	–
8 B 154 TB	15	15.4	15.75	A-3	3030	3	1	3	2.25	69.0	–	–	–	–	–	–	–	–
8 B 184 TB	18	18.4	18.75	A-3	3030	3	1	3	2.25	99.0	–	–	–	–	–	–	–	–
8 B 200 TB	19.6	20	20.35	A-3	3030	3	1	3	2.25	115.0	–	–	–	–	–	–	–	–
8 B 250 TB	24.6	25	25.35	A-3	3535	3.5	.75	3.5	2	145.0	–	–	–	–	–	–	–	–
8 B 300 TB	29.6	30	30.35	A-3	3535	3.5	.75	3.5	2	170.0	–	–	–	–	–	–	–	–
8 B 380 TB	37.6	38	38.35	A-3	4040	4	1.125	4	1.125	260.0	–	–	–	–	–	–	–	–

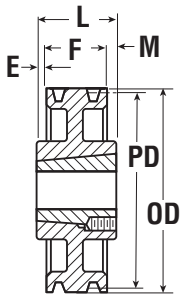
Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-8 thru B-10 for additional bushing dimensions.



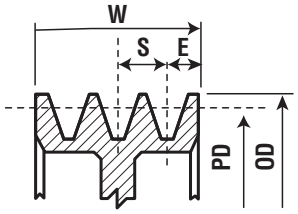
Type A



Type B



Type C



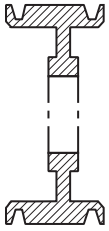
Combination Groove Dimensions

Belt Selection	E	S	OD
C	.6875	1	PD B + .40

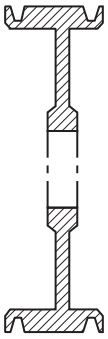
W = S(N-1) + 2E
N = No. of Grooves



1=SOLID



2=WEB



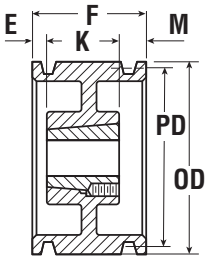
3=ARM/SPOKE

Taper Bushed Sheaves – C

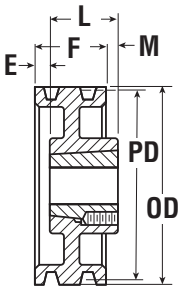
2 Grooves F = 2 3/8										3 Grooves F = 3 3/8							
Part Number	PD C Belt	OD	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush
2 C 70 TB	7	7.4	A-1	2517	2.5	.625	1.75	–	15.0	3 C 70 TB	A-1	2517	2.5	.25	1.75	1.375	18.0
2 C 75 TB	7.5	7.9	A-1	2517	2.5	.625	1.75	–	17.0	3 C 75 TB	A-1	2517	2.5	.25	1.75	1.375	20.0
2 C 80 TB	8	8.4	A-1	2517	2.5	.625	1.75	–	20.0	3 C 80 TB	A-1	2517	2.5	.25	1.75	1.375	22.0
2 C 85 TB	8.5	8.9	A-2	2517	2.5	.625	1.75	–	22.0	3 C 85 TB	A-2	2517	2.5	.25	1.75	1.375	23.0
2 C 90 TB	9	9.4	A-2	2517	2.5	.625	1.75	–	23.0	3 C 90 TB	A-2	2517	2.5	.25	1.75	1.375	24.0
2 C 95 TB	9.5	9.9	A-2	2517	2.5	.625	1.75	–	24.0	3 C 95 TB	A-2	2517	2.5	.25	1.75	1.375	27.0
2 C 100 TB	10	10.4	A-2	2517	2.5	.625	1.75	–	25.0	3 C 100 TB	A-2	2517	2.5	.25	1.75	1.375	29.0
2 C 105 TB	10.5	10.9	A-2	2517	2.5	.625	1.75	–	26.0	3 C 105 TB	A-2	2517	2.5	.25	1.75	1.375	32.0
2 C 110 TB	11	11.4	A-2	2517	2.5	.625	1.75	–	27.0	3 C 110 TB	A-2	2517	2.5	.25	1.75	1.375	35.0
2 C 120 TB	12	12.4	A-2	2517	2.5	.625	1.75	–	33.0	3 C 120 TB	A-2	3020	3	–	2	1.375	44.0
2 C 130 TB	13	13.4	A-3	2517	2.5	.625	1.75	–	35.0	3 C 130 TB	A-3	3020	3	–	2	1.375	49.0
2 C 140 TB	14	14.4	A-3	2517	2.5	.625	1.75	–	36.0	3 C 140 TB	A-3	3020	3	–	2	1.375	50.0
2 C 160 TB	16	16.4	A-3	2517	2.5	.625	1.75	–	42.0	3 C 160 TB	A-3	3020	3	–	2	1.375	64.0
2 C 180 TB	18	18.4	A-3	3020	3	–	2	.375	42.0	3 C 180 TB	A-3	3030	3	–	3	.375	64.0
2 C 200 TB	20	20.4	A-3	3020	3	–	2	.375	45.0	3 C 200 TB	A-3	3030	3	–	3	.375	78.0
2 C 240 TB	24	24.4	A-3	3020	3	–	2	.375	72.0	3 C 240 TB	A-3	3030	3	–	3	.375	96.0
2 C 300 TB	30	30.4	C-3	3535	3.5	.5	3.5	.625	85.0	3 C 300 TB	B-3	3535	3.5	–	3.5	.125	125.0
–	36	36.4	–	–	–	–	–	–	–	3 C 360 TB	B-3	3535	3.5	–	3.5	.125	175.0

Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-8 thru B-10 for additional bushing dimensions.

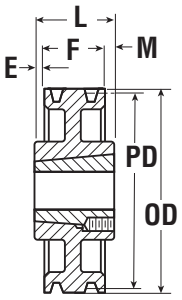
C Conventional Stock Taper Bushed Sheaves



Type A



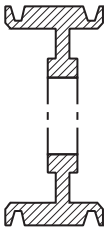
Type B



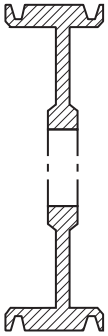
Type C



1=SOLID



2=WEB

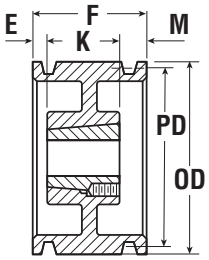


3=ARM/SPOKE

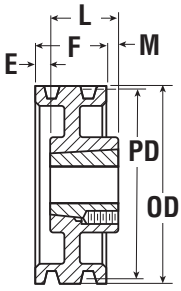
Taper Bushed Sheaves – C

4 Grooves F = 4 3/8										5 Grooves F = 5 3/8							
Part Number	PD C Belt	OD	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush
4 C 70 TB	7	7.4	A-1	2517	2.5	.5	1.75	2.125	20.0	5 C 70 TB	A-1	2517	2.5	1.5	1.75	2.125	23.0
4 C 75 TB	7.5	7.9	A-1	2517	2.5	.5	1.75	2.125	23.0	5 C 75 TB	A-1	2517	2.5	1.5	1.75	2.125	26.0
4 C 80 TB	8	8.4	A-1	2517	2.5	.5	1.75	2.125	25.0	5 C 80 TB	A-1	2517	2.5	1.5	1.75	2.125	30.0
4 C 85 TB	8.5	8.9	A-2	2517	2.5	.5	1.75	2.125	26.0	5 C 85 TB	A-1	2517	2.5	1.5	1.75	2.125	34.0
4 C 90 TB	9	9.4	A-2	2517	2.5	.5	1.75	2.125	27.0	5 C 90 TB	A-2	2517	2.5	1.5	1.75	2.125	35.0
4 C 95 TB	9.5	9.9	A-2	2517	2.5	.5	1.75	2.125	36.0	5 C 95 TB	A-2	2517	2.5	1.5	1.75	2.125	36.0
4 C 100 TB	10	10.4	A-2	2517	2.5	.5	1.75	2.125	39.0	5 C 100 TB	A-2	2517	2.5	1.5	1.75	2.125	39.0
4 C 105 TB	10.5	10.9	A-2	2517	2.5	.5	1.75	2.125	42.0	5 C 105 TB	A-2	2517	2.5	1.5	1.75	2.125	42.0
4 C 110 TB	11	11.4	A-2	2517	2.5	.5	1.75	2.125	45.0	5 C 110 TB	A-2	2517	2.5	1.5	1.75	2.125	43.0
4 C 120 TB	12	12.4	A-2	3030	3	–	3	1.375	47.0	5 C 120 TB	A-2	3030	3	.5	3	1.875	58.0
4 C 130 TB	13	13.4	A-3	3030	3	–	3	1.375	51.0	5 C 130 TB	A-3	3030	3	.5	3	1.875	63.0
4 C 140 TB	14	14.4	A-3	3030	3	–	3	1.375	54.0	5 C 140 TB	A-3	3030	3	.5	3	1.875	65.0
4 C 160 TB	16	16.4	A-3	3030	3	–	3	1.375	71.0	5 C 160 TB	A-3	3030	3	.5	3	1.875	70.0
4 C 180 TB	18	18.4	A-3	3030	3	–	3	1.375	81.0	5 C 180 TB	A-3	3030	3	.5	3	1.875	83.0
4 C 200 TB	20	20.4	A-3	3030	3	–	3	1.375	84.0	5 C 200 TB	A-3	3535	3.5	–	3.5	1.875	110.0
4 C 240 TB	24	24.4	A-3	3030	3	–	3	1.375	116.0	5 C 240 TB	A-3	3535	3.5	–	3.5	1.875	138.0
4 C 300 TB	30	30.4	A-3	3535	3.5	–	3.5	.875	164.0	5 C 300 TB	A-3	3535	3.5	–	3.5	1.875	176.0
4 C 360 TB	36	36.4	A-3	3535	3.5	–	3.5	.875	192.0	5 C 360 TB	A-3	4040	4	.25	4	1.125	244.0
4 C 440 TB	44	44.4	A-3	4040	4	–	4	.375	282.0	5 C 440 TB	A-3	4040	4	.25	4	1.125	288.0

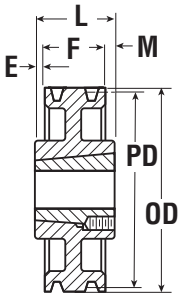
Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-8 thru B-10 for additional bushing dimensions.



Type A



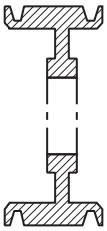
Type B



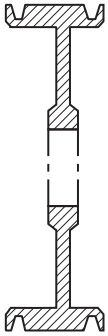
Type C



1=SOLID



2=WEB



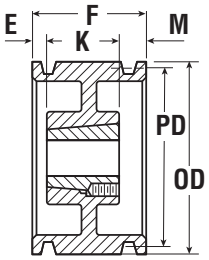
3=ARM/SPOKE

Taper Bushed Sheaves – C

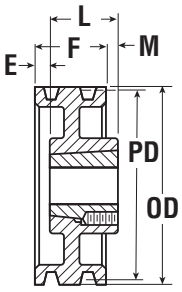
6 Grooves F = 6 3/8										8 Grooves F = 8 3/8							
Part Number	PD C Belt	OD	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush
6 C 70 TB	7	7.4	A-1	3030	3	1	3	2.375	30.0	–	–	–	–	–	–	–	–
6 C 75 TB	7.5	7.9	A-1	3030	3	1	3	2.375	31.0	–	–	–	–	–	–	–	–
6 C 80 TB	8	8.4	A-1	3030	3	1	3	2.375	35.0	8 C 80 TB	A-1	3030	3	2	3	3.375	45.0
6 C 85 TB	8.5	8.9	A-1	3030	3	1	3	2.375	40.0	8 C 85 TB	A-1	3030	3	2	3	3.375	47.0
6 C 90 TB	9	9.4	A-1	3030	3	1	3	2.375	47.0	8 C 90 TB	A-1	3535	3.5	1.5	3.5	3.375	64.0
6 C 95 TB	9.5	9.9	A-1	3030	3	1	3	2.375	53.0	8 C 95 TB	A-1	3535	3.5	1.5	3.5	3.375	67.0
6 C 100 TB	10	10.4	A-1	3030	3	1	3	2.375	57.0	8 C 100 TB	A-1	3535	3.5	1.5	3.5	3.375	70.0
6 C 105 TB	10.5	10.9	A-2	3030	3	1	3	2.375	58.0	8 C 105 TB	A-1	3535	3.5	1.5	3.5	3.375	84.0
6 C 110 TB	11	11.4	A-2	3030	3	1	3	2.375	66.0	8 C 110 TB	A-1	3535	3.5	1.5	3.5	3.375	87.0
6 C 120 TB	12	12.4	A-2	3030	3	1	3	2.375	70.0	8 C 120 TB	A-2	3535	3.5	1.5	3.5	3.375	90.0
6 C 130 TB	13	13.4	A-3	3030	3	1	3	2.375	75.0	8 C 130 TB	A-2	3535	3.5	1.5	3.5	3.375	97.0
6 C 140 TB	14	14.4	A-3	3535	3.5	.5	3.5	2.375	80.0	8 C 140 TB	A-2	3535	3.5	1.5	3.5	3.375	105.0
6 C 160 TB	16	16.4	A-3	3535	3.5	.5	3.5	2.375	87.0	8 C 160 TB	A-3	3535	3.5	1.5	3.5	3.375	115.0
6 C 180 TB	18	18.4	A-3	3535	3.5	.5	3.5	2.375	102.0	8 C 180 TB	A-3	4040	4	1.5	4	2.875	137.0
6 C 200 TB	20	20.4	A-3	3535	3.5	.5	3.5	2.375	126.0	8 C 200 TB	A-3	4040	4	1.5	4	2.875	180.0
6 C 240 TB	24	24.4	A-3	3535	3.5	.5	3.5	2.375	150.0	8 C 240 TB	A-3	4040	4	1.5	4	2.875	205.0
6 C 300 TB	30	30.4	A-3	4040	4	1	4	1.375	226.0	8 C 300 TB	A-3	4040	4	1.5	4	2.875	263.0
6 C 360 TB	36	36.4	A-3	4040	4	1	4	1.375	270.0	8 C 360 TB	A-3	4545	4.5	1.25	4.5	2.625	343.0
6 C 440 TB	44	44.4	A-3	4040	4	1	4	1.375	320.0	8 C 440 TB	A-3	4545	4.5	1.25	4.5	2.625	432.0

Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-8 thru B-10 for additional bushing dimensions.

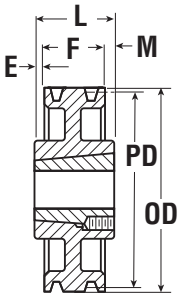
C Conventional Stock Taper Bushed Sheaves



Type A



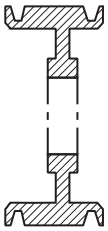
Type B



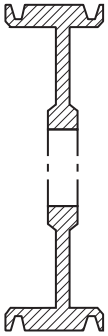
Type C



1=SOLID



2=WEB



3=ARM/SPOKE

Taper Bushed Sheaves – C

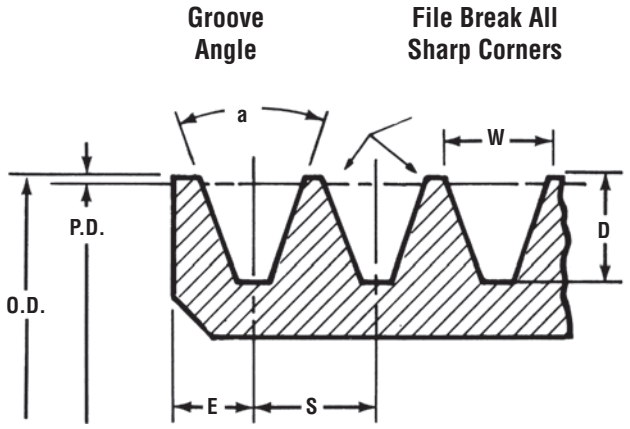
10 Grooves F = 10 3/8										12 Grooves F = 12 3/8							
Part Number	PD C Belt	OD	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush	Part Number	Type	Bush	Bush Max Bore	E	L Length Thru Bore	M	Wt. Less Bush
10 C 90 TB	9	9.4	A-1	4545	4.5	1.5	4.5	4.375	57.0	12 C 90 TB	A-1	4040	4	3.5	4	4.875	65.0
10 C 95 TB	9.5	9.9	A-1	4545	4.5	1.5	4.5	4.375	66.0	12 C 95 TB	A-1	4040	4	3.5	4	4.875	75.0
10 C 100 TB	10	10.4	A-1	4545	4.5	1.5	4.5	4.375	77.0	12 C 100 TB	A-1	4040	4	3.5	4	4.875	85.0
10 C 105 TB	10.5	10.9	A-1	4545	4.5	1.5	4.5	4.375	87.0	12 C 105 TB	A-1	4040	4	3.5	4	4.875	95.0
10 C 110 TB	11	11.4	A-1	4545	4.5	1.5	4.5	4.375	98.0	12 C 110 TB	A-1	4040	4	3.5	4	4.875	104.0
10 C 120 TB	12	12.4	A-1	4545	4.5	1.5	4.5	4.375	121.0	12 C 120 TB	A-1	4040	4	3.5	4	4.875	126.0
10 C 130 TB	13	13.4	A-1	4545	4.5	2	4.5	3.875	146.0	12 C 130 TB	A-1	4545	4.5	3	4.5	4.875	156.0
10 C 140 TB	14	14.4	A-2	4545	4.5	2	4.5	3.875	170.1	12 C 140 TB	A-1	4545	4.5	3	4.5	4.875	184.0
10 C 160 TB	16	16.4	A-2	4545	4.5	2	4.5	3.875	173.4	–	–	–	–	–	–	–	–
10 C 180 TB	18	18.4	A-2	4545	4.5	2	4.5	3.875	180.1	–	–	–	–	–	–	–	–
10 C 200 TB	20	20.4	A-3	4545	4.5	2	4.5	3.875	201.0	–	–	–	–	–	–	–	–
10 C 240 TB	24	24.4	A-3	4545	4.5	2	4.5	3.875	243.0	–	–	–	–	–	–	–	–
10 C 300 TB	30	30.4	A-3	4545	4.5	2	4.5	3.875	320.0	–	–	–	–	–	–	–	–
10 C 360 TB	36	36.4	A-3	4545	4.5	2	4.5	3.875	464.0	–	–	–	–	–	–	–	–
10 C 440 TB	44	44.4	A-3	4545	4.5	2	4.5	3.875	508.0	–	–	–	–	–	–	–	–

Dimensions in inches, weight in pounds. Weights do not include bushings. See page B-8 thru B-10 for additional bushing dimensions.

Hi-Cap Wedge Groove Dimensions and Tolerances

Hi-Cap Wedge Sheaves Tolerances

Outside Diameter	
Under 12''	± 5"
12" thru 17.99"	+ .010"
18" thru 36"	± .015"
Over 36"	± .020"
Over 72"	± .250"
Outside Diameter Eccentricity	
Under 9"	8"
9" thru 13.99"	.010"
14" thru 36"	.012"
Over 36"	.020"
Side Wobble And Runout	
20" P.D. & Under	not to exceed 1" per inch of P.D.
Over 20" P.D.	.010" plus 05" per inch of O.D.



Face Width of Stock and Standard Sheaves

Face Width = S(N-1) + 2E
Where:
N = Number of Grooves

Standard Sheaves

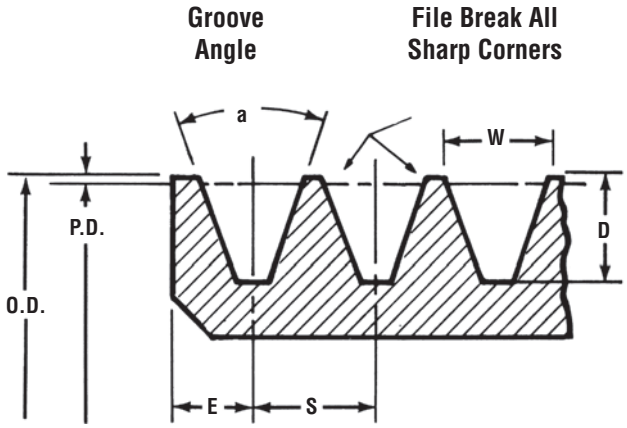
Belt	Minimum Recommended Pitch Diameter	P.D. Range	a Groove Angle	Groove Dimensions				
				W	D	X	S	E
3V	2.65	Under 3.5 3.5 - 6 6.01-12 Over 12	36° 38° 40° 42°	0.35	0.35	0.025	0.407	0.344
5V	7.1	Under 10 16-Oct Over16	38° 40° 42°	0.6	0.6	0.05	0.688	0.5
8V	12.5	Under 16 16-22.4 Over 22.4	38° 40° 42°	1	1	0.1	1.125	0.75

Dimensions in inches.

Conventional Groove Dimensions and Tolerances

Conventional Sheave Tolerances

Outside Diameter	
Under 12"	± .020"
12" thru 23.99"	± .040"
24" thru 57.99"	± .060"
58" thru 71.99"	± .120"
Over 72"	± .250"
Outside Diameter Eccentricity	
Under 10" P.D.	.010"
10.01" thru 60" P.D.	.010" plus 05" per inch of P.D.
Over 60" P.D.	Add 1" for each add'l inch of P.D.
Side Wobble And Runout	
20" P.D. & Under	not to exceed 1" per inch of P.D.
20" thru 60" P.D.	Add 05" for each add'l inch of P.D. up to 60"
Over 60" P.D.	Add 1" for each add'l inch of P.D. above 60"



Face Width of Stock and Standard Sheaves

Face Width = S(N-1) + 2E
Where:
N = Number of Grooves

Standard Sheaves

Belt	Minimum Recommended Pitch Diameter	P.D. Range	a Groove Angle ± 0.25°	Groove Dimensions						
				W		D ± .031	X	S* ± .031	E	
A	3.0	2.6 - 5.4 Over 5.4	34° 38°	0.494 0.504	± 5	0.49	0.125	0.625	0.375	+ 0.07 – 0
B	5.4	4.6 - 7.0 Over 7.0	34° 38°	0.637 0.65	± 5	0.58	0.175	0.75	0.5	+ 0.15 – 0
A - B	A 3.0 B 5.4	3.4 - 6.8 Over 6.8	34° 38°	0.612 0.625	± 5	0.625	0.175	0.75	0.5	+ 0.15 – 0
C	9.0	7.0 - 7.99 8.0 - 12.0 Over 12.0	34° 36° 38°	0.879 0.887 0.895	± 7	0.78	0.2	1	0.688	+ 0.15 – 0
D	13.0	12.0 - 12.99 13.0 - 17.0 Over 17.0	34° 36° 38°	1.259 1.271 1.283	± 7	1.05	0.3	1.438	0.875	+ 0.25 – 0
E	21.0	18.0 - 24.0 Over 24.0	36° 38°	1.527 1.542	± .010	1.3	0.4	1.75	1.123	+ 0.25 – 0

Deep Groove Sheaves

Belt	Minimum Recommended Pitch Diameter	P.D. Range	a Groove Angle ± 0.25°	Groove Dimensions						
				W		D ± .031	X	S* ± .031	E	
A	3.0	2.6 - 5.4 Over 5.4	34° 38°	0.589 0.611	± 5	0.645	0.280	0.75	0.438	+ 0.07 – 0
B	5.4	4.6 - 7.0 Over 7.0	34° 38°	0.747 0 .774	± 5	0.76	0.875	0.875	0.563	+ 0.15 – 0
C	9.0	7.0 - 7.99 8.0 - 12.0 Over 12.0	34° 36° 38°	1.066 1.085 1.105	± 7	1.085	1.25	1.25	0.813	+ 0.15 – 0
D	13.0	12.0 - 12.99 13.0 - 17.0 Over 17.0	34° 36° 38°	1.513 1.541 1.569	± 7	1.465	1.75	1.75	1.063	+ 0.25 – 0
E	21.0	18.0 - 24.0 Over 24.0	36° 38°	1.816 1.849	± .010	1.745	2.845	2.063	1.313	+ 0.25 – 0

Dimensions in inches

*Summation of the deviations from "S" for all grooves in any one sheave shall not exceed ± .063. Available on request, deep groove sheaves are intended for quarter turn drives and for long center vertical shaft drives. They may also be necessary for such applications as car shakers, vibrating screens and certain types of crushers where oscillation in center distance may occur.

Stock Drive Selection

To select the best V-Belt Drive for an application, utilizing stock sheaves, simply follow the step by step instructions below:

BEFORE SELECTING A DRIVE, YOU NEED TO KNOW THESE FACTS:

1. The horsepower requirement of the drive.
2. The RPM of the driver.
3. The RPM of the driven machine.
4. The approximate center distance for the drive.
5. Shaft size of both units.
6. Average hours of operation per day.

Table 1 — Service Factors

THE CORRECT SERVICE FACTOR IS DETERMINED BY:

1. The extent and frequency of peak loads.
2. The number of operating hours per year, broken down into average hours per day of continuous service.
3. The proper service category, (intermittent, normal or continuous). Select the one that most closely approximates your application conditions.

INTERMITTENT SERVICE — SERVICE FACTOR 1.0 TO 1.5

a. Light Duty — Not more than 6 hours per day.
b. Never exceeding rated load.

NORMAL SERVICE — SERVICE FACTOR 1.1 TO 1.6

a. Daily service 6 to 16 hours per day.
b. Where occasional starting or peak load does not exceed 200% of the full load.

CONTINUOUS SERVICE — SERVICE FACTOR 1.2 TO 1.8

a. Continuous service 16 to 24 hours per day.
b. Where starting or peak load is in excess of 200% of the full load or where starting or peak loads and overloads occur frequently.

TYPICAL SERVICE FACTORS

Driven machine types noted below are representative samples only. Select a category most closely approximating your application from those listed below.

IF IDLERS ARE USED, ADD THE FOLLOWING TO THE SERVICE FACTOR:

Idler on slack side (inside)	None
Idler on slack side (outside)	0.1
Idler on tight side (inside)	0.1
Idler on tight side (outside)	0.2

DRIVEN MACHINE TYPES	DRIVER TYPES					
	ELECTRIC MOTORS: AC Normal Torque, Squirrel Cage and Synchronous; AC Split Phase; DC Shunt Wound. **Internal Combustion Engines**			**ELECTRIC MOTORS:** AC Hi-Torque; AC Hi-Slip; AC Repulsion-Induction; AC Single Phase, Series Wound; AC Slip Ring; DC Compound Wound		
	INTERMITTENT SERVICE	NORMAL SERVICE	CONTINUOUS SERVICE	INTERMITTENT SERVICE	NORMAL SERVICE	CONTINUOUS SERVICE
Agitators for Liquids Blowers and Exhausters Centrifugal Pumps and Compressors Fans up to 10 HP Light Duty Conveyors	1.0	1.1	1.2	1.1	1.2	1.3
Belt Conveyors For Sand, Grain, etc. Dough Mixers Fans Over 10 HP Generators Line Shafts Laundry Machinery Machine Tools Punches-Presses-Shears Printing Machinery Positive Displacement Rotary Pumps Revolving and Vibrating Screens	1.1	1.2	1.3	1.2	1.3	1.4
Brick Machinery Bucket Elevators Exciters Piston Compressors Conveyors (Drag-Pan-Screw) Hammer Mills Paper Mill Beaters Piston Pumps Positive Displacement Blowers Pulverizers Saw Mill and Woodworking Machinery Textile Machinery	1.2	1.3	1.4	1.4	1.5	1.6
Crushers (Gyratory-Jaw-Roll) Mills (Ball-Rod-Tube) Hoists Rubber Calenders-Extruders-Mills	1.3	1.4	1.5	1.5	1.6	1.8
Chokable Equipment	2.0	2.0	2.0	2.0	2.0	2.0

FOR A GOOD COMMERCIAL DRIVE SELECTION, USE CONTINUOUS SERVICE FACTOR

Made-To-Order Sheaves

Martin has the capacity to produce a wide range of Made-To-Order Sheaves These sheaves meet the same quality standards as our stock line of QD and Taper Bushed Sheaves

Since Made-To-Order Sheaves can be manufactured to meet most customer requirements, the following pages give standard dimensions for Made-To-Order Sheaves Martin can alter these dimensions such as hub location, length through bore, to meet desired requirements These sheaves are normally Bored-To-Size and are furnished with standard keyway and two set screws as indicated However, most Made-To-Order Sheaves can be furnished in QD or Taper Bushed style hubs Also, Martin can furnish Made-To-Order Sheaves in a split construction Consult factory with specific requirements.



Wire Rope Idler



Flat Belt Pulley



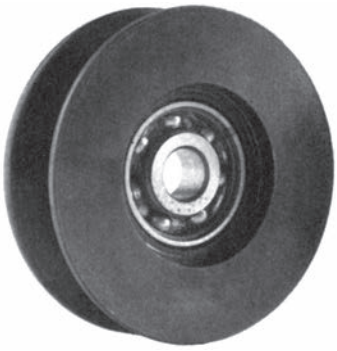
Duplex – Sheave and Flat Belt



Poly-V Sheave



Crown Face Pulley



Idler Sheave

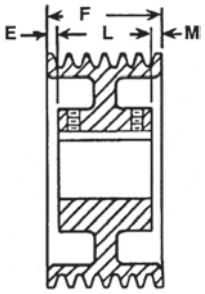
All Martin sheaves and timing pulleys can be manufactured to meet your special requirements: Aluminum, Brass, Ductile, Steel, Stainless Steel Martin, service and quality drive components you can depend on to get the job done

Made-To-Order Sheaves

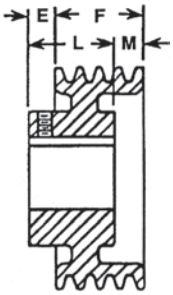


0.375 × 0.3125

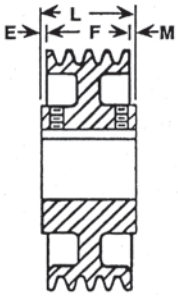
MTO - 3V



Type A



Type D



Type C

O.D. Range ■	1 — Groove, F = ◆				2 — Groove, F = ❍				3 — Groove, F = 1.5			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
2.65 - 4.9	D	1.3125	0.625	—	D	1.625	0.625	0.0938	D	1.625	0.625	0.5
5.0 - 10.9	D	1.5	0.625	0.1875	C	1.75	0.625	0.0313	D	1.75	0.625	0.375
11.0 - 13.9	C	1.75	0.625	0.3125	C	2.25	0.625	0.5313	C	2.5	0.625	0.375
14.0 - 16.9	C	1.75	0.625	0.3125	C	2.25	0.625	0.5313	C	2.5	0.625	0.375
17.0 - 24.9	C	1.75	0.375	0.375	C	2.5	0.625	0.625	C	3	0.75	0.75
25.0 - 33.5	C	1.75	0.25	0.25	C	2.5	0.625	0.625	C	3.25	0.875	0.875
2.65 - 4.9	D	1.625	0.625	0.9063	D	2.25	0.625	0.6875	D	2.25	0.625	1.0938

O.D. Range ■	4 — Groove, F = 1.9063				5 — Groove, F = 20.3125				6 — Groove, F = 2.7188			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
2.65 - 4.9	D	1.625	0.625	0.9063	D	2.25	0.625	0.6875	D	2.25	0.625	1.0938
5.0 - 6.9	D	1.75	0.625	0.7813	D	2.25	0.625	0.6875	D	2.25	0.625	1.0938
7.0 - 10.9	D	2.25	0.625	0.2813	D	2.25	0.625	0.6875	D	2.5	0.625	0.8438
11.0 - 20.9	D	2.5	0.625	0.0313	C	3	0.625	0.0625	D	3	0.625	0.3438
21.0 - 29.9	C	3	0.5469	0.5469	C	3.25	0.5	0.4375	C	3.5	0.3906	0.3906
30.0 - 33.5	C	3.5	0.7969	0.7969	C	3.5	0.5938	0.5938	C	4	0.6406	0.6406

O.D. Range ■	8 — Groove, F = 3.5313				10 — Groove, F = 4.3438				12 — Groove, F = 5.1563			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
4.0 - 4.9	D	2.25	0.625	1.9063	D	2.5	0.625	2.4688	D	3.5	0.625	2.2813
5.0 - 6.9	D	2.5	0.625	1.6563	D	2.5	0.625	2.4688	D	3.5	0.625	2.2813
7.0 - 13.9	D	3	0.625	1.1563	D	3.25	0.625	1.7188	D	3.5	0.625	2.2813
14.0 - 16.9	D	3.5	0.625	0.6563	D	3.5	0.625	1.4688	D	3.5	0.625	2.2813
17.0 - 20.9	C	4	0.625	0.1563	D	4	0.625	0.9688	D	4	0.625	1.7813
21.0 - 33.5	C	4.5	0.4844	0.4844	C	4.5	0.0781	0.0781	A	4.5	0.3281	0.3281

O.D. Range ■	14 — Groove, F = 5.9688				16 — Groove, F = 6.7188				18 — Groove, F = 7.5938			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
4.0 - 8.9	D	3	0.625	3.0938	D	4	0.625	3.4063	D	4	0.625	4.2188
9.0 - 16.9	D	3	0.625	3.0938	D	4	0.625	3.4063	D	4	0.625	4.2188
17.0 - 20.9	D	4	0.625	2.5938	D	40.5	0.625	2.9063	D	4.5	0.625	2.7188
21.0 - 24.9	A	4	0.9844	0.9844	A	4.5	1.1406	1.1406	A	4.5	1.5469	1.5469
25.0 - 29.9	A	4	0.9844	0.9844	A	4.5	1.1406	1.1406	A	4.5	1.5469	1.5469
30.0 - 33.5	A	5	0.4844	0.4844	A	5	0.8906	0.8906	A	5	1.2969	1.2969
2.65 - 4.9	D	1.625	0.625	0.9063	D	2.25	0.625	0.6875	D	2.25	0.625	1.0938

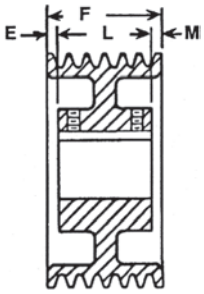
■ P.D. = O.D.–.05"
◆ 0.6875" for 2.65-10.9 O.D., 0.8125" for 11.0-16.9 O.D., 1" for 17.0-24.9 O.D., 1.25" for 25.0-33.5 O.D.
❍ 1.0938" for 2.65-16.9 O.D., 1.25" for 17.0-33.5 O.D.

Made-To-Order Sheaves

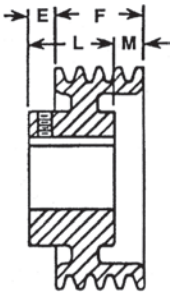


0.625 × 0.5313

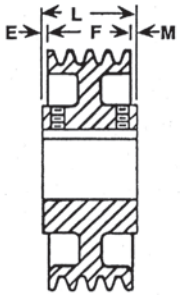
MTO - 5V



Type A



Type D



Type C

O.D. Range ■	2 — Groove, F = 1.6875				3 — Groove, F = 2.375				4 — Groove, F = 3.0625			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
7.0 - 10.9	D	2.25	0.875	0.3125	D	2.5	0.875	0.75	D	3	0.875	0.9375
11.0 - 23.9	D	2.25	0.875	0.3125	D	3.25	0.875	—	D	3.5	0.875	0.4375
24.0 - 29.9	C	2.5	0.4063	0.4063	C	3.5	0.5625	0.5625	C	4	0.4688	0.4688
30.0 - 44.9	C	3.5	0.9063	0.9063	C	4.5	1.0625	1.0625	C	5.25	1.0938	1.0938
45.0 - 75.0	C	5	1.6563	1.6563	C	5.25	1.4375	1.4375	C	6	1.4688	1.4688

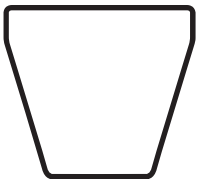
O.D. Range ■	5 — Groove, F = 3.75				6 — Groove, F = 4.4375				8 — Groove, F = 5.8125			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
7.0 - 11.9	D	3.25	0.875	1.375	D	3.5	0.875	1.8125	D	4	0.875	2.6875
12.0 - 23.9	D	4	0.875	0.625	D	4	0.875	1.3125	D	4.5	0.875	2.1875
24.0 - 44.9	C	4.5	0.375	0.375	C	5.25	0.4063	0.4063	A	5.5	0.1563	0.1563
45.0 - 52.9	C	5.25	0.75	0.75	C	6	0.7813	0.7813	C	6	0.0938	0.0938
53.0 - 75.9	C	6.25	1.375	1.375	C	6.5	1.0313	1.0313	C	6.5	0.3438	0.3438

O.D. Range ■	10 — Groove, F = 7.1875				12 — Groove, F = 8.5625				14 — Groove, F = 9.9375			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
9.0 - 23.9	D	4.25	0.875	3.4063	D	5	0.875	4.9375	D	6	0.875	4.8125
24.0 - 36.9	A	4.5	1.3438	1.3438	A	5.5	1.5313	1.5313	A	6.5	1.7188	1.7188
37.0 - 44.9	A	5.5	0.8438	0.8438	A	6	1.2813	1.2813	A	7	1.4688	1.4688
45.0 - 52.9	A	6	0.5938	0.5938	A	6	1.2813	1.2813	A	7.5	1.2188	1.2188
53.0 - 75.9	A	7	0.0938	0.0938	A	7	0.7813	0.7813	A	8	0.9688	0.9688

O.D. Range ■	16 — Groove, F = 11.3125				18 — Groove, F = 12.6875				20 — Groove, F = 14.0625			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
9.0 - 23.9	D	6.5	0.875	5.6875	D	7	0.875	6.5625	D	8	0.875	6.9375
24.0 - 36.9	A	7	2.1563	1.3438	A	8	2.3438	2.3438	A	8.5	2.7813	2.7813
37.0 - 44.9	A	7.5	1.9063	1.9063	A	8.5	2.0938	2.0938	A	9	2.5313	2.5313
45.0 - 52.9	A	8	1.6563	1.6563	A	9	1.8438	1.8438	A	9.5	2.2813	2.2813
53.0 - 62.9	A	8.5	1.4063	1.4063	A	9.5	1.5938	1.5938	A	10	2.0313	2.0313
63.0 - 75.0	A	9	1.1563	1.1563	A	10.5	1.0938	1.0938	A	12	1.0313	1.0313

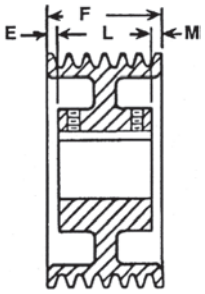
■ P.D. = O.D.–.10"

Made-To-Order Sheaves

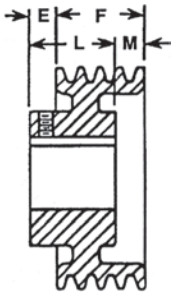


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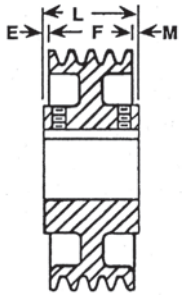
MTO - 8V



Type A



Type D



Type C

O.D. Range ■	4 — Groove, F = 4.875				5 — Groove, F = 6				7 — Groove, F = 7.125			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
13.0 - 26.9	D	5	1.125	1	D	5.5	1.125	1.625	D	6	1.125	2.25
27.0 - 39.9	D	5.5	0.3125	0.3125	C	6	—	—	A	7	0.0625	0.0625
40.0 - 57.9	C	6	0.5625	0.5625	C	7	0.5	0.5	C	7.5	0.1875	0.1875
58.0 - 69.9	C	7	1.0625	1.0625	C	8	—	—	C	8	0.4375	0.4375
70.0 - 81.9	C	8	1.5625	1.5625	C	8.25	1.25	1.25	C	9	0.9375	0.9375
82.0 - 85.0	C	8.5	1.1875	1.1875	C	9	1.5	1.5	C	10	1.4375	1.4375

O.D. Range ■	8 — Groove, F = 9.375				10 — Groove, F = 11.625				12 — Groove, F = 13.875			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
13.0 - 29.9	D	6.5	1.125	4	D	7	1.125	5.75	D	8	1.125	7
30.0 - 39.9	A	7.5	0.9375	0.9375	A	8	1.8125	1.8125	A	8.5	2.6875	2.6875
40.0 - 57.9	A	8	0.6875	0.6875	A	9	1.3125	1.3125	A	9.5	2.1875	2.1875
58.0 - 69.9	A	9	0.1875	0.1875	A	9.5	1.0625	1.0625	A	10	1.9375	1.9375
70.0 - 81.9	C	9.5	0.0625	0.0625	A	10	0.8125	0.8125	A	11	1.4375	1.4375
82.0 - 85.0	C	10	0.3125	0.3125	A	11	0.3125	0.3125	A	12	0.9375	0.9375

O.D. Range ■	14 — Groove, F = 16.125				16 — Groove, F = 18.375				18 — Groove, F = 20.625			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
13.0 - 29.9	D	9.25	1.125	7.75	D	10.5	1.125	9	D	16.5	1.125	5.25
30.0 - 39.9	A	9	3.5625	3.5625	A	10	4.1875	4.1875	A	12	4.3125	4.3125
40.0 - 57.9	A	10	3.5625	3.0625	A	10.5	3.9375	3.9375	A	12.5	4.0625	4.0625
58.0 - 69.9	A	11	2.5625	2.5625	A	11	3.6875	3.6875	A	13	3.8125	3.8125
70.0 - 81.9	A	12	2.0625	2.0625	A	12	3.1875	3.1875	A	14	3.3125	3.3125
82.0 - 85.0	A	13	1.5625	1.5625	A	13	2.6875	2.6875	A	15	2.8125	2.8125

O.D. Range ■	20 — Groove, F = 22.875				22 — Groove, F = 25.125				24 — Groove, F = 27.375			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
13.0 - 29.9	D	18	1.125	6	D	19	1.125	7.25	D	22	1.125	6.5
30.0 - 39.9	A	13.5	4.6875	4.6875	A	20.5	2.8125	2.8125	A	22	2.6875	2.6875
40.0 - 57.9	A	14	4.4375	4.4375	A	15	5.0625	5.0625	A	23	2.1875	2.1875
58.0 - 69.9	A	14.5	4.1875	4.1875	A	16	4.5625	4.5625	A	17	5.1875	5.1875
70.0 - 81.9	A	15	3.9375	3.9375	A	16.5	4.3125	4.3125	A	17.5	4.9375	4.9375
82.0 - 85.0	A	16	3.4375	3.4375	A	17	4.0625	4.0625	A	18	4.6875	4.6875

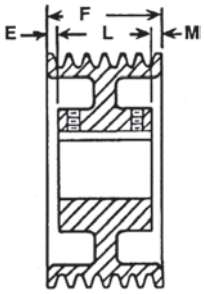
■ P.D. = O.D.–.20"

Made-To-Order Sheaves

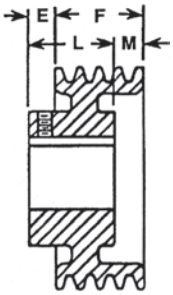


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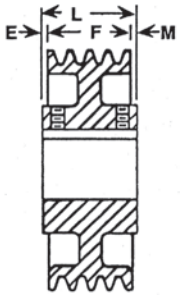
MTO - A



Type A



Type D



Type C

O.D. Range ■	1 — Groove, F = ◆				2 — Groove, F = 1.375				3 — Groove, F = 2			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
3.0 - 6.9	D	1.375	0.625	—	D	1.375	0.625	0.625	D	1.5	0.625	1.25
7.0 - 11.9	D	1.375	0.625	0.125	D	2	0.625	—	D	2	0.625	0.625
12.0 - 20.9	C	2	0.625	0.375	D	2	0.625	—	D	2	0.625	0.625
21.0 - 25.0	C	2	0.5	0.5	C	2	0.3125	0.3125	C	2.5	0.25	0.25

O.D. Range ■	4 — Groove, F = 2.625				5 — Groove, F = 3.25				6 — Groove, F = 3.875			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
3.0 - 6.9	D	2	0.625	1.25	D	2.5	0.625	1.375	D	2.75	0.625	1.75
7.0 - 14.9	A	2	0.625	1.25	D	2.5	0.625	1.375	D	2.75	0.625	1.75
15.0 - 20.9	A	2.5	0.625	0.75	D	3	0.625	0.875	D	3.5	0.625	1
21.0 - 25.0	A	2.5	0.0625	0.0625	A	3	0.125	0.125	A	3.5	0.1875	0.1875

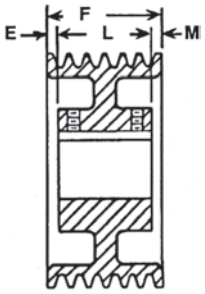
O.D. Range ■	7 — Groove, F = 4.5				8 — Groove, F = 5.125				10 — Groove, F = 6.375			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
3.0 - 6.9	D	3	0.625	2.125	D	3.5	0.625	2.25	D	3.5	0.625	3.5
7.0 - 14.9	D	3	0.625	2.125	D	3.5	0.625	2.25	D	3.5	0.625	3.5
15.0 - 20.9	D	3.5	0.625	1.625	D	4	0.625	1.75	D	4	0.625	3
21.0 - 25.0	A	3.5	0.5	0.5	A	4	0.5625	0.5625	A	4	1.1875	1.1875

■ P.D. = O.D.–.25"
◆ 0.75" for 3.0-6.9 P.D., 0.875" for 7.0-11.9 P.D., 1" for 12.0-25.0 P.D.

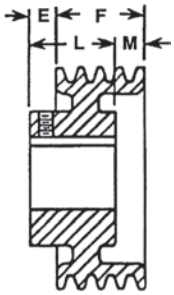


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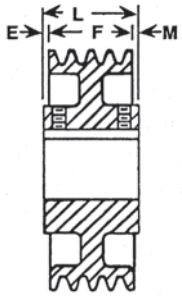
MTO - B



Type A



Type D



Type C

O.D. Range ■	2 — Groove, F = 1.75				3 — Groove, F = 2.5				4 — Groove, F = 3.25			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
5.0 - 6.9	D	2.25	0.875	0.375	D	2.5	0.875	0.875	D	3	0.875	1.125
7.0 - 20.9	D	2.25	0.875	0.375	D	2.5	0.875	0.875	D	3	0.875	1.125
21.0 - 39.0	C	3	0.625	0.625	C	3	0.25	0.25	C	3.5	0.125	0.125

O.D. Range ■	5 — Groove, F = 4				6 — Groove, F = 4.75				7 — Groove, F = 5.5			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
5.0 - 8.9	D	3	0.875	1.875	D	3	0.875	2.625	D	3	0.875	3.375
9.0 - 20.9	D	3	0.875	1.875	D	3.5	0.875	2.125	D	3.5	0.875	2.875
21.0 - 29.9	A	3.5	0.25	0.25	A	3.5	0.625	0.625	A	4	0.75	0.75
30.0 - 38.0	A	4	—	—	A	4	0.375	0.375	A	4.5	0.5	0.5

O.D. Range ■	8 — Groove, F = 6.25				9 — Groove, F = 7				10 — Groove, F = 7.75			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
5.0 - 8.9	D	3.5	0.875	3.625	D	3.5	0.875	4.375	D	4	0.875	4.625
9.0 - 20.9	D	4	0.875	3.125	D	4	0.875	3.875	D	4.5	0.875	4.125
21.0 - 24.9	A	4.5	0.875	0.875	A	5	1	1	A	5.5	1.125	1.125
25.0 - 38.0	A	5	0.625	0.625	A	5.5	0.75	0.75	A	6	0.875	0.875

O.D. Range ■	12 — Groove, F = 9.25				13 — Groove, F = 10				14 — Groove, F = 10.75			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
5.0 - 8.9	D	5.5	0.875	4.625	D	6	0.875	4.875	D	6.5	0.875	5.125
9.0 - 20.9	D	5.5	0.875	4.625	D	6	0.875	4.875	D	6.5	0.875	5.125
21.0 - 24.9	A	5.5	1.875	1.875	A	6	2	2	A	6.5	2.125	2.125
25.0 - 29.9	A	6	1.625	1.625	A	6.5	1.75	1.75	A	7	1.875	1.875
30.0 - 38.0	A	6.5	1.375	1.375	A	7	1.5	1.5	A	7.5	1.625	1.625

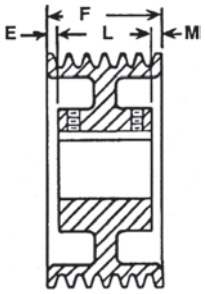
■ P.D. = O.D.–.35"

Made-To-Order Sheaves

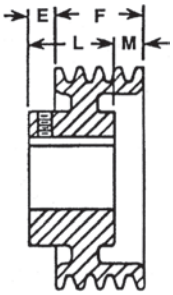


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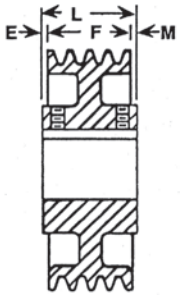
MTO - C



Type A



Type D



Type C

O.D. Range ■	3 — Groove, F = 3.375				4 — Groove, F = 4.375				5 — Groove, F = 5.375			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
9.0 - 15.9	D	2.5	0.875	1.75	D	3	0.875	2.25	D	3.5	0.875	2.75
16.0 - 23.9	D	3	0.875	1.25	D	3.5	0.875	1.75	D	4	0.875	2.25
24.0 - 35.9	A	3.5	0.0625	0.0625	A	3.5	0.4375	0.4375	A	4	0.6875	0.6875
36.0 - 43.9	A	4	0.3125	0.3125	C	4.5	0.0625	0.0625	A	5	0.1875	0.1875
44.0 - 55.9	A	4.5	0.5625	0.5625	C	5	0.3125	0.3125	C	5.5	0.0625	0.0625
56.0 - 64.0	A	5	0.8125	0.8125	C	5.5	0.5625	0.5625	C	6	0.3125	0.3125

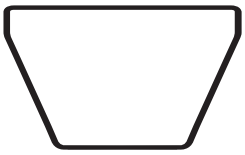
O.D. Range ■	6 — Groove, F = 6.375				7 — Groove, F = 7.375				8 — Groove, F = 8.375			
		L	E	M	Type	L	E	M	Type	L	E	M
9.0 - 15.9	D	3.5	0.875	3.75	D	4	0.875	4.25	D	5	0.875	5.25
16.0 - 23.9	D	4	0.875	3.25	D	4.5	0.875	3.75	D	5.5	0.875	4.75
24.0 - 35.9	A	4.5	0.9375	0.9375	A	5	1.1875	1.1875	A	5.5	1.4375	1.4375
36.0 - 43.9	A	5	0.6875	0.6875	A	5.5	0.9375	0.9375	A	6.5	1.1875	1.1875
44.0 - 55.9	A	5.5	0.4375	0.4375	A	6	0.6875	0.6875	A	7	0.9375	0.9375
56.0 - 64.0	A	6	0.1875	0.1875	A	6.5	0.4375	0.4375	A	7.5	0.6875	0.6875

O.D. Range ■	9 — Groove, F = 9.375				10 — Groove, F = 10.375				11 — Groove, F = 11.375			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
9.0 - 15.9	D	5	0.875	5.25	D	6	0.875	5.25	D	7	0.875	5.25
16.0 - 23.9	D	5.5	0.875	4.75	D	6.5	0.875	4.75	D	7.5	0.875	4.75
24.0 - 35.9	A	6	1.6875	1.6875	A	7	1.6875	1.6875	A	8	1.6875	1.6875
36.0 - 43.9	A	6.5	1.4375	1.4375	A	7.5	1.4375	1.4375	A	8.5	1.4375	1.4375
44.0 - 55.9	A	7	1.1875	1.1875	A	8	1.1875	1.1875	A	9	1.1875	1.1875
56.0 - 64.0	A	7.5	0.9375	0.9375	A	8.5	0.9375	0.9375	A	9.5	0.9375	0.9375

O.D. Range ■	12 — Groove, F = 12.375				13 — Groove, F = 13.375				14 — Groove, F = 14.375			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
9.0 - 15.9	D	7	0.875	6.25	D	8	0.875	6.25	D	8	0.875	7.25
16.0 - 23.9	D	7.5	0.875	5.75	D	8	0.875	6.25	D	8	0.875	7.25
24.0 - 35.9	A	8	2.1875	2.1875	A	8.5	2.4375	2.4375	A	8.5	2.9375	2.9375
36.0 - 43.9	A	8.5	1.9375	1.9375	A	9	2.1875	2.1875	A	9	2.6875	2.6875
44.0 - 55.9	A	9	1.6875	1.6875	A	9.5	1.9375	1.9375	A	9.5	2.4375	2.4375
56.0 - 64.0	A	9.5	1.4375	1.4375	A	10	1.6875	1.6875	A	10	2.1875	2.1875

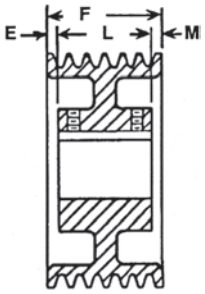
■ P.D. = O.D.–.40"

Made-To-Order Sheaves

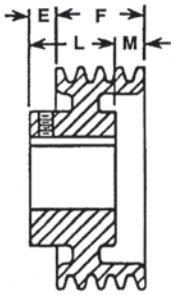


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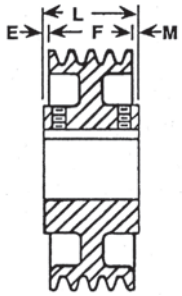
MTO - D



Type A



Type D



Type C

O.D. Range ■	3 — Groove, F = 4.625				4 — Groove, F = 6.0625				5 — Groove, F = 7.5			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
13.0 - 26.9	D	4	1	1.625	D	4	1	3.0625	D	4.5	1	4
27.0 - 39.9	A	4	0.3125	0.3125	A	4.5	0.7813	0.7813	D	5.5	1	1
40.0 - 57.9	C	5	0.1875	0.1875	A	5.5	0.2813	0.2813	A	6.5	0.5	0.5
58.0 - 69.9	C	5.5	0.4375	0.4375	A	6	0.0313	0.0313	A	7	0.25	0.25
70.0 - 81.9	C	6	0.6875	0.6875	C	6.5	0.2188	0.2188	A	7.5	—	—
82.0 - 85.0	C	6.5	0.9375	0.9375	C	7	0.4688	0.4688	C	8	0.25	0.25

O.D. Range ■	6 — Groove, F = 8.9375				7 — Groove, F = 10.375				8 — Groove, F = 11.8125			
		L	E	M	Type	L	E	M	Type	L	E	M
13.0 - 26.9	D	5	1	4.9375	D	5.5	1	5.875	D	6	1	6.8125
27.0 - 39.9	A	6	1.4688	1.4688	A	7	1.6875	1.6875	A	7.5	2.1563	2.1563
40.0 - 57.9	C	7	0.9688	0.9688	A	8	1.1875	1.1875	A	8.5	1.6563	1.6563
58.0 - 69.9	C	7.5	0.7188	0.7188	A	80.5	0.9375	0.9375	A	9	1.4063	1.4063
70.0 - 81.9	C	8	0.4688	0.4688	A	9	0.6875	0.6875	A	9.5	1.1563	1.1563
82.0 - 85.0	C	8.5	0.2188	0.2188	A	90.5	0.4375	0.4375	A	10	0.9063	0.9063

O.D. Range ■	9 — Groove, F = 13.25				10 — Groove, F = 14.6875				11 — Groove, F = 16.125			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
13.0 - 17.9	D	7	1	7.25	D	8	1	7.6875	D	13	1	4.125
18.0 - 26.9	D	7	1	7.25	D	8	1	7.6875	D	9	1	8.125
27.0 - 39.9	A	8	2.625	2.625	A	9	2.8438	2.8438	A	9.5	3.3125	3.3125
40.0 - 57.9	A	9	2.125	2.125	A	10	2.3438	2.3438	A	10.5	2.8125	2.8125
58.0 - 69.9	A	10	1.625	1.625	A	10.5	2.0938	2.0938	A	11.5	2.3125	2.3125
70.0 - 85.0	A	10.5	1.375	1.375	A	11.5	1.5938	1.5938	A	12	2.0625	2.0625

O.D. Range ■	12 — Groove, F = 17.5625				13 — Groove, F = 19				14 — Groove, F = 20.4375			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
13.0 - 17.9	D	14	1	4.5625	D	15.5	1	4.5	D	16.5	1	4.9375
18.0 - 26.9	D	10	1	8.5625	A	10.5	1	9.5	D	16.5	1	4.9375
27.0 - 39.9	A	10.5	3.5313	3.5313	A	11	4	4	A	12	4.2188	4.2188
40.0 - 57.9	A	11.5	3.0313	3.0313	A	12.5	3.25	3.25	A	13	3.7188	3.7188
58.0 - 69.9	A	12	2.7813	2.7813	A	13	3	3	A	13.5	3.4688	3.4688
70.0 - 85.0	A	13	2.2813	2.2813	A	13.5	2.75	2.75	A	14.5	2.9688	2.9688

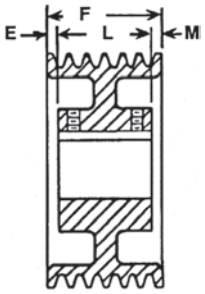
■ P.D. = O.D.–.60"

Made-To-Order Sheaves

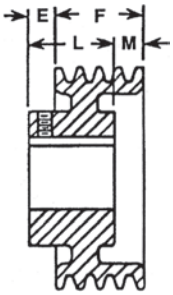


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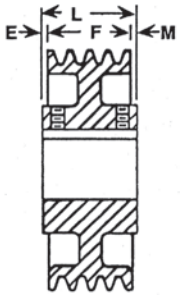
MTO - E



Type A



Type D



Type C

O.D. Range ■	4 — Groove, F = 7.5				6 — Groove, F = 11				8 — Groove, F = 14.5			
	Type	L	E	M	Type	L	E	M	Type	L	E	M
21.0 - 26.9	D	5	1.125	3.625	D	7	1.125	5.125	D	9	1.125	6.625
27.0 - 45.9	A	6	0.75	0.75	A	7.5	1.75	1.75	A	9.5	2.5	2.5
46.0 - 57.9	A	6.5	0.5	0.5	A	8	1.5	1.5	A	10	2.25	2.25
58.0 - 73.9	A	7.5	0	0	A	8.5	1.5	1.5	A	10.5	2	2
74.0 - 83.9	A	7.5	0	0	A	9	1	1	A	11	1.75	1.75
84.0 - 85.0	C	8	0.25	0.25	A	9.5	0.75	0.75	A	11.5	1.5	1.5

O.D. Range ■	10 — Groove, F = 18				12 — Groove, F = 21.5				14 — Groove, F = 25			
		L	E	M	Type	L	E	M	Type	L	E	M
21.0 - 26.9	D	11	1.125	8.125	D	17	1.125	5.625	D	19	1.125	7.125
27.0 - 45.9	A	11	3.5	3.5	A	13	4.25	4.25	A	20.5	2.25	2.25
46.0 - 57.9	A	11.5	3.25	3.25	A	13.5	4	4	A	15	5	5
58.0 - 73.9	A	12	3	3	A	14	3.75	3.75	A	15.5	4.75	4.75
74.0 - 83.9	A	12.5	2.75	2.75	A	14.5	3.5	3.5	A	16.5	4.25	4.25
84.0 - 85.0	A	13	2.5	2.5	A	15	3.25	3.25	A	16.5	4.25	4.25

■ P.D. = O.D.–.80"

Stock FHP Sheaves



AK / BK
Bored-To-Size



AK / BK
MST® (Martin Split Taper) Bushed



2AK / 2BK
Bored-To-Size

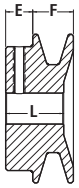


2AK / 2BK
MST® (Martin Split Taper) Bushed

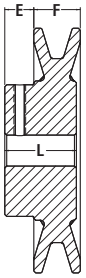
- Fractional horsepower sheaves for light duty applications.
- Single and double groove designs.
- Both bored-to-size and MST bushed.
- Precision machined grooves.
- Statically balanced.

Call Martin for your made-to-order and large quantity requirements.

AK Single Groove FHP Sheaves Bored-To-Size



Type A
Solid



Type B
Web



Type C
Arm/Spoke

FHP Sheave — AK

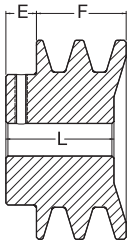
Part Number	Diameter			Type	Stock Finished Bores Includes Keyway and Setscrew											F	E	L Thru Bore	Weight lb (Approx.)
	OD	Datum A(4L) Belts	Pitch 3L Belts																
AK15	1.55	1.3	–	A	0.5	0.625										0.6563	0.4375	0.4063	0.3
AK17	1.75	1.5	1.16	A	0.5	0.625										0.6563	0.4375	0.0625	0.3
AK19	1.95	1.7	1.36	A	0.5	0.625	0.75	0.875								0.6563	0.4375	0.0625	0.5
AK20	2	1.8	1.46	A	0.5	0.625	0.75									0.6563	0.4375	0.0625	0.5
AK21	2.1	1.90	1.56	A	0.5	0.625	0.75									0.6563	0.4375	0.0625	0.5
AK22	2.2	2	1.66	A	0.5	0.625	0.75	0.875								0.6563	0.4375	0.0625	0.6
AK23	2.3	2.1	1.76	A	0.5	0.625	0.75									0.6563	0.4375	0.0625	0.6
AK24	2.4	2.2	1.86	A	0.5	0.625	0.75	0.875		1						0.6563	0.4375	0.0625	0.6
AK25	2.5	2.3	1.96	B	0.5	0.625	0.75	0.875								0.6563	0.4375	0.0625	0.7
AK26	2.6	2.4	2.06	B	0.5	0.625	0.75									0.6563	0.4375	0.0625	0.7
AK27	2.7	2.5	2.16	B	0.5	0.625	0.75			1						0.6563	0.4375	0.0625	0.8
AK28	2.8	2.6	2.26	B	0.5	0.625	0.75	0.875								0.6563	0.4375	0.0625	0.8
AK30	3.05	2.8	2.46	B	0.5	0.625	0.75	0.875		1						0.6563	0.4375	0.0625	0.9
AK32	3.25	3	2.66	B	0.5	0.625	0.75	0.875		1						0.6563	0.4375	0.0625	1.0
AK34	3.45	3.2	2.86	B	0.5	0.625	0.75	0.875		1						0.6563	0.4375	0.0625	1.1
AK35	3.55	3.3	2.96	B	0.5	0.625	0.75	0.875		1						0.6563	0.4375	0.0625	1.2
AK39	3.75	3.5	3.16	B	0.5	0.625	0.75	0.875	0.0625	1						0.75	0.4687	1.1563	1.6
AK41	3.95	3.7	3.36	B	0.5	0.625	0.75	0.875	0.0625	1	1.125					0.75	0.4687	1.1563	1.6
AK44	4.25	4	3.66	B	0.5	0.625	0.75	0.875	0.0625	1	1.125					0.75	0.4687	1.1563	1.9
AK46	4.45	4.2	3.86	B	0.5	0.625	0.75	0.875	0.0625	1	1.125					0.75	0.4687	1.1563	2.0
AK49	4.75	4.5	4.16	B	0.5	0.625	0.75	0.875	0.0625	1	1.125					0.75	0.4687	1.1563	2.1
AK51	4.95	4.7	4.36	B	0.5	0.625	0.75	0.875		1	1.125					0.75	0.4687	1.1563	2.2
AK54	5.25	5	4.66	B	0.5	0.625	0.75	0.875	0.0625	1	1.125	1.1875				0.75	0.4687	1.1563	2.4
AK56	5.45	5.2	4.86	B	0.5	0.625	0.75	0.875	0.0625	1	1.125	1.1875				0.75	0.4687	1.1563	2.5
AK59	5.75	5.5	5.16	C	0.5	0.625	0.75	0.875	0.0625	1	1.125	1.1875				0.75	0.4687	1.1563	2.7
AK61	5.95	5.7	5.36	C	0.5	0.625	0.75	0.875	0.0625	1	1.125	1.1875				0.75	0.4687	1.1563	2.8
AK64	6.25	6	5.66	C	0.5	0.625	0.75	0.875	0.0625	1	1.125	1.1875				0.75	0.4687	1.1563	3.0
AK66	6.45	6.2	5.86	C		0.625	0.75			1	1.125					0.75	0.4687	1.1563	3.0
AK69	6.75	6.5	6.16	C			0.75			1	1.125					0.75	0.7188	1.4687	3.7
AK71	6.95	6.7	6.36	C	0.5	0.625	0.75			1	1.125				1.4375	0.75	0.7188	1.4687	4.3
AK74	7.25	7	6.66	C	0.5	0.625	0.75		0.0625	1	1.125	1.1875	1.25		1.4375	0.75	0.7188*	1.4687	4.5
AK79	7.75	7.5	7.16	C			0.75			1	1.125				1.4375	0.75	0.7188	1.4687	4.7
AK81	7.95	7.7	7.36	C		0.625	0.75			1		1.1875				0.75	0.7188	1.4687	4.7
AK84	8.25	8	7.66	C	0.5	0.625	0.75		0.0625	1		1.1875			1.4375	0.75	0.7188*	1.4687	5.0
AK89	8.75	8.5	8.16	C			0.75			1	1.125				1.4375	0.75	0.7188	1.4687	5.2
AK91	8.95	8.7	8.36	C			0.75			1						0.75	0.7188	1.4687	5.2
AK94	9.25	9	8.66	C	0.5	0.625	0.75		0.0625	1		1.1875	1.25		1.4375	0.75	0.7188*	1.4687	5.5
AK99	9.75	9.5	9.16	C			0.75			1					1.4375	0.75	0.7188*	1.4687	5.7
AK104	10.25	10	9.66	C		0.625	0.75			1		1.1875	1.25	1.375	1.4375	0.75	0.7188	1.4687	5.9
AK109	10.75	10.5	10.16	C			0.75			1				1.375	1.4375	0.75	0.7188	1.4687	6.1
AK114	11.25	11	10.66	C			0.75			1		1.1875			1.4375	0.75	0.7188*	1.4687	6.7
AK124	12.25	12	11.66	C		0.625	0.75			1		1.1875	1.25		1.4375	0.75	0.7188*	1.4687	7.3
AK134	13.25	13	12.66	C			0.75			1		1.1875		1.375	1.4375	0.75	0.7188	1.4687	8.2
AK144	14.25	14	13.66	C			0.75			1		1.1875			1.4375	0.75	0.7188	1.4687	8.7
AK154	15.25	15	14.66	C			0.75			1					1.4375	0.75	0.7188	1.4687	9.7
AK184	18.25	18	17.66	C			0.75			1		1.1875			1.4375	0.75	0.7188	1.4687	11.8

E = 0.7813 FOR BORE SIZES <= 1
0.5" Bore - setscrew only - no keyway

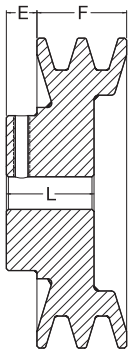
Two Groove FHP Sheaves Bored-To-Size 2AK

Keyway Dimensions Inch Bore

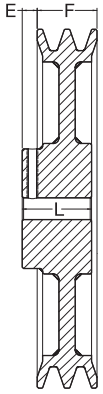
Diameter of Shaft	Keyway Width × Depth
0.5	NONE
0.625 - 0.875	0.1875 × 0.0938
0.9375 - 1.25	0.25 × 0.125
1.3125 - 1.375	0.3125 × 0.1563
1.4375 - 1.75	0.375 × 0.1875



Type A
Solid



Type B
Web



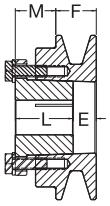
Type C
Arm/Spoke

FHP Sheave — 2AK

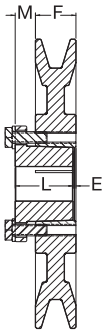
Part Number	Diameter			Type	Stock Finished Bores Includes Keyway and Setscrew									F	E	L Thru Bore	Weight lb (Approx.)
	OD	Datum A(4L) Belts	Pitch 3L Belts														
2AK20	2	1.8	1.46	A	0.5	0.625	0.75							1.375	0.4688	1.6563	0.8
2AK21	2.15	1.9	1.56	A	0.5	0.625	0.75							1.375	0.4688	1.6563	0.9
2AK22	2.25	2	1.66	A	0.5	0.625	0.75	0.875		1				1.375	0.4688	1.6563	1.1
2AK23	2.35	2.1	1.76	A		0.625	0.75	0.875		1				1.375	0.4688	1.6563	1.2
2AK25	2.55	2.3	1.96	A		0.625	0.75	0.875		1				1.375	0.4688	1.6563	1.4
2AK26	2.65	2.4	2.06	A		0.625	0.75	0.875						1.375	0.4688	1.6563	1.5
2AK27	2.75	2.5	2.16	A		0.625	0.75	0.875		1				1.375	0.4688	1.6563	1.6
2AK28	2.85	2.6	2.26	A		0.625	0.75	0.875		1				1.375	0.4688	1.6563	1.7
2AK30	3.05	2.8	2.46	A	0.5	0.625	0.75	0.875		1	1.125			1.375	0.4688	1.6563	2.0
2AK32	3.25	3	2.66	A		0.625	0.75	0.875		1	1.125			1.375	0.4688	1.6563	2.2
2AK34	3.45	3.2	2.86	A		0.625	0.75	0.875		1	1.125			1.375	0.4688	1.6563	2.5
2AK39	3.75	3.5	3.16	B		0.625	0.75	0.875		1	1.125			1.375	0.4688	1.3438	2.6
2AK41	3.95	3.7	3.36	B		0.625	0.75	0.875		1	1.125			1.375	0.4688	1.3438	2.9
2AK44	4.25	4	3.66	B		0.625	0.75	0.875		1	1.125			1.375	0.4688	1.3438	3.3
2AK46	4.45	4.2	3.86	B		0.625		0.875		1	1.125			1.375	0.4688	1.3438	3.6
2AK49	4.75	4.5	4.16	B			0.75	0.875		1	1.125		1.375	1.375	0.4688	1.3438	3.8
2AK51	4.95	4.7	4.36	B			0.75	0.875		1	1.125		1.375	1.375	0.4688	1.3438	4.1
2AK54	5.25	5	4.66	B		0.625	0.75	0.875		1	1.125		1.375	1.375	0.4688	1.3438	4.3
2AK56	5.45	5.2	4.86	B		0.625	0.75			1	1.125		1.375	1.375	0.4688	1.3438	4.5
2AK59	5.75	5.5	5.16	B						1	1.125		1.375	1.375	0.4688	1.3438	4.9
2AK61	5.95	5.7	5.36	B			0.75	0.875		1	1.125		1.375	1.375	0.4688	1.3438	5.2
2AK64	6.25	6	5.66	C			0.75			1	1.125	1.1875	1.375	1.4375	1.375	0.3438	1.5938	5.6
2AK74	7.25	7	6.66	C			0.75			1	1.125	1.1875	1.375	1.4375	1.375	0.3438	1.5938	6.5
2AK84	8.25	8	7.66	C			0.75		0.9375	1	1.125		1.375	1.4375	1.375	0.3438	1.5938	7.2
2AK94	9.25	9	8.66	C			0.75	0.875		1	1.125	1.1875	1.375	1.4375	1.375	0.3438	1.5938	8.0
2AK104	10.25	10	9.66	C			0.75		0.9375	1		1.1875		1.4375	1.375	0.3438	1.5938	9.0
2AK114	11.25	11	10.66	C						1		1.1875	1.375	1.4375	1.375	0.3438	1.5938	9.7
2AK124	12.25	12	11.66	C						1		1.1875		1.4375	1.375	0.3438	1.5938	10.5
2AK134	13.25	13	12.66	C								1.1875		1.4375	1.375	0.3438	1.5938	12.7
2AK144	14.25	14	13.66	C						1				1.4375	1.375	0.3438	1.5938	13.1
2AK154	15.25	15	14.66	C								1.1875		1.4375	1.375	0.3438	1.5938	14.3
2AK184	18.25	18	17.66	C								1.1875		1.4375	1.375	0.3438	1.5938	17.1

0.5" Bore - setscrew only - no keyway

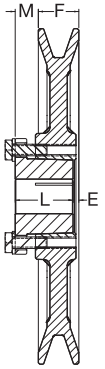
AK-H Single Groove FHP Sheaves MST® Bushed



Type A
Solid



Type B
Web



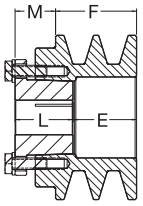
Type C
Arm/Spoke

FHP Sheave — AK-H

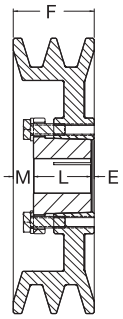
Part Number	Diameter			Type	Bush	Bush Max. Bore	F	E	L Thru Bore	M	Weight Less Bush
	OD	Datum A(4L) Belts	Pitch 3L Belts								
AK30-H	3.05	2.8	2.46	A	H	1.5	0.75	0.375	1.25	0.875	1.3
AK32-H	3.25	3	2.66	A	H	1.5	0.75	0.375	1.25	0.875	1.4
AK34-H	3.45	3.2	2.86	A	H	1.5	0.75	0.0625	1.25	0.5625	1.2
AK39-H	3.75	3.5	3.16	A	H	1.5	0.75	0.0625	1.25	0.5625	1.4
AK41-H	3.95	3.7	3.36	A	H	1.5	0.75	0.0625	1.25	0.5625	1.6
AK44-H	4.25	4	3.66	A	H	1.5	0.75	0.0625	1.25	0.5625	2.0
AK46-H	4.45	4.2	3.86	A	H	1.5	0.75	0.0625	1.25	0.5625	2.2
AK49-H	4.75	4.5	4.16	B	H	1.5	0.75	0.0625	1.25	0.5625	2.1
AK51-H	4.95	4.7	4.36	B	H	1.5	0.75	0.0625	1.25	0.5625	2.3
AK54-H	5.25	5	4.66	B	H	1.5	0.75	0.0625	1.25	0.5625	2.3
AK56-H	5.45	5.2	4.86	B	H	1.5	0.75	0.0625	1.25	0.5625	2.4
AK59-H	5.75	5.5	5.16	B	H	1.5	0.75	0.0625	1.25	0.5625	2.5
AK61-H	5.95	5.7	5.36	C	H	1.5	0.75	0.0625	1.25	0.5625	2.6
AK64-H	6.25	6	5.66	C	H	1.5	0.75	0.0625	1.25	0.5625	2.8
AK66-H	6.45	6.2	5.86	C	H	1.5	0.75	0.0625	1.25	0.5625	2.8
AK69-H	6.75	6.5	6.16	C	H	1.5	0.75	0.0625	1.25	0.5625	3.0
AK71-H	6.95	6.7	6.36	C	H	1.5	0.75	0.0625	1.25	0.5625	3.0
AK74-H	7.25	7	6.66	C	H	1.5	0.75	0.0625	1.25	0.5625	3.3
AK79-H	7.75	7.5	7.16	C	H	1.5	0.75	0.0625	1.25	0.5625	3.5
AK84-H	8.25	8	7.66	C	H	1.5	0.75	0.0625	1.25	0.5625	3.8
AK89-H	8.75	8.5	8.16	C	H	1.5	0.75	0.0625	1.25	0.5625	4.0
AK94-H	9.25	9	8.66	C	H	1.5	0.75	0.0625	1.25	0.5625	4.4
AK99-H	9.75	9.5	9.16	C	H	1.5	0.75	0.0625	1.25	0.5625	4.7
AK104-H	10.25	10	9.66	C	H	1.5	0.75	0.0625	1.25	0.5625	5.0
AK109-H	10.75	10.5	10.16	C	H	1.5	0.75	0.0625	1.25	0.5625	5.2
AK114-H	11.25	11	10.66	C	H	1.5	0.75	0.0625	1.25	0.5625	5.5
AK124-H	12.25	12	11.66	C	H	1.5	0.75	0.0625	1.25	0.5625	6.0
AK134-H	13.25	13	12.66	C	H	1.5	0.75	0.0625	1.25	0.5625	7.3
AK144-H	14.25	14	13.66	C	H	1.5	0.75	0.0625	1.25	0.5625	7.9
AK154-H	15.25	15	14.66	C	H	1.5	0.75	0.0625	1.25	0.5625	8.9
AK184-H	18.25	18	17.66	C	H	1.5	0.75	0.0625	1.25	0.5625	11.4

Dimensions in inches, weight in pounds. Weights do not include bushings. See page D-58 for additional bushing information.

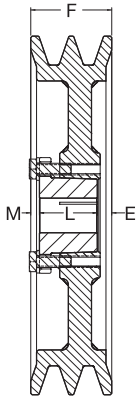
Two Groove FHP Sheaves MST® Bushed 2AK-H



Type A
Solid



Type B
Web



Type C
Arm/Spoke

FHP Sheave — 2AK-H

Part Number	Diameter			Type	Bush	Bush Max. Bore	F	E	L Thru Bore	M	Weight Less Bush
	OD	Datum A(4L) Belts	Pitch 3L Belts								
2AK30-H	3.05	2.8	2.46	A	H	1.5	1.375	1	1.25	0.875	1.7
2AK32-H	3.25	3	2.66	A	H	1.5	1.375	1	1.25	0.875	1.9
2AK34-H	3.45	3.2	2.86	A	H	1.5	1.375	0.5625	1.25	0.4375	1.7
2AK39-H	3.75	3.5	3.16	A	H	1.5	1.375	0.5625	1.25	0.4375	2.0
2AK41-H	3.95	3.7	3.36	B	H	1.5	1.375	0.0625	1.25	0.0625	2.2
2AK44-H	4.25	4	3.66	B	H	1.5	1.375	0.0625	1.25	0.0625	2.7
2AK46-H	4.45	4.2	3.86	B	H	1.5	1.375	0.0625	1.25	0.0625	3.0
2AK49-H	4.75	4.5	4.16	B	H	1.5	1.375	0.0625	1.25	0.0625	3.1
2AK51-H	4.95	4.7	4.36	B	H	1.5	1.375	0.0625	1.25	0.0625	3.5
2AK54-H	5.25	5	4.66	B	H	1.5	1.375	0.0625	1.25	0.0625	3.4
2AK56-H	5.45	5.2	4.86	B	H	1.5	1.375	0.0625	1.25	0.0625	3.6
2AK59-H	5.75	5.5	5.16	C	H	1.5	1.375	0.0625	1.25	0.0625	3.4
2AK61-H	5.95	5.7	5.36	C	H	1.5	1.375	0.0625	1.25	0.0625	3.7
2AK64-H	6.25	6	5.66	C	H	1.5	1.375	0.0625	1.25	0.0625	3.9
2AK74-H	7.25	7	6.66	C	H	1.5	1.375	0.0625	1.25	0.0625	5.0
2AK84-H	8.25	8	7.66	C	H	1.5	1.375	0.0625	1.25	0.0625	5.6
2AK94-H	9.25	9	8.66	C	H	1.5	1.375	0.0625	1.25	0.0625	6.3
2AK104-H	10.25	10	9.66	C	H	1.5	1.375	0.0625	1.25	0.0625	7.6
2AK114-H	11.25	11	10.66	C	H	1.5	1.375	0.0625	1.25	0.0625	8.4
2AK124-H	12.25	12	11.66	C	H	1.5	1.375	0.0625	1.25	0.0625	9.2
2AK134-H	13.25	13	12.66	C	H	1.5	1.375	0.0625	1.25	0.0625	11.5
2AK144-H	14.25	14	13.66	C	H	1.5	1.375	0.0625	1.25	0.0625	11.8
2AK154-H	15.25	15	14.66	C	H	1.5	1.375	0.0625	1.25	0.0625	13.3
2AK184-H	18.25	18	17.66	C	H	1.5	1.375	0.0625	1.25	0.0625	16.9

Dimensions in inches, weight in pounds. Weights do not include bushings. See page D-58 for additional bushing information.

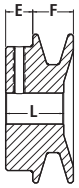
MST "H" Bushings – Inch Bore

Diameter of Shaft	Keyway Width × Depth	Diameter of Shaft	Keyway Width × Depth	Diameter of Shaft	Keyway Width × Depth
0.375	NONE	0.7813	0.1875 × 0.0938	1.25	0.25 × 0.125
0.4375	NONE	0.8125	0.1875 × 0.0938	1.3125	0.3125 × 0.0625
0.5	0.125 × 0.0625	0.875	0.1875 × 0.0938	1.375	0.3125 × 0.0625
0.5625	0.125 × 0.0625	0.9375	0.25 × 0.125	1.375	0.375 × 0.0625
0.5938	0.125 × 0.0625	0.9688	0.25 × 0.125	1.4375	0.375 × 0.0625
0.625	0.1875 × 0.0938	1	0.25 × 0.125	1.5	0.375 × 0.03125
0.6563	0.1875 × 0.0938	1.0625	0.25 × 0.125		
0.6875	0.1875 × 0.0938	1.125	0.25 × 0.125		
0.75	0.1875 × 0.0938	1.1875	0.25 × 0.125		

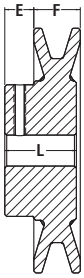
MST "H" Bushings – Millimeter Bore

Diameter of Shaft	Keyway Width × Depth	Diameter of Shaft	Keyway Width × Depth
10	NONE	24	8 × 3.3
11	NONE	25	8 × 3.3
12	NONE	28	8 × 3.3
14	5 × 2.3	30	8 × 3.3
16	5 × 2.3	32	10 × 1.3
18	6 × 2.8	35	10 × 0.3
19	6 × 2.8	36	10 × 1.3
20	6 × 2.8	38	10 × 0.3
22	6 × 2.8		

BK Single Groove FHP Sheaves Bored-To-Size



Type A
Solid



Type B
Web



Type C
Arm/Spoke

FHP Sheave — BK

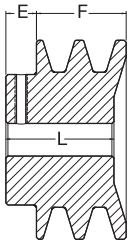
Part Number	Diameter			Type	Stock Finished Bores Includes Keyway and Setscrew											F	E	L Thru Bore	Weight lb (Approx.)
	OD	Datum A(4L) Belts	Pitch 3L Belts																
BK23	2.3	-	2.1	A		0.625				1						0.8125	0.4063	1.0625	0.4
BK24	2.4	1.8	2.2	A	0.5	0.625	0.75	0.875								0.8125	0.4063	1.0625	0.4
BK25	2.5	1.9	2.3	A	0.5	0.625	0.75	0.875								0.8125	0.4063	1.0625	0.5
BK26	2.6	2	2.4	A	0.5	0.625	0.75	0.875								0.8125	0.4063	1.0625	0.6
BK27	2.7	2.1	2.5	B	0.5	0.625	0.75	0.875			1.125					0.8125	0.4063	1.0625	0.6
BK28	2.95	2.2	2.6	B	0.5	0.625	0.75	0.875		1	1.125					0.8125	0.4063	1.0625	0.8
BK30	3.15	2.4	2.8	B	0.5	0.625	0.75	0.875		1	1.125					0.8125	0.4063	1.0625	0.8
BK32	3.35	2.6	3	B	0.5	0.625	0.75	0.875		1						0.8125	0.4063	1.0625	0.8
BK34	3.55	2.8	3.2	B	0.5	0.625	0.75	0.875		1	1.125					0.875	0.4063	1.1563	1.3
BK36	3.75	3	3.4	B	0.5	0.625	0.75	0.875		1	1.125					0.875	0.4063	1.1563	1.5
BK40	3.95	3.2	3.6	B	0.5	0.625	0.75	0.875		1	1.125					0.875	0.4063	1.1563	1.5
BK45	4.25	3.5	3.9	B	0.5	0.625	0.75	0.875		1	1.125					0.875	0.4063	1.1563	1.8
BK46	4.35	3.6	4	B				0.875								0.875	0.4063	1.1563	1.8
BK47	4.45	3.7	4.1	B	0.5	0.625	0.75	0.875		1	1.125					0.875	0.4063	1.1563	1.8
BK48	4.55	3.8	4.2	B	0.5	0.625	0.75	0.875			1.125					0.875	0.4063	1.1563	2.0
BK50	4.75	4	4.4	B	0.5	0.625	0.75	0.875	0.9375	1	1.125					0.875	0.4063	1.1563	2.0
BK52	4.95	4.2	4.6	B	0.5	0.625	0.75	0.875		1	1.125					0.875	0.4063	1.1563	2.0
BK55	5.25	4.5	4.9	B	0.5	0.625	0.75	0.875		1	1.125	1.1875				0.875	0.4063	1.1563	2.2
BK57	5.45	4.7	5.1	B		0.625	0.75	0.875	0.9375	1	1.125					0.875	0.4063	1.1563	2.3
BK60	5.75	5	5.4	B	0.5	0.625	0.75	0.875		1	1.125	1.1875				0.875	0.4063	1.1563	2.3
BK62	5.95	5.2	5.6	B	0.5	0.625	0.75	0.875	0.9375	1	1.125	1.1875				0.875	0.4063	1.1563	2.4
BK65	6.25	5.5	5.9	B		0.625	0.75	0.875		1	1.125					0.875	0.4063	1.1563	2.7
BK67	6.45	5.7	6.1	C		0.625	0.75	0.875		1	1.125					0.875	0.4063	1.1563	2.8
BK70	6.75	6	6.4	C		0.625	0.75	0.875	0.9375	1	1.125	1.1875			1.4375	0.875	0.6563*	1.4688	3.3
BK72	6.95	6.2	6.6	C			0.75			1	1.125			1.375	1.4375	0.875	0.6563	1.4688	3.9
BK75	7.25	6.5	6.9	C			0.75			1	1.125				1.4375	0.875	0.6563	1.4688	3.9
BK77	7.45	6.7	7.1	C			0.75			1	1.125			1.375	1.4375	0.875	0.6563	1.4688	4.1
BK80	7.75	7	7.4	C		0.625	0.75	0.875		1	1.125	1.1875	1.25	1.375	1.4375	0.875	0.6563	1.4688	4.4
BK85	8.25	7.5	7.9	C			0.75			1	1.125	1.1875		1.375	1.4375	0.875	0.6563	1.4688	5.0
BK90	8.75	8	8.4	C			0.75	0.875	0.9375	1	1.125	1.1875		1.375	1.4375	0.875	0.6563	1.4688	5.0
BK95	9.25	8.5	8.9	C			0.75			1	1.125			1.375	1.4375	0.875	0.6563	1.4688	5.4
BK100	9.75	9	9.4	C			0.75	0.875		1	1.125	1.1875	1.25	1.375	1.4375	0.875	0.6563	1.4688	5.6
BK105	10.25	9.5	9.9	C						1				1.375	1.4375	0.875	0.6563	1.4688	5.8
BK110	10.75	10	10.4	C			0.75			1	1.125	1.1875		1.375	1.4375	0.875	0.6563	1.4688	6.4
BK115	11.25	10.5	10.9	C						1				1.375	1.4375	0.875	0.6563	1.4688	6.9
BK120	11.75	11	11.4	C			0.75			1		1.1875		1.375	1.4375	0.875	0.6563	1.4688	7.4
BK130	12.75	12	12.4	C			0.75	0.875		1	1.125	1.1875			1.4375	0.875	0.6563	1.4688	8.4
BK140	13.75	13	13.4	C			0.75			1		1.1875			1.4375	0.875	0.6563	1.4688	9.4
BK160	15.75	15	15.4	C						1	1.125	1.1875	1.25		1.4375	0.875	0.6563	1.4688	11.4
BK190	18.75	18	18.4	C						1		1.1875	1.25		1.4375	0.875	0.6563	1.4688	13.4

E = 0.4063 FOR BORE SIZES <= 1
0.5" Bore - setscrew only - no keyway

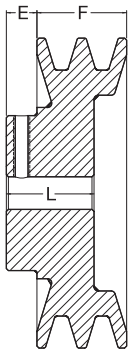
Two Groove FHP Sheaves Bored-To-Size 2BK

Keyway Dimensions Inch Bore

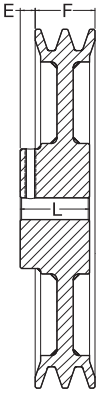
Diameter of Shaft	Keyway Width × Depth
0.5	NONE
0.625 - 0.875	0.1875 × 0.0938
0.9375 - 1.25	0.25 × 0.125
1.3125 - 1.375	0.3125 × 0.1563
1.4375 - 1.75	0.375 × 0.1875



Type A Solid



Type B Web



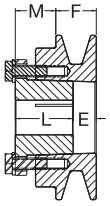
Type C Arm/Spoke

FHP Sheave — 2BK

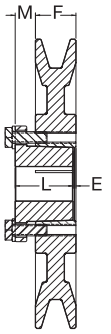
Part Number	Diameter			Type	Stock Finished Bores Includes Keyway and Setscrew									F	E	L Thru Bore	Weight lb (Approx.)
	OD	Datum A(4L) Belts	Pitch 3L Belts														
2BK25	2.5	1.9	2.3	A	0.5	0.625	0.75	0.875						1.75	0.4688	1.9688	1.3
2BK26	2.6	2	2.4	A		0.625		0.875		1.125				1.75	0.4688	1.9688	1.5
2BK27	2.7	2.1	2.5	A	0.5	0.625	0.75	0.875	1					1.75	0.4688	1.9688	1.6
2BK28	2.95	2.2	2.6	A	0.5	0.625	0.75	0.875	1	1.125				1.75	0.4688	1.9688	1.9
2BK30	3.15	2.4	2.8	A	0.5	0.625	0.75	0.875	1	1.125				1.75	0.4688	1.9688	2.3
2BK32	3.35	2.6	3	A		0.625		0.875	1	1.125				1.75	0.4688	1.9688	2.6
2BK34	3.55	2.8	3.2	A		0.625	0.75	0.875	1	1.125				1.75	0.4688	1.9688	2.8
2BK36	3.75	3	3.4	A			0.75	0.875	1	1.125		1.375		1.75	0.4688	1.9688	3.3
2BK40	3.95	3.2	3.6	B		0.625	0.75	0.875	1	1.125				1.75	0.4688	1.4688	3.3
2BK45	4.25	3.5	3.9	B					1	1.125		1.375		1.75	0.4688	1.4688	3.3
2BK47	4.45	3.7	4.1	B				0.875	1	1.125				1.75	0.4688	1.4688	3.7
2BK50	4.75	4	4.4	B			0.75		1	1.125		1.375		1.75	0.4688	1.4688	4.1
2BK52	4.95	4.2	4.6	B				0.875	1	1.125		1.375		1.75	0.4688	1.4688	4.5
2BK55	5.25	4.5	4.9	B						1.125		1.375		1.75	0.4688	1.4688	4.5
2BK57	5.45	4.7	5.1	B					1	1.125		1.375		1.75	0.4688	1.4688	5.1
2BK60	5.75	5	5.4	B			0.75	0.875	1	1.125		1.375		1.75	0.4688	1.4688	4.9
2BK62	5.95	5.2	5.6	B					1	1.125		1.375		1.75	0.4688	1.4688	4.8
2BK65	6.25	5.5	5.9	B					1	1.125		1.375		1.75	0.4688	1.4688	5.0
2BK67	6.45	5.7	6.1	C					1	1.125		1.375		1.75	0.4688	1.4688	5.0
2BK70	6.75	6	6.4	C			0.75		1	1.125	1.1875	1.375	1.4375	1.75	0.3438	1.5938	6.6
2BK80	7.75	7	7.4	C			0.75		1	1.125	1.1875	1.375	1.4375	1.75	0.3438	1.5938	7.2
2BK90	8.75	8	8.4	C			0.75		1	1.125	1.1875	1.375	1.4375	1.75	0.3438	1.5938	8.4
2BK100	9.75	9	9.4	C			0.75		1		1.1875	1.375	1.4375	1.75	0.3438	1.5938	9.4
2BK110	10.75	10	10.4	C					1		1.1875		1.4375	1.75	0.3438	1.5938	10.4
2BK120	11.75	11	11.4	C					1		1.1875		1.4375	1.75	0.3438	1.5938	11.8
2BK130	12.75	12	12.4	C					1		1.1875		1.4375	1.75	0.3438	1.5938	14.9
2BK140	13.75	13	13.4	C					1		1.1875		1.4375	1.75	0.3438	1.5938	16.3
2BK160	15.75	15	15.4	C					1		1.1875		1.4375	1.75	0.3438	1.5938	18.0
2BK190	18.75	18	18.4	C					1		1.1875		1.4375	1.75	0.3438	1.5938	23.3

0.5" Bore - setscrew only - no keyway

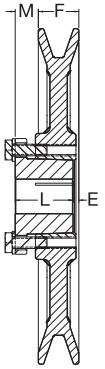
BK-H Single Groove FHP Sheaves MST® Bushed



Type A
Solid



Type B
Web



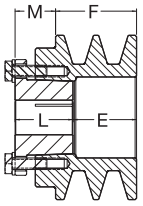
Type C
Arm/Spoke

FHP Sheave — BK-H

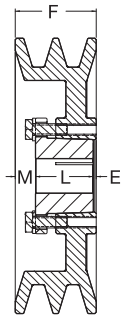
Part Number	Diameter			Type	Bush	Bush Max. Bore	F	E	L Thru Bore	M	Weight Less Bush
	OD	Datum A(4L) Belts	Pitch 3L Belts								
BK30-H	3.15	2.4	2.8	A	H	1.5	0.875	0.5	1.25	0.875	1.3
BK32-H	3.35	2.6	3	A	H	1.5	0.875	0.5	1.25	0.875	1.5
BK34-H	3.55	2.8	3.2	A	H	1.5	0.875	0.5	1.25	0.875	1.7
BK36-H	3.75	3	3.4	B	H	1.5	0.875	0.0625	1.25	0.4375	1.3
BK40-H	3.95	3.2	3.6	B	H	1.5	0.875	0.0625	1.25	0.4375	1.5
BK45-H	4.25	3.5	3.9	B	H	1.5	0.875	0.0625	1.25	0.4375	1.9
BK47-H	4.45	3.7	4.1	B	H	1.5	0.875	0.0625	1.25	0.4375	2.2
BK50-H	4.75	4	4.4	B	H	1.5	0.875	0.0625	1.25	0.4375	2.2
BK52-H	4.95	4.2	4.6	B	H	1.5	0.875	0.0625	1.25	0.4375	2.5
BK55-H	5.25	4.5	4.9	B	H	1.5	0.875	0.0625	1.25	0.4375	3.0
BK57-H	5.45	4.7	5.1	B	H	1.5	0.875	0.0625	1.25	0.4375	3.2
BK60-H	5.75	5	5.4	B	H	1.5	0.875	0.0625	1.25	0.4375	3.2
BK62-H	5.95	5.2	5.6	B	H	1.5	0.875	0.0625	1.25	0.4375	3.6
BK65-H	6.25	5.5	5.9	B	H	1.5	0.875	0.0625	1.25	0.4375	4.0
BK67-H	6.45	5.7	6.1	B	H	1.5	0.875	0.0625	1.25	0.4375	4.2
BK70-H	6.75	6	6.4	C	H	1.5	0.875	0.125	1.25	0.5	3.3
BK72-H	6.95	6.2	6.6	C	H	1.5	0.875	0.125	1.25	0.5	3.6
BK75-H	7.25	6.5	6.9	C	H	1.5	0.875	0.125	1.25	0.5	3.4
BK77-H	7.45	6.7	7.1	C	H	1.5	0.875	0.125	1.25	0.5	3.7
BK80-H	7.75	7	7.4	C	H	1.5	0.875	0.125	1.25	0.5	4.0
BK85-H	8.25	7.5	7.9	C	H	1.5	0.875	0.125	1.25	0.5	4.1
BK90-H	8.75	8	8.4	C	H	1.5	0.875	0.125	1.25	0.5	4.5
BK95-H	9.25	8.5	8.9	C	H	1.5	0.875	0.125	1.25	0.5	4.8
BK100-H	9.75	9	9.4	C	H	1.5	0.875	0.125	1.25	0.5	5.1
BK105-H	10.25	9.5	9.9	C	H	1.5	0.875	0.125	1.25	0.5	5.4
BK110-H	10.75	10	10.4	C	H	1.5	0.875	0.125	1.25	0.5	6.0
BK115-H	11.25	10.5	10.9	C	H	1.5	0.875	0.125	1.25	0.5	6.3
BK120-H	11.75	11	11.4	C	H	1.5	0.875	0.125	1.25	0.5	6.6
BK130-H	12.75	12	12.4	C	H	1.5	0.875	0.125	1.25	0.5	7.2
BK140-H	13.75	13	13.4	C	H	1.5	0.875	0.125	1.25	0.5	8.6
BK150-H	14.75	14	14.4	C	H	1.5	0.875	0.125	1.25	0.5	9.4
BK160-H	15.75	15	15.4	C	H	1.5	0.875	0.125	1.25	0.5	10.1
BK190-H	18.75	18	18.4	C	H	1.5	0.875	0.125	1.25	0.5	12.3

Dimensions in inches, weight in pounds. Weights do not include bushings. See page D-58 for additional bushing information.

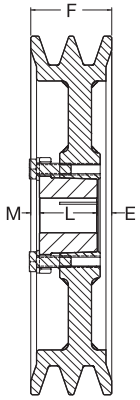
Two Groove FHP Sheaves MST® Bushed 2BK-H



Type A
Solid



Type B
Web



Type C
Arm/Spoke

FHP Sheave — 2BK-H

Part Number	Diameter			Type	Bush	Bush Max. Bore	F	E	L Thru Bore	M	Weight Less Bush
	OD	Datum A(4L) Belts	Pitch 3L Belts								
2BK32-H	3.35	2.6	3	A	H	1.5	1.75	1.375	1.25	0.875	2.2
2BK34-H	3.55	2.8	3.2	A	H	1.5	1.75	1.375	1.25	0.875	2.6
2BK36-H	3.75	3	3.4	A	H	1.5	1.75	0.9375	1.25	0.4375	2.4
2BK40-H	3.95	3.2	3.6	A	H	1.5	1.75	0.9375	1.25	0.4375	2.6
2BK45-H	4.25	3.5	3.9	A	H	1.5	1.75	0.9375	1.25	0.4375	3.1
2BK47-H	4.45	3.7	4.1	B	H	1.5	1.75	0.0625	1.25	0.4375	3.2
2BK50-H	4.75	4	4.4	B	H	1.5	1.75	0.0625	1.25	0.4375	3.7
2BK52-H	4.95	4.2	4.6	B	H	1.5	1.75	0.0625	1.25	0.4375	4.1
2BK55-H	5.25	4.5	4.9	B	H	1.5	1.75	0.0625	1.25	0.4375	4.2
2BK57-H	5.45	4.7	5.1	B	H	1.5	1.75	0.0625	1.25	0.4375	4.5
2BK60-H	5.75	5	5.4	B	H	1.5	1.75	0.0625	1.25	0.4375	4.9
2BK62-H	5.95	5.2	5.6	B	H	1.5	1.75	0.0625	1.25	0.4375	5.2
2BK65-H	6.25	5.5	5.9	C	H	1.5	1.75	0.3125	1.25	0.1875	5.7
2BK67-H	6.45	5.7	6.1	C	H	1.5	1.75	0.3125	1.25	0.1875	5.8
2BK70-H	6.75	6	6.4	C	H	1.5	1.75	0.3125	1.25	0.1875	6.1
2BK72-H	6.95	6.2	6.6	C	H	1.5	1.75	0.3125	1.25	0.1875	6.1
2BK80-H	7.75	7	7.4	C	H	1.5	1.75	0.3125	1.25	0.1875	7.4
2BK90-H	8.75	8	8.4	C	H	1.5	1.75	0.3125	1.25	0.1875	8.5
2BK100-H	9.75	9	9.4	C	H	1.5	1.75	0.3125	1.25	0.1875	9.7
2BK110-H	10.75	10	10.4	C	H	1.5	1.75	0.3125	1.25	0.1875	10.9
2BK120-H	11.75	11	11.4	C	H	1.5	1.75	0.3125	1.25	0.1875	12.0
2BK130-H	12.75	12	12.4	C	H	1.5	1.75	0.3125	1.25	0.1875	13.4
2BK140-H	13.75	13	13.4	C	H	1.5	1.75	0.3125	1.25	0.1875	15.3
2BK160-H	15.75	15	15.4	C	H	1.5	1.75	0.3125	1.25	0.1875	17.8
2BK190-H	18.75	18	18.4	C	H	1.5	1.75	0.3125	1.25	0.1875	22.8

Dimensions in inches, weight in pounds. Weights do not include bushings. See page D-58 for additional bushing information.

MST "H" Bushings – Inch Bore

Diameter of Shaft	Keyway Width × Depth
0.375	NONE
0.4375	NONE
0.5	0.125 × 0.0625
0.5625	0.125 × 0.0625
0.5938	0.125 × 0.0625
0.625	0.1875 × 0.0938
0.6563	0.1875 × 0.0938
0.6875	0.1875 × 0.0938
0.75	0.1875 × 0.0938

Diameter of Shaft	Keyway Width × Depth
0.7813	0.1875 × 0.0938
0.8125	0.1875 × 0.0938
0.875	0.1875 × 0.0938
0.9375	0.25 × 0.125
0.9688	0.25 × 0.125
1	0.25 × 0.125
1.0625	0.25 × 0.125
1.125	0.25 × 0.125
1.1875	0.25 × 0.125

Diameter of Shaft	Keyway Width × Depth
1.25	0.25 × 0.125
1.3125	0.3125 × 0.0625
1.375	0.3125 × 0.0625
1.375	0.375 × 0.0625
1.4375	0.375 × 0.0625
1.5	0.375 × 0.0313

MST "H" Bushings – Millimeter Bore

Diameter of Shaft	Keyway Width × Depth
10	NONE
11	NONE
12	NONE
14	5 × 2.3
16	5 × 2.3
18	6 × 2.8
19	6 × 2.8
20	6 × 2.8
22	6 × 2.8

Diameter of Shaft	Keyway Width × Depth
24	8 × 3.3
25	8 × 3.3
28	8 × 3.3
30	8 × 3.3
32	10 × 1.3
35	10 × 0.3
36	10 × 1.3
38	10 × 0.3

Stock Variable Pitch Sheaves



1VP
Bored-To-Size



2VP
Bored-To-Size

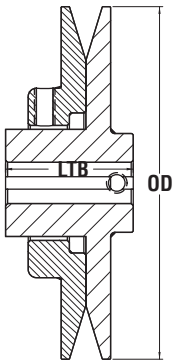
- Stationary adjustable speed sheaves.
- Single and double groove designs.
- Full range of popular bore sizes including keyway and setscrew.
- Positive locking system.
- Precision machined grooves.
- Statically balanced.

Call Martin for your made-to-order and large quantity requirements.

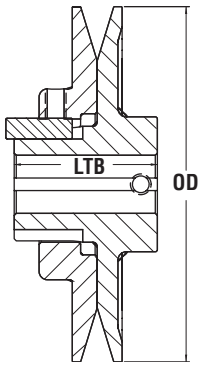
Single Groove Variable Pitch Sheaves – Bored-To-Size 1VP

Keyway Dimensions
Inch Bore

Diameter of Shaft	Keyway Width × Depth
0.5	NONE
0.625 - 0.875	0.1875 × 0.0938
0.9375 - 1.25	0.25 × 0.125
1.3125 - 1.375	0.3125 × 0.1563
1.4375 - 1.75	0.375 × 0.1875



Type A



Type B

Belt Dimensions

Part Number	Diameters and Turns															
	3L Belts				A or 4L Belts				B or 5L Belts				5V Belts			
	Min Pitch	Turns Open	Max Pitch	Turns Open	Min Pitch	Turns Open	Max Pitch	Turns Open	Min Pitch	Turns Open	Max Pitch	Turns Open	Min Pitch	Turns Open	Max Pitch	Turns Open
1VP25	1.6	4	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-
1VP30	1.8	4	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-
1VP34	1.9	4	2.8	-	2	5	3	-	2.3	5	3.2	1	-	-	-	-
1VP40	2.4	4	3.2	-	2.5	5	3.5	-	2.6	6	3.6	1	-	-	-	-
1VP44	2.8	4	3.7	-	2.9	5	3.9	-	3	6	4	1	-	-	-	-
1VP50	3.4	4	4.2	-	3.5	5	4.5	-	3.6	6	4.6	1	-	-	-	-
1VP56	4	4	4.8	-	4.1	5	5.1	-	4.2	6	5.2	1	-	-	-	-
1VP60	-	-	-	-	4.2	5	5.2	-	4.4	6	5.6	-	-	-	-	-
1VP62	4.6	4	5.4	-	4.7	5	5.7	-	4.8	6	5.8	1	5.1	6	6.1	1
1VP65	-	-	-	-	4.7	5	5.7	-	4.9	6	6.1	-	5.1	6	6.3	-
1VP68	5.2	4	6	-	5.3	5	6.3	-	5.4	6	6.4	1	5.7	6	6.7	1
1VP71	-	-	-	-	5.3	5	6.3	-	5.5	6	6.7	-	5.7	6	6.9	-
1VP75	-	-	-	-	5.7	5	6.7	-	5.9	6	7.1	-	6.1	6	7.3	-

Stock Size Dimensions

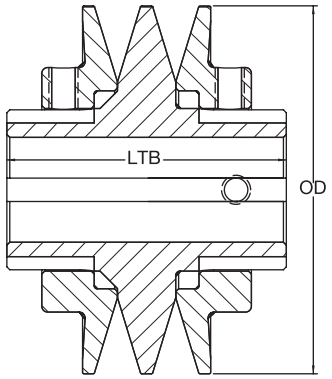
Part Number	OD	Type	L Thru Bore	Stock Finished Bore Includes Keyway and Setscrew								Wt. lb (Approx.)
1VP25	2.5	A	1.7188	0.5	0.625	0.75						0.8
1VP30	2.87	A	1.6875	0.5	0.625	0.75						1.1
1VP34	3.15	A	1.9063	0.5	0.625	0.75	0.875					1.4
1VP40	3.75	A	1.875	0.5	0.625	0.75	0.875					1.7
1VP44	4.15	A	1.875	0.5	0.625	0.75						2.4
1VP44	4.15	B	2.1875				0.875	1	1.125			3.0
1VP50	4.75	A	2	0.5	0.625	0.75						2.7
1VP50	4.75	B	2.1563				0.875	1	1.125			3.5
1VP56	5.35	A	1.9375	0.5	0.625	0.75						4.1
1VP56	5.35	B	2.1563				0.875	1	1.125			4.4
1VP60	6	B	2.2188		0.625	0.75	0.875	1	1.125		1.375	6.3
1VP62	5.95	B	1.9063		0.625	0.75	0.875	1	1.125	1.25	1.375	6.1
1VP65	6.5	B	2.2188			0.75	0.875		1.125		1.375	7.1
1VP68	6.55	B	1.9063		0.625	0.75	0.875	1	1.125	1.25	1.375	7.3
1VP71	7.1	B	2.2188			0.75	0.875		1.125		1.375	8.2
1VP75	7.5	B	2.2188			0.75	0.875	1	1.125		1.375	9.0

0.5" Bore - setscrew only - no keyway.
Dimensions in inches.

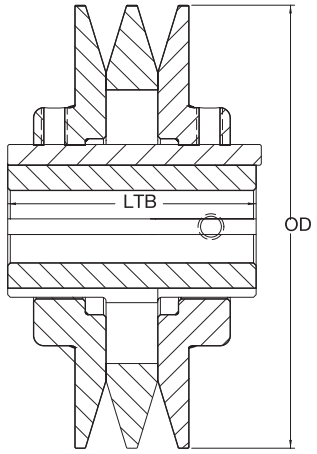
2VP Two Groove Variable Pitch Sheaves – Bored-To-Size

Keyway Dimensions
Inch Bore

Diameter of Shaft	Keyway Width × Depth
0.5	NONE
0.625 - 0.875	0.1875 × 0.0938
0.9375 - 1.25	0.25 × 0.125
1.3125 - 1.375	0.3125 × 0.1563
1.4375 - 1.75	0.375 × 0.1875



Type A



Type B

Belt Dimensions

Part Number	Diameters and Turns															
	3L Belts				A or 4L Belts				B or 5L Belts				5V Belts			
	Min Pitch	Turns Open	Max Pitch	Turns Open	Min Pitch	Turns Open	Max Pitch	Turns Open	Min Pitch	Turns Open	Max Pitch	Turns Open	Min Pitch	Turns Open	Max Pitch	Turns Open
2VP36	2	4	2.8	-	2.1	5	3.1	-	2.4	5	3.2	1	-	-	-	-
2VP42	2.6	4	3.4	-	2.7	5	3.7	-	2.8	6	3.8	1	-	-	-	-
2VP50	3.4	4	4.2	-	3.5	5	4.5	-	3.6	6	4.6	1	-	-	-	-
2VP56	4	4	4.8	-	4.1	5	5.1	-	4.2	6	5.2	1	-	-	-	-
2VP60	-	-	-	-	4.2	5	5.2	-	4.4	6	5.6	-	-	-	-	-
2VP62	4.6	4	5.4	-	4.7	5	5.7	-	4.8	6	5.8	1	5.1	6	6.1	1
2VP65	-	-	-	-	4.7	5	5.7	-	4.9	6	6.1	-	5.1	6	6.3	-
2VP68	5.2	4	6	-	5.3	5	6.3	-	5.4	6	6.4	1	5.7	6	6.7	1
2VP71	-	-	-	-	5.3	5	6.3	-	5.5	6	6.7	-	5.7	6	6.9	-
2VP75	-	-	-	-	5.7	5	6.7	-	5.9	6	7.1	-	6.1	6	7.3	-

Stock Size Dimensions

Part Number	OD	Type	L Thru Bore	Stock Finished Bore Includes Keyway and Setscrew								Wt. lb (Approx.)
2VP36	3.35	A	3	0.5	0.625	0.75	0.875	1				3.6
2VP42	3.95	A	3		0.625	0.75	0.875	1	1.125			4.5
2VP50	4.75	B	3		0.625	0.75	0.875	1	1.125			6.1
2VP56	5.35	B	3		0.625	0.75	0.875	1	1.125			7.5
2VP60	6	B	3.25			0.75	0.875	1	1.125		1.375	10.9
2VP62	5.95	B	3			0.75	0.875	1	1.125		1.375	10.0
2VP65	6.5	B	3.25			0.75	0.875		1.125		1.375	12.5
2VP68	6.55	B	3			0.75	0.875	1	1.125	1.25	1.375	11.7
2VP71	7.1	B	3.25			0.75	0.875		1.125		1.375	14.7
2VP75	7.5	B	3.25			0.75	0.875	1	1.125		1.375	16.3

0.5" Bore - setscrew only - no keyway.
Dimensions in inches.

Variable Pitch Sheaves Instructions

Mounting and Adjusting Procedure

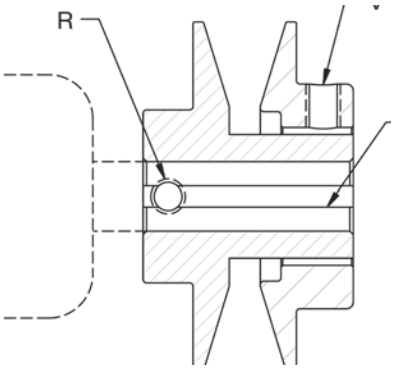
Single Groove Sheaves Without External Key:

Mounting:

1. Make sure that the shaft, sheave bore , key and keyway are free of burrs and paint.
2. All sheaves should be mounted on the motor or driving shaft with the end containing the setscrew "R" toward the motor. Be sure setscrew "R" is well over the shaft.
3. Fit shaft key "C" between sheave and shaft. Lock setscrew "R" in place. Wrench torque 110 in-lb minimum – 130 in-lb maximum.
4. Be sure both driving and driven sheaves are in alignment and that shafts are parallel.
5. Total axial and parallel misalignment must not exceed ¼°.

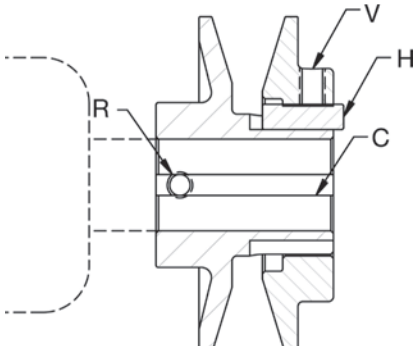
Adjusting:

1. Loosen setscrew "V" in movable flange of sheave.
2. Adjust sheave pitch diameter for desired speed by opening rotating parts by half or full turn increments from closed position. Do not open more than five full turns for "A" belts or six full turns for "B" belts.
3. Tighten setscrew "V" over a flat in the hub to 110 to 130 in-lb.
4. Put on belts and adjust belt tension. (Do not force belts over grooves.)
5. Future adjustments should be made by loosening the belt tension and increasing or decreasing the pitch diameter of the sheave by half or full turns as required. Readjust belt tension before starting drive.
6. Be sure that key is in place and that all setscrews are torqued properly before starting drive. Check setscrews and belt tension after 24 hours of service.



Do not operate sheave with flange projecting beyond the hub end

Single Groove Sheaves With External Key:



Key "H" projects to provide a grip to removal.

Do not operate sheave with flange projecting beyond the hub end.

Mounting:

1. Make sure that the shaft, sheave bore, keys and keyways are free of burrs and paint.
2. All sheaves should be mounted on the motor or driving shaft with the end containing the setscrew "R" toward the motor. Be sure setscrew "R" is well over the shaft.
3. Fit shaft key "C" between sheave and shaft. Lock setscrew "R" in place. Wrench torque 110 in-lb minimum - 130 in-lb maximum.
4. Be sure both driving and driven sheaves are in alignment and that shafts are parallel.
5. Total axial and parallel misalignment must not exceed ¼°.

Adjusting:

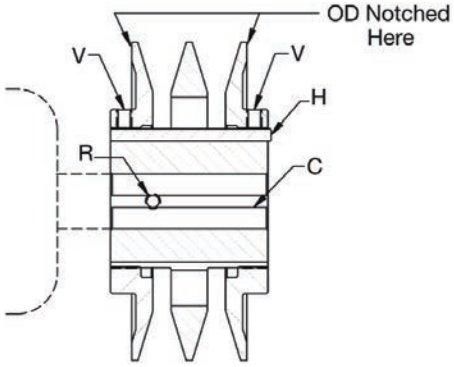
1. Loosen setscrew "V" in movable flange of sheave and pull out external key "H". (This key projects a small amount to provide a grip for removal.)
2. Adjust sheave pitch diameter for desired speed by opening rotating parts by half or full turn increments from closed position. **Do not open more that five full turns for "A" belts or six full turns for "B" belts.** (Except 1VP34 - 5 turns.)
3. Replace key "H" and tighten setscrew "V" to 110 to 130 in-lb
4. Put on belts and adjust belt tension. (Do not force belts over grooves.)
5. Future adjustments should be made by loosening the belt tension and increasing or decreasing the pitch diameter of the sheave by half or full turns as required. Readjust belt tension before starting drive.
6. Be sure that all keys are in place and that all setscrews are torqued properly before starting drive. Check setscrews and belt tension after 24 hours service.

WARNING: Because of the possible danger to person(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed: Products must be used in accordance with the engineering information specified in the catalog. Proper installation, maintenance and operation procedures must be observed. The instructions given above must be followed. Inspections should be made as necessary to assure safe operation under prevailing conditions. All rotating power transmission products when used in a drive are potentially dangerous and must be guarded by the user as required by applicable laws, regulations, standards, and good safety practice. (Refer to ANSI Standard B15.1.)

Variable Pitch Sheaves Instructions

Mounting and Adjusting Procedure

Double Groove Sheaves With External Key:



Key "H" projects to provide a grip for removal.

Do not operate sheave with flange projecting beyond the hub end.

Mounting:

1. Make sure that the shaft, sheave bore , key and keyway are free of burrs and paint.
2. Remove key "H" from sheave. Unscrew flanges until setscrew "R" is visible. If setscrew "R" is at an angle , flange may have to be removed in order to tighten it.
3. All sheaves should be mounted on the motor or driving shaft with the end containing the setscrew "R" toward the motor. Be sure setscrew "R" is well over the shaft.
4. Fit shaft key "C" between sheave and shaft. Lock setscrew "R" in place. Wrench torque 110 in-lb minimum – 130 in-lb maximum.
5. Be sure both driving and driven sheaves are in alignment and that shafts are parallel.
6. Total axial and parallel misalignment must not exceed ¼°.

Adjusting:

Each flange of the sheave has a small notch on the O.D. of the flange. This mark is located directly over the keyway on the two adjustable flanges and over one of the keyways on the non-adjustable (center) flange. To obtain proper adjustments:

1. Loosen setscrew "V" in movable flange and pull out key "H". (This key projects a small amount to provide a grip for removal.).
2. Rotate both movable flanges inward until they touch the center flange.
3. 3. Locate the notch over the keyway on the center flange.
4. Open each movable flange until its notch is adjacent to the notch on the center flange. Be certain that neither movable flange is opened more than one full turn.
5. From the position obtained in Step 4, open each movable flange the same number of full or half turns until the desired number of turns is obtained. **Do not open more than five full turns for "A" belts or six full turns for "B" belts.** (Except 2VP36 - 5 turns.)
6. Replace key "H" and tighten setscrews "V". Wrench torque 110 in.-lb. minimum to 130 in.-lb. maximum.
7. Put on belts and adjust belt tension. (Do not force belts over flanges.)
8. Future adjustments should be made by loosening the belt tension and increasing or decreasing the pitch diameter of the sheave by half or full turns as required. Readjust belt tension before starting drive.
9. Two groove sheaves must have both halves adjusted by the same number of turns from the position established in Step 4 to ensure the same pitch diameter.
10. Be sure that key is in place and that all setscrews are torqued properly before starting drive. Check setscrews and belt tension after 24 hours of service.

WARNING: Because of the possible danger to person(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed: Products must be used in accordance with the information specified in the catalog. Proper installation, maintenance and operation procedures must be observed. The instructions given above must be followed. Inspections should be made as necessary to assure safe operation under prevailing conditions. All rotating power transmission products when used in a drive are potentially dangerous and must be guarded by the user as required by applicable laws, regulations, standards, and good safety practice. (Refer to ANSI Standard B15.1.)

Stock MST® Hi-Cap® Wedge & Conventional Sheaves







Martin Split Taper (MST®)

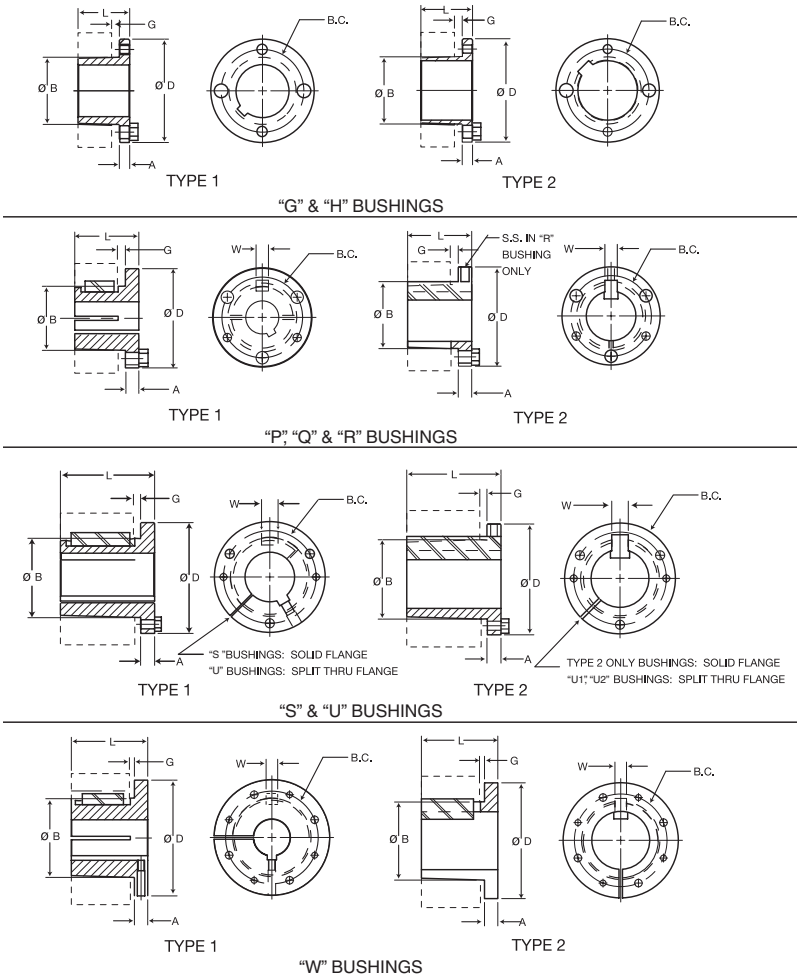
Quality

Inventory

Service

- **Immediate Delivery.**
  Deep and broad inventory. Same day shipment.
- **Local Service & Availability.**
  Branches throughout North America.
  Open early / Stay late.
- **Quick Alterations & MTO's.**
  Fast hardening on unhardened sizes. Special sheave and bushing combinations.
- **Reduced Shipping Expense.**
  Unsurpassed freight allowance. Product closer to YOU. Can ship with other products.
- **Lower Transaction Cost.**
  No minimum order or handling charge.
- **Blind Assembly.**
  Bushing will only mount one way in sheave. Bolts all line up when bushing is installed.
- **Key to Key Drive.**
  Bushing provides drive keyed to both the shaft and the driven sheave.
- **Comprehensive Offering.**
  Martin Split Taper joins complete QD & Taper bushed lines.

MST® Bushings



Bushing Specifications

Part Number	Dimensions							Stock Bore Range		Cap Screws		Av. Wt. Lbs.	Wrench Torque In./lbs.
	D	L	A	B Large End	G	B.C.	W	Type 1	Type 2	No.	Size		
G	2	1	.25	1.172	.19	1.56	—	.375 –.938	1	2	.25 ×.625	.5	95
H	2.5	1.25	.25	1.625	.19	2	—	.375 – 1.375	1.438 – 1.5	2	.25 ×.75	.8	95
P1	3	1.94	.41	1.938	.22	2.44	.375	.5 – 1.438	1.5 – 1.75	3	.313 × 1	1.3	192
P2	3	2.94	.41	1.938	.22	2.44	.375	.75 – 1.438	1.5 – 1.75	3	.313 × 1	1.5	192
P3	3	4.44	.41	1.938	.22	2.44	.375	1.125 – 1.375	1.625	3	.313 × 1	2.0	192
Q1	4.12	2.5	.53	2.875	.22	3.38	.5	.75 – 2.063	2.125 – 2.688	3	.375 × 1.25	3.5	348
Q2	4.12	3.5	.53	2.875	.22	3.38	.5	1 – 2.063	2.125 – 2.625	3	.375 × 1.25	4.5	348
Q3	4.12	5	.53	2.875	.22	3.38	.5	1.375 – 2.063	2.125 – 2.5	3	.375 × 1.25	5.5	348
R1	5.38	2.88	.62	4	.25	4.62	.75	1.125 – 2.813	2.875 – 3.75	3	.375 × 1.75	7.5	348
R2	5.38	4.88	.62	4	.25	4.62	.75	1.375 – 2.813	2.875 – 3.625	3	.375 × 1.75	11.0	348
S1	6.38	4.38	.75	4.625	.31	5.38	.75	1.688 – 3.188	3.25 – 4.25	3	.5 × 2.25	13.5	840
S2	6.38	6.75	.75	4.625	.31	5.38	.75	1.875 – 3.188	3.25 – 4.188	3	.5 × 2.25	19.0	840
UO	8.38	5.25	1.06	6	.44	7	1.25	2.375 – 3.063	—	3	.625 × 2.75	30.0	1680
UO	8.38	4.94	.75	6	.44	7	1.25	3.25 – 4.25	4.375 – 5.5	3	.625 × 2.75	27.0	1680
U1	8.38	7.12	1.06	6	.44	7	1.25	2.375 – 4.25	4.375 – 5.5	3	.625 × 2.75	40.0	1680
U2	8.38	10.12	1.06	6	.44	7	1.25	2.438 – 4.25	4.375 – 5	3	.625 × 2.75	50.0	1680
W1	12.5	8.25	1.44	8.5	.44	10	1.25	3.375 – 6.188	6.25 – 7.438	4	.75 × 3	104.0	3000
W2	12.5	11.25	1.44	8.5	.44	10	1.25	3.375 – 6.188	6.25 – 7.438	4	.75 × 3	133.0	3000

All tapers are.75" per 12" on Diameter.

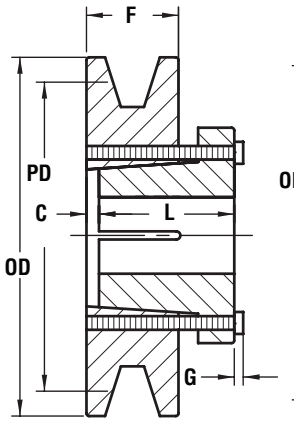
All dimensions are in inches except, as noted.

All bushings are cast iron, ductile iron, sintered steel, or steel. Consult manufacturer for clarification.

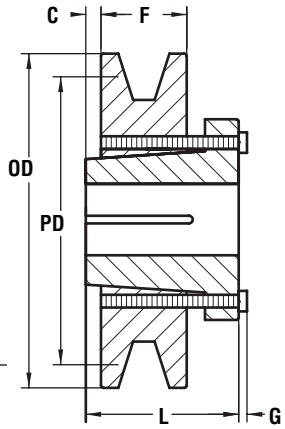
Metric bushings also available.

FOR MST BUSHING INSTALATION & REMOVAL INSTRUCTION, GO TO PAGE 14 OF SECTION B.

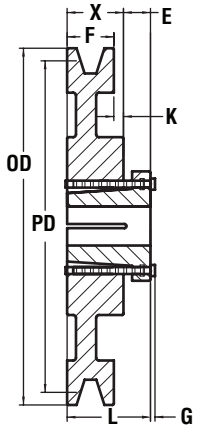
Hi-Cap Wedge Stock MST® Sheaves 3V



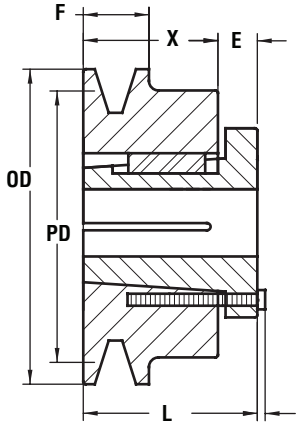
Type A



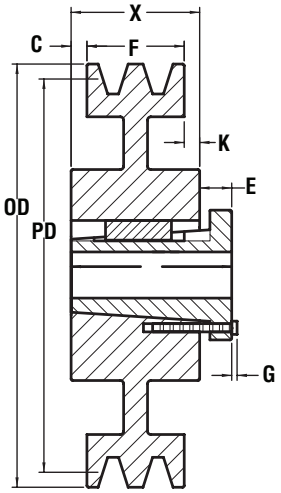
Type C



Type E



Type G



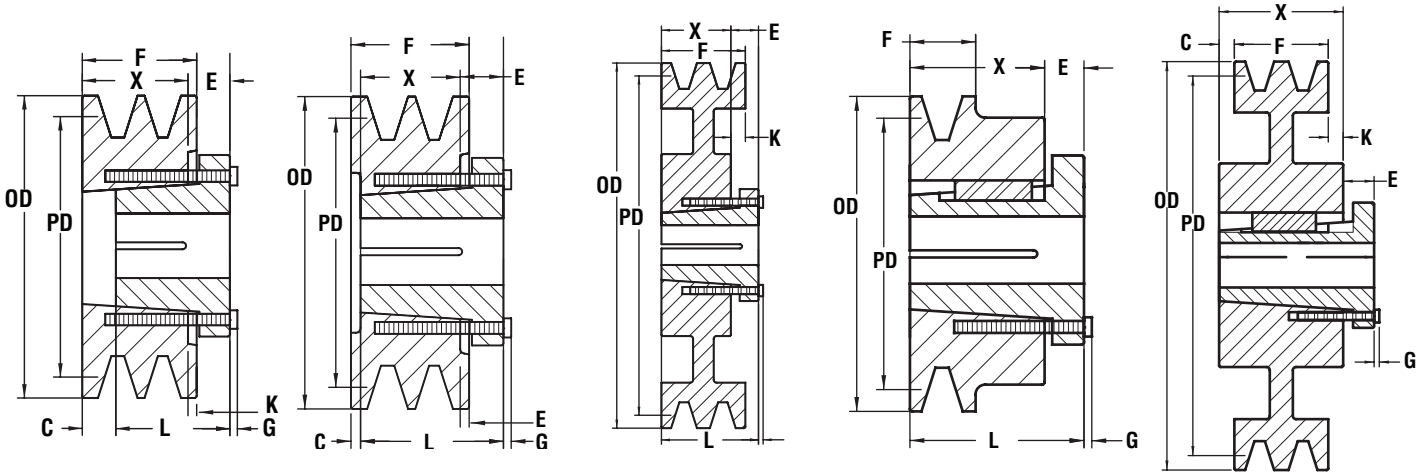
Type L

3V MST® Sheaves

1 Groove F = 0.6875												
Part Number	OD	PD 3V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
1 3V 265 G	2.65	2.6	A-1	G	1	0.13	–	0.19	0.06	1	0.63	0.6
1 3V 280 G	2.8	2.75	A-1	G	1	0.13	–	0.19	0.06	1	0.63	0.7
1 3V 300 G	3	2.95	A-1	G	1	0.13	–	0.19	0.06	1	0.63	0.9
1 3V 315 H	3.15	3.1	C-1	H	1.5	0.13	–	0.19	0.31	1.25	0.88	0.8
1 3V 335 H	3.35	3.3	C-1	H	1.5	0.13	–	0.19	0.31	1.25	0.88	0.9
1 3V 365 H	3.65	3.6	E-1	H	1.5	–	0.44	0.19	0.19	1.25	0.88	1.4
1 3V 365 P	3.65	3.6	G-1	P1	1.75	–	0.63	0.25	0.63	1.94	1.31	2.0
1 3V 412 H	4.12	4.07	E-1	H	1.5	–	0.44	0.19	0.19	1.25	0.88	1.9
1 3V 412 P	4.12	4.07	G-1	P1	1.75	–	0.63	0.25	0.63	1.94	1.31	2.6
1 3V 450 H	4.5	4.45	E-1	H	1.5	–	0.44	0.19	0.19	1.25	0.88	2.2
1 3V 450 P	4.5	4.45	G-1	P1	1.75	–	0.63	0.25	0.63	1.94	1.31	3.0
1 3V 475 H	4.75	4.7	E-1	H	1.5	–	0.44	0.19	0.19	1.25	0.88	2.4
1 3V 475 P	4.75	4.7	G-1	P1	1.75	–	0.63	0.25	0.63	1.94	1.31	3.5
1 3V 500 H	5	4.95	E-1	H	1.5	–	0.44	0.19	0.19	1.25	0.88	2.6
1 3V 500 P	5	4.95	G-1	P1	1.75	–	0.63	0.25	0.63	1.94	1.31	3.8
1 3V 530 H	5.3	5.25	E-1	H	1.5	–	0.44	0.19	0.19	1.25	0.88	2.5
1 3V 530 P	5.3	5.25	G-1	P1	1.75	–	0.63	0.25	0.63	1.94	1.31	4.2
1 3V 560 H	5.6	5.55	E-1	H	1.5	–	0.44	0.19	0.19	1.25	0.88	2.6
1 3V 560 P	5.6	5.55	G-1	P1	1.75	–	0.63	0.25	0.63	1.94	1.31	4.6
1 3V 600 H	6	5.95	E-1	H	1.5	–	0.44	0.19	0.19	1.25	0.88	2.9
1 3V 600 P	6	5.95	G-1	P1	1.75	–	0.63	0.25	0.63	1.94	1.31	5.3
1 3V 650 P	6.5	6.45	L-3	P1	1.75	0.31	0.63	0.25	0.63	1.94	1.31	5.5
1 3V 690 P	6.9	6.85	L-3	P1	1.75	0.31	0.63	0.25	0.63	1.94	1.31	4.9
1 3V 800 P	8	7.95	L-3	P1	1.75	0.31	0.63	0.25	0.63	1.94	1.31	6.5
1 3V 1060 P	10.6	10.55	L-3	P1	1.75	0.31	0.63	0.25	0.94	1.94	1.31	7.8
1 3V 1400 Q	14	13.95	L-3	Q1	2.69	0.53	0.75	0.28	1.06	2.5	1.75	18.1
1 3V 1900 Q	19	18.95	L-3	Q1	2.69	0.53	0.75	0.28	1.06	2.5	1.75	26.3
1 3V 2500 Q	25	24.95	L-3	Q1	2.69	0.53	0.75	0.28	1.06	2.5	1.75	38.3

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

3V Hi-Cap Wedge Stock MST® Sheaves

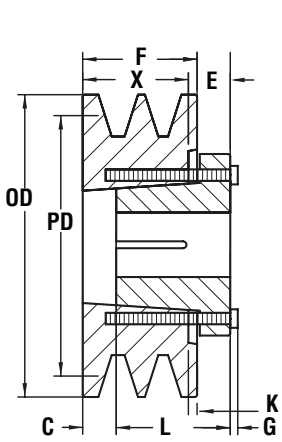


3V MST® Sheaves

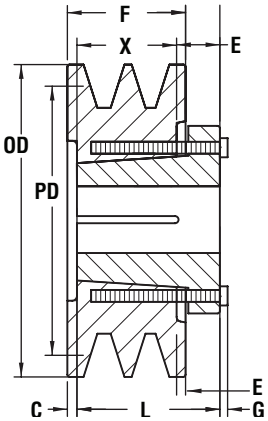
2 Grooves F = 1.0313												
Part Number	OD	PD 3V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
2 3V 265 G	2.65	2.6	B-1	G	1	0.41	0.44	0.19	–	1	0.97	0.8
2 3V 280 G	2.8	2.75	B-1	G	1	0.41	0.44	0.19	–	1	0.97	0.9
2 3V 300 G	3	2.95	B-1	G	1	0.41	0.44	0.19	–	1	0.97	1.3
2 3V 315 H	3.15	3.1	D-1	H	1.5	0.22	0.44	0.19	–	1.25	0.81	0.9
2 3V 335 H	3.35	3.3	D-1	H	1.5	0.22	0.44	0.19	–	1.25	0.81	1.3
2 3V 365 H	3.65	3.6	F-1	H	1.5	–	0.44	0.19	0.19	1.25	0.88	1.6
2 3V 365 P	3.65	3.6	G-1	P1	1.75	–	0.63	0.25	–	1.94	1.31	2.0
2 3V 412 H	4.12	4.07	F-1	H	1.5	–	0.44	0.19	0.19	1.25	0.88	2.3
2 3V 412 P	4.12	4.07	G-1	P1	1.75	–	0.63	0.25	–	1.94	1.31	2.8
2 3V 450 H	4.5	4.45	F-1	H	1.5	–	0.44	0.19	0.19	1.25	0.88	2.8
2 3V 450 P	4.5	4.45	G-1	P1	1.75	–	0.63	0.25	–	1.94	1.31	3.5
2 3V 475 H	4.75	4.7	F-1	H	1.5	–	0.44	0.19	0.19	1.25	0.88	3.1
2 3V 475 P	4.75	4.7	G-1	P1	1.75	–	0.63	0.25	–	1.94	1.31	4.0
2 3V 500 H	5	4.95	F-1	H	1.5	–	0.44	0.19	0.19	1.25	0.88	3.4
2 3V 500 P	5	4.95	G-1	P1	1.75	–	0.63	0.25	–	1.94	1.31	4.6
2 3V 530 H	5.3	5.25	F-1	H	1.5	–	0.44	0.19	0.19	1.25	0.88	3.7
2 3V 530 P	5.3	5.25	G-1	P1	1.75	–	0.63	0.25	–	1.94	1.31	5.6
2 3V 560 H	5.6	5.55	F-1	H	1.5	–	0.44	0.19	0.19	1.25	0.88	3.1
2 3V 560 P	5.6	5.55	G-1	P1	1.75	–	0.63	0.25	–	1.94	1.31	6.0
2 3V 600 H	6	5.95	F-1	H	1.5	–	0.44	0.19	0.19	1.25	0.88	3.6
2 3V 600 P	6	5.95	G-1	P1	1.75	–	0.63	0.25	–	1.94	1.31	6.8
2 3V 650 P	6.5	6.45	L-3	P1	1.75	0.33	0.75	0.28	1.05	2.5	1.75	8.3
2 3V 690 P	6.9	6.85	L-3	P1	1.75	0.33	0.75	0.28	1.05	2.5	1.75	9.8
2 3V 800 P	8	7.95	L-3	Q1	2.69	0.33	0.75	0.28	1.05	2.5	1.75	10.8
2 3V 1060 P	10.6	10.55	L-3	Q1	2.69	0.33	0.75	0.28	1.05	2.5	1.75	13.5
2 3V 1400 Q	14	13.95	L-3	Q1	2.69	0.53	0.75	0.28	1.06	2.5	1.75	22.5
2 3V 1900 Q	19	18.95	L-3	Q1	2.69	0.53	0.75	0.28	1.06	2.5	1.75	28.9
2 3V 2500 Q	25	24.95	L-3	Q1	2.69	0.53	0.75	0.28	1.06	2.5	1.75	43.5

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

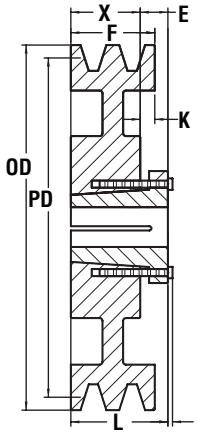
Hi-Cap Wedge Stock MST® Sheaves 3V



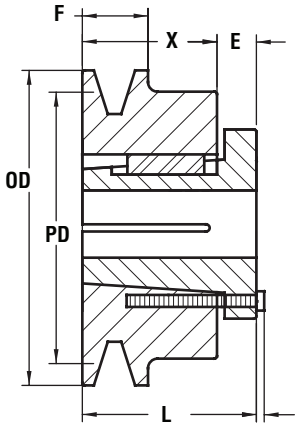
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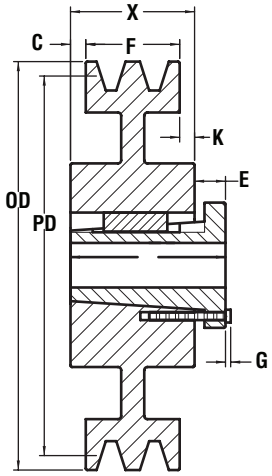
Type D



Type S



Type J



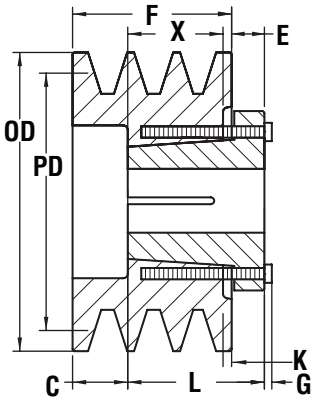
Type L

3V MST® Sheaves

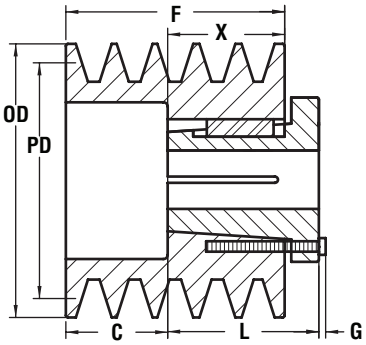
3 Grooves F = 1.5												
Part Number	OD	PD 3V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
3 3V 265 G	2.65	2.6	B-1	G	1	0.81	0.44	0.19	0.06	1	0.63	1.1
3 3V 280 G	2.8	2.75	B-1	G	1	0.81	0.44	0.19	0.06	1	0.63	1.6
3 3V 300 G	3	2.95	B-1	G	1	0.81	0.44	0.19	0.06	1	0.63	1.8
3 3V 315 H	3.15	3.1	D-1	H	1.5	0.56	0.44	0.19	0.06	1.25	0.88	1.4
3 3V 335 H	3.35	3.3	D-1	H	1.5	0.56	0.44	0.19	0.06	1.25	0.88	1.8
3 3V 365 P	3.65	3.6	S-1	P1	1.75	0.19	0.63	0.25	0	1.94	1.31	2.5
3 3V 412 P	4.12	4.07	S-1	P1	1.75	0.19	0.63	0.25	0	1.94	1.31	3.0
3 3V 450 P	4.5	4.45	J-1	P1	1.75	–	0.63	0.25	0.19	1.94	1.31	3.9
3 3V 475 P	4.75	4.7	J-1	P1	1.75	–	0.63	0.25	0.19	1.94	1.31	4.4
3 3V 500 P	5	4.95	J-1	P1	1.75	–	0.63	0.25	0.19	1.94	1.31	4.9
3 3V 530 P	5.3	5.25	J-1	P1	1.75	–	0.63	0.25	0.19	1.94	1.31	5.9
3 3V 560 P	5.6	5.55	J-1	P1	1.75	–	0.63	0.25	0.19	1.94	1.31	7.5
3 3V 600 P	6	5.95	J-1	P1	1.75	–	0.63	0.25	0.19	1.94	1.31	8.0
3 3V 650 Q	6.5	6.45	L-1	Q1	2.69	0.13	0.75	0.28	0.38	2.5	1.75	9.9
3 3V 690 Q	6.9	6.85	L-1	Q1	2.69	0.13	0.75	0.28	0.38	2.5	1.75	11.3
3 3V 800 Q	8	7.95	L-2	Q1	2.69	0.13	0.75	0.28	0.38	2.5	1.75	11.9
3 3V 1060 Q	10.6	10.55	L-3	Q1	2.69	0.13	0.75	0.28	0.38	2.5	1.75	15.1
3 3V 1400 Q	14	13.95	L-3	Q1	2.69	0.13	0.75	0.28	0.38	2.5	1.75	24.5
3 3V 1900 R	19	18.95	L-3	R1	3.75	0.25	0.88	0.28	0.75	2.88	2	35.1
3 3V 2500 R	25	24.95	L-3	R1	3.75	0.25	0.88	0.28	0.75	2.88	2	55.0
3 3V 3350 R	33.5	33.45	L-3	R1	3.75	0.25	0.88	0.28	0.75	2.88	2	80.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

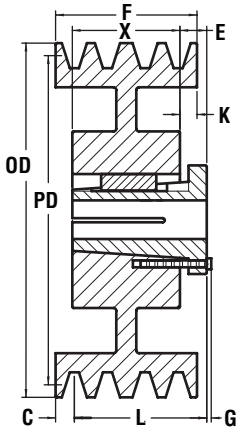
3V Hi-Cap Wedge Stock MST® Sheaves



Type H



Type S



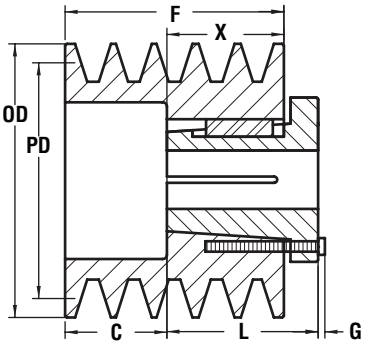
Type J

3V MST® Sheaves

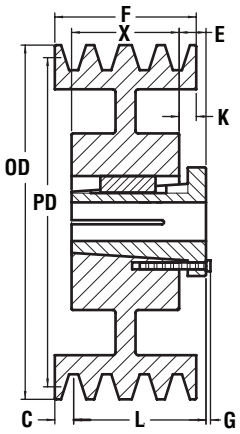
4 Grooves F = 1.9063												
Part Number	OD	PD 3V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
4 3V 265 G	2.65	2.6	H-1	G	1	1.22	0.44	0.19	0.06	1	0.63	1.4
4 3V 280 G	2.8	2.75	H-1	G	1	1.22	0.44	0.19	0.06	1	0.63	1.8
4 3V 300 G	3	2.95	H-1	G	1	1.22	0.44	0.19	0.06	1	0.63	2.1
4 3V 315 H	3.15	3.1	H-1	H	1.5	0.97	0.44	0.19	0.06	1.25	0.88	1.8
4 3V 335 H	3.35	3.3	H-1	H	1.5	0.97	0.44	0.19	0.06	1.25	0.88	2.3
4 3V 365 P	3.65	3.6	S-1	P1	1.75	0.59	0.63	0.25	0	1.94	1.31	2.8
4 3V 412 P	4.12	4.07	S-1	P1	1.75	0.59	0.63	0.25	0	1.94	1.31	3.7
4 3V 450 P	4.5	4.45	J-1	P1	1.75	–	0.63	0.25	0.59	1.94	1.31	4.4
4 3V 475 P	4.75	4.7	J-1	P1	1.75	–	0.63	0.25	0.59	1.94	1.31	5.1
4 3V 500 P	5	4.95	J-1	P1	1.75	–	0.63	0.25	0.59	1.94	1.31	5.8
4 3V 530 P	5.3	5.25	J-1	P1	1.75	–	0.63	0.25	0.59	1.94	1.31	6.5
4 3V 560 P	5.6	5.55	J-1	P1	1.75	–	0.63	0.25	0.59	1.94	1.31	8.1
4 3V 600 Q	6	5.95	J-1	Q1	2.69	–	0.75	0.28	0.16	2.5	1.75	9.0
4 3V 650 Q	6.5	6.45	J-2	Q1	2.69	0.08	0.75	0.28	0.08	2.5	1.75	11.1
4 3V 690 Q	6.9	6.85	J-2	Q1	2.69	0.08	0.75	0.28	0.08	2.5	1.75	12.9
4 3V 800 Q	8	7.95	J-2	Q1	2.69	0.08	0.75	0.28	0.08	2.5	1.75	13.1
4 3V 1060 Q	10.6	10.55	J-3	Q1	2.69	0.08	0.75	0.28	0.08	2.5	1.75	15.9
4 3V 1400 Q	14	13.95	J-3	Q1	2.69	0.08	0.75	0.28	0.08	2.5	1.75	25.4
4 3V 1900 R	19	18.95	J-3	R1	3.75	0.05	0.88	0.28	0.14	2.88	2	37.3
4 3V 2500 R	25	24.95	J-3	R1	3.75	0.05	0.88	0.28	0.14	2.88	2	60.0
4 3V 3350 R	33.5	33.45	J-3	R1	3.75	0.05	0.88	0.28	0.14	2.88	2	88.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

Hi-Cap Wedge Stock MST® Sheaves 3V



Type S



Type J

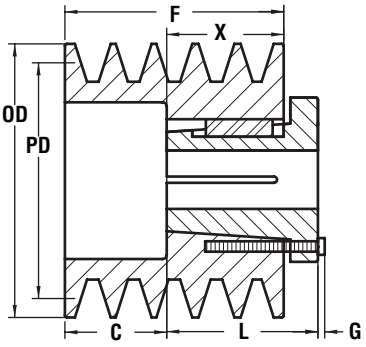
3V MST® Sheaves

5 Grooves F = 2.3125												
Part Number	OD	PD 3V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
5 3V 475 P	4.75	4.7	J-2	P1	1.75	0.38	0.63	0.25	0.62	1.94	1.31	5.6
5 3V 500 P	5	4.95	J-2	P1	1.75	0.38	0.63	0.25	0.62	1.94	1.31	6.0
5 3V 530 P	5.3	5.25	J-2	P1	1.75	0.38	0.63	0.25	0.62	1.94	1.31	7.1
5 3V 560 P	5.6	5.55	J-2	P1	1.75	0.38	0.63	0.25	0.62	1.94	1.31	8.1
5 3V 600 Q	6	5.95	J-2	Q1	2.69	0	0.75	0.28	0.56	2.5	1.75	9.5
5 3V 650 Q	6.5	6.45	J-2	Q1	2.69	0.28	0.75	0.28	0.28	2.5	1.75	11.6
5 3V 690 Q	6.9	6.85	J-2	Q1	2.69	0.28	0.75	0.28	0.28	2.5	1.75	13.9
5 3V 800 Q	8	7.95	J-2	Q1	2.69	0.28	0.75	0.28	0.28	2.5	1.75	14.3
5 3V 1060 Q	10.6	10.55	J-3	Q1	2.69	0.28	0.75	0.28	0.28	2.5	1.75	17.5
5 3V 1400 Q	14	13.95	J-3	Q1	2.69	0.28	0.75	0.28	0.28	2.5	1.75	27.5
5 3V 1900 R	19	18.95	J-3	R1	3.75	0.16	0.88	0.28	0.16	2.88	2	40.9
5 3V 2500 R	25	24.95	J-3	R1	3.75	0.16	0.88	0.28	0.16	2.88	2	64.0
5 3V 3350 R	33.5	33.45	J-3	R1	3.75	0.16	0.88	0.28	0.16	2.88	2	92.0

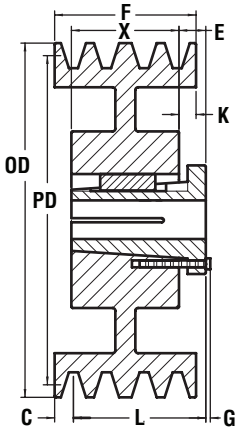
5 Grooves F = 2.3125												
Part Number	OD	PD 3V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
6 3V 475 Q	4.75	4.7	S-1	Q1	2.69	0.97	–	0.28	–	2.5	1.75	5.6
6 3V 500 Q	5	4.95	S-1	Q1	2.69	0.97	–	0.28	–	2.5	1.75	6.1
6 3V 530 Q	5.3	5.25	S-1	Q1	2.69	0.97	–	0.28	–	2.5	1.75	7.3
6 3V 560 Q	5.6	5.55	J-1	Q1	2.69	0.22	0.75	0.28	0.75	2.5	1.75	8.8
6 3V 600 Q	6	5.95	J-2	Q1	2.69	0.22	0.75	0.28	0.75	2.5	1.75	10.1
6 3V 650 Q	6.5	6.45	J-2	Q1	2.69	0.48	0.75	0.28	0.48	2.5	1.75	12.9
6 3V 690 Q	6.9	6.85	J-2	Q1	2.69	0.48	0.75	0.28	0.48	2.5	1.75	14.4
6 3V 800 Q	8	7.95	J-2	Q1	2.69	0.48	0.75	0.28	0.48	2.5	1.75	16.1
6 3V 1060 R	10.6	10.55	J-3	R1	3.75	0.36	0.88	0.28	0.36	2.88	2	22.4
6 3V 1400 R	14	13.95	J-3	R1	3.75	0.36	0.88	0.28	0.36	2.88	2	32.1
6 3V 1900 R	19	18.95	J-3	R1	3.75	0.36	0.88	0.28	0.36	2.88	2	42.8
6 3V 2500 R	25	24.95	J-3	R1	3.75	0.36	0.88	0.28	0.36	2.88	2	64.0
6 3V 3350 R	33.5	33.45	J-3	R1	3.75	0.36	0.88	0.28	0.36	2.88	2	99.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

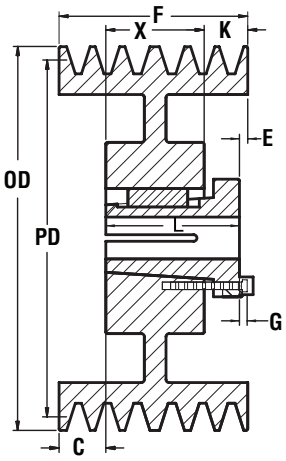
3V Hi-Cap Wedge Stock MST® Sheaves



Type S



Type J



Type K

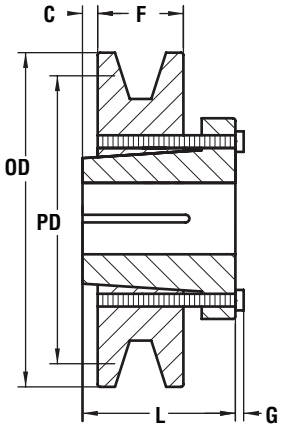
3V MST® Sheaves

8 Grooves F = 3.5313												
Part Number	OD	PD 3V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
8 3V 475 Q	4.75	4.7	S-1	Q2	2.63	0.78	0.75	0.28	–	3.5	2.75	7.3
8 3V 500 Q	5	4.95	S-1	Q2	2.63	0.78	0.75	0.28	–	3.5	2.75	8.6
8 3V 530 Q	5.3	5.25	S-1	Q2	2.63	0.78	0.75	0.28	–	3.5	2.75	10.3
8 3V 560 Q	5.6	5.55	K-1	Q2	2.63	–	0.75	0.28	0.78	3.5	2.75	12.3
8 3V 600 Q	6	5.95	K-1	Q2	2.63	–	0.75	0.28	0.78	3.5	2.75	15.1
8 3V 650 Q	6.5	6.45	J-2	Q2	2.63	0.39	0.75	0.28	0.39	3.5	2.75	18.3
8 3V 690 Q	6.9	6.85	J-2	Q2	2.63	0.39	0.75	0.28	0.39	3.5	2.75	21.4
8 3V 800 R	8	7.95	J-2	R1	3.75	0.77	0.88	0.28	0.77	2.88	2	23.2
8 3V 1060 R	10.6	10.55	J-3	R1	3.75	0.77	0.88	0.28	0.77	2.88	2	24.5
8 3V 1400 R	14	13.95	J-3	R1	3.75	0.77	0.88	0.28	0.77	2.88	2	39.0
8 3V 1900 R	19	18.95	J-3	R1	3.75	0.77	0.88	0.28	0.77	2.88	2	49.0
8 3V 2500 R	25	24.95	J-3	R1	3.75	0.77	0.88	0.28	0.77	2.88	2	76.0
8 3V 3350 S	33.5	33.45	J-3	S1	4.25	0.11	1.06	0.38	0.11	4.38	3.31	126.0

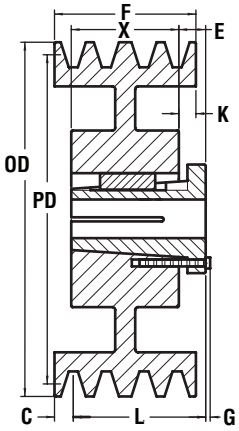
10 Grooves F = 4.3438												
Part Number	OD	PD 3V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
10 3V 475 Q	4.75	4.7	S-1	Q2	2.63	1.59	0.75	0.28	–	3.5	2.75	8.4
10 3V 500 Q	5	4.95	S-1	Q2	2.63	1.59	0.75	0.28	–	3.5	2.75	9.9
10 3V 530 Q	5.3	5.25	S-1	Q2	2.63	1.59	0.75	0.28	–	3.5	2.75	11.4
10 3V 560 Q	5.6	5.55	J-2	Q2	2.63	0.84	0.75	0.28	0.75	3.5	2.75	13.8
10 3V 600 Q	6	5.95	J-2	Q2	2.63	0.84	0.75	0.28	0.75	3.5	2.75	16.5
10 3V 650 Q	6.5	6.45	K-2	Q2	2.63	0.80	0.75	0.28	0.80	3.5	2.75	20.4
10 3V 690 Q	6.9	6.85	K-2	Q2	2.63	0.80	0.75	0.28	0.80	3.5	2.75	23.4
10 3V 800 R	8	7.95	K-2	R1	3.75	1.17	0.88	0.28	1.17	2.88	2	26.0
10 3V 1060 R	10.6	10.55	K-3	R1	3.75	1.17	0.88	0.28	1.17	2.88	2	28.4
10 3V 1400 R	14	13.95	K-3	R1	3.75	1.17	0.88	0.28	1.17	2.88	2	42.3
10 3V 1900 R	19	18.95	K-3	R1	3.75	1.17	0.88	0.28	1.17	2.88	2	54.0
10 3V 2500 S	25	24.95	J-3	S1	4.25	0.52	1.06	0.38	0.52	4.38	3.31	103.0
10 3V 3350 S	33.5	33.45	J-3	S1	4.25	0.52	1.06	0.38	0.52	4.38	3.31	138.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

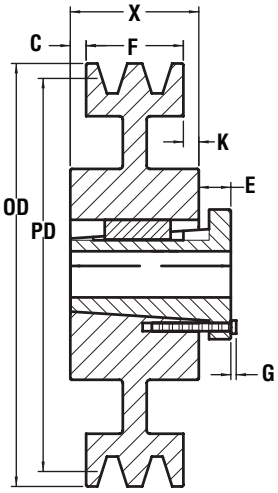
Hi-Cap Wedge Stock MST® Sheaves 5V



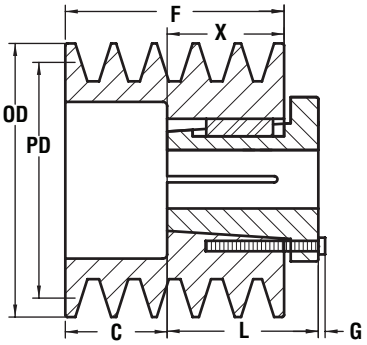
Type C



Type J



Type L



Type S

5V MST® Sheaves

2 Grooves F = 1.6875												
Part Number	OD	PD 5V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
2 5V 440 P	4.4	4.3	J-1	P1	1.75	0.19	0.63	0.25	–	1.94	1.31	3.8
2 5V 460 Q	4.6	4.5	C-1	Q1	2.69	–	0.75	0.28	–	2.5	1.75	6.6
2 5V 490 Q	4.9	4.8	C-1	Q1	2.69	–	0.75	0.28	–	2.5	1.75	6.2
2 5V 520 Q	5.2	5.1	C-1	Q1	2.69	–	0.75	0.28	–	2.5	1.75	5.6
2 5V 550 Q	5.5	5.4	C-1	Q1	2.69	–	0.75	0.28	–	2.5	1.75	6.6
2 5V 590 Q	5.9	5.8	C-1	Q1	2.69	–	0.75	0.28	–	2.5	1.75	7.6
2 5V 630 Q	6.3	6.2	C-1	Q1	2.69	–	0.75	0.28	–	2.5	1.75	9.4
2 5V 670 Q	6.7	6.6	C-1	Q1	2.69	–	0.75	0.28	–	2.5	1.75	11.0
2 5V 710 Q	7.1	7	C-1	Q1	2.69	–	0.75	0.28	–	2.5	1.75	11.6
2 5V 750 Q	7.5	7.4	C-1	Q1	2.69	–	0.75	0.28	–	2.5	1.75	14.1
2 5V 800 Q	8	7.9	C-1	Q1	2.69	–	0.75	0.28	–	2.5	1.75	11.6
2 5V 850 Q	8.5	8.4	L-2	Q1	2.69	–	0.75	0.28	–	2.5	1.75	12.9
2 5V 900 Q	9	8.9	L-2	Q1	2.69	0.03	0.75	0.28	0.03	2.5	1.75	16.3
2 5V 925 Q	9.25	9.15	L-2	Q1	2.69	0.03	0.75	0.28	0.03	2.5	1.75	15.1
2 5V 975 Q	9.75	9.65	L-2	Q1	2.69	0.03	0.75	0.28	0.03	2.5	1.75	16.1
2 5V 1030 Q	10.3	10.2	L-2	Q1	2.69	0.03	0.75	0.28	0.03	2.5	1.75	18.8
2 5V 1090 Q	10.9	10.8	L-2	Q1	2.69	0.03	0.75	0.28	0.03	2.5	1.75	19.3
2 5V 1180 Q	11.8	11.7	L-2	Q1	2.69	0.03	0.75	0.28	0.03	2.5	1.75	21.4
2 5V 1250 Q	12.5	12.4	L-2	Q1	2.69	0.03	0.75	0.28	0.03	2.5	1.75	23.8
2 5V 1320 Q	13.2	13.1	L-2	Q1	2.69	0.03	0.75	0.28	0.03	2.5	1.75	25.5
2 5V 1400 R	14	13.9	L-3	R1	3.75	0.16	0.88	0.28	0.16	2.88	2	27.6
2 5V 1500 R	15	14.9	L-3	R1	3.75	0.16	0.88	0.28	0.16	2.88	2	30.9
2 5V 1600 R	16	15.9	L-3	R1	3.75	0.16	0.88	0.28	0.16	2.88	2	33.3
2 5V 2120 R	21.2	21.1	L-3	R1	3.75	0.16	0.88	0.28	0.16	2.88	2	47.5
2 5V 2800 R	28	27.9	L-3	R1	3.75	0.16	0.88	0.28	0.16	2.88	2	71.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

5V Hi-Cap Wedge Stock MST® Sheaves

5V MST® Sheaves

3 Grooves F = 2.375												
Part Number	OD	PD 5V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
3 5V 440 P	4.4	4.3	S-1	P1	1.75	0.53	0.63	0.25	0.53	1.94	1.31	3.1
3 5V 460 Q	4.6	4.5	S-1	Q1	2.69	1.78	0.75	0.28	1.16	2.5	1.75	7.6
3 5V 490 Q	4.9	4.8	S-1	Q1	2.69	0.63	0.75	0.28	0	2.5	1.75	7.3
3 5V 520 Q	5.2	5.1	J-1	Q1	2.69	0.63	0.75	0.28	0	2.5	1.75	5.8
3 5V 550 Q	5.5	5.4	J-1	Q1	2.69	0.63	0.75	0.28	0	2.5	1.75	7.5
3 5V 590 Q	5.9	5.8	J-1	Q1	2.69	0.19	0.75	0.28	0.44	2.5	1.75	8.6
3 5V 630 Q	6.3	6.2	J-1	Q1	2.69	0.19	0.75	0.28	0.44	2.5	1.75	10.3
3 5V 670 Q	6.7	6.6	J-2	Q1	2.69	0.19	0.75	0.28	0.44	2.5	1.75	12.0
3 5V 710 Q	7.1	7	J-2	Q1	2.69	0.19	0.75	0.28	0.44	2.5	1.75	13.9
3 5V 750 Q	7.5	7.4	J-2	Q1	2.69	0.19	0.75	0.28	0.44	2.5	1.75	16.0
3 5V 800 R	8	7.9	J-1	R1	3.75	0.19	0.88	0.28	0.19	2.88	2	17.2
3 5V 850 R	8.5	8.4	J-1	R1	3.75	0.19	0.88	0.28	0.19	2.88	2	20.5
3 5V 900 R	9	8.9	J-1	R1	3.75	0.19	0.88	0.28	0.19	2.88	2	22.2
3 5V 925 R	9.25	9.15	L-3	R1	3.75	0.19	0.88	0.28	0.19	2.88	2	24.1
3 5V 975 R	9.75	9.65	L-3	R1	3.75	0.19	0.88	0.28	0.19	2.88	2	24.8
3 5V 1030 R	10.3	10.2	J-2	R1	3.75	0.19	0.88	0.28	0.19	2.88	2	26.4
3 5V 1090 R	10.9	10.8	J-3	R1	3.75	0.19	0.88	0.28	0.19	2.88	2	28.0
3 5V 1180 R	11.8	11.7	J-3	R1	3.75	0.19	0.88	0.28	0.19	2.88	2	31.9
3 5V 1250 R	12.5	12.4	J-3	R1	3.75	0.19	0.88	0.28	0.19	2.88	2	35.1
3 5V 1320 R	13.2	13.1	J-3	R1	3.75	0.19	0.88	0.28	0.19	2.88	2	29.0
3 5V 1400 R	14	13.9	J-3	R1	3.75	0.19	0.88	0.28	0.19	2.88	2	32.3
3 5V 1500 R	15	14.9	J-3	R1	3.75	0.19	0.88	0.28	0.19	2.88	2	35.0
3 5V 1600 R	16	15.9	J-3	R1	3.75	0.19	0.88	0.28	0.19	2.88	2	38.7
3 5V 2120 R	21.2	21.1	J-3	R1	3.75	0.19	0.88	0.28	0.19	2.88	2	52.0
3 5V 2800 R	28	27.9	J-3	R1	3.75	0.19	0.88	0.28	0.19	2.88	2	80.0
3 5V 3750 S	37.5	37.4	L-3	S1	4.25	0.19	1.06	0.38	1.13	4.38	3.31	147.0
3 5V 5000 U	50	49.9	L-3	U0	5.5	0.69	1.19	0.47	2.06	4.94	3.75	216.0

4 Grooves F = 3.0625												
Part Number	OD	PD 5V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
4 5V 440 P	4.4	4.3	S-1	P1	1.75	0.88	0.63	0.25	0.87	1.94	1.31	3.2
4 5V 465 Q	4.6	4.5	S-1	Q2	2.63	1.47	0.75	0.28	1.16	3.5	2.75	8.6
4 5V 490 Q	4.9	4.8	S-1	Q1	2.69	1.31	0.75	0.28	–	2.5	1.75	8.5
4 5V 520 Q	5.2	5.1	J-1	Q1	2.69	1.31	0.75	0.28	–	2.5	1.75	7.8
4 5V 550 Q	5.5	5.4	J-1	Q1	2.69	1.31	0.75	0.28	–	2.5	1.75	8.3
4 5V 590 Q	5.9	5.8	J-1	Q1	2.69	0.56	0.75	0.28	0.75	2.5	1.75	10.1
4 5V 630 Q	6.3	6.2	J-2	Q1	2.69	0.56	0.75	0.28	0.75	2.5	1.75	11.8
4 5V 670 Q	6.7	6.6	J-2	Q1	2.69	0.56	0.75	0.28	0.75	2.5	1.75	13.6
4 5V 710 Q	7.1	7	J-2	Q1	2.69	0.56	0.75	0.28	0.75	2.5	1.75	15.9
4 5V 750 Q	7.5	7.4	J-2	Q1	2.69	0.56	0.75	0.28	0.75	2.5	1.75	18.4
4 5V 800 R	8	7.9	J-1	R1	3.75	0.53	0.88	0.28	0.53	2.88	2	19.4
4 5V 850 R	8.5	8.4	J-1	R1	3.75	0.53	0.88	0.28	0.53	2.88	2	22.8
4 5V 900 R	9	8.9	J-2	R1	3.75	0.53	0.88	0.28	0.53	2.88	2	24.5
4 5V 925 R	9.25	9.15	J-2	R1	3.75	0.53	0.88	0.28	0.53	2.88	2	26.6
4 5V 975 R	9.75	9.65	J-2	R1	3.75	0.53	0.88	0.28	0.53	2.88	2	28.0
4 5V 1030 R	10.3	10.2	J-2	R1	3.75	0.53	0.88	0.28	0.53	2.88	2	30.8
4 5V 1090 R	10.9	10.8	J-2	R1	3.75	0.53	0.88	0.28	0.53	2.88	2	31.7
4 5V 1180 R	11.8	11.7	J-3	R1	3.75	0.53	0.88	0.28	0.53	2.88	2	35.3
4 5V 1250 R	12.5	12.4	J-3	R1	3.75	0.53	0.88	0.28	0.53	2.88	2	37.9
4 5V 1320 R	13.2	13.1	J-3	R1	3.75	0.53	0.88	0.28	0.53	2.88	2	33.3
4 5V 1400 R	14	13.9	J-3	R1	3.75	0.53	0.88	0.28	0.53	2.88	2	36.5
4 5V 1500 R	15	14.9	J-3	R1	3.75	0.53	0.88	0.28	0.53	2.88	2	40.9
4 5V 1600 R	16	15.9	J-3	R1	3.75	0.53	0.88	0.28	0.53	2.88	2	43.3
4 5V 2120 R	21.2	21.1	J-3	R1	3.75	0.53	0.88	0.28	0.53	2.88	2	59.0
4 5V 2800 S	28	27.9	L-3	S1	4.25	0.13	1.06	0.38	0.38	4.38	3.31	135.0
4 5V 3750 S	37.5	37.4	L-3	S1	4.25	0.13	1.06	0.38	0.38	4.38	3.31	157.0
4 5V 5000 Q	50	49.9	L-3	Q1	2.69	0.34	0.75	0.28	0.97	2.5	1.75	239.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

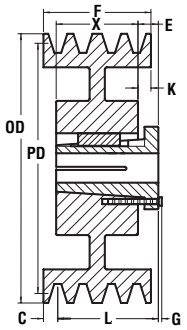
5V MST® Sheaves

5 Grooves F = 3.75												
Part Number	OD	PD 5V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
5 5V 465 Q	4.6	4.5	S-1	Q2	2.63	2.31	0.75	0.28	1.31	3.5	2.75	8.9
5 5V 490 Q	4.9	4.8	S-1	Q2	2.63	1	0.75	0.28	0	3.5	2.75	9.2
5 5V 520 Q	5.2	5.1	J-1	Q2	2.63	1	0.75	0.28	0	3.5	2.75	9.0
5 5V 550 Q	5.5	5.4	J-1	Q2	2.63	1	0.75	0.28	0	3.5	2.75	10.8
5 5V 590 Q	5.9	5.8	J-1	Q2	2.63	0.25	0.75	0.28	0.75	3.5	2.75	13.2
5 5V 630 Q	6.3	6.2	J-2	Q2	2.63	0.25	0.75	0.28	0.75	3.5	2.75	15.9
5 5V 670 Q	6.7	6.6	J-2	Q2	2.63	0.25	0.75	0.28	0.75	3.5	2.75	18.6
5 5V 710 Q	7.1	7	K-1	Q2	2.63	0.25	0.75	0.28	0.75	3.5	2.75	22.0
5 5V 750 Q	7.5	7.4	K-1	Q2	2.63	0.25	0.75	0.28	0.75	3.5	2.75	25.0
5 5V 800 R	8	7.9	K-1	R1	3.75	0.88	0.88	0.28	0.88	2.88	2	21.7
5 5V 850 R	8.5	8.4	J-1	R1	3.75	0.88	0.88	0.28	0.88	2.88	2	25.1
5 5V 900 R	9	8.9	J-1	R1	3.75	0.88	0.88	0.28	0.88	2.88	2	25.4
5 5V 925 R	9.25	9.15	J-3	R1	3.75	0.88	0.88	0.28	0.88	2.88	2	28.4
5 5V 975 R	9.75	9.65	J-3	R1	3.75	0.88	0.88	0.28	0.88	2.88	2	31.8
5 5V 1030 R	10.3	10.2	J-2	R1	3.75	0.88	0.88	0.28	0.88	2.88	2	32.5
5 5V 1090 R	10.9	10.8	K-2	R1	3.75	0.88	0.88	0.28	0.88	2.88	2	35.1
5 5V 1180 R	11.8	11.7	J-2	R1	3.75	0.88	0.88	0.28	0.88	2.88	2	38.8
5 5V 1250 R	12.5	12.4	J-2	R1	3.75	0.88	0.88	0.28	0.88	2.88	2	41.8
5 5V 1320 R	13.2	13.1	K-3	R1	3.75	0.88	0.88	0.28	0.88	2.88	2	37.1
5 5V 1400 R	14	13.9	K-3	R1	3.75	0.88	0.88	0.28	0.88	2.88	2	41.6
5 5V 1500 R	15	14.9	K-3	R1	3.75	0.88	0.88	0.28	0.88	2.88	2	45.0
5 5V 1600 R	16	15.9	K-3	R1	3.75	0.88	0.88	0.28	0.88	2.88	2	48.0
5 5V 2120 S	21.2	21.1	J-3	S1	4.25	0.22	1.06	0.38	0.22	4.38	3.31	90.0
5 5V 2500 S	25	24.9	J-3	S1	4.25	0.22	1.06	0.38	0.22	4.38	3.31	105.0
5 5V 2800 S	28	27.9	J-3	S1	4.25	0.22	1.06	0.38	0.22	4.38	3.31	120.0
5 5V 3750 U	37.5	37.4	K-2	U0	5.5	0	1.19	0.47	0	4.94	3.75	185.0
5 5V 5000 U	50	49.9	J-1	U0	5.5	0	1.19	0.47	0	4.94	3.75	244.0

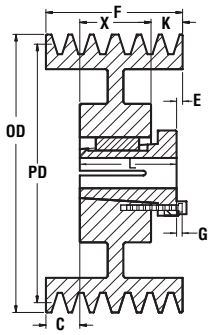
6 Grooves F = 4.4375												
Part Number	OD	PD 5V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
6 5V 710 Q	7.1	7	J-2	Q2	2.63	0.44	0.28	0.75	1.25	3.5	2.75	23.6
6 5V 750 Q	7.5	7.4	J-2	Q2	2.63	0.44	0.28	0.75	1.25	3.5	2.75	27.3
6 5V 800 R	8	7.9	K-2	R1	3.75	1.22	0.28	0.88	1.22	2.88	2	23.3
6 5V 850 R	8.5	8.4	K-2	R1	3.75	1.22	0.28	0.88	1.22	2.88	2	27.3
6 5V 900 R	9	8.9	K-2	R1	3.75	1.22	0.28	0.88	1.22	2.88	2	28.8
6 5V 925 R	9.25	9.15	J-1	R1	3.75	1.22	0.28	0.88	1.22	2.88	2	31.1
6 5V 975 R	9.75	9.65	J-3	R1	3.75	1.22	0.28	0.88	1.22	2.88	2	34.5
6 5V 1030 R	10.3	10.2	K-2	R1	3.75	1.22	0.28	0.88	1.22	2.88	2	36.8
6 5V 1090 R	10.9	10.8	J-1	R1	3.75	1.22	0.28	0.88	1.22	2.88	2	39.6
6 5V 1180 R	11.8	11.7	J-1	R1	3.75	1.22	0.28	0.88	1.22	2.88	2	42.5
6 5V 1250 S	12.5	12.4	J-3	S1	4.25	0.56	0.38	1.06	0.56	4.38	3.31	65.0
6 5V 1320 S	13.2	13.1	J-3	S1	4.25	0.56	0.38	1.06	0.56	4.38	3.31	71.0
6 5V 1400 S	14	13.9	J-2	S1	4.25	0.56	0.38	1.06	0.56	4.38	3.31	70.0
6 5V 1500 S	15	14.9	J-3	S1	4.25	0.56	0.38	1.06	0.56	4.38	3.31	69.0
6 5V 1600 S	16	15.9	J-3	S1	4.25	0.56	0.38	1.06	0.56	4.38	3.31	79.0
6 5V 2120 S	21.2	21.1	J-3	S1	4.25	0.56	0.38	1.06	0.56	4.38	3.31	97.0
6 5V 2500 S	25	24.9	J-3	S1	4.25	0.56	0.38	1.06	0.56	4.38	3.31	113.0
6 5V 2800 S	28	27.9	J-3	S1	4.25	0.56	0.38	1.06	0.56	4.38	3.31	128.0
6 5V 3750 U	37.5	37.4	K-2	U0	5.5	0.34	0.47	1.19	0.34	4.94	3.75	206.0
6 5V 5000 U	50	49.9	K-2	U0	5.5	0.34	0.47	1.19	0.34	4.94	3.75	271.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

5V Hi-Cap Wedge Stock MST® Sheaves



Type J



Type K

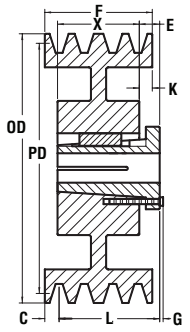
5V MST® Sheaves

8 Grooves F = 5.8125												
Part Number	OD	PD 5V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
8 5V 710 Q	7.1	7	K-2	Q2	2.63	1.31	0.75	0.28	1.75	3.5	2.75	28.0
8 5V 750 Q	7.5	7.4	K-2	Q2	2.63	1.31	0.75	0.28	1.75	3.5	2.75	32.0
8 5V 800 R	8	7.9	K-2	R2	3.63	0.91	0.88	0.28	0.91	4.88	4	45.3
8 5V 850 R	8.5	8.4	K-2	R2	3.63	0.91	0.88	0.28	0.91	4.88	4	45.5
8 5V 900 R	9	8.9	K-2	R2	3.63	0.91	0.88	0.28	0.91	4.88	4	50.0
8 5V 925 S	9.25	9.15	K-2	S1	4.25	1.25	1.06	0.38	1.25	4.38	3.31	47.3
8 5V 975 S	9.75	9.65	K-2	S1	4.25	1.25	1.06	0.38	1.25	4.38	3.31	50.0
8 5V 1030 S	10.3	10.2	K-2	S1	4.25	1.25	1.06	0.38	1.25	4.38	3.31	63.0
8 5V 1090 S	10.9	10.8	K-2	S1	4.25	1.25	1.06	0.38	1.25	4.38	3.31	71.0
8 5V 1180 S	11.8	11.7	K-2	S1	4.25	1.25	1.06	0.38	1.25	4.38	3.31	85.0
8 5V 1250 S	12.5	12.4	K-3	S1	4.25	1.25	1.06	0.38	1.25	4.38	3.31	76.0
8 5V 1320 S	13.2	13.1	K-3	S1	4.25	1.25	1.06	0.38	1.25	4.38	3.31	79.0
8 5V 1400 S	14	13.9	K-3	S1	4.25	1.25	1.06	0.38	1.25	4.38	3.31	77.0
8 5V 1500 S	15	14.9	K-3	S1	4.25	1.25	1.06	0.38	1.25	4.38	3.31	83.0
8 5V 1600 S	16	15.9	K-3	S1	4.25	1.25	1.06	0.38	1.25	4.38	3.31	90.0
8 5V 2120 U	21.2	21.1	J-3	U1	5.5	0.09	1.5	0.47	0.09	7.13	5.63	175.0
8 5V 2500 U	25	24.9	J-3	U1	5.5	0.09	1.5	0.47	0.09	7.13	5.63	190.0
8 5V 2800 U	28	27.9	J-3	U1	5.5	0.09	1.5	0.47	0.09	7.13	5.63	222.0
8 5V 3750 U	37.5	37.4	J-3	U1	5.5	0.09	1.5	0.47	0.09	7.13	5.63	264.0
8 5V 5000 U	50	49.9	J-3	U1	5.5	0.09	1.5	0.47	0.09	7.13	5.63	393.0

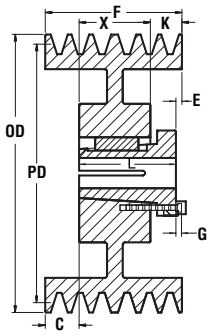
10 Grooves F = 7.3125												
Part Number	OD	PD 5V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
10 5V 800 R	8	7.9	K-2	R2	3.63	1.59	0.88	0.28	1.59	4.88	4	43.8
10 5V 850 R	8.5	8.4	K-2	R2	3.63	1.59	0.88	0.28	1.59	4.88	4	53.0
10 5V 900 R	9	8.9	K-2	R2	3.63	1.59	0.88	0.28	1.59	4.88	4	59.0
10 5V 925 S	9.25	9.15	K-2	S1	4.25	1.94	1.06	0.38	1.94	4.38	3.31	53.0
10 5V 975 S	9.75	9.65	K-2	S1	4.25	1.94	1.06	0.38	1.94	4.38	3.31	60.0
10 5V 1030 S	10.3	10.2	K-2	S1	4.25	1.94	1.06	0.38	1.94	4.38	3.31	69.0
10 5V 1090 S	10.9	10.8	K-2	S1	4.25	1.94	1.06	0.38	1.94	4.38	3.31	78.0
10 5V 1180 S	11.8	11.7	J-2	S1	4.25	1.94	1.06	0.38	1.94	4.38	3.31	93.0
10 5V 1250 U	12.5	12.4	J-2	U1	5.5	0.78	1.5	0.47	0.78	7.13	5.63	132.0
10 5V 1320 U	13.2	13.1	J-2	U1	5.5	0.78	1.5	0.47	0.78	7.13	5.63	151.0
10 5V 1400 U	14	13.9	J-2	U1	5.5	0.78	1.5	0.47	0.78	7.13	5.63	177.0
10 5V 1500 U	15	14.9	J-2	U1	5.5	0.78	1.5	0.47	0.78	7.13	5.63	164.0
10 5V 1600 U	16	15.9	J-3	U1	5.5	0.78	1.5	0.47	0.78	7.13	5.63	138.0
10 5V 2120 U	21.2	21.1	J-3	U1	5.5	0.78	1.5	0.47	0.78	7.13	5.63	188.0
10 5V 2500 U	25	24.9	J-3	U1	5.5	0.78	1.5	0.47	0.78	7.13	5.63	213.0
10 5V 2800 U	28	27.9	J-3	U1	5.5	0.78	1.5	0.47	0.78	7.13	5.63	238.0
10 5V 3750 U	37.5	37.4	J-3	U1	5.5	0.78	1.5	0.47	0.78	7.13	5.63	293.0
10 5V 5000 U	50	49.9	J-3	U1	5.5	0.78	1.5	0.47	0.78	7.13	5.63	428.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

Hi-Cap Wedge Stock MST® Sheaves 8V



Type J



Type K

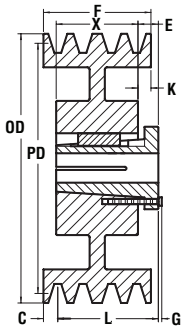
8V MST® Sheaves

4 Grooves F = 4.875												
Part Number	OD	PD 8V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
4 8V 1250 S	12.5	12.3	K-2	S1	4.25	–	1.06	0.38	1.56	4.38	3.31	94.0
4 8V 1320 S	13.2	13	K-2	S1	4.25	–	1.06	0.38	1.56	4.38	3.31	99.0
4 8V 1400 S	14	13.8	K-2	S1	4.25	–	1.06	0.38	1.56	4.38	3.31	114.0
4 8V 1500 S	15	14.8	K-2	S1	4.25	–	1.06	0.38	1.56	4.38	3.31	107.0
4 8V 1600 S	16	15.8	K-2	S1	4.25	–	1.06	0.38	1.56	4.38	3.31	113.0
4 8V 1700 S	17	16.8	K-2	S1	4.25	–	1.06	0.38	1.56	4.38	3.31	115.0
4 8V 1800 S	18	17.8	K-2	S1	4.25	–	1.06	0.38	1.56	4.38	3.31	123.0
4 8V 1900 S	19	18.8	K-2	S1	4.25	–	1.06	0.38	1.56	4.38	3.31	132.0
4 8V 2000 S	20	19.8	K-2	S1	4.25	–	1.06	0.38	1.56	4.38	3.31	147.0
4 8V 2120 S	21.2	21	K-2	S1	4.25	–	1.06	0.38	1.56	4.38	3.31	159.0
4 8V 2240 U	22.4	22.2	J-3	U0	5.5	0.56	1.19	0.47	0.56	4.94	3.75	159.0
4 8V 3000 U	30	29.8	J-3	U0	5.5	0.56	1.19	0.47	0.56	4.94	3.75	218.0
4 8V 4000 U	40	39.8	J-3	U0	5.5	0.56	1.19	0.47	0.56	4.94	3.75	296.0
4 8V 4800 U	48	47.8	J-3	U0	5.5	0.56	1.19	0.47	0.56	4.94	3.75	405.0
4 8V 5300 U	53	52.8	J-3	U0	5.5	0.56	1.19	0.47	0.56	4.94	3.75	450.0
4 8V 5800 U	58	57.8	J-3	U0	5.5	0.56	1.19	0.47	0.56	4.94	3.75	495.0
4 8V 6400 U	64	63.8	J-3	U0	5.5	0.56	1.19	0.47	0.56	4.94	3.75	520.0

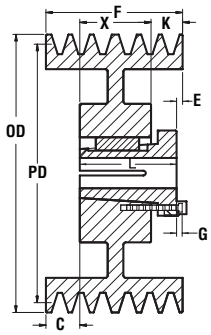
5 Grooves F = 6												
Part Number	OD	PD 8V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
5 8V 1250 S	12.5	12.3	K-2	S1	4.25	0.75	1.06	0.38	1.94	4.38	3.31	100.0
5 8V 1320 S	13.2	13	K-2	S1	4.25	0.75	1.06	0.38	1.94	4.38	3.31	109.0
5 8V 1400 S	14	13.8	K-2	S1	4.25	0.75	1.06	0.38	1.94	4.38	3.31	127.0
5 8V 1500 S	15	14.8	K-2	S1	4.25	0.75	1.06	0.38	1.94	4.38	3.31	120.0
5 8V 1600 S	16	15.8	K-2	S1	4.25	0.75	1.06	0.38	1.94	4.38	3.31	121.0
5 8V 1700 S	17	16.8	K-2	S1	4.25	0.75	1.06	0.38	1.94	4.38	3.31	133.0
5 8V 1800 S	18	17.8	K-2	S1	4.25	0.75	1.06	0.38	1.94	4.38	3.31	140.0
5 8V 1900 S	19	18.8	K-2	S1	4.25	0.75	1.06	0.38	1.94	4.38	3.31	158.0
5 8V 2000 S	20	19.8	K-2	S1	4.25	0.75	1.06	0.38	1.94	4.38	3.31	166.0
5 8V 2120 S	21.2	21	K-2	S1	4.25	0.75	1.06	0.38	1.94	4.38	3.31	174.0
5 8V 2240 U	22.4	22.2	J-3	U0	5.5	1.13	1.19	0.47	1.13	4.94	3.75	157.0
5 8V 3000 U	30	29.8	J-3	U0	5.5	1.13	1.19	0.47	1.13	4.94	3.75	243.0
5 8V 4000 U	40	39.8	J-3	U0	5.5	1.13	1.19	0.47	1.13	4.94	3.75	325.0
5 8V 4800 U	48	47.8	J-3	U0	5.5	1.13	1.19	0.47	1.13	4.94	3.75	440.0
5 8V 5300 U	53	52.8	J-3	U0	5.5	1.13	1.19	0.47	1.13	4.94	3.75	480.0
5 8V 5800 U	58	57.8	J-3	U0	5.5	1.13	1.19	0.47	1.13	4.94	3.75	525.0
5 8V 6400 U	64	63.8	J-3	U0	5.5	1.13	1.19	0.47	1.13	4.94	3.75	555.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

8V Hi-Cap Wedge Stock MST® Sheaves



Type J



Type K

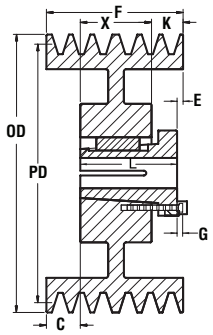
8V MST® Sheaves

6 Grooves F = 7.125												
Part Number	OD	PD 8V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
6 8V 1250 S	12.5	12.3	K-2	S1	4.25	0.75	1.06	0.38	3.06	4.38	3.31	109.0
6 8V 1320 S	13.2	13	K-2	S1	4.25	0.75	1.06	0.38	3.06	4.38	3.31	119.0
6 8V 1400 S	14	13.8	K-2	S1	4.25	0.75	1.06	0.38	3.06	4.38	3.31	135.0
6 8V 1500 S	15	14.8	K-2	S1	4.25	0.75	1.06	0.38	3.06	4.38	3.31	129.0
6 8V 1600 S	16	15.8	K-2	S1	4.25	0.75	1.06	0.38	3.06	4.38	3.31	133.0
6 8V 1700 S	17	16.8	K-2	S1	4.25	0.75	1.06	0.38	3.06	4.38	3.31	147.0
6 8V 1800 S	18	17.8	K-2	S1	4.25	0.75	1.06	0.38	3.06	4.38	3.31	154.0
6 8V 1900 S	19	18.8	K-2	S1	4.25	0.75	1.06	0.38	3.06	4.38	3.31	167.0
6 8V 2000 S	20	19.8	K-2	S1	4.25	0.75	1.06	0.38	3.06	4.38	3.31	178.0
6 8V 2120 S	21.2	21	K-2	S1	4.25	0.75	1.06	0.38	3.06	4.38	3.31	186.0
6 8V 2240 U	22.4	22.2	K-3	U0	5.5	1.69	1.19	0.47	1.69	4.94	3.75	195.0
6 8V 3000 U	30	29.8	K-3	U0	5.5	1.69	1.19	0.47	1.69	4.94	3.75	263.0
6 8V 4000 U	40	39.8	K-3	U0	5.5	1.69	1.19	0.47	1.69	4.94	3.75	363.0
6 8V 4800 U	48	47.8	K-3	U0	5.5	1.69	1.19	0.47	1.69	4.94	3.75	478.0
6 8V 5300 U	53	52.8	K-3	U0	5.5	1.69	1.19	0.47	1.69	4.94	3.75	510.0
6 8V 5800 U	58	57.8	K-3	U0	5.5	1.69	1.19	0.47	1.69	4.94	3.75	555.0
6 8V 6400 U	64	63.8	K-3	U0	5.5	1.69	1.19	0.47	1.69	4.94	3.75	585.0

8 Grooves F = 9.375												
Part Number	OD	PD 8V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
8 8V 1250 S	12.5	12.3	K-3	S2	4.19	0.75	1.06	0.38	2.94	6.75	5.69	140.0
8 8V 1320 S	13.2	13	K-2	S2	4.19	0.75	1.06	0.38	2.94	6.75	5.69	176.0
8 8V 1400 S	14	13.8	K-2	S2	4.19	0.75	1.06	0.38	2.94	6.75	5.69	205.0
8 8V 1500 S	15	14.8	K-2	S2	4.19	0.75	1.06	0.38	2.94	6.75	5.69	186.0
8 8V 1600 S	16	15.8	K-2	S2	4.19	0.75	1.06	0.38	2.94	6.75	5.69	210.0
8 8V 1700 U	17	16.8	K-3	U1	5.5	1	1.5	0.47	2.75	7.13	5.63	248.0
8 8V 1800 U	18	17.8	K-2	U1	5.5	1	1.5	0.47	2.75	7.13	5.63	249.0
8 8V 1900 U	19	18.8	K-2	U1	5.5	1	1.5	0.47	2.75	7.13	5.63	235.0
8 8V 2000 U	20	19.8	K-2	U1	5.5	1	1.5	0.47	2.75	7.13	5.63	251.0
8 8V 2120 U	21.2	21	K-2	U1	5.5	1	1.5	0.47	2.75	7.13	5.63	268.0
8 8V 2240 U	22.4	22.2	K-2	U1	5.5	1.88	1.5	0.47	1.88	7.13	5.63	253.0
8 8V 3000 U	30	29.8	K-3	U1	5.5	1.88	1.5	0.47	1.88	7.13	5.63	358.0
8 8V 4000 W	40	39.8	K-3	W1	7.44	1.5	1.88	0.56	1.5	1.44	6.38	567.0
8 8V 4800 W	48	47.8	J-3	W1	7.44	1.5	1.88	0.56	1.5	1.44	6.38	715.0
8 8V 5300 W	53	52.8	J-3	W1	7.44	1.5	1.88	0.56	1.5	1.44	6.38	762.0
8 8V 5800 W	58	57.8	J-3	W1	7.44	1.5	1.88	0.56	1.5	1.44	6.38	914.0
8 8V 6400 W	64	63.8	J-3	W1	7.44	1.5	1.88	0.56	1.5	1.44	6.38	970.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

Hi-Cap Wedge Stock MST® Sheaves 8V



Type K

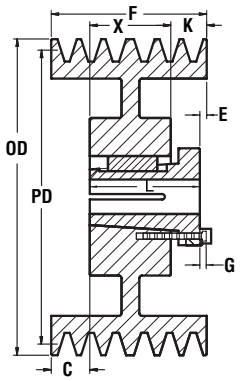
8V MST® Sheaves

10 Grooves F = 11.625												
Part Number	OD	PD 8V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
10 8V 1250 U	12.5	12.3	K-2	U1	5.5	1	1.5	0.47	5	7.13	5.63	156.0
10 8V 1320 U	13.2	13	K-2	U1	5.5	1	1.5	0.47	5	7.13	5.63	182.0
10 8V 1400 U	14	13.8	K-2	U1	5.5	1	1.5	0.47	5	7.13	5.63	207.0
10 8V 1500 U	15	14.8	K-2	U1	5.5	1	1.5	0.47	5	7.13	5.63	240.0
10 8V 1600 U	16	15.8	K-2	U1	5.5	1	1.5	0.47	5	7.13	5.63	283.0
10 8V 1700 U	17	16.8	K-2	U1	5.5	1	1.5	0.47	5	7.13	5.63	274.0
10 8V 1800 U	18	17.8	K-2	U1	5.5	1	1.5	0.47	5	7.13	5.63	282.0
10 8V 1900 U	19	18.8	K-2	U1	5.5	1	1.5	0.47	5	7.13	5.63	264.0
10 8V 2000 U	20	19.8	K-2	U1	5.5	1	1.5	0.47	5	7.13	5.63	279.0
10 8V 2120 U	21.2	21	K-2	U1	5.5	1	1.5	0.47	5	7.13	5.63	296.0
10 8V 2240 U	22.4	22.2	K-3	U1	5.5	3	1.5	0.47	3	7.13	5.63	309.0
10 8V 3000 U	30	29.8	K-3	U1	5.5	3	1.5	0.47	3	7.13	5.63	410.0
10 8V 4000 W	40	39.8	K-3	W1	7.44	2.63	1.88	0.56	2.63	1.44	6.38	625.0
10 8V 4800 W	48	47.8	K-3	W1	7.44	2.63	1.88	0.56	2.63	1.44	6.38	811.0
10 8V 5300 W	53	52.8	K-3	W1	7.44	2.63	1.88	0.56	2.63	1.44	6.38	955.0
10 8V 5800 W	58	57.8	K-3	W1	7.44	2.63	1.88	0.56	2.63	1.44	6.38	1060.0
10 8V 6400 W	64	63.8	K-3	W1	7.44	2.63	1.88	0.56	2.63	1.44	6.38	1170.0

12 Grooves F = 13.875												
Part Number	OD	PD 8V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
12 8V 1250 U	12.5	12.3	K-2	U2	5	1	1.5	0.47	4.25	1.06	8.63	200.0
12 8V 1320 U	13.2	13	K-2	U2	5	1	1.5	0.47	4.25	1.06	8.63	243.0
12 8V 1400 U	14	13.8	K-2	U2	5	1	1.5	0.47	4.25	1.06	8.63	282.0
12 8V 1500 U	15	14.8	K-2	U2	5	1	1.5	0.47	4.25	1.06	8.63	331.0
12 8V 1600 U	16	15.8	K-2	U2	5	1	1.5	0.47	4.25	1.06	8.63	387.0
12 8V 1700 U	17	16.8	K-2	U2	5	1	1.5	0.47	4.25	1.06	8.63	395.0
12 8V 1800 U	18	17.8	K-2	U2	5	1	1.5	0.47	4.25	1.06	8.63	408.0
12 8V 1900 U	19	18.8	K-2	U2	5	1	1.5	0.47	4.25	1.06	8.63	435.0
12 8V 2000 U	20	19.8	K-2	U2	5	1	1.5	0.47	4.25	1.06	8.63	428.0
12 8V 2120 U	21.2	21	K-2	U2	5	1	1.5	0.47	4.25	1.06	8.63	450.0
12 8V 2240 U	22.4	22.2	K-3	U2	5	2.63	1.5	0.47	2.63	1.06	8.63	421.0
12 8V 3000 U	30	29.8	K-3	U2	5	2.63	1.5	0.47	2.63	1.06	8.63	509.0
12 8V 4000 W	40	39.8	K-3	W2	7.44	2.25	1.88	0.56	11.63	11.25	0	764.0
12 8V 4800 W	48	47.8	K-3	W2	7.44	2.25	1.88	0.56	11.63	11.25	0	1000.0
12 8V 5800 W	58	57.8	K-3	W2	7.44	2.25	1.88	0.56	11.63	11.25	0	1330.0
12 8V 6400 W	64	63.8	K-3	W2	7.44	2.25	1.88	0.56	11.63	11.25	0	1460.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

8V Hi-Cap Wedge Stock MST® Sheaves



Type K

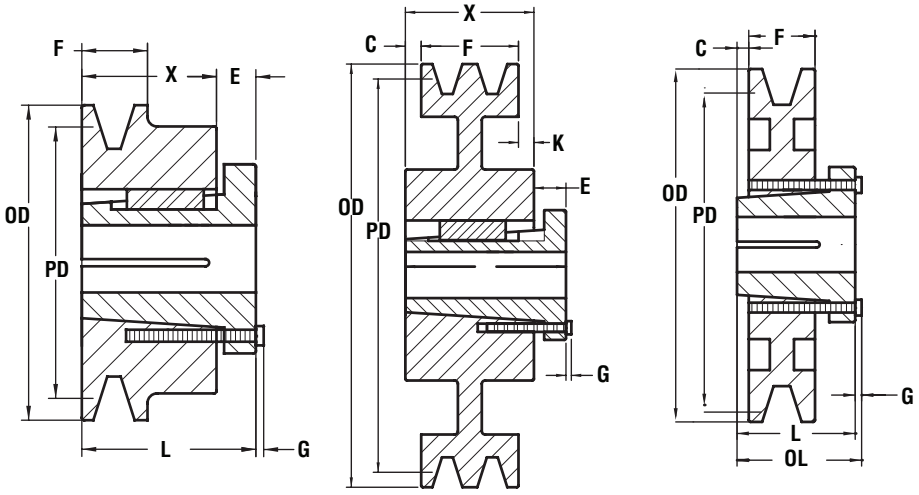
8V MST® Sheaves

14 Grooves F = 16.125												
Part Number	OD	PD 8V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
14 8V 1250 U	12.5	12.3	K-2	U2	5	1	1.5	0.47	6.5	1.06	8.63	220.0
14 8V 1320 U	13.2	13	K-2	U2	5	1	1.5	0.47	6.5	1.06	8.63	261.0
14 8V 1400 U	14	13.8	K-2	U2	5	1	1.5	0.47	6.5	1.06	8.63	300.0
14 8V 1500 U	15	14.8	K-2	U2	5	1	1.5	0.47	6.5	1.06	8.63	370.0
14 8V 1600 U	16	15.8	K-2	U2	5	1	1.5	0.47	6.5	1.06	8.63	415.0
14 8V 1700 U	17	16.8	K-2	U2	5	1	1.5	0.47	6.5	1.06	8.63	440.0
14 8V 1800 U	18	17.8	K-2	U2	5	1	1.5	0.47	6.5	1.06	8.63	450.0
14 8V 1900 U	19	18.8	K-2	U2	5	1	1.5	0.47	6.5	1.06	8.63	470.0
14 8V 2000 U	20	19.8	K-2	U2	5	1	1.5	0.47	6.5	1.06	8.63	490.0
14 8V 2120 U	21.2	21	K-2	U2	5	1	1.5	0.47	6.5	1.06	8.63	510.0
14 8V 2240 U	22.4	22.2	K-3	U2	5	3.75	1.5	0.47	3.75	1.06	8.63	459.0
14 8V 3000 U	30	29.8	K-3	U2	5	3.75	1.5	0.47	3.75	1.06	8.63	710.0
14 8V 4000 W	40	39.8	K-3	W2	7.44	3.38	1.88	0.56	12.75	11.25	0	840.0
14 8V 4800 W	48	47.8	K-3	W2	7.44	3.38	1.88	0.56	12.75	11.25	0	1140.0
14 8V 5300 W	53	52.8	K-3	W2	7.44	3.38	1.88	0.56	12.75	11.25	0	1234.0
14 8V 5800 W	58	57.8	K-3	W2	7.44	3.38	1.88	0.56	12.75	11.25	0	1450.0
14 8V 6400 W	64	63.8	K-3	W2	7.44	3.38	1.88	0.56	12.75	11.25	0	1550.0

16 Grooves F = 18.375												
Part Number	OD	PD 8V Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
16 8V 1250 U	12.5	12.3	K-2	U2	5	1	1.5	0.47	8.75	1.06	8.63	270.0
16 8V 1320 U	13.2	13	K-2	U2	5	1	1.5	0.47	8.75	1.06	8.63	280.0
16 8V 1400 U	14	13.8	K-2	U2	5	1	1.5	0.47	8.75	1.06	8.63	323.0
16 8V 1500 U	15	14.8	K-2	U2	5	1	1.5	0.47	8.75	1.06	8.63	430.0
16 8V 1600 U	16	15.8	K-2	U2	5	1	1.5	0.47	8.75	1.06	8.63	445.0
16 8V 1700 U	17	16.8	K-2	U2	5	1	1.5	0.47	8.75	1.06	8.63	447.0
16 8V 1800 U	18	17.8	K-2	U2	5	1	1.5	0.47	8.75	1.06	8.63	480.0
16 8V 1900 U	19	18.8	K-2	U2	5	1	1.5	0.47	8.75	1.06	8.63	494.0
16 8V 2000 U	20	19.8	K-2	U2	5	1	1.5	0.47	8.75	1.06	8.63	520.0
16 8V 2120 U	21.2	21	K-2	U2	5	1	1.5	0.47	8.75	1.06	8.63	538.0
16 8V 2240 U	22.4	22.2	K-3	U2	5	4.88	1.5	0.47	4.88	1.06	8.63	522.0
16 8V 3000 W	30	29.8	K-3	W2	7.44	4.5	1.88	0.56	13.88	11.25	0	990.0
16 8V 4000 W	40	39.8	K-3	W2	7.44	4.5	1.88	0.56	13.88	11.25	0	871.0
16 8V 4800 W	48	47.8	K-3	W2	7.44	4.5	1.88	0.56	13.88	11.25	0	1360.0
16 8V 5300 W	53	52.8	K-3	W2	7.44	4.5	1.88	0.56	13.88	11.25	0	1490.0
16 8V 5800 W	58	57.8	K-3	W2	7.44	4.5	1.88	0.56	13.88	11.25	0	1620.0
16 8V 6400 W	64	63.8	K-3	W2	7.44	4.5	1.88	0.56	13.88	11.25	0	1790.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

Combination Groove Conventional MST® Bushed Stock Sheaves A-B



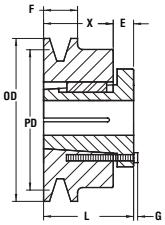
Type G Type L Type M

A-B MST® Sheaves

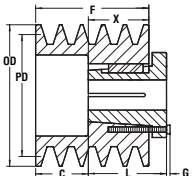
1 Groove													
F = 1													
Part Number	OD	PD		Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
		A Belt	B Belt										
1 B 34 P	3.75	3	3.4	G-1	P1	1.75	0.13	0.63	0.25	0.44	1.94	1.31	2.0
1 B 36 P	3.95	3.2	3.6	G-1	P1	1.75	0.13	0.63	0.25	0.44	1.94	1.31	2.3
1 B 38 P	4.15	3.4	3.8	G-1	P1	1.75	0.13	0.63	0.25	0.44	1.94	1.31	2.6
1 B 40 P	4.35	3.6	4	M-1	P1	1.75	0.31	–	0.25	0.63	1.94	1.31	2.1
1 B 42 P	4.55	3.8	4.2	M-1	P1	1.75	0.31	–	0.25	0.63	1.94	1.31	2.4
1 B 44 P	4.75	4	4.4	M-1	P1	1.75	0.31	–	0.25	0.63	1.94	1.31	2.8
1 B 46 P	4.95	4.2	4.6	M-1	P1	1.75	0.31	–	0.25	0.63	1.94	1.31	3.1
1 B 48 P	5.15	4.4	4.8	M-1	P1	1.75	0.31	–	0.25	0.66	1.94	1.31	3.5
1 B 50 P	5.35	4.6	5	M-1	P1	1.75	0.31	–	0.25	0.63	1.94	1.31	3.9
1 B 52 P	5.55	4.8	5.2	M-1	P1	1.75	0.31	–	0.25	0.63	1.94	1.31	4.1
1 B 54 P	5.75	5	5.4	M-1	P1	1.75	0.31	–	0.25	0.63	1.94	1.31	4.6
1 B 56 P	5.95	5.2	5.6	M-1	P1	1.75	0.31	–	0.25	0.63	1.94	1.31	5.1
1 B 58 P	6.15	5.4	5.8	M-1	P1	1.75	0.31	–	0.25	0.65	1.94	1.31	5.6
1 B 60 P	6.35	5.6	6	M-1	P1	1.75	0.31	–	0.25	0.63	1.94	1.31	6.0
1 B 62 P	6.55	5.8	6.2	M-2	P1	1.75	0.31	–	0.25	0.63	1.94	1.31	5.5
1 B 64 P	6.75	6	6.4	M-1	P1	1.75	0.31	–	0.25	0.63	1.94	1.31	5.8
1 B 66 P	6.95	6.2	6.6	M-1	P1	1.75	0.31	–	0.25	0.63	1.94	1.31	5.9
1 B 68 P	7.15	6.4	6.8	M-1	P1	1.75	0.31	–	0.25	0.63	1.94	1.31	6.1
1 B 70 P	7.35	6.6	7	L-1	P1	1.75	0.16	0.63	0.25	0.47	1.94	1.31	6.4
1 B 74 P	7.75	7	7.4	L-2	P1	1.75	0.16	0.63	0.25	0.47	1.94	1.31	7.3
1 B 80 P	8.35	7.6	8	L-2	P1	1.75	0.16	0.63	0.25	0.47	1.94	1.31	7.8
1 B 86 P	8.95	8.2	8.6	L-2	P1	1.75	0.16	0.63	0.25	0.47	1.94	1.31	8.6
1 B 90 P	9.35	8.6	9	L-2	P1	1.75	0.16	0.63	0.25	0.47	1.94	1.31	8.9
1 B 94 P	9.75	9	9.4	L-3	P1	1.75	0.16	0.63	0.25	0.47	1.94	1.31	9.1
1 B 110 P	11.35	10.6	11	L-2	P1	1.75	0.16	0.63	0.25	0.47	1.94	1.31	11.1
1 B 124 Q	12.75	12	12.4	L-3	Q1	2.69	0.38	0.75	0.28	1.13	2.5	1.75	17.8
1 B 136 Q	13.95	13.2	13.6	L-3	Q1	2.69	0.38	0.75	0.28	1.13	2.5	1.75	18.2
1 B 154 Q	15.75	15	15.4	L-3	Q1	2.69	0.38	0.75	0.28	1.13	2.5	1.75	20.3
1 B 160 Q	16.35	15.6	16	L-3	Q1	2.69	0.38	0.75	0.28	1.13	2.5	1.75	22.0
1 B 184 Q	18.75	18	18.4	L-3	Q1	2.69	0.38	0.75	0.28	1.13	2.5	1.75	27.5
1 B 200 Q	20.35	19.5	20	L-3	Q1	2.69	0.38	0.75	0.28	1.13	2.5	1.75	27.2
1 B 250 Q	25.35	24.5	25	L-3	Q1	2.69	0.38	0.75	0.28	1.13	2.5	1.75	42.4
1 B 300 Q	30.35	29.5	30	L-3	Q1	2.69	0.38	0.75	0.28	1.13	2.5	1.75	56.0
1 B 380 Q	38.35	37.5	38	L-3	Q1	2.69	0.38	0.75	0.28	1.13	2.5	1.75	78.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

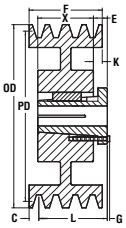
A-B Combination Groove Conventional MST® Bushed Stock Sheaves



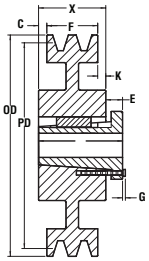
Type G



Type S



Type J



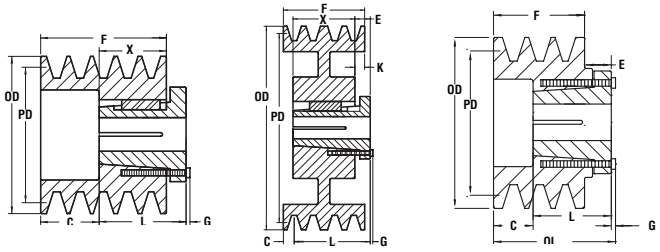
Type L

A-B MST® Sheaves

2 Grooves F = 1.75													
Part Number	OD	PD		Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
		A Belt	B Belt										
2 B 34 P	3.75	3	3.4	G-1	P1	1.75	0.88	0.63	0.25	1.31	1.31	2.19	2.9
2 B 36 P	3.95	3.2	3.6	G-1	P1	1.75	0.88	0.63	0.25	1.31	1.94	2.19	3.8
2 B 38 P	4.15	3.4	3.8	S-1	P1	1.75	0.44	–	0.25	–	1.31	1.31	3.0
2 B 40 P	4.35	3.6	4	S-1	P1	1.75	0.44	–	0.25	–	1.31	1.31	3.8
2 B 42 P	4.55	3.8	4.2	S-1	P1	1.75	0.44	–	0.25	–	1.94	1.31	3.9
2 B 44 P	4.75	4	4.4	J-1	P1	1.75	–	0.63	0.25	0.44	1.31	1.31	3.9
2 B 46 P	4.95	4.2	4.6	J-1	P1	1.75	–	0.63	0.25	0.44	1.31	1.31	4.5
2 B 48 P	5.15	4.4	4.8	J-1	P1	1.75	–	0.63	0.25	0.44	1.94	1.31	5.3
2 B 50 P	5.35	4.6	5	J-1	P1	1.75	–	0.63	0.25	0.44	1.31	1.31	5.6
2 B 52 P	5.55	4.8	5.2	J-1	P1	1.75	–	0.63	0.25	0.44	1.94	1.31	6.1
2 B 54 P	5.75	5	5.4	J-1	P1	1.75	–	0.63	0.25	0.44	1.31	1.31	6.5
2 B 54 Q	5.75	5	5.4	S-1	Q1	2.69	–	0.63	0.28	–	2.5	1.75	6.0
2 B 56 P	5.95	5.2	5.6	J-1	P1	1.75	–	0.63	0.25	0.44	1.31	1.31	7.4
2 B 56 Q	5.95	5.2	5.6	S-1	Q1	2.69	–	0.63	0.28	–	2.5	1.75	7.3
2 B 58 P	6.15	5.4	5.8	J-1	P1	1.75	–	0.63	0.25	0.44	1.31	1.31	8.0
2 B 58 Q	6.15	5.4	5.8	S-1	Q1	2.69	–	0.63	0.28	–	2.5	1.75	7.9
2 B 60 P	6.35	5.6	6	J-1	P1	1.75	–	0.63	0.25	0.44	1.31	1.31	8.9
2 B 60 Q	6.35	5.6	6	S-1	Q1	2.69	–	0.63	0.28	–	2.5	1.75	8.9
2 B 62 P	6.55	5.8	6.2	J-2	P1	1.75	–	0.63	0.25	0.44	1.31	1.31	7.6
2 B 62 Q	6.55	5.8	6.2	S-1	Q1	2.69	–	0.63	0.28	–	2.5	1.75	9.4
2 B 64 P	6.75	6	6.4	J-2	P1	1.75	–	0.63	0.25	0.44	1.31	1.31	7.8
2 B 64 Q	6.75	6	6.4	S-1	Q1	2.69	–	0.63	0.28	–	2.5	1.75	10.1
2 B 66 P	6.95	6.2	6.6	J-2	P1	1.75	–	0.63	0.25	0.44	1.31	1.31	8.3
2 B 66 Q	6.95	6.2	6.6	S-1	Q1	2.69	–	0.63	0.28	–	2.5	1.75	11.1
2 B 68 P	7.15	6.4	6.8	J-2	P1	1.75	–	0.63	0.25	0.44	1.31	1.31	8.8
2 B 68 Q	7.15	6.4	6.8	S-1	Q1	2.69	–	0.63	0.28	–	2.5	1.75	12.3
2 B 70 Q	7.35	6.6	7	J-2	Q1	2.69	–	0.75	0.28	–	1.75	1.75	11.1
2 B 74 Q	7.75	7	7.4	J-2	Q1	2.69	–	0.75	0.28	–	2.5	1.75	11.5
2 B 80 Q	8.35	7.6	8	J-2	Q1	2.69	–	0.75	0.28	–	1.75	1.75	12.8
2 B 86 Q	8.95	8.2	8.6	J-2	Q1	2.69	–	0.75	0.28	–	2.5	1.75	16.0
2 B 90 Q	9.35	8.6	9	J-3	Q1	2.69	–	0.75	0.28	–	1.75	1.75	15.1
2 B 94 Q	9.75	9	9.4	J-3	Q1	2.69	–	0.75	0.28	–	2.5	1.75	15.5
2 B 110 Q	11.35	10.6	11	J-3	Q1	2.69	–	0.75	0.28	–	1.75	1.75	18.9
2 B 124 Q	12.75	12	12.4	J-3	Q1	2.69	–	0.75	0.28	–	1.75	1.75	21.1
2 B 136 Q	13.95	13.2	13.6	J-3	Q1	2.69	–	0.75	0.28	–	2.5	1.75	23.0
2 B 154 Q	15.75	15	15.4	J-3	Q1	2.69	–	0.75	0.28	–	1.75	1.75	24.8
2 B 154 R	15.75	15	15.4	L-3	R1	3.75	0.13	0.75	0.28	0.25	2.88	2	30.6
2 B 160 Q	16.35	15.6	16	J-3	Q1	2.69	–	0.75	0.28	–	1.75	1.75	27.0
2 B 160 R	16.35	15.6	16	L-3	R1	3.75	0.13	0.75	0.28	0.25	2.88	2	32.0
2 B 184 Q	18.75	18	18.4	J-3	Q1	2.69	–	0.75	0.28	–	1.75	1.75	32.3
2 B 184 R	18.75	18	18.4	L-3	R1	3.75	0.13	0.75	0.28	0.38	2.88	2	39.1
2 B 200 Q	20.35	19.5	20	J-3	Q1	2.69	–	0.75	0.28	–	1.75	1.75	42.3
2 B 200 R	20.35	19.5	20	L-3	R1	3.75	0.13	0.75	0.28	0.25	2.88	2	43.5
2 B 250 Q	25.35	24.5	25	J-3	Q1	2.69	–	0.75	0.28	–	1.75	1.75	50.3
2 B 250 R	25.35	24.5	25	L-3	R1	3.75	0.13	0.75	0.28	0.25	2.88	2	58.0
2 B 300 Q	30.35	29.5	30	J-3	Q1	2.69	–	0.75	0.28	–	1.75	1.75	68.8
2 B 300 R	30.35	29.5	30	L-3	R1	3.75	0.13	0.75	0.28	0.25	2.88	2	81.0
2 B 380 Q	38.35	37.5	38	J-3	Q1	2.69	–	0.75	0.28	–	1.75	1.75	95.5
2 B 380 R	38.35	37.5	38	L-3	R1	3.75	0.13	0.75	0.28	0.25	2.88	2	92.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

Combination Groove Conventional MST® Bushed Stock Sheaves A-B



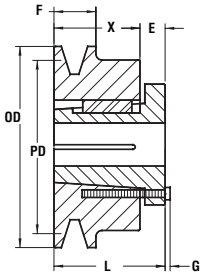
Type S Type J Type N

A-B MST® Sheaves

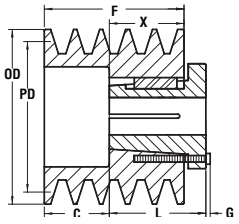
3 Grooves F = 2.5													
Part Number	OD	PD		Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
		A Belt	B Belt										
3 B 34 P	3.75	3	3.4	G-1	P2	1.75	0.63	0.63	0.25	0.44	2.94	2.31	3.8
3 B 36 P	3.95	3.2	3.6	N-1	P2	1.75	0.63	0.63	0.25	0.44	2.31	2.31	4.4
3 B 38 P	4.15	3.4	3.8	S-1	P1	1.75	1.19	–	0.25	–	1.94	1.31	3.8
3 B 40 P	4.35	3.6	4	S-1	P1	1.75	1.19	–	0.25	–	1.94	1.31	4.5
3 B 42 P	4.55	3.8	4.2	S-1	P1	1.75	1.19	–	0.25	–	1.31	1.31	4.9
3 B 44 P	4.75	4	4.4	J-1	P1	1.75	0.56	0.63	0.25	0.63	1.94	1.31	5.1
3 B 46 P	4.95	4.2	4.6	J-2	P1	1.75	0.56	0.63	0.25	0.63	1.31	1.31	6.0
3 B 48 P	5.15	4.4	4.8	J-2	P1	1.75	0.56	0.63	0.25	0.63	1.94	1.31	6.3
3 B 50 P	5.35	4.6	5	J-2	P1	1.75	0.56	0.63	0.25	0.63	1.31	1.31	6.9
3 B 52 P	5.55	4.8	5.2	J-2	P1	1.75	0.56	0.63	0.25	0.63	1.94	1.31	7.5
3 B 54 P	5.75	5	5.4	J-2	P1	1.75	0.56	0.63	0.25	0.63	1.31	1.31	8.3
3 B 54 Q	5.75	5	5.4	S-1	Q1	2.69	0.56	0.63	0.28	0.19	2.5	1.75	7.9
3 B 56 P	5.95	5.2	5.6	J-2	P1	1.75	0.56	0.63	0.25	0.63	1.31	1.31	9.0
3 B 56 Q	5.95	5.2	5.6	S-1	Q1	2.69	0.75	0.63	0.28	–	2.5	1.75	9.0
3 B 58 P	6.15	5.4	5.8	J-2	P1	1.75	0.56	0.63	0.25	0.63	1.31	1.31	9.6
3 B 58 Q	6.15	5.4	5.8	J-2	Q1	2.69	0.56	0.63	0.28	0.19	2.5	1.75	9.4
3 B 60 P	6.35	5.6	6	J-2	P1	1.75	0.56	0.63	0.25	0.63	1.31	1.31	10.5
3 B 60 Q	6.35	5.6	6	J-2	Q1	2.69	0.38	0.63	0.28	0.38	2.5	1.75	10.4
3 B 62 P	6.55	5.8	6.2	J-2	P1	1.75	0.56	0.63	0.25	0.63	1.31	1.31	9.4
3 B 62 Q	6.55	5.8	6.2	J-2	Q1	2.69	0.56	0.63	0.28	0.19	2.5	1.75	11.3
3 B 64 P	6.75	6	6.4	J-2	P1	1.75	0.56	0.63	0.25	0.63	1.31	1.31	9.5
3 B 64 Q	6.75	6	6.4	J-2	Q1	2.69	0.38	0.63	0.28	0.38	2.5	1.75	12.1
3 B 66 P	6.95	6.2	6.6	J-2	P1	1.75	0.56	0.63	0.25	0.63	1.31	1.31	10.0
3 B 66 Q	6.95	6.2	6.6	J-2	Q1	2.69	0.56	0.63	0.28	0.19	2.5	1.75	13.0
3 B 68 P	7.15	6.4	6.8	J-2	P1	1.75	0.56	0.63	0.25	0.63	1.31	1.31	10.4
3 B 68 Q	7.15	6.4	6.8	J-2	Q1	2.69	0.56	0.63	0.28	0.19	2.5	1.75	14.3
3 B 70 Q	7.35	6.6	7	J-2	Q1	2.69	0.38	0.75	0.28	0.38	1.75	1.75	13.0
3 B 74 Q	7.75	7	7.4	J-2	Q1	2.69	0.38	0.75	0.28	0.38	2.5	1.75	0.0
3 B 80 Q	8.35	7.6	8	J-2	Q1	2.69	0.38	0.75	0.28	0.38	1.75	1.75	15.3
3 B 86 Q	8.95	8.2	8.6	J-2	Q1	2.69	0.38	0.75	0.28	0.38	2.5	1.75	0.0
3 B 90 Q	9.35	8.6	9	J-3	Q1	2.69	0.38	0.75	0.28	0.38	1.75	1.75	18.1
3 B 94 Q	9.75	9	9.4	J-3	Q1	2.69	0.38	0.75	0.28	0.38	2.5	1.75	0.0
3 B 110 Q	11.35	10.6	11	J-3	Q1	2.69	0.38	0.75	0.28	0.38	1.75	1.75	21.3
3 B 124 Q	12.75	12	12.4	J-3	Q1	2.69	0.38	0.75	0.28	0.38	2.5	1.75	25.4
3 B 136 Q	13.95	13.2	13.6	J-3	Q1	2.69	0.38	0.75	0.28	0.38	1.75	1.75	27.4
3 B 154 Q	15.75	15	15.4	J-3	Q1	2.69	0.38	0.75	0.28	0.38	1.75	1.75	29.8
3 B 154 R	15.75	15	15.4	J-3	R1	3.75	0.38	0.75	0.28	0.13	2.88	2	35.5
3 B 160 Q	16.35	15.6	16	J-3	Q1	2.69	0.38	0.75	0.28	0.38	1.75	1.75	32.0
3 B 160 R	16.35	15.6	16	J-3	R1	3.75	0.38	0.75	0.28	0.13	2.88	2	38.0
3 B 184 Q	18.75	18	18.4	J-3	Q1	2.69	0.38	0.75	0.28	0.38	1.75	1.75	37.8
3 B 184 R	18.75	18	18.4	J-3	R1	3.75	0.38	0.75	0.28	0.13	2.88	2	44.8
3 B 200 Q	20.35	19.5	20	J-3	Q1	2.69	0.38	0.75	0.28	0.38	1.75	1.75	49.9
3 B 200 R	20.35	19.5	20	J-3	R1	3.75	0.38	0.75	0.28	0.13	2.88	2	50.3
3 B 250 Q	25.35	24.5	25	J-3	Q1	2.69	0.38	0.75	0.28	0.38	1.75	1.75	61.0
3 B 250 R	25.35	24.5	25	J-3	R1	3.75	0.38	0.75	0.28	0.13	2.88	2	65.0
3 B 300 Q	30.35	29.5	30	J-3	Q1	2.69	0.38	0.75	0.28	0.38	1.75	1.75	78.5
3 B 300 R	30.35	29.5	30	J-3	R1	3.75	0.38	0.75	0.28	0.13	2.88	2	89.0
3 B 380 Q	38.35	37.5	38	J-3	Q1	2.69	0.38	0.75	0.28	0.38	1.75	1.75	110.0
3 B 380 R	38.35	37.5	38	J-3	R1	3.75	0.38	0.75	0.28	0.13	2.88	2	106.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

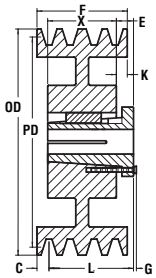
A-B Combination Groove Conventional MST® Bushed Stock Sheaves



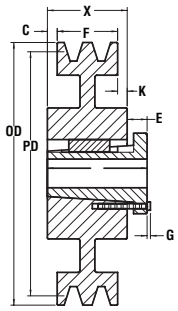
Type G



Type S



Type J



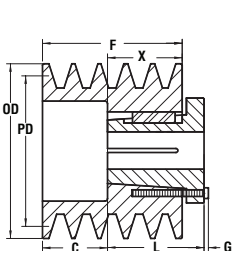
Type L

A-B MST® Sheaves

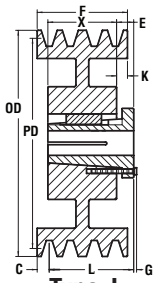
4 Grooves													
F = 3.25													
Part Number	OD	PD		Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
		A Belt	B Belt										
4 B 34 P	3.75	3	3.4	G-1	P2	1.75	1.38	0.63	0.25	0.44	2.94	2.31	4.5
4 B 36 P	3.95	3.2	3.6	N-1	P2	1.75	1.38	0.63	0.25	0.44	2.31	2.31	5.3
4 B 38 P	4.15	3.4	3.8	S-1	P1	1.75	1.94	–	0.25	–	1.94	1.31	4.8
4 B 40 P	4.35	3.6	4	J-2	P1	1.75	1.94	–	0.25	–	1.94	1.31	5.5
4 B 42 P	4.55	3.8	4.2	S-1	P1	1.75	1.94	–	0.25	–	1.31	1.31	5.9
4 B 44 P	4.75	4	4.4	J-2	P1	1.75	1.31	0.63	0.25	0.63	1.94	1.31	6.5
4 B 46 P	4.95	4.2	4.6	J-2	P1	1.75	1.31	0.63	0.25	0.63	1.31	1.31	7.1
4 B 48 P	5.15	4.4	4.8	J-2	P1	1.75	1.31	0.63	0.25	0.63	1.94	1.31	7.5
4 B 50 P	5.35	4.6	5	J-2	P1	1.75	1.31	0.63	0.25	0.63	1.31	1.31	8.3
4 B 52 P	5.55	4.8	5.2	J-2	P1	1.75	1.31	0.63	0.25	0.63	1.94	1.31	9.1
4 B 54 P	5.75	5	5.4	J-2	P1	1.75	1.31	0.63	0.25	0.63	1.31	1.31	9.6
4 B 54 Q	5.75	5	5.4	S-1	Q1	2.69	1.31	0.63	0.28	0.19	2.5	1.75	9.3
4 B 56 P	5.95	5.2	5.6	J-2	P1	1.75	1.31	0.63	0.25	0.63	1.31	1.31	10.6
4 B 56 Q	5.95	5.2	5.6	S-1	Q1	2.69	1.31	0.63	0.28	0.19	2.5	1.75	10.5
4 B 58 P	6.15	5.4	5.8	J-2	P1	1.75	1.31	0.63	0.25	0.63	1.31	1.31	11.6
4 B 58 Q	6.15	5.4	5.8	J-2	Q1	2.69	1.31	0.63	0.28	0.19	2.5	1.75	11.5
4 B 60 P	6.35	5.6	6	J-2	P1	1.75	1.31	0.63	0.25	0.63	1.31	1.31	11.9
4 B 60 Q	6.35	5.6	6	J-2	Q1	2.69	1.31	0.63	0.28	0.19	2.5	1.75	12.6
4 B 62 P	6.55	5.8	6.2	J-2	P1	1.75	1.31	0.63	0.25	0.63	1.31	1.31	11.1
4 B 62 Q	6.55	5.8	6.2	J-2	Q1	2.69	1.31	0.63	0.28	0.19	2.5	1.75	12.6
4 B 64 P	6.75	6	6.4	J-2	P1	1.75	1.31	0.63	0.25	0.63	1.31	1.31	11.8
4 B 64 Q	6.75	6	6.4	J-2	Q1	2.69	1.31	0.63	0.28	0.19	2.5	1.75	14.1
4 B 66 P	6.95	6.2	6.6	J-2	P1	1.75	1.31	0.63	0.25	0.63	1.31	1.31	12.0
4 B 66 Q	6.95	6.2	6.6	J-2	Q1	2.69	1.31	0.63	0.28	0.19	2.5	1.75	14.8
4 B 68 P	7.15	6.4	6.8	J-2	P1	1.75	1.31	0.63	0.25	0.63	1.31	1.31	12.5
4 B 68 Q	7.15	6.4	6.8	J-2	Q1	2.69	1.31	0.63	0.28	0.19	2.5	1.75	16.9
4 B 70 Q	7.35	6.6	7	J-2	Q1	2.69	0.75	0.75	0.28	0.75	2.5	1.75	15.3
4 B 74 Q	7.75	7	7.4	J-2	Q1	2.69	0.75	0.75	0.28	0.75	1.75	1.75	15.3
4 B 80 Q	8.35	7.6	8	J-2	Q1	2.69	0.75	0.75	0.28	0.75	2.5	1.75	17.0
4 B 86 Q	8.95	8.2	8.6	J-2	P1	1.75	0.75	0.75	0.25	0.75	1.31	1.75	20.8
4 B 90 Q	9.35	8.6	9	J-3	Q1	2.69	0.75	0.75	0.28	0.75	2.5	1.75	20.6
4 B 94 Q	9.75	9	9.4	J-3	Q1	2.69	0.75	0.75	0.28	0.75	1.75	1.75	20.1
4 B 110 Q	11.35	10.6	11	J-3	Q1	2.69	0.75	0.75	0.28	0.75	1.75	1.75	25.8
4 B 124 Q	12.75	12	12.4	J-3	Q1	2.69	0.75	0.75	0.28	0.75	2.5	1.75	27.5
4 B 136 Q	13.95	13.2	13.6	J-3	Q1	2.69	0.75	0.75	0.28	0.75	1.75	1.75	31.5
4 B 154 Q	15.75	15	15.4	J-3	Q1	2.69	0.75	0.75	0.28	0.75	1.75	1.75	36.0
4 B 154 R	15.75	15	15.4	J-3	R1	3.75	0.75	0.88	0.28	0.5	2.88	2	40.1
4 B 160 Q	16.35	15.6	16	J-3	Q1	2.69	0.75	0.75	0.28	0.75	1.75	1.75	39.0
4 B 160 R	16.35	15.6	16	J-3	R1	3.75	0.75	0.88	0.28	0.5	2.88	2	44.0
4 B 184 Q	18.75	18	18.4	J-3	Q1	2.69	0.75	0.75	0.28	0.75	1.75	1.75	44.8
4 B 184 R	18.75	18	18.4	J-3	R1	3.75	0.75	0.88	0.28	0.5	2.88	2	50.3
4 B 200 Q	20.35	19.5	20	J-3	Q1	2.69	0.75	0.75	0.28	0.75	1.75	1.75	57.0
4 B 200 R	20.35	19.5	20	J-3	R1	3.75	0.75	0.88	0.28	0.5	2.88	2	54.0
4 B 250 Q	25.35	24.5	25	J-3	Q1	2.69	0.75	0.75	0.28	0.75	1.75	1.75	69.5
4 B 250 R	25.35	24.5	25	J-3	R1	3.75	0.75	0.88	0.28	0.5	2.88	2	71.0
4 B 300 Q	30.35	29.5	30	J-3	Q1	2.69	0.75	0.75	0.28	0.75	1.75	1.75	90.8
4 B 300 R	30.35	29.5	30	J-3	R1	3.75	0.75	0.88	0.28	0.5	2.88	2	99.0
4 B 380 Q	38.35	37.5	38	J-3	Q1	2.69	0.75	0.75	0.28	0.75	1.75	1.75	125.0
4 B 380 R	38.35	37.5	38	J-3	R1	3.75	0.75	0.88	0.28	0.5	2.88	2	126.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

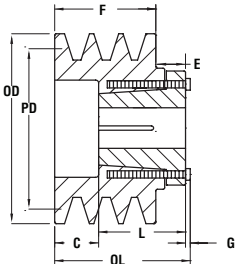
Combination Groove Conventional MST® Bushed Stock Sheaves A-B



Type S



Type J



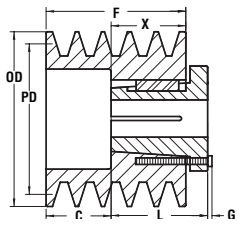
Type N

A-B MST® Sheaves

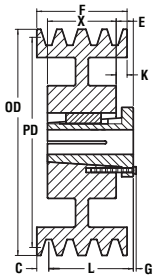
5 Grooves F = 4													
Part Number	OD	PD		Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
		A Belt	B Belt										
5 B 34 P	3.75	3	3.4	N-1	P2	1.75	2.13	0.63	0.25	0.44	2.31	2.31	5.3
5 B 36 P	3.95	3.2	3.6	G-1	P2	1.75	2.13	0.63	0.25	0.44	2.94	2.31	6.1
5 B 38 P	4.15	3.4	3.8	S-1	P2	1.75	1.69	–	0.25	–	2.31	2.31	6.1
5 B 40 P	4.35	3.6	4	S-1	P2	1.75	1.69	–	0.25	–	2.31	2.31	7.0
5 B 42 P	4.55	3.8	4.2	S-1	P2	1.75	1.69	–	0.25	–	2.94	2.31	7.8
5 B 44 P	4.75	4	4.4	J-2	P2	1.75	1.06	0.63	0.25	0.63	2.31	2.31	8.5
5 B 46 P	4.95	4.2	4.6	J-2	P2	1.75	1.06	0.63	0.25	0.63	2.94	2.31	9.8
5 B 48 P	5.15	4.4	4.8	J-2	P2	1.75	1.06	0.63	0.25	0.63	2.31	2.31	10.5
5 B 50 P	5.35	4.6	5	J-2	P2	1.75	1.06	0.63	0.25	0.63	2.94	2.31	11.6
5 B 52 P	5.55	4.8	5.2	J-2	P2	1.75	1.06	0.63	0.25	0.63	2.94	2.31	12.5
5 B 54 Q	5.75	5	5.4	J-2	Q1	2.69	1.5	0.75	0.28	0.75	1.75	1.75	10.4
5 B 56 Q	5.95	5.2	5.6	J-2	Q1	2.69	1.5	0.75	0.28	0.75	2.5	1.75	11.8
5 B 58 Q	6.15	5.4	5.8	J-2	Q1	2.69	1.5	0.75	0.28	0.75	1.75	1.75	12.8
5 B 60 Q	6.35	5.6	6	J-2	Q1	2.69	1.5	0.75	0.28	0.75	2.5	1.75	13.8
5 B 62 Q	6.55	5.8	6.2	J-2	Q1	2.69	1.5	0.75	0.28	0.75	1.75	1.75	14.6
5 B 64 Q	6.75	6	6.4	J-2	Q1	2.69	1.5	0.75	0.28	0.75	2.5	1.75	16.4
5 B 66 Q	6.95	6.2	6.6	J-2	Q1	2.69	1.5	0.75	0.28	0.75	1.75	1.75	17.1
5 B 68 Q	7.15	6.4	6.8	J-2	Q1	2.69	1.5	0.75	0.28	0.75	2.5	1.75	17.9
5 B 70 Q	7.35	6.6	7	J-2	Q2	2.63	0.63	0.75	0.28	0.63	2.75	2.75	20.9
5 B 70 R	7.35	6.6	7	J-2	R1	3.75	1	0.88	0.28	1	2.88	2	17.0
5 B 74 Q	7.75	7	7.4	J-2	Q2	2.63	0.63	0.75	0.28	0.63	2.75	2.75	19.8
5 B 74 R	7.75	7	7.4	J-2	R1	3.75	1	0.88	0.28	1	2.88	2	20.3
5 B 80 Q	8.35	7.6	8	J-2	Q2	2.63	0.63	0.75	0.28	0.63	2.75	2.75	22.3
5 B 80 R	8.35	7.6	8	J-2	R1	3.75	1	0.88	0.28	1	2.88	2	24.8
5 B 86 Q	8.95	8.2	8.6	J-2	Q2	2.63	0.63	0.75	0.28	0.63	2.75	2.75	29.5
5 B 86 R	8.95	8.2	8.6	J-2	R1	3.75	1	0.88	0.28	1	2.88	2	27.3
5 B 90 Q	9.35	8.6	9	J-3	Q2	2.63	0.63	0.75	0.28	0.63	2.75	2.75	28.6
5 B 90 R	9.35	8.6	9	J-2	R1	3.75	1	0.88	0.28	1	2.88	2	29.1
5 B 94 Q	9.75	9	9.4	J-3	Q2	2.63	0.63	0.75	0.28	0.63	2.75	2.75	29.5
5 B 94 R	9.75	9	9.4	J-2	R1	3.75	1	0.88	0.28	1	2.88	2	30.0
5 B 110 Q	11.35	10.6	11	J-3	Q2	2.63	0.63	0.75	0.28	0.63	2.75	2.75	32.8
5 B 110 R	11.35	10.6	11	K-3	R1	3.75	1	0.88	0.28	1	2.88	2	32.8
5 B 124 Q	12.75	12	12.4	J-3	Q2	2.63	0.63	0.75	0.28	0.63	2.75	2.75	35.4
5 B 124 R	12.75	12	12.4	K-3	R1	3.75	1	0.88	0.28	1	2.88	2	36.0
5 B 136 Q	13.95	13.2	13.6	J-3	Q2	2.63	0.63	0.75	0.28	0.63	2.75	2.75	41.0
5 B 136 R	13.95	13.2	13.6	K-3	R1	3.75	1	0.88	0.28	1	2.88	2	40.3
5 B 154 Q	15.75	15	15.4	J-3	Q2	2.63	0.63	0.75	0.28	0.63	2.75	2.75	45.3
5 B 154 R	15.75	15	15.4	K-3	R1	3.75	1	0.88	0.28	1	2.88	2	45.0
5 B 160 Q	16.35	15.6	16	J-3	Q2	2.63	0.63	0.75	0.28	0.63	2.75	2.75	48.0
5 B 160 R	16.35	15.6	16	K-3	R1	3.75	1	0.88	0.28	1	2.88	2	48.0
5 B 184 Q	18.75	18	18.4	J-3	Q2	2.63	0.63	0.75	0.28	0.63	2.75	2.75	57.3
5 B 184 R	18.75	18	18.4	K-3	R1	3.75	1	0.88	0.28	1	2.88	2	54.0
5 B 200 Q	20.35	19.5	20	J-3	Q2	2.63	0.63	0.75	0.28	0.63	2.75	2.75	66.0
5 B 200 R	20.35	19.5	20	K-3	R1	3.75	1	0.88	0.28	1	2.88	2	64.0
5 B 250 Q	25.35	24.5	25	J-3	Q2	2.63	0.63	0.75	0.28	0.63	2.75	2.75	82.5
5 B 250 R	25.35	24.5	25	K-3	R1	3.75	1	0.88	0.28	1	2.88	2	79.0
5 B 300 Q	30.35	29.5	30	J-3	Q2	2.63	0.63	0.75	0.28	0.63	2.75	2.75	117.0
5 B 300 R	30.35	29.5	30	K-3	R1	3.75	1	0.88	0.28	1	2.88	2	115.0
5 B 380 Q	38.35	37.5	38	J-3	Q2	2.63	0.63	0.75	0.28	0.63	2.75	2.75	159.0
5 B 380 R	38.35	37.5	38	K-3	R1	3.75	1	0.88	0.28	1	2.88	2	150.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

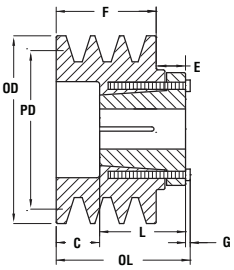
A-B Combination Groove Conventional MST® Bushed Stock Sheaves



Type S



Type J



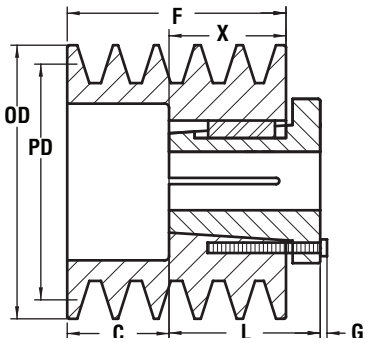
Type N

A-B MST® Sheaves

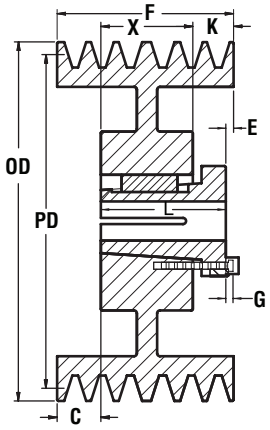
6 Grooves													
F = 4.75													
Part Number	OD	PD		Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
		A Belt	B Belt										
6 B 34 P	3.75	3	3.4	N-1	P2	1.75	0	0.63	0.25	2.44	2.94	2.31	6.1
6 B 36 P	3.95	3.2	3.6	N-1	P2	1.75	2.88	0.63	0.25	0.44	2.31	2.31	7.3
6 B 38 P	4.15	3.4	3.8	S-1	P2	1.75	–	–	0.25	2.44	2.94	2.31	7.0
6 B 40 P	4.35	3.6	4	S-1	P2	1.75	–	–	0.25	2.44	2.94	2.31	8.1
6 B 42 P	4.55	3.8	4.2	S-1	P2	1.75	2.44	–	0.25	–	2.31	2.31	9.3
6 B 44 P	4.75	4	4.4	J-2	P2	1.75	–	0.63	0.25	2.44	2.94	2.31	9.9
6 B 46 P	4.95	4.2	4.6	J-2	P2	1.75	–	0.63	0.25	2.44	2.94	2.31	11.0
6 B 48 P	5.15	4.4	4.8	J-2	P2	1.75	1.81	0.63	0.25	0.63	2.31	2.31	11.8
6 B 50 P	5.35	4.6	5	J-2	P2	1.75	–	0.63	0.25	2.44	2.94	2.31	12.9
6 B 52 P	5.55	4.8	5.2	J-2	P2	1.75	1.81	0.63	0.25	0.63	2.31	2.31	14.8
6 B 54 Q	5.75	5	5.4	J-2	Q1	2.69	–	0.75	0.28	3	2.5	1.75	11.8
6 B 56 Q	5.95	5.2	5.6	J-2	Q1	2.69	2.25	0.75	0.28	0.75	1.75	1.75	17.3
6 B 58 Q	6.15	5.4	5.8	J-2	Q1	2.69	–	0.75	0.28	3	2.5	1.75	14.5
6 B 60 Q	6.35	5.6	6	J-2	Q1	2.69	–	0.75	0.28	3	2.5	1.75	15.4
6 B 62 Q	6.55	5.8	6.2	J-2	Q1	2.69	2.25	0.75	0.28	0.75	1.75	1.75	16.4
6 B 64 Q	6.75	6	6.4	J-2	Q1	2.69	–	0.75	0.28	3	2.5	1.75	18.6
6 B 66 Q	6.95	6.2	6.6	J-2	Q1	2.69	2.25	0.75	0.28	0.75	1.75	1.75	18.5
6 B 68 Q	7.15	6.4	6.8	J-2	Q1	2.69	–	0.75	0.28	3	2.5	1.75	20.8
6 B 70 Q	7.35	6.6	7	K-2	Q2	2.63	1	0.75	0.28	1	2.75	2.75	22.8
6 B 70 R	7.35	6.6	7	J-2	R1	3.75	–	0.88	0.28	2.75	2.88	2	19.0
6 B 74 Q	7.75	7	7.4	K-2	Q2	2.63	1	0.75	0.28	1	2.75	2.75	26.5
6 B 74 R	7.75	7	7.4	J-2	R1	3.75	–	0.88	0.28	2.75	2.88	2	21.8
6 B 80 Q	8.35	7.6	8	K-2	Q2	2.63	1	0.75	0.28	1	2.75	2.75	24.1
6 B 80 R	8.35	7.6	8	J-2	R1	3.75	–	0.88	0.28	2.75	2.88	2	26.8
6 B 86 Q	8.95	8.2	8.6	K-2	Q2	2.63	1	0.75	0.28	1	2.75	2.75	27.1
6 B 86 R	8.95	8.2	8.6	J-2	R1	3.75	–	0.88	0.28	2.75	2.88	2	29.4
6 B 90 Q	9.35	8.6	9	K-2	Q2	2.63	1	0.75	0.28	1	2.75	2.75	30.6
6 B 90 R	9.35	8.6	9	J-2	R1	3.75	–	0.88	0.28	2.75	2.88	2	31.4
6 B 94 Q	9.75	9	9.4	K-3	Q2	2.63	1	0.75	0.28	1	2.75	2.75	32.8
6 B 94 R	9.75	9	9.4	J-2	R1	3.75	–	0.88	0.28	2.75	2.88	2	32.8
6 B 110 Q	11.35	10.6	11	K-3	Q2	2.63	1	0.75	0.28	1	2.75	2.75	36.6
6 B 110 R	11.35	10.6	11	J-2	R1	3.75	–	0.88	0.28	2.75	2.88	2	37.0
6 B 124 Q	12.75	12	12.4	K-3	Q2	2.63	1	0.75	0.28	1	2.75	2.75	39.8
6 B 124 R	12.75	12	12.4	J-2	R1	3.75	–	0.88	0.28	2.75	2.88	2	39.4
6 B 136 Q	13.95	13.2	13.6	K-3	Q2	2.63	1	0.75	0.28	1	2.75	2.75	44.9
6 B 136 R	13.95	13.2	13.6	K-3	R1	3.75	–	0.88	0.28	2.75	2.88	2	45.3
6 B 154 Q	15.75	15	15.4	K-3	Q2	2.63	1	0.75	0.28	1	2.75	2.75	49.9
6 B 154 R	15.75	15	15.4	K-3	R1	3.75	–	0.88	0.28	2.75	2.88	2	49.1
6 B 160 Q	16.35	15.6	16	K-3	Q2	2.63	1	0.75	0.28	1	2.75	2.75	54.0
6 B 160 R	16.35	15.6	16	K-3	R1	3.75	–	0.88	0.28	2.75	2.88	2	52.0
6 B 184 Q	18.75	18	18.4	K-3	Q2	2.63	1	0.75	0.28	1	2.75	2.75	62.0
6 B 184 R	18.75	18	18.4	K-3	R1	3.75	–	0.88	0.28	2.75	2.88	2	59.0
6 B 200 Q	20.35	19.5	20	K-3	Q2	2.63	1	0.75	0.28	1	2.75	2.75	74.0
6 B 200 R	20.35	19.5	20	K-3	R1	3.75	–	0.88	0.28	2.75	2.88	2	69.0
6 B 250 Q	25.35	24.5	25	K-3	Q2	2.63	1	0.75	0.28	1	2.75	2.75	89.5
6 B 250 R	25.35	24.5	25	K-3	R1	3.75	–	0.88	0.28	2.75	2.88	2	83.0
6 B 300 Q	30.35	29.5	30	K-3	Q2	2.63	1	0.75	0.28	1	2.75	2.75	128.0
6 B 300 R	30.35	29.5	30	K-3	R1	3.75	–	0.88	0.28	2.75	2.88	2	126.0
6 B 380 Q	38.35	37.5	38	K-3	Q2	2.63	1	0.75	0.28	1	2.75	2.75	179.0
6 B 380 R	38.35	37.5	38	K-3	R1	3.75	–	0.88	0.28	2.75	2.88	2	170.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

Combination Groove Conventional MST® Bushed Stock Sheaves A-B



Type S



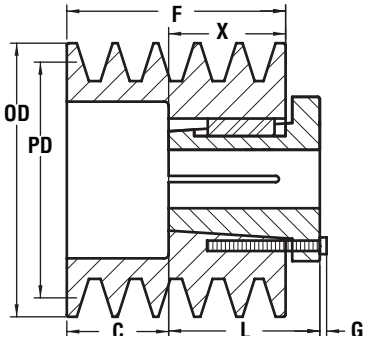
Type K

A-B MST® Sheaves

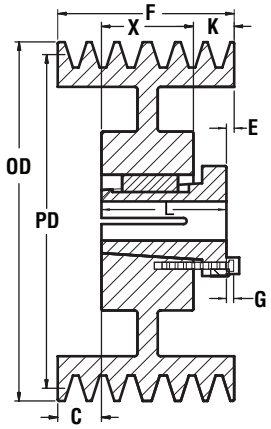
8 Grooves F = 6.25												
Part Number	OD	PD		Type	Bush	Bush Max Bore	E	G	K	Length Thru Bore	X	Wt. Less Bushing
		A Belt	B Belt									
8 B 54 Q	5.75	5	5.4	S-1	Q2	2.63	0.75	0.28	3.50	3.50	2.75	18.1
8 B 56 Q	5.95	5.2	5.6	S-1	Q2	2.63	0.75	0.28	3.50	3.50	2.75	20.6
8 B 58 Q	6.15	5.4	5.8	K-2	Q2	2.63	0.75	0.28	3.50	3.50	2.75	20.9
8 B 60 Q	6.35	5.6	6	K-2	Q2	2.63	0.75	0.28	3.50	3.50	2.75	23.0
8 B 62 Q	6.55	5.8	6.2	K-2	Q2	2.63	0.75	0.28	3.50	3.50	2.75	23.0
8 B 64 Q	6.55	5.8	6.2	K-2	Q2	2.63	0.75	0.28	3.50	3.50	2.75	25.0
8 B 66 Q	6.95	6.2	6.6	K-2	Q2	2.63	0.75	0.28	3.50	3.50	2.75	27.3
8 B 68 Q	7.15	6.4	6.8	K-2	Q2	2.63	0.75	0.28	3.50	3.50	2.75	31.1
8 B 70 R	7.35	6.6	7	K-2	R2	3.63	0.88	0.28	2.25	4.88	4	29.5
8 B 74 R	7.75	7	7.4	K-2	R2	3.63	0.88	0.28	2.25	4.88	4	34.9
8 B 80 R	8.35	7.6	8	K-2	R2	3.63	0.88	0.28	2.25	4.88	4	42.9
8 B 86 R	8.95	8.2	8.6	K-2	R2	3.63	0.88	0.28	2.25	4.88	4	52.0
8 B 90 R	9.35	8.6	9	K-2	R2	3.63	0.88	0.28	2.25	4.88	4	48.3
8 B 94 R	9.75	9	9.4	K-2	R2	3.63	0.88	0.28	2.25	4.88	4	49.3
8 B 110 R	11.35	10.6	11	K-2	R2	3.63	0.88	0.28	2.25	4.88	4	55.0
8 B 124 R	12.75	12	12.4	K-3	R2	3.63	0.88	0.28	2.25	4.88	4	60.0
8 B 136 R	13.95	13.2	13.6	K-3	R2	3.63	0.88	0.28	2.25	4.88	4	68.5
8 B 154 R	15.75	15	15.4	K-3	R2	3.63	0.88	0.28	2.25	4.88	4	77.3
8 B 184 R	18.75	18	18.4	K-3	R2	3.63	0.88	0.28	2.25	4.88	4	90.0
8 B 200 R	20.35	19.5	20	K-3	R2	3.63	0.88	0.28	2.25	4.88	4	96.0
8 B 250 R	25.35	24.5	25	K-3	R2	3.63	0.88	0.28	2.25	4.88	4	129.0
8 B 300 R	30.35	29.5	30	K-3	R2	3.63	0.88	0.28	2.25	4.88	4	163.0
8 B 300 S	30.35	29.5	30	K-3	S1	4.25	1.06	0.38	2.94	4.38	3.31	168.0
8 B 380 R	38.35	37.5	38	K-3	R2	3.63	0.88	0.28	2.25	4.88	4	228.0
8 B 380 S	38.35	37.5	38	K-3	S1	4.25	1.06	0.38	2.94	4.38	3.31	238.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

A-B Combination Groove Conventional MST® Bushed Stock Sheaves



Type S

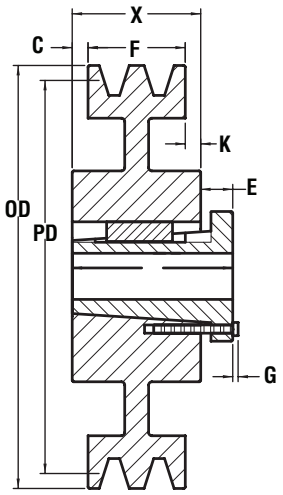


Type K

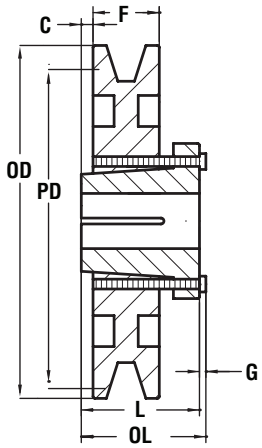
A-B MST® Sheaves

10 Grooves F = 7.75												
Part Number	OD	PD		Type	Bush	Bush Max Bore	E	G	K	Length Thru Bore	X	Wt. Less Bushing
		A Belt	B Belt									
10 B 54 Q	5.75	5	5.4	S-1	Q2	2.63	0.75	0.28	5	3.5	2.75	21.5
10 B 56 Q	5.95	5.2	5.6	S-1	Q2	2.63	0.75	0.28	5	3.5	2.75	24.9
10 B 58 Q	6.15	5.4	5.8	K-2	Q2	2.63	0.75	0.28	5	3.5	2.75	23.5
10 B 60 Q	6.35	5.6	6	K-2	Q2	2.63	0.75	0.28	5	3.5	2.75	25.6
10 B 62 Q	6.55	5.8	6.2	K-2	Q2	2.63	0.75	0.28	5	3.5	2.75	27.5
10 B 64 Q	6.75	6	6.4	K-2	Q2	2.63	0.75	0.28	5	3.5	2.75	31.4
10 B 66 Q	6.95	6.2	6.6	K-2	Q2	2.63	0.75	0.28	5	3.5	2.75	32.5
10 B 68 Q	7.15	6.4	6.8	K-2	Q2	2.63	0.75	0.28	5	3.5	2.75	36.1
10 B 70 R	7.35	6.6	7	K-2	R2	3.63	0.88	0.28	3.75	4.88	4	34.0
10 B 74 R	7.75	7	7.4	K-2	R2	3.63	0.88	0.28	3.75	4.88	4	39.3
10 B 80 R	8.35	7.6	8	K-2	R2	3.63	0.88	0.28	3.75	4.88	4	48.5
10 B 86 R	8.95	8.2	8.6	K-2	R2	3.63	0.88	0.28	3.75	4.88	4	51.5
10 B 90 R	9.35	8.6	9	K-2	R2	3.63	0.88	0.28	3.75	4.88	4	52.3
10 B 94 R	9.75	9	9.4	K-2	R2	3.63	0.88	0.28	3.75	4.88	4	54.0
10 B 110 R	11.35	10.6	11	K-2	R2	3.63	0.88	0.28	3.75	4.88	4	61.0
10 B 124 R	12.75	12	12.4	K-2	R2	3.63	0.88	0.28	3.75	4.88	4	77.5
10 B 136 R	13.95	13.2	13.6	K-2	R2	3.63	0.88	0.28	3.75	4.88	4	76.5
10 B 154 R	15.75	15	15.4	K-3	R2	3.63	0.88	0.28	3.75	4.88	4	89.0
10 B 184 R	18.75	18	18.4	K-3	R2	3.63	0.88	0.28	3.75	4.88	4	104.0
10 B 200 R	20.35	19.5	20	K-3	R2	3.63	0.88	0.28	3.75	4.88	4	112.0
10 B 250 R	25.35	24.5	25	K-3	R2	3.63	0.88	0.28	3.75	4.88	4	153.0
10 B 300 R	30.35	29.5	30	K-3	R2	3.63	0.88	0.28	3.75	4.88	4	188.0
10 B 380 R	38.35	37.5	38	K-3	R2	3.63	0.88	0.28	3.75	4.88	4	258.0
10 B 380 U	38.35	37.5	38	K-3	U0	5.5	1.19	0.47	4	4.94	3.75	270.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked



Type L



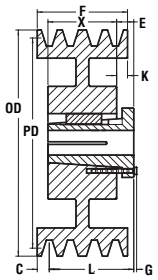
Type M

C MST® Sheaves

1 Groove F = 1.25												
Part Number	OD	PD C Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
1 C 56 P	6	5.6	M-1	P1	1.75	0.06	0.63	0.25	–	1.94	1.31	6.0
1 C 60 Q	6.4	6	M-1	Q1	2.69	0.5	0.75	0.28	–	2.5	1.75	6.1
1 C 70 Q	7.4	7	M-1	Q1	2.69	0.5	0.75	0.28	–	2.5	1.25	9.3
1 C 72 Q	7.6	7.2	M-2	Q1	2.69	0.5	0.75	0.28	–	2.5	1.25	10.1
1 C 74 Q	7.8	7.4	M-2	Q1	2.69	0.5	0.75	0.28	–	2.5	1.25	10.8
1 C 76 Q	8	7.6	M-2	Q1	2.69	0.5	0.75	0.28	–	2.5	1.25	11.4
1 C 78 Q	8.2	7.8	M-2	Q1	2.69	0.5	0.75	0.28	–	2.5	1.25	9.8
1 C 80 Q	8.4	8	M-2	Q1	2.69	0.5	0.75	0.28	–	2.5	1.25	9.9
1 C 82 Q	8.6	8.2	M-2	Q1	2.69	0.5	0.75	0.28	–	2.5	1.25	10.1
1 C 84 Q	8.8	8.4	M-2	Q1	2.69	0.5	0.75	0.28	–	2.5	1.25	11.0
1 C 86 Q	9	8.6	M-2	Q1	2.69	0.5	0.75	0.28	–	2.5	1.25	10.6
1 C 88 Q	9.2	8.8	M-2	Q1	2.69	0.5	0.75	0.28	–	2.5	1.25	11.6
1 C 90 Q	9.4	9	M-2	Q1	2.69	0.5	0.75	0.28	–	2.5	1.25	11.4
1 C 92 Q	9.6	9.2	M-2	Q1	2.69	0.5	0.75	0.28	–	2.5	1.25	12.6
1 C 94 Q	9.8	9.4	L-3	Q1	2.69	0.25	0.75	0.28	1	2.5	1.75	14.8
1 C 96 Q	10	9.6	L-3	Q1	2.69	0.25	0.75	0.28	1	2.5	1.75	15.8
1 C 98 Q	10.2	9.8	L-3	Q1	2.69	0.25	0.75	0.28	1	2.5	1.75	15.9
1 C 100 Q	10.4	10	L-3	Q1	2.69	0.25	0.75	0.28	1	2.5	1.75	16.8
1 C 102 Q	10.6	10.2	L-3	Q1	2.69	0.25	0.75	0.28	1	2.5	1.75	16.1
1 C 106 Q	11	10.6	L-3	Q1	2.69	0.25	0.75	0.28	1	2.5	1.75	17.3
1 C 110 Q	11.4	11	L-3	Q1	2.69	0.25	0.75	0.28	1	2.5	1.75	17.5
1 C 114 Q	11.8	11.4	L-3	Q1	2.69	0.25	0.75	0.28	1	2.5	1.75	18.6
1 C 120 Q	12.4	12	L-3	Q1	2.69	0.25	0.75	0.28	1	2.5	1.75	19.5
1 C 130 Q	13.4	13	L-3	Q1	2.69	0.25	0.75	0.28	1	2.5	1.75	22.8
1 C 160 Q	16.4	16	L-3	Q1	2.69	0.25	0.75	0.28	1	2.5	1.75	28.5
1 C 200 Q	20.4	20	L-3	Q1	2.69	0.25	0.75	0.28	1	2.5	1.75	37.8
1 C 240 Q	24.4	24	L-3	Q1	2.69	0.25	0.75	0.28	1	2.5	1.75	49.5

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

C Conventional MST® Bushed Stock Sheaves

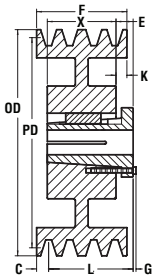


Type J

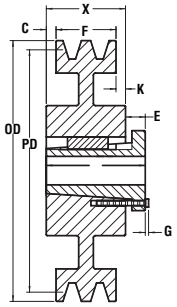
C MST® Sheaves

2 Grooves F = 2.25												
Part Number	OD	PD C Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
2 C 56 P	6	5.6	J-2	P1	1.75	0.31	0.63	0.25	0.63	1.94	1.31	6.0
2 C 60 Q	6.4	6	J-2	Q1	2.69	0	0.75	0.28	0.5	2.5	1.75	6.1
2 C 70 Q	7.4	7	J-2	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	9.3
2 C 72 Q	7.6	7.2	J-2	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	10.1
2 C 74 Q	7.8	7.4	J-2	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	10.8
2 C 76 Q	8	7.6	J-2	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	11.4
2 C 78 Q	8.2	7.8	J-2	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	9.8
2 C 80 Q	8.4	8	J-2	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	9.9
2 C 82 Q	8.6	8.2	J-2	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	10.1
2 C 84 Q	8.8	8.4	J-2	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	11.0
2 C 86 Q	9	8.6	J-2	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	10.6
2 C 88 Q	9.2	8.8	J-2	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	11.6
2 C 90 Q	9.4	9	J-2	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	11.4
2 C 92 Q	9.6	9.2	J-2	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	12.6
2 C 94 Q	9.8	9.4	J-3	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	14.8
2 C 96 Q	10	9.6	J-3	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	15.8
2 C 98 Q	10.2	9.8	J-3	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	15.9
2 C 100 Q	10.4	10	J-3	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	16.8
2 C 102 Q	10.6	10.2	J-3	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	16.1
2 C 106 Q	11	10.6	J-3	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	17.3
2 C 110 Q	11.4	11	J-3	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	17.5
2 C 114 Q	11.8	11.4	J-3	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	18.6
2 C 120 Q	12.4	12	J-3	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	19.5
2 C 130 Q	13.4	13	J-3	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	22.8
2 C 140 R	14.4	14	J-3	R1	3.75	0.13	0.88	0.28	0.13	2.88	2	28.5
2 C 160 Q	16.4	16	J-3	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	37.8
2 C 180 R	18.4	18	J-3	R1	3.75	0.13	0.88	0.28	0.13	2.88	2	49.5
2 C 200 Q	20.4	20	J-3	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	46.0
2 C 240 Q	24.4	24	J-3	Q1	2.69	0.25	0.75	0.28	0.25	2.5	1.75	59.5
2 C 270 R	27.4	27	J-3	R1	3.75	0.13	0.88	0.28	0.13	2.88	2	77.0
2 C 300 R	30.4	30	J-3	R1	3.75	0.13	0.88	0.28	0.13	2.88	2	93.0
2 C 360 R	36.4	36	J-3	R1	3.75	0.13	0.88	0.28	0.13	2.88	2	117.0
2 C 440 R	44.4	44	J-3	R1	3.75	0.13	0.88	0.28	0.13	2.88	2	164.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked



Type J



Type L

C MST® Sheaves

3 Grooves F = 3.25												
Part Number	OD	PD C Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
3 C 50 Q	5.4	5	J-1	Q1	2.69	1.5	0.75	0.28	–	2.5	1.75	8.4
3 C 56 P	6	5.6	J-2	P2	1.75	0.31	0.63	0.25	0.63	2.94	2.31	12.9
3 C 60 Q	6.4	6	J-2	Q1	2.69	0.63	0.75	0.28	0.75	2.5	1.75	11.8
3 C 70 Q	7.4	7	J-2	Q1	2.69	0.63	0.75	0.28	0.75	2.5	1.75	16.8
3 C 72 Q	7.6	7.2	J-2	Q1	2.69	0.63	0.75	0.28	0.75	2.5	1.75	18.0
3 C 74 Q	7.8	7.4	J-2	Q1	2.69	0.63	0.75	0.28	0.75	2.5	1.75	19.1
3 C 76 Q	8	7.6	J-2	Q1	2.69	0.63	0.75	0.28	0.75	2.5	1.75	21.3
3 C 78 Q	8.2	7.8	J-2	Q1	2.69	0.63	0.75	0.28	0.75	2.5	1.75	17.4
3 C 80 Q	8.4	8	J-2	Q1	2.69	0.63	0.75	0.28	0.75	2.5	1.75	17.8
3 C 82 Q	8.6	8.2	J-2	Q1	2.69	0.63	0.75	0.28	0.75	2.5	1.75	17.9
3 C 84 Q	8.8	8.4	J-2	Q1	2.69	0.63	0.75	0.28	0.75	2.5	1.75	20.4
3 C 86 Q	9	8.6	J-2	Q1	2.69	0.63	0.75	0.28	0.75	2.5	1.75	19.5
3 C 88 Q	9.2	8.8	J-2	Q1	2.69	0.63	0.75	0.28	0.75	2.5	1.75	22.5
3 C 90 R	9.4	9	J-2	R1	3.75	0.63	0.88	0.28	0.75	2.88	2	27.3
3 C 90 Q	9.4	9	J-2	Q1	2.69	0.75	0.75	0.28	0.75	2.5	1.75	20.4
3 C 92 R	9.6	9.2	J-2	R1	3.75	0.63	0.88	0.28	0.75	2.88	2	27.5
3 C 92 Q	9.6	9.2	J-2	Q1	2.69	0.75	0.75	0.28	0.75	2.5	1.75	22.8
3 C 94 R	9.8	9.4	J-3	R1	3.75	0.63	0.88	0.28	0.75	2.88	2	26.9
3 C 94 Q	9.8	9.4	J-3	Q1	2.69	0.75	0.75	0.28	0.75	2.5	1.75	23.0
3 C 96 R	10	9.6	J-3	R1	3.75	0.63	0.88	0.28	0.75	2.88	2	28.4
3 C 96 Q	10	9.6	J-3	Q1	2.69	0.75	0.75	0.28	0.75	2.5	1.75	25.3
3 C 98 R	10.2	9.8	J-3	R1	3.75	0.63	0.88	0.28	0.75	2.88	2	29.3
3 C 98 Q	10.2	9.8	J-3	Q1	2.69	0.75	0.75	0.28	0.75	2.5	1.75	24.4
3 C 100 R	10.4	10	J-2	R1	3.75	0.63	0.88	0.28	0.63	2.88	2	29.0
3 C 100 Q	10.4	10	J-3	Q1	2.69	0.75	0.75	0.28	0.75	2.5	1.75	27.6
3 C 102 R	10.6	10.2	J-2	R1	3.75	0.63	0.88	0.28	0.63	2.88	2	31.4
3 C 102 Q	10.6	10.2	J-3	Q1	2.69	0.75	0.75	0.28	0.75	2.5	1.75	24.9
3 C 106 R	11	10.6	J-2	R1	3.75	0.63	0.88	0.28	0.63	2.88	2	31.8
3 C 106 Q	11	10.6	J-3	Q1	2.69	0.75	0.75	0.28	0.75	2.5	1.75	26.9
3 C 110 R	11.4	11	J-2	R1	3.75	0.63	0.88	0.28	0.63	2.88	2	29.3
3 C 110 Q	11.4	11	J-3	Q1	2.69	0.75	0.75	0.28	0.75	2.5	1.75	27.4
3 C 114 Q	11.8	11.4	J-3	Q1	2.69	0.75	0.75	0.28	0.75	2.5	1.75	28.3
3 C 120 R	12.4	12	J-2	R1	3.75	0.63	0.88	0.28	0.63	2.88	2	36.9
3 C 120 Q	12.4	12	J-3	Q1	2.69	0.75	0.75	0.28	0.75	2.5	1.75	30.3
3 C 130 R	13.4	13	J-3	R1	3.75	0.63	0.88	0.28	0.63	2.88	2	34.8
3 C 130 Q	13.4	13	J-3	Q1	2.69	0.75	0.75	0.28	0.75	2.5	1.75	34.9
3 C 140 R	14.4	14	J-3	R1	3.75	0.63	0.88	0.28	0.63	2.88	2	39.4
3 C 150 R	15.4	15	J-3	R1	3.75	0.63	0.88	0.28	0.63	2.88	2	43.8
3 C 160 R	16.4	16	J-3	R1	3.75	0.63	0.88	0.28	0.63	2.88	2	47.0
3 C 160 Q	16.4	16	J-3	Q1	2.69	0.75	0.75	0.28	0.75	2.5	1.75	46.0
3 C 180 R	18.4	18	J-3	R1	3.75	0.63	0.88	0.28	0.63	2.88	2	51.5
3 C 200 R	20.4	20	J-3	R1	3.75	0.63	0.88	0.28	0.63	2.88	2	58.0
3 C 200 Q	20.4	20	J-3	Q1	2.69	0.75	0.75	0.28	0.75	2.5	1.75	54.5
3 C 240 R	24.4	24	J-3	R1	3.75	0.63	0.88	0.28	0.63	2.88	2	71.0
3 C 240 Q	24.4	24	J-3	Q1	2.69	0.75	0.75	0.28	0.75	2.5	1.75	71.0
3 C 270 R	27.4	27	J-3	R1	3.75	0.63	0.88	0.28	0.63	2.88	2	92.0
3 C 300 R	30.4	30	J-3	R1	3.75	0.63	0.88	0.28	0.63	2.88	2	110.0
3 C 360 R	36.4	36	J-3	R1	3.75	0.63	0.88	0.28	0.63	2.88	2	135.0
3 C 440 R	44.4	44	J-3	R1	3.75	0.63	0.88	0.28	0.63	2.88	2	196.0
3 C 500 R	50.4	50	J-3	R1	3.75	0.63	0.88	0.28	0.63	2.88	2	213.0
3 C 500 S	50.4	50	L-3	S1	4.25	0.03	1.06	0.38	0.03	4.38	3.31	224.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

C Conventional MST® Bushed Stock Sheaves

C MST® Sheaves

4 Grooves F = 4.25												
Part Number	OD	PD C Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
4 C 50 Q	5.4	5	J-1	Q2	2.63	1.5	2.75	0.28	–	3.5	2.75	10.9
4 C 56 P	6	5.6	J-2	P2	1.75	1.31	0.63	0.25	0.63	2.94	2.31	15.4
4 C 60 Q	6.4	6	J-2	Q2	2.63	0.75	2.75	0.28	0.88	3.5	2.75	17.0
4 C 70 Q	7.4	7	J-2	Q2	2.63	0.75	0.75	0.28	0.75	3.5	2.75	23.8
4 C 72 Q	7.6	7.2	J-2	Q2	2.63	0.75	0.75	0.28	0.75	3.5	2.75	26.8
4 C 74 Q	7.8	7.4	J-2	Q2	2.63	0.75	0.75	0.28	0.75	3.5	2.75	27.5
4 C 76 Q	8	7.6	J-2	Q2	2.63	0.75	0.75	0.28	0.75	3.5	2.75	30.3
4 C 78 Q	8.2	7.8	J-2	Q2	2.63	0.75	0.75	0.28	0.75	3.5	2.75	26.4
4 C 80 Q	8.4	8	J-2	Q2	2.63	0.75	0.75	0.28	0.75	3.5	2.75	29.0
4 C 82 Q	8.6	8.2	J-2	Q2	2.63	0.75	0.75	0.28	0.75	3.5	2.75	26.8
4 C 84 Q	8.8	8.4	J-2	Q2	2.63	0.75	0.75	0.28	0.75	3.5	2.75	28.8
4 C 86 Q	9	8.6	J-2	Q2	2.63	0.75	0.75	0.28	0.75	3.5	2.75	27.9
4 C 88 Q	9.2	8.8	J-2	Q2	2.63	0.75	0.75	0.28	0.75	3.5	2.75	31.6
4 C 90 R	9.4	9	K-2	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	30.0
4 C 90 Q	9.4	9	J-2	Q2	2.63	0.75	0.75	0.28	0.75	3.5	2.75	28.4
4 C 92 R	9.6	9.2	K-2	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	31.6
4 C 92 Q	9.6	9.2	J-2	Q2	2.63	0.75	0.75	0.28	0.75	3.5	2.75	32.3
4 C 94 R	9.8	9.4	K-2	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	31.6
4 C 94 Q	9.8	9.4	J-2	Q2	2.63	0.75	0.75	0.28	0.75	3.5	2.75	31.8
4 C 96 R	10	9.6	K-2	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	31.1
4 C 96 Q	10	9.6	J-2	Q2	2.63	0.75	0.75	0.28	0.75	3.5	2.75	35.2
4 C 98 R	10.2	9.8	K-2	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	33.4
4 C 98 Q	10.2	9.8	J-2	Q2	2.63	0.75	0.75	0.28	0.75	3.5	2.75	33.0
4 C 100 R	10.4	10	K-2	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	34.1
4 C 100 Q	10.4	10	J-3	Q2	2.63	0.75	0.75	0.28	0.75	3.5	2.75	37.0
4 C 102 R	10.6	10.2	K-2	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	36.5
4 C 102 Q	10.6	10.2	J-3	Q2	2.63	0.75	0.88	0.28	0.75	3.5	2.75	33.5
4 C 106 R	11	10.6	K-2	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	36.5
4 C 106 Q	11	10.6	J-3	Q2	2.63	0.75	0.88	0.28	0.75	3.5	2.75	36.3
4 C 110 R	11.4	11	K-2	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	33.0
4 C 110 Q	11.4	11	J-3	Q2	2.63	0.75	0.88	0.28	0.75	3.5	2.75	36.3
4 C 114 Q	11.8	11.4	J-3	Q2	2.63	0.75	0.75	0.28	0.75	3.5	2.75	38.4
4 C 120 R	12.4	12	K-2	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	42.9
4 C 120 Q	12.4	12	J-3	Q2	2.63	0.75	0.88	0.28	0.75	3.5	2.75	40.5
4 C 130 R	13.4	13	K-3	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	40.1
4 C 130 Q	13.4	13	J-3	Q2	2.63	0.75	0.88	0.28	0.75	3.5	2.75	43.6
4 C 140 R	14.4	14	K-3	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	46.6
4 C 150 R	15.4	15	K-3	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	52.0
4 C 160 R	16.4	16	K-3	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	55.0
4 C 160 Q	16.4	16	J-3	Q2	2.63	0.75	0.88	0.28	0.75	3.5	2.75	55.0
4 C 180 R	18.4	18	K-3	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	60.0
4 C 180 S	18.4	18	J-3	S1	4.25	0.47	1.06	0.38	0.47	4.38	3.31	92.0
4 C 200 R	20.4	20	K-3	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	69.0
4 C 200 S	20.4	20	J-3	S1	4.25	0.47	1.06	0.38	0.47	4.38	3.31	103.0
4 C 200 Q	20.4	20	J-3	Q2	2.63	0.75	1.06	0.28	0.75	3.5	2.75	103.0
4 C 240 R	24.4	24	K-3	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	86.0
4 C 240 S	24.4	24	J-3	S1	4.25	0.47	1.06	0.38	0.47	4.38	3.31	120.0
4 C 240 Q	24.4	24	J-3	Q2	2.63	0.75	1.06	0.28	0.75	3.5	2.75	120.0
4 C 270 R	27.4	27	K-3	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	110.0
4 C 270 S	27.4	27	J-3	S1	4.25	0.47	1.06	0.38	0.47	4.38	3.31	123.0
4 C 300 R	30.4	30	K-3	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	123.0
4 C 300 S	30.4	30	J-3	S1	4.25	0.47	1.06	0.38	0.47	4.38	3.31	142.0
4 C 360 R	36.4	36	K-3	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	156.0
4 C 360 S	36.4	36	J-3	S1	4.25	0.47	1.06	0.38	0.47	4.38	3.31	183.0
4 C 440 R	44.4	44	K-3	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	218.0
4 C 440 U	44.4	44	J-3	U0	5.5	0.25	1.19	0.47	0.25	4.94	3.75	241.0
4 C 500 R	50.4	50	K-3	R1	3.75	1.13	0.88	0.28	1.13	2.88	2	240.0
4 C 500 U	50.4	50	J-3	U0	5.5	0.25	1.19	0.47	0.25	4.94	3.75	283.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings

1 = Solid 2 = Web 3 = Spoked

C MST® Sheaves

5 Grooves F = 5.25												
Part Number	OD	PD C Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
5 C 70 Q	7.4	7	K-2	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	27.5
5 C 72 Q	7.6	7.2	K-2	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	29.8
5 C 74 Q	7.8	7.4	K-2	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	31.0
5 C 76 Q	8	7.6	K-2	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	34.3
5 C 78 Q	8.2	7.8	K-2	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	30.0
5 C 80 Q	8.4	8	K-2	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	33.4
5 C 82 Q	8.6	8.2	K-2	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	30.3
5 C 84 Q	8.8	8.4	K-2	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	32.8
5 C 86 Q	9	8.6	K-2	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	31.0
5 C 88 Q	9.2	8.8	K-2	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	34.9
5 C 90 R	9.4	9	K-2	R1	3.75	1.63	0.88	0.28	1.63	2.88	2	33.4
5 C 90 Q	9.4	9	K-2	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	32.6
5 C 92 R	9.6	9.2	K-2	R1	3.75	1.63	0.88	0.28	1.63	2.88	2	36.8
5 C 92 Q	9.6	9.2	K-2	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	36.4
5 C 94 R	9.8	9.4	K-2	R1	3.75	1.63	0.88	0.28	1.63	2.88	2	35.8
5 C 94 Q	9.8	9.4	K-3	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	35.6
5 C 96 R	10	9.6	K-2	R1	3.75	1.63	0.88	0.28	1.63	2.88	2	35.4
5 C 96 Q	10	9.6	K-3	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	39.1
5 C 98 R	10.2	9.8	K-2	R1	3.75	1.63	0.88	0.28	1.63	2.88	2	37.6
5 C 98 Q	10.2	9.8	K-3	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	37.3
5 C 100 R	10.4	10	K-2	R1	3.75	1.63	0.88	0.28	1.63	2.88	2	38.9
5 C 100 Q	10.4	10	K-3	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	42.3
5 C 102 R	10.6	10.2	K-2	R1	3.75	1.63	0.88	0.28	1.63	2.88	2	40.6
5 C 102 Q	10.6	10.2	K-3	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	39.4
5 C 106 R	11	10.6	K-2	R1	3.75	1.63	0.88	0.28	1.63	2.88	2	39.0
5 C 106 Q	11	10.6	K-3	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	41.0
5 C 110 R	11.4	11	K-2	R1	3.75	1.63	0.88	0.28	1.63	2.88	2	38.8
5 C 110 Q	11.4	11	K-3	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	42.4
5 C 114 Q	11.8	11.4	K-3	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	42.8
5 C 120 R	12.4	12	K-2	R1	3.75	1.63	0.88	0.28	1.63	2.88	2	47.5
5 C 120 Q	12.4	12	K-3	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	46.3
5 C 130 R	13.4	13	K-3	R1	3.75	1.63	0.88	0.28	1.63	2.88	2	46.0
5 C 130 Q	13.4	13	K-3	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	49.5
5 C 140 R	14.4	14	K-3	R1	3.75	1.63	0.88	0.28	1.63	2.88	2	52.0
5 C 150 R	15.4	15	K-3	R1	3.75	1.63	0.88	0.28	1.63	2.88	2	54.0
5 C 160 R	16.4	16	K-3	R1	3.75	1.63	0.88	0.28	1.63	2.88	2	63.0
5 C 160 Q	16.4	16	K-3	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	64.5
5 C 180 R	18.4	18	K-3	R1	3.75	1.63	0.88	0.28	1.63	2.88	2	69.0
5 C 180 S	18.4	18	J-3	S1	4.25	0.97	1.06	0.38	0.97	4.38	3.31	100.0
5 C 200 R	20.4	20	K-3	R1	3.75	0.63	0.88	0.28	2.63	2.88	2	77.0
5 C 200 S	20.4	20	J-3	S1	4.25	0.97	1.06	0.38	0.97	4.38	3.31	99.0
5 C 200 Q	20.4	20	K-3	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	78.0
5 C 240 R	24.4	24	K-3	R1	3.75	0.63	0.88	0.28	2.63	2.88	2	110.0
5 C 240 S	24.4	24	J-3	S1	4.25	0.97	1.06	0.38	0.97	4.38	3.31	129.0
5 C 240 Q	24.4	24	K-3	Q2	2.63	1.25	0.75	0.28	1.25	3.5	2.75	96.0
5 C 270 R	27.4	27	J-3	R2	3.63	0.63	0.88	0.28	0.63	4.88	4	131.0
5 C 300 R	30.4	30	J-3	R2	3.63	0.63	0.88	0.28	0.63	4.88	4	150.0
5 C 300 S	30.4	30	J-3	S1	4.25	0.97	1.06	0.38	0.97	4.38	3.31	160.0
5 C 360 R	36.4	36	J-3	R2	3.63	0.63	0.88	0.28	0.63	4.88	4	194.0
5 C 440 R	44.4	44	J-3	R2	3.63	0.63	0.88	0.28	0.63	4.88	4	243.0
5 C 500 R	50.4	50	J-3	R2	3.63	0.63	0.88	0.28	0.63	4.88	4	273.0

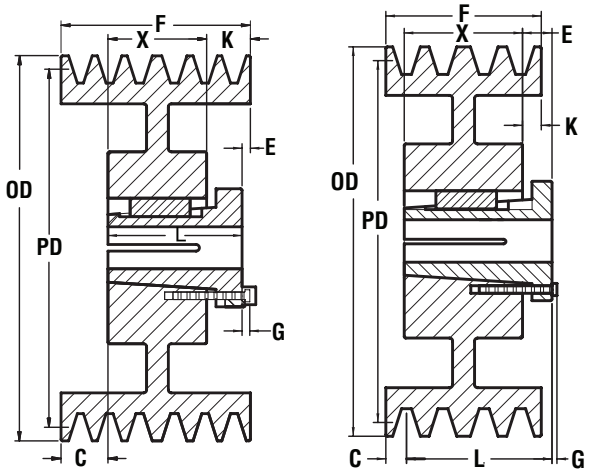
NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

C Conventional MST® Bushed Stock Sheaves

C MST® Sheaves

6 Grooves F = 6.25												
Part Number	OD	PD C Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
6 C 70 Q	7.4	7	K-2	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	29.9
6 C 72 Q	7.6	7.2	K-2	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	33.6
6 C 74 Q	7.8	7.4	K-2	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	33.3
6 C 76 Q	8	7.6	K-2	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	37.9
6 C 78 Q	8.2	7.8	K-2	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	33.5
6 C 80 Q	8.4	8	K-2	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	37.6
6 C 82 Q	8.6	8.2	K-2	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	34.0
6 C 84 Q	8.8	8.4	K-2	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	37.0
6 C 86 Q	9	8.6	K-2	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	35.0
6 C 88 Q	9.2	8.8	K-2	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	39.4
6 C 90 R	9.4	9	K-2	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	53.0
6 C 90 Q	9.4	9	K-2	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	36.8
6 C 92 R	9.6	9.2	K-2	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	58.0
6 C 92 Q	9.6	9.2	K-2	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	41.0
6 C 94 R	9.8	9.4	K-2	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	63.5
6 C 94 Q	9.8	9.4	K-3	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	39.4
6 C 96 R	10	9.6	K-2	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	55.0
6 C 96 Q	10	9.6	K-3	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	43.6
6 C 98 R	10.2	9.8	K-2	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	65.0
6 C 98 Q	10.2	9.8	K-3	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	42.0
6 C 100 R	10.4	10	K-2	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	62.0
6 C 100 Q	10.4	10	K-3	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	47.3
6 C 102 R	10.6	10.2	K-2	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	68.0
6 C 102 Q	10.6	10.2	K-3	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	44.4
6 C 106 R	11	10.6	K-2	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	55.0
6 C 106 Q	11	10.6	K-3	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	45.4
6 C 110 R	11.4	11	K-2	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	51.5
6 C 110 Q	11.4	11	K-3	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	47.0
6 C 114 Q	11.8	11.4	K-3	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	49.6
6 C 120 R	12.4	12	K-2	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	64.0
6 C 120 Q	12.4	12	K-3	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	51.0
6 C 130 R	13.4	13	K-3	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	61.0
6 C 130 Q	13.4	13	K-3	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	56.0
6 C 140 R	14.4	14	K-3	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	69.0
6 C 150 R	15.4	15	K-3	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	68.0
6 C 160 R	16.4	16	K-3	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	77.0
6 C 160 Q	16.4	16	K-3	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	72.0
6 C 180 R	18.4	18	K-3	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	84.0
6 C 180 S	18.4	18	K-3	S1	4.25	1.47	1.06	0.28	1.47	4.38	3.31	107.0
6 C 200 R	20.4	20	K-3	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	91.5
6 C 200 S	20.4	20	K-3	S1	4.25	1.47	1.06	0.38	1.47	4.38	3.31	127.0
6 C 200 Q	20.4	20	K-3	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	88.3
6 C 240 R	24.4	24	K-3	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	116.0
6 C 240 S	24.4	24	K-3	S1	4.25	1.47	1.06	0.38	1.47	4.38	3.31	125.0
6 C 240 Q	24.4	24	K-3	Q2	2.63	1.75	0.75	0.28	1.75	3.5	2.75	108.0
6 C 270 R	27.4	27	K-3	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	144.0
6 C 270 S	27.4	27	K-3	S1	4.25	1.47	1.06	0.38	1.47	4.38	3.31	151.0
6 C 300 R	30.4	30	K-3	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	160.0
6 C 300 U	30.4	30	K-3	U0	5.5	1.25	1.19	0.47	1.25	4.94	3.75	191.0
6 C 360 R	36.4	36	K-3	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	211.0
6 C 360 U	36.4	36	K-3	U0	5.5	1.25	1.19	0.47	1.25	4.94	3.75	233.0
6 C 440 R	44.4	44	K-3	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	286.0
6 C 500 R	50.4	50	K-3	R2	3.63	1.13	0.88	0.28	1.13	4.88	4	303.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked



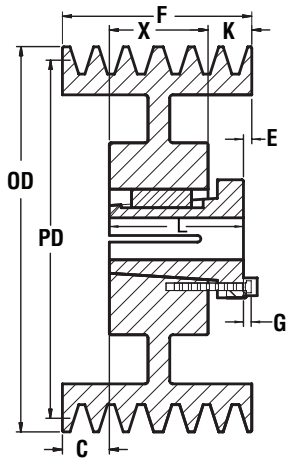
Type K Type J

C MST® Sheaves

7 Grooves F = 7.25												
Part Number	OD	PD C Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
7 C 70 Q	7.4	7	K-2	Q3	2.50	1.50	0.750	0.281	1.50	50	00	37.5
7 C 80 R	8.4	8	K-2	R2	3.625	1.625	0.875	0.281	1.625	4.875	40	45.6
7 C 86 R	9	8.6	K-2	R2	3.625	1.625	0.875	0.281	1.625	4.875	40	52.8
7 C 90 R	9.4	9	K-2	R2	3.625	1.625	0.875	0.281	1.625	4.875	40	58.0
7 C 92 R	9.6	9.2	K-2	R2	3.625	1.625	0.875	0.281	1.625	4.875	40	63.0
7 C 94 R	9.8	9.4	K-2	R2	3.625	1.625	0.875	0.281	1.625	4.875	40	68.0
7 C 98 R	10.2	9.8	K-2	R2	3.625	1.625	0.875	0.281	1.625	4.875	40	73.0
7 C 100 R	10.4	10	K-2	R2	3.625	1.625	0.875	0.281	1.625	4.875	40	71.0
7 C 102 R	10.6	10.2	K-2	R2	3.625	1.625	0.875	0.281	1.625	4.875	40	76.0
7 C 106 R	11	10.6	K-2	R2	3.625	1.625	0.875	0.281	1.625	4.875	40	71.0
7 C 110 R	11.4	11	K-2	R2	3.625	1.625	0.875	0.281	1.625	4.875	40	68.0
7 C 120 R	12.4	12	K-2	R2	3.625	1.625	0.875	0.281	1.625	4.875	40	67.0
7 C 130 R	13.4	13	K-3	R2	3.625	1.625	0.875	0.281	1.625	4.875	40	84.0
7 C 140 R	14.4	14	K-3	R2	3.625	1.625	0.875	0.281	1.625	4.875	40	83.0
7 C 150 R	15.4	15	K-3	R2	3.625	1.625	0.875	0.281	1.625	4.875	40	86.0
7 C 160 R	16.4	16	K-3	R2	3.625	1.625	0.875	0.281	1.625	4.875	40	88.0
7 C 180 S	18.4	18	J-3	S2	4.188	0.781	1.062	0.375	1.281	6.750	5.688	137.0
7 C 180 U	18.4	18	K-3	U0	5.50	1.750	1.188	0.468	1.750	4.938	3.750	133.0
7 C 200 S	20.4	20	J-3	S2	4.188	0.781	1.062	0.375	1.281	6.750	5.688	152.0
7 C 200 U	20.4	20	K-3	U0	5.50	1.750	1.188	0.468	1.750	4.938	3.750	144.0
7 C 240 S	24.4	24	J-3	S2	4.188	0.781	1.062	0.375	1.281	6.750	5.688	173.0
7 C 270 S	27.4	27	J-3	S2	4.188	0.781	1.062	0.375	1.281	6.750	5.688	197.0
7 C 270 U	27.4	27	K-3	U0	5.50	1.750	1.188	0.468	1.750	4.938	3.750	196.0
7 C 300 S	30.4	30	J-3	S2	4.188	0.781	1.062	0.375	1.281	6.750	5.688	220.0
7 C 300 U	30.4	30	K-3	U0	5.50	1.750	1.188	0.468	1.750	4.938	3.750	217.0
7 C 360 S	36.4	36	J-3	S2	4.188	0.781	1.062	0.375	1.281	6.750	5.688	279.0
7 C 440 S	44.4	44	J-3	S2	4.188	0.781	1.062	0.375	1.281	6.750	5.688	337.0
7 C 500 S	50.4	50	J-3	S2	4.188	0.781	1.062	0.375	1.281	6.750	5.688	382.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

C Conventional MST® Bushed Stock Sheaves

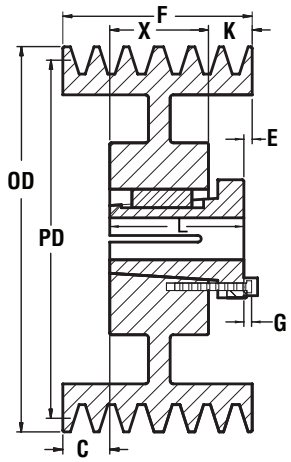


Type K

C MST® Sheaves

8 Grooves												
F = 8.25												
Part Number	OD	PD C Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
8 C 70 Q	7.4	7	K-2	Q3	2.5	1.63	0.75	0.28	2.38	5	0	40.0
8 C 80 R	8.4	8	K-2	R2	3.63	1.63	0.88	0.28	2.63	4.88	4	49.0
8 C 86 R	9	8.6	K-2	R2	3.63	1.63	0.88	0.28	2.63	4.88	4	57.0
8 C 90 R	9.4	9	K-2	R2	3.63	1.63	0.88	0.28	2.63	4.88	4	62.0
8 C 92 R	9.6	9.2	K-2	R2	3.63	1.63	0.88	0.28	2.63	4.88	4	68.0
8 C 94 R	9.8	9.4	K-2	R2	3.63	1.63	0.88	0.28	2.63	4.88	4	73.0
8 C 96 R	10	9.6	K-2	R2	3.63	1.63	0.88	0.28	2.63	4.88	4	70.0
8 C 98 R	10.2	9.8	K-2	R2	3.63	1.63	0.88	0.28	2.63	4.88	4	76.0
8 C 100 R	10.4	10	K-2	R2	3.63	1.63	0.88	0.28	2.63	4.88	4	72.0
8 C 102 R	10.6	10.2	K-2	R2	3.63	1.63	0.88	0.28	2.63	4.88	4	79.0
8 C 106 R	11	10.6	K-2	R2	3.63	1.63	0.88	0.28	2.63	4.88	4	76.0
8 C 110 R	11.4	11	K-2	R2	3.63	2.13	0.88	0.28	2.13	4.88	4	73.0
8 C 120 R	12.4	12	K-2	R2	3.63	2.13	0.88	0.28	2.13	4.88	4	74.0
8 C 130 R	13.4	13	K-3	R2	3.63	2.13	0.88	0.28	2.13	4.88	4	80.0
8 C 140 R	14.4	14	K-3	R2	3.63	2.13	0.88	0.28	2.13	4.88	4	84.0
8 C 150 R	15.4	15	K-3	R2	3.63	2.13	0.88	0.28	2.13	4.88	4	93.0
8 C 160 R	16.4	16	K-3	R2	3.63	2.13	0.88	0.28	2.13	4.88	4	100.0
8 C 180 S	18.4	18	K-3	S2	4.19	1.28	1.06	0.38	1.28	6.75	5.69	140.0
8 C 180 U	18.4	18	K-3	U0	5.5	2.25	1.19	0.47	2.25	4.94	3.75	141.0
8 C 200 S	20.4	20	K-3	S2	4.19	1.28	1.06	0.38	1.28	6.75	5.69	163.0
8 C 200 U	20.4	20	K-3	U0	5.5	2.25	1.19	0.47	2.25	4.94	3.75	160.0
8 C 240 S	24.4	24	K-3	S2	4.19	1.28	1.06	0.38	1.28	6.75	5.69	194.0
8 C 240 U	24.4	24	K-3	U0	5.5	2.25	1.19	0.47	2.25	4.94	3.75	184.0
8 C 270 S	27.4	27	K-3	S2	4.19	1.28	1.06	0.38	1.28	6.75	5.69	224.0
8 C 300 S	30.4	30	K-3	S2	4.19	1.28	1.06	0.38	1.28	6.75	5.69	212.0
8 C 300 U	30.4	30	K-3	U0	5.5	2.25	1.19	0.47	2.25	4.94	3.75	227.0
8 C 360 S	36.4	36	K-3	S2	4.19	1.28	1.06	0.38	1.28	6.75	5.69	261.0
8 C 360 U	36.4	36	K-3	U0	5.5	2.25	1.19	0.47	2.25	4.94	3.75	288.0
8 C 440 S	44.4	44	K-3	S2	4.19	1.28	1.06	0.38	1.28	6.75	5.69	368.0
8 C 440 U	44.4	44	K-3	U0	5.5	2.25	1.19	0.47	2.25	4.94	3.75	358.0
8 C 500 S	50.4	50	K-3	S2	4.19	1.28	1.06	0.38	1.28	6.75	5.69	429.0
8 C 500 U	50.4	50	K-3	U0	5.5	2.25	1.19	0.47	2.25	4.94	3.75	417.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked



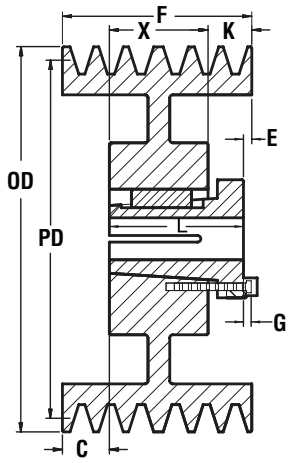
Type K

C MST® Sheaves

10 Grooves F = 10.25												
Part Number	OD	PD C Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
10 C 80 R	8.4	8	K-2	R2	3.63	1.63	0.88	0.28	4.63	4.88	4	70.0
10 C 86 R	9	8.6	K-2	R2	3.63	1.63	0.88	0.28	4.63	4.88	4	72.0
10 C 90 R	9.4	9	K-2	R2	3.63	1.63	0.88	0.28	4.63	4.88	4	72.0
10 C 92 R	9.6	9.2	K-2	R2	3.63	1.63	0.88	0.28	4.63	4.88	4	70.0
10 C 94 R	9.8	9.4	K-2	R2	3.63	1.63	0.88	0.28	4.63	4.88	4	78.0
10 C 96 R	10	9.6	K-2	R2	3.63	1.63	0.88	0.28	4.63	4.88	4	73.0
10 C 98 R	10.2	9.8	K-2	R2	3.63	1.63	0.88	0.28	4.63	4.88	4	88.0
10 C 100 R	10.4	10	K-2	R2	3.63	1.63	0.88	0.28	4.63	4.88	4	89.0
10 C 102 R	10.6	10.2	K-2	R2	3.63	1.63	0.88	0.28	4.63	4.88	4	97.0
10 C 106 R	11	10.6	K-2	R2	3.63	1.63	0.88	0.28	4.63	4.88	4	84.0
10 C 110 R	11.4	11	K-2	R2	3.63	3.13	0.88	0.28	4.63	4.88	4	84.0
10 C 120 R	12.4	12	K-2	R2	3.63	3.13	0.88	0.28	4.63	4.88	4	97.0
10 C 130 R	13.4	13	K-3	R2	3.63	3.13	0.88	0.28	4.63	4.88	4	102.0
10 C 140 R	14.4	14	K-3	R2	3.63	3.13	0.88	0.28	4.63	4.88	4	106.0
10 C 150 R	15.4	15	K-3	R2	3.63	3.13	0.88	0.28	4.63	4.88	4	110.0
10 C 160 R	16.4	16	K-3	R2	3.63	3.13	0.88	0.28	4.63	4.88	4	111.0
10 C 180 S	18.4	18	K-3	S2	4.19	2.28	1.06	0.38	2.28	6.75	5.69	164.0
10 C 180 U	18.4	18	K-3	U0	5.5	3.25	1.19	0.47	3.25	4.94	3.75	163.0
10 C 200 S	20.4	20	K-3	S2	4.19	2.28	1.06	0.38	2.28	6.75	5.69	170.0
10 C 200 U	20.4	20	K-3	U0	5.5	3.25	1.19	0.47	3.25	4.94	3.75	178.0
10 C 240 S	24.4	24	K-3	S2	4.19	2.28	1.06	0.38	2.28	6.75	5.69	210.0
10 C 240 U	24.4	24	K-3	U0	5.5	3.25	1.19	0.47	3.25	4.94	3.75	208.0
10 C 270 S	27.4	27	K-3	S2	4.19	2.28	1.06	0.38	2.28	6.75	5.69	246.0
10 C 300 S	30.4	30	K-3	S2	4.19	2.28	1.06	0.38	2.28	6.75	5.69	278.0
10 C 300 U	30.4	30	K-3	U1	5.5	2.31	1.5	0.47	2.31	7.13	5.63	298.0
10 C 360 S	36.4	36	K-3	S2	4.19	2.28	1.06	0.38	2.28	6.75	5.69	324.0
10 C 360 U	36.4	36	K-3	U1	5.5	2.31	1.5	0.47	2.31	7.13	5.63	362.0
10 C 440 U	44.4	44	K-3	U1	5.5	2.31	1.5	0.47	2.31	7.13	5.63	463.0
10 C 500 U	50.4	50	K-3	U1	5.5	2.31	1.5	0.47	2.31	7.13	5.63	480.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

C Conventional MST® Bushed Stock Sheaves



Type K

C MST® Sheaves

12 Grooves F = 12.25												
Part Number	OD	PD C Belt	Type	Bush	Bush Max Bore	C	E	G	K	Length Thru Bore	X	Wt. Less Bushing
12 C 90 S	9.4	9	K-2	S2	4.19	2	1.06	0.38	4.56	6.75	5.69	88.0
12 C 92 S	9.6	9.2	K-2	S2	4.19	2	1.06	0.38	4.56	6.75	5.69	93.0
12 C 94 S	9.8	9.4	K-2	S2	4.19	2	1.06	0.38	4.56	6.75	5.69	104.0
12 C 96 S	10	9.6	K-2	S2	4.19	2	1.06	0.38	4.56	6.75	5.69	102.0
12 C 98 S	10.2	9.8	K-2	S2	4.19	2	1.06	0.38	4.56	6.75	5.69	111.0
12 C 100 S	10.4	10	K-2	S2	4.19	2	1.06	0.38	4.56	6.75	5.69	112.0
12 C 102 S	10.6	10.2	K-2	S2	4.19	2	1.06	0.38	4.56	6.75	5.69	121.0
12 C 106 S	11	10.6	K-2	S2	4.19	2	1.06	0.38	4.56	6.75	5.69	133.0
12 C 110 S	11.4	11	K-2	S2	4.19	3.28	1.06	0.38	3.28	6.75	5.69	128.0
12 C 120 S	12.4	12	K-2	S2	4.19	3.28	1.06	0.38	3.28	6.75	5.69	140.0
12 C 130 S	13.4	13	K-2	S2	4.19	3.28	1.06	0.38	3.28	6.75	5.69	165.0
12 C 140 S	14.4	14	K-3	S2	4.19	3.28	1.06	0.38	3.28	6.75	5.69	148.0
12 C 150 S	15.4	15	K-3	S2	4.19	3.28	1.06	0.38	3.28	6.75	5.69	162.0
12 C 160 S	16.4	16	K-3	S2	4.19	3.28	1.06	0.38	3.28	6.75	5.69	163.0
12 C 180 U	18.4	18	K-3	U1	5.5	3.31	1.5	0.47	3.31	7.13	5.63	204.0
12 C 200 U	20.4	20	K-3	U1	5.5	3.31	1.5	0.47	3.31	7.13	5.63	224.0
12 C 240 U	24.4	24	K-3	U1	5.5	3.31	1.5	0.47	3.31	7.13	5.63	257.0
12 C 270 U	27.4	27	K-3	U1	5.5	3.31	1.5	0.47	3.31	7.13	5.63	300.0
12 C 300 U	30.4	30	K-3	U1	5.5	3.31	1.5	0.47	3.31	7.13	5.63	327.0
12 C 360 U	36.4	36	K-3	U1	5.5	3.31	1.5	0.47	3.31	7.13	5.63	397.0
12 C 440 U	44.4	44	K-3	U1	5.5	3.31	1.5	0.47	3.31	7.13	5.63	519.0
12 C 500 U	50.4	50	K-3	U1	5.5	3.31	1.5	0.47	3.31	7.13	5.63	551.0

NOTE: Dimensions in inches, weight in pounds. Weights do not include bushings 1 = Solid 2 = Web 3 = Spoked

ROLLER CHAIN SPROCKETS

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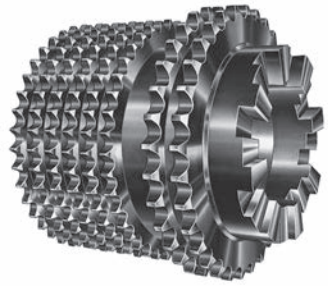
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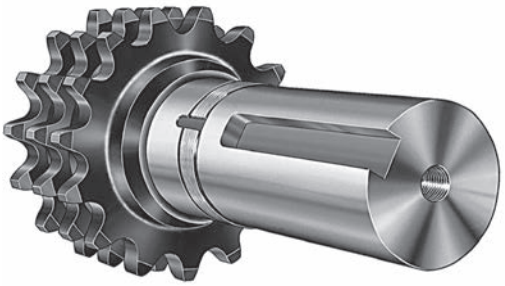
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Made-To-Order Sprockets



Multi-Strand Oil Field
Sprocket with Clutch Jaws



Triple 160
Shaft Sprocket



Quadruple 160
Sprocket



Triple 200
Sprocket



Double 200
Sprocket and Pinion



Large Triple Strand
Sprocket with Mounting Flange



Sprocket with
Mud Relief



Standard RC Sprocket
with Spline Bore



Special Dryer Sprocket



Special Plastic Sprocket



Block Chain

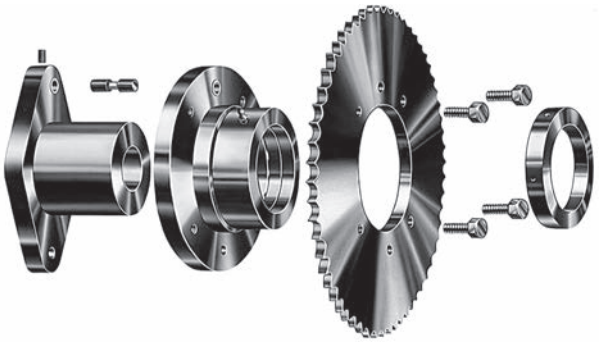
Martin manufactures numerous made-to-order sprockets. If you do not see the sprocket you need in this section, call us. Chances are if chain runs on it, we have made the sprocket before. Special materials, special bores, duplex, triplex, double-single-doubles, etc. are all familiar to Martin.

Bolt-On
Shear Pin Sprockets

Shear Pin sprockets provide simple, dependable protection against expensive machinery damage caused by overloads or jamming. Torque is transmitted by a single pin, necked to shear when the safe load is exceeded. When an overload occurs, the pin shears, disconnecting the drive immediately.

The Bolt-on Shear Pin Adapter converts any plate sprocket into a stock Shear Pin sprocket allowing immediate delivery of stock Shear Pin sprockets.

Selection guide on page E-6 gives complete procedure to select the proper Shear Pin assembly.



Stock Shear Pin Assemblies

Shear Pin Assembly Number	Hub Bore Range	Shear Pin Hub	Shear Pin Adapter
		Catalog Number	Catalog Number
SP-17	1" & UNDER	SPH-17	SPA-17
SP-18	1 1/16 - 1 1/4	SPH-18	SPA-18
SP-19	1 5/16 - 1 1/2	SPH-19	SPA-19
SP-20	1 9/16 - 1 3/4	SPH-20	SPA-20
SP-21	1 13/16 - 2	SPH-21	SPA-21
SP-22	2 1/16 - 2 1/4	SPH-22	SPA-22
SP-23	2 5/16 - 2 1/2	SPH-23	SPA-23
SP-24	2 9/16 - 2 3/4	SPH-24	SPA-24
SP-25	2 13/16 - 3	SPH-25	SPA-25
SP-26	3 1/16 - 3 1/2	SPH-26	SPA-26
SP-27	3 9/16 - 4	SPH-27	SPA-27
SP-28	4 1/16 - 4 1/2	SPH-28	SPA-28
SP-29	4 9/16 - 5	SPH-29	SPA-29
SP-30	4 7/8 - 5 1/2	SPH-30	SPA-30
SP-31	5 9/16 - 6	SPH-31	SPA-31

Notes on Pricing:

Shear Pin Hub List Price includes any finished bore within the stated range, standard keyway, setscrew, and hardened steel shear pin bushing.

Shear Pin Adapter List Price includes the Shear Pin bushin and grease fitting.

Complete Assembly List Price includes all components of the Shear Pin assembly as described above. Total list price of any Shear Pin sprocket is the complete assembly list price plus the list price of the desired plate sprocket (from tables of stock sprocket list prices).

Replacement Sprockets should be priced as altered stock sprockets directly from List Price and Alteration Charge tables.

Shear Pin Components may be ordered separately and will be treated as stock items when conforming to standard specifications and descriptions above.

Pricing Examples:

1. **Stock Shear Pin Sprocket**
   To price a 35 tooth shear pin sprocket for 160 chain (160SP35) using SP-26 shear pin assembly with 3 7/16" bore, standard keyway and setscrew:

   SP-26 Assembly List Price.....
   160A35 List Price.....
   Total List Price ..... **See List Price Sheet**

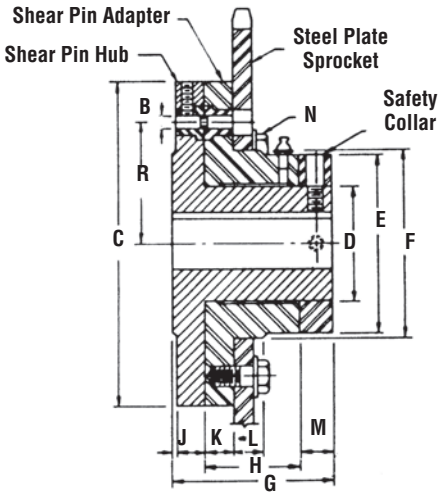
2. **Shear Pin Adapter and Sprocket for Existing Hub**
   To price a "Bolt-on" shear pin adapter and sprocket to replace the sprocket part of existing 50SP40 using SP-19 hub:

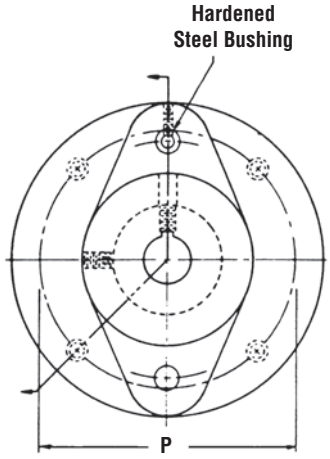
   SPA-19 Adapter List Price.....
   50A40 List Price.....
   Total List Price ..... **See List Price Sheet**

Shear Pin Sprockets can also be furnished in other standard styles or made to customer's specifications. Price on application.

It is important that the torque requirement for the selected hub be checkedin the torque rating table on page E-6 and the neck diameter of Shear Pin be specified.

Bolt-On Shear Pin Sprockets







Shear Pin Assembly Dimensions (Inches) — Table I

Shear Pin Assembly Number	Shear Pin		Diameter				Length Thru			Hub Flange Thickness	Adapt. Flange Thickness	Sprocket Seat Width	Bolts		Wt. lbs (Approx)	
	Radius	Pin Dia.	Flange	Shear Pin Hub	Adapt. Hub & Collar	Sprocket Seat	Shear Pin Hub	Adapt.	Collar				Number & Size	Belt Circle	Shear Pin Hub	Shear Pin Adapt.
	R	B	C	D	E	F	G	H	M	J	K	L	N	P		
SP-17	1.813	0.25	5.25	1.75	2.5	2.625	2.438	1.375	0.375	0.563	0.563	0.438	4 - 3/8"	4	2.7	3.2
SP-18	2.188	0.25	6	2.25	3.25	3.375	2.938	1.75	0.5	0.563	0.563	0.563	4 - 3/8"	4.75	4.6	4.7
SP-19	2.563	0.313	6.75	2.75	4	4.125	3.563	2.125	0.625	0.688	0.688	0.688	4 - 1/2"	5.5	7.2	7.6
SP-20	3	0.375	7.75	3.25	4.75	4.875	4.188	2.5	0.75	0.813	0.813	0.688	4 - 1/2"	6.25	11.0	11.9
SP-21	3.313	0.438	8.75	33/4	5.25	5.375	4.813	2.875	0.875	0.938	0.938	0.938	4 - 5/8"	7	16.2	16.9
SP-22	3.813	0.5	9.75	4.25	6.25	6.375	5.188	3	1	1.063	1.063	1.188	4 - 5/8"	8	23.3	24.5
SP-23	4	0.5	10	4.5	6.5	6.625	5.688	3.5	1	1.063	1.063	1.375	4 - 5/8"	8.25	26.3	27.7
SP-24	4.375	0.563	11.5	5	7	7.125	6.313	3.875	1.125	1.188	1.188	13/8	4 - 5/8"	9.25	40.4	38.6
SP-25	4.875	0.625	12.5		8	8.125	6.938	4.25	1.25	1.313	1.313	1.375	6 - 5/8"	10.25	52.6	53.6
SP-26	5.313	0.688	13.5	6.25	8.75	8.875	7.813	4.875	1.375	1.438	1.438	13/8	6 - 5/8"	11.25	66.7	66.8
SP-27	6.063	0.75	151/2	7	10	101/8	8.688	5.5	1.5	1.563	1.5	1.375	6 - 5/8"	12.75	96.5	100.0
SP-28	6.438	0.75	16.25	7.75	10.75	10.875	9.688	6.5	1.5	1.563	1.5	13/8	6 - 3/4"	13.5	125.0	115.0
SP-29	7.125	0.875	17.5	8.5	12	12.125	10.688	7	1.75	1.813	1.5	1.75	6 - 1"	14.75	160.0	150.0
SP-30	8.125	1	20.25	9.75	13.75	13.875	11.688	7.5	2	2.063	1.5	1.75	6 - 1"	17	215.0	207.0
SP-31	8.875	1.375	22.5	10.75	15	15.125	12.938	8.25	2.25	2.313	1.5	1.75	6 - 1"	18.75	318.0	265.0

Sprocket Sizes For Stock Shear Pin Assemblies — Table II

Shear Pin Assembly Number	Hub Bore Range	Minimum Number of Teeth for Single Sprockets											
		Chain Number											
		35	41	40	50	60	80	100	120	140	160	180	200	240
SP-17	1" & UNDER	48	37	37	30	26	—	—	—	—	—	—	—	—
SP-18	1 /16 - 1 1/4	55	42	42	34	29	23	—	—	—	—	—	—	—
SP-19	1 5/16 - 1 1/2	61	46	47	38	32	25	21	—	—	—	—	—	—
SP-20	1 9/16 - 1 3/4	69	53	53	43	36	28	23	—	—	—	—	—	—
SP-21	1 13/16 - 2	78	59	59	48	41	31	26	22	19	—	—	—	—
SP-22	2 1/16 - 2 1/4	86	65	66	53	45	34	28	24	21	19	17	—	14
SP-23	2 5/16 - 2 1/2	89	67	67	55	46	35	29	25	22	19	18	16	14
SP-24	2 9/16 - 2 3/4	101	76	77	62	52	40	33	28	24	22	20	18	16
SP-25	2 13/16 - 3	110	83	83	67	56	43	35	30	26	23	21	19	17
SP-26	3 1/16 - 3 1/2	—	98	98	72	61	46	38	32	28	25	23	20	18
SP-27	3 9/16 - 4	—	102	102	82	69	53	43	36	32	28	25	23	20
SP-28	4 1/16 - 4 1/2	—	107	107	86	72	55	45	38	33	29	26	24	21
SP-29	4 9/16 - 5	—	—	—	92	77	59	48	40	35	31	28	26	22
SP-30	5 1/16 - 5 1/2	—	—	—	106	89	68	55	46	40	35	32	29	25
SP-31	5 9/16 - 6	—	—	—	—	98	75	61	51	44	39	35	32	27

Bolt-On
Shear Pin Sprockets

Shear Pin Sprocket Selection

1. The shear pin assembly required is determined by the shaft size. Select the smallest shear pin assembly which will accommodate the required bore. Table on page E-5 contains the bore ranges and minimum sprocket sizes which allow chain clearance over the shear pin assembly flange.
2. Using one of the following formulas, compute the torque load the pin must transmit and find the value in the torque rating table below to obtain the proper shear pin neck diameter.

$$T = \frac{HP \times 63{,}025 \times 1.5}{RPM} \quad \text{or} \quad T = \frac{D \times CP \times 1.5}{2}$$

or T = Output of reducer × speed ratio of chain drive × 1.5

Where:
T = Torque in pound inches
HP = Horsepower at Sprocket
RPM = Sprocket Speed
D = PD of Sprocket
CP = Chain pull in pounds
1.5 = Safety factor for starting load

Example:

1. Determine the shear pin assembly and pin neck diameter to transmit 20 horsepower at 67 RPM with a 45 tooth, No. 100 sprocket on a 2 15/16" shaft.

(1) Referring to Table II (page E-5), shear pin assembly SP-25 is required for a 2 15/16" bore. The 45 tooth sprocket is well above the minimum size.

(2) Torque and neck diameter:

$$T = \frac{HP \times 63{,}025 \times 1.5}{RPM}$$

$$T = \frac{HP \times 63{,}025 \times 1.5}{RPM} = 28{,}200 \text{ lb. in.}$$

Referring to Table III (below) under SP-25, a pin necked to 3/8" shows a torque rating of 29,810 lb. in., which exceeds the 28,200 lb. in. required.

(3) Order: 100SP45, SP-25 assembly with 2 15/16" bore and 3/8" pin neck diameter.

Shear Pin Torque Ratings — Table III

Shear Pin Neck Diameter (Inches)	TORQUE RATING — POUND INCHES														
	Shear Pin Hub Number														
	SP17	SP18	SP19	SP20	SP21	SP22	SP23	SP24	SP25	SP26	SP27	SP28	SP29	SP30	SP31
3/32	728	875	1022	1204	1323	1556	1603								
1/8	1248	1500	1752	2064	2268	2616	2748								
5/32	1976	2375	2774	3268	3591	4142	4351	4750							
3/16	2808	3375	3942	4944	5103	5886	6183	6750	7317						
7/32	3848	4625	5402	6364	6993	8066	8473	9250	10027						
1/4	5200	6250	7300	8600	9450	10900	11450	12500	13550	15200	17300	18400			
9/32			9052	10664	11718	13516	14198	15500	16802	18848	21452	22816			
5/16			11096	13072	14364	16568	17403	19000	20596	23140	26296	27968	30932		
11/32				15824	17388	20056	21068	23000	24932	27968	31832	33856	37440		
3/8				18920	20790	23980	25190	27500	29810	33440	38060	40480	44770	51040	
13/32					24570	28340	29170	32500	35230	39520	44980	47840	52910	60320	
7/16					28350	32700	34350	37500	41650	45600	51900	55200	61050	69600	
15/32						37060	38930	42500	46070	51680	58820	62560	69190	78880	
1/2						42728	44884	49000	53116	59584	67816	72128	79772	90944	
17/32								55000	59620	66880	76120	80960	89540	102080	
9/16								62000	67280	75392	85808	91264	100936	115072	
19/32									73220	82080	93420	99360	109890	125280	136890
5/8									82800	92720	105530	112240	124135	141520	154635
21/32										103360	117640	126120	138380	157760	172380
11/16										112480	128020	136160	150590	171680	187590
23/32											138400	147200	162800	185600	202800
3/4											152240	161920	179080	204160	223080
25/32													195360	222720	243360
13/16													211640	241280	263640
27/32													227920	259840	283920
7/8													244200	278400	304200
29/32														296960	324480
15/16														301600	329550
31/32														338720	370110
1														371200	405600
1 1/16															446160
1 1/8															507000

Type D Sprockets — Stock Detachable Hubs

Type D sprockets consist of a Type A plate sprocket bolted to a detachable hub. A solid or split plate sprocket may be assembled to a solid or split hub. When ordering a Type D sprocket, be sure to select a plate sprocket large enough to allow chain clearance over the hub flange diameter, dimension D.

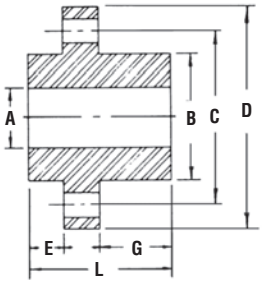
Bolt holes of Type D hubs are drilled for interchangeability. Speed ratios may be changed simply by removing the plate sprocket and substituting another with a different number of teeth. When worn, the sprocket may be reversed to use the unworn tooth surfaces, increasing the life of the sprocket.

Split Hubs-Cast Iron — Dimensions (Inches)

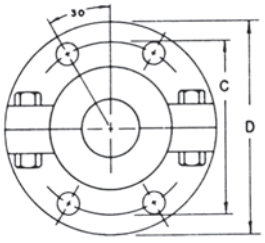
Hub Number	Bore Range A		Hub Diameter B	Bolt Circle C	Flange Diameter D	Bolt Holes		E	F	L	Wt. lb (Approx.)
	Stock	*Max				Number	Bolt Size				
102S	1.313	1.5	3	4	5	4	0.438	1.75	1.375	3.125	7.7
103S	1.563	2.25	4	5.063	6	4	0.5	2	1.5	3.5	14.5
104S	2.313	2.5	4.5	5.75	7	4	0.625	2.25	1.75	4	18.3
105S	2.563	2.75	5	6.25	7.5	4	0.625	2.25	1.875	4.125	23.6
106S	2.813	3.25	5.5	7	8.5	4	0.625	2.5	2	4.5	28.2
107S	3.313	3.5	6	7.5	9	4	0.625	3	1.75	4.75	37.4
108S	3.563	4	7	8.625	10.375	4	0.75	3.375	1.875	5.25	55.1
109S	4.063	6	10.5	13	15.5	4	1	4.125	1.75	5.875	155.0

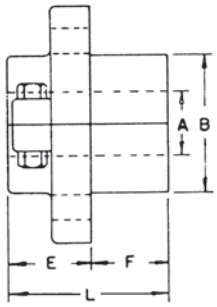
*Maximum bores shown are maximum bores with standard keyseat and setscrew.

To obtain the price of a complete Type D sprocket, add the list price of hub, plus alteration charges and the list price of the desired Type A plate sprocket, including rebore, bolt hole drilling, and splitting charge if desired. These hubs may also be used with Accu-Torch Sprockets.











Alteration Charges

See current discount sheet for alteration charges.

Split Hubs-Cast Iron — Dimensions (Inches)

Hub Number	Bore Range A		Hub Diameter B	Bolt Circle C	Flange Diameter D	Bolt Holes		E	F	G	L	Wt. lb (Approx.)
	Stock	*Max				Number	Bolt Size					
101	0.625	1.75	2.5	3.375	4.25	6	0.375	0.5	0.375	1.125	2	3.4
102	1.438	2	3	4	5	6	0.438	0.5	0.5	1.5	2.5	5.4
103	1.813	2.5	4	5.063	6	6	0.5	0.5	0.625	1.625	2.75	10.2
104	2.313	3	4.5	5.75	7	6	0.625	0.5	0.75	2	3.25	14.2
105	2.563	3.25	5	6.25	7.5	6	0.625	0.563	0.938	2.5	4	22.2
106	2.813	3.75	5.5	7	8.5	6	0.625	0.625	1	2.375	4	28.4
107	3.313	4	6	7.5	9	6	0.625	0.625	1.25	2.375	4.25	34.7
108	3.563	4.5	7	8.625	10.375	6	0.75	0.625	1.375	2.5	4.5	52.4
109	4.063	7	10.5	13	15.5	6	1	3/4	1.5	2.75	5	143

*Maximum bores shown are maximum bores with standard keyseat and setscrew.

All Steel
Instant Split® Sprocket

Manufactured from stock plate sprockets, Martin's instant split-sprocket offers unlimited design and is simply installed with a hand wrench, greatly reducing costly downtime.



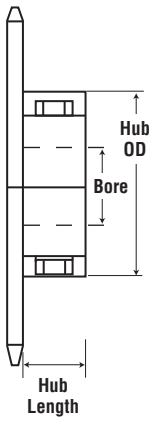
Single-Style B and C — Steel-Instant Split-Sprocket

Hub Number	Bore	Hub OD	Hub* Lentgh	Bolts	Wt. lb (Approx.)
S-1	3/4" - 1 1/2"	3.125	1	3/8" × 2 1/4"	1.8
S-2	1 3/8" - 2 1/4"	4.375	1.25	1/2" × 3"	4.1
S-3	2" - 3"	6	1.375	5/8" × 4 1/2"	8.4
S-4	2 3/4" - 4"	7.625	1.5	3/4" × 5 1/2"	14.4
S-5	3 3/4" - 5"	9.25	2	1" × 6"	27.8
S-6	4 3/4" - 6"	10.25	2.25	1" × 6"	35.4
S-7	5 3/4" - 7"	12.5	2.5	1" × 7"	64.4
S-8	6 1/4" - 8"	14.5	3	1" × 8"	98.5

*Add hub length to plate thickness to determine LTB.

For style C, add hub length × 2.

TOTAL LIST PRICE OF MARTIN SPLIT-SPROCKET IS SIMPLY THE HUB PRICE PLUS THE PLATE PRICE.

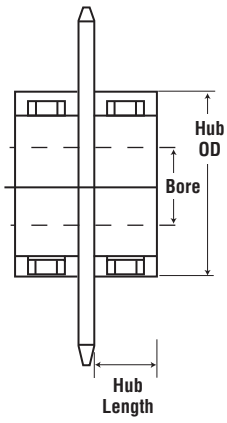


PRICING EXAMPLE STYLE B

120B45 Split with S-3 Hub, 2 15/16" Bore, KW & SS

S-3 Hub
120A45 Plate

SEE HUB LIST
+ SEE PLATE LIST
TOTAL LIST PRICE



PRICING EXAMPLE STYLE C

120C45 Split with S-3 Hub, 2 15/16" Bore, KW & SS

Two S-3 Hubs
120A45 Plate

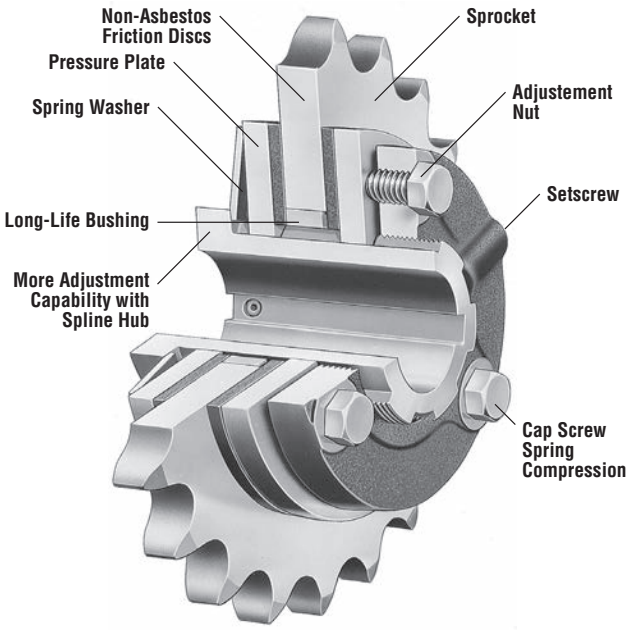
SEE HUB LIST
+ SEE PLATE LIST
TOTAL LIST PRICE

Instant split hubs are for use with plate sprockets only. For multiple strand split sprockets, consult Martin.

Sprocket Size For Instant Split Hubs

Split Hub Number	Bore	Minimum Number of Teeth for Single Sprockets										
		Chain Number										
		40	50	60	80	100	120	140	160	180	200	240
S-1	3/4" - 1 1/2"	28	23	20	16	—	—	—	—	—	—	—
S-2	1 3/8" - 2 1/4"	38	30	26	20	17	15	14	—	—	—	—
S-3	2" - 3"	46	37	32	25	20	18	16	15	14	—	—
S-4	2 3/4" - 4"	—	48	40	30	25	21	19	17	16	15	12
S-5	3 3/4" - 5"	—	—	—	—	30	25	22	20	18	17	14
S-6	4 3/4" - 6"	—	—	—	—	32	27	24	22	19	18	15
S-7	5 3/4" - 7"	—	—	—	—	—	32	28	25	22	21	18
S-8	6 1/4" - 8"	—	—	—	—	—	—	—	28	25	23	20

MARTIN TORQUE-LIMITER clutch offers thrifty overload protection that's easy to adjust.



Here is low cost protection for your machinery... a torque limiting clutch that is easy to install.

Torque-Limiter clutches feature an exclusive "Easy-Set Adjustment." With "Easy-Set," torque adjustment is accomplished quickly! The need for hammer and block, brute strength, and spanner wrenches is eliminated.

These simple steps and the job is done:

1. Snug up the adjusting nut, finger tight, locate set screw over nearest spline notch, and tighten. See table at right.
2. Tighten three cap screws until heads bottom — with a small wrench; this gives maximum torque.
3. For less torque — back off the cap screws, loosen the set screw, back off adjusting nut to one of the six spline notches as required, and retighten set screw and cap screws.

"Easy-Set Adjustment" not only simplifies installation, it provides solid support for pressure plates by compression at their peripheries.

The Torque-Limiter clutch gives machinery permanent protection against overloads during starting, reversing, or driving — by slipping at any desired load. It resumes driving without resetting when the overload is relieved. It is simple in design, compact, efficient, and built for long life. It provides low cost torque limiting service for a wide variety of applications. No lubrication . . . minimum maintenance.

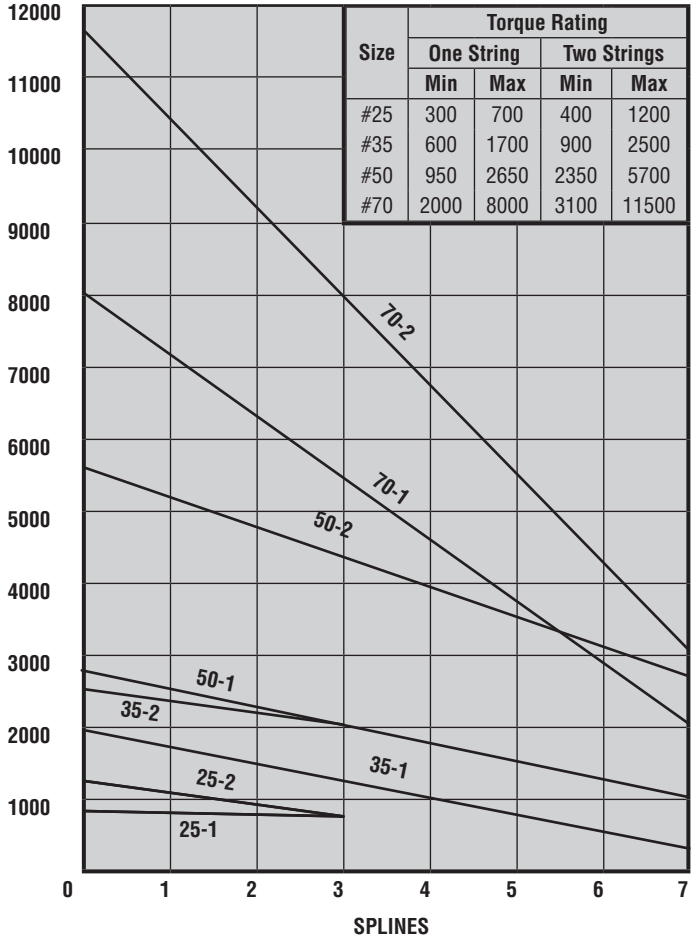
Starting shock from electric motors is a major cause of maintenance of moving parts. Torque-Limiter clutches provide a cushion by slipping until the torque drops to a pre-set level. They can be set to reduce shock loads on motors and driven equipment during reversing or inching. They provide mechanical protection against breakage due to sudden overload — by slipping when the pre-set torque limit is reached.

Torque-Limiter clutches may be used with a sprocket, gear, sheave, flange, or other driven member. It is recommended that the rubbing sides of the driven member be ground to provide a smooth rubbing surface of 63 to 125 micro-inches. See torque rating table on following page.

The driven member is mounted on an oil-impregnated bushing and clamped between two, high quality friction discs by spring pressure. Each Torque-Limiter unit, completely assembled, contains one spring. Higher torque ratings can be obtained by the use of a second spring nested within the original spring. See rating table on following page.

When an overload occurs, the driven member slips between longlife, clutch-type friction discs. After slipping has started, it will continue at approximately 90% of the torque setting, due to the lower coefficient of friction when slipping, until the overload condition has been corrected.

TORQUE-LIMITER CLUTCH CALIBRATION



Size	Torque Rating			
	One String		Two Strings	
	Min	Max	Min	Max
#25	300	700	400	1200
#35	600	1700	900	2500
#50	950	2650	2350	5700
#70	2000	8000	3100	11500

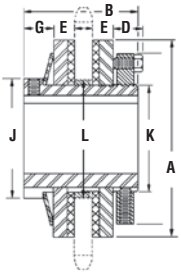
Note:
Graph indicates approximate rated torque vs. number of splines adjusting nut is backed off from finger tight.

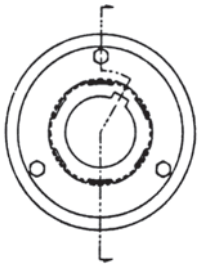
Torque-Limiter Clutches



Each assembled unit contains one spring. Higher ratings can be obtained by ordering a second spring to nest in the original one. Bushings need to be ordered separately, if required.

The rubbing sides of the center member should be ground parallel — 63 to 125 micro-inches.





Torque-Limiter Clutch Ratings

Size No.	Avg. Wt.	Torque Rating ▲ (lb-in) With One Spring Min.	With One Spring Max.	With Two Springs** Min.	With Two Springs** Max.	A	B	C Min.	C Max.	D	E	G ✣	H	J	K +.000 -.002 Spline OD	L +.003 -.000 Sprocket Bore
TT25	1	300	700	400	1200	2.5	1.75	0.125	0.344	0.453	0.297	0.297	2.50	1.50	1.37	1.631/1.628
TT35	2.5	600	1700	900	2500	3.5	2.438	0.125	0.625	0.703	0.359	0.547	3.19	1.94	1.68	2.006/2.003
TT50	6	950	2650	2350	5700	5	2.875	0.125	0.625	0.828	0.453	0.656	4.31	2.81	2.63	3.008/3.005
TT70	18	2100	8000	3100	11500	7	3.875	0.25	1.25	0.859	0.484	0.906	6.00	4.00	3.81	4.197/4.194

▲ Using a center member with rubbing sides ground parallel — 63 to 125 micro-inches. Center member must be clean and free from oil, rust, etc.

** Second spring may be nested in one originally furnished. Order if required.

✣ Nominal for maximum torque setting. For minimum torque setting, add 3/64" for No. 25; 5/64" for No. 35; 3/32" for Nos. 50 and 70. When two springs are used this dimension is increased approximately 1/16" on Nos. 25, 35 and 50 — 3/32" on No. 70.

Stock Bores — Torque Limiters (No KW 1-SS†)

Size No.	Stock Bore	Max. Bore Std. KW*	Max. Bore Shallow KW*
TT25	1	7/8	1
TT35	2.5	1 3/16	1 1/4
TT50	6	1 3/4	2
TT70	18	2 3/4	3

† For additional SS see List Price Alterations.

* KW to be cut central w/threaded spline.

Standard Keyways

Torque-Limiter Bore	Keyway	Torque-Limiter Bore	Keyway
1/2 - 9/16	1/8 × 1/16	1 7/16 - 1 3/4	3/8 × 3/16
5/8 - 7/8	3/16 × 3/32	1 13/16 - 2 1/4	1/2 × 1/4
15/16 - 1 1/4	1/4 × 1/8	2 5/16 - 2 3/4	5/8 × 5/16
1 5/16 - 1 3/8	5/16 × 5/32	2 13/16 - 3	3/4 × 3/8

Bored to Size Torque Limiters w/Std. KW & 1-SS†

Size No.	Finished Bores															
TT25	1/2	5/8	3/4	7/8												
TT35			3/4	7/8	1											
TT50					1	1 1/8	1 3/16	1 1/4	1 3/8	1 7/16	1 1/2	1 5/8				
TT70										1 7/16	1 1/2		1 3/4	1 15/16	2	2 7/16

† KW same as std. listed in tables above. For additional SS see List Price.

Stock Plate Sprockets with Ground Face and Bored to Fit the Martin Torque Limiter

UNIT TT25

Sprocket Size
35TTA25-25
35TTA26-25
40TTA20-25
40TTA22-25
40TTA24-25
40TTA28-25
40TTA30-25
50TTA17-25
50TTA21-25
50TTA22-25

UNIT TT35

Sprocket Size
35TTA35-35
35TTA40-35
40TTA28-35
40TTA30-35
40TTA32-35
50TTA22-35
50TTA24-35
50TTA25-35
50TTA26-35
60TTA18-35
60TTA20-35

UNIT TT50

Sprocket Size
40TTA35-50
50TTA30-50
50TTA32-50
60TTA25-50
60TTA26-50
60TTA28-50
60TTA30-50
80TTA20-50
80TTA22-50
80TTA24-50

UNIT TT70

Sprocket Size
60TTA36-70
80TTA26-70
80TTA28-70
80TTA30-70
80TTA36-70
100TTA22-70
100TTA24-70

Spare Parts

TT25 TT50 TT35 TT70	Qty. Req.*
PRESSURE PLATE	2
FRICTION DISC	2
ADJ. NUT ASSY. & S.S.	1
ADJ. TENSION NUT	3
HUB	1

* Per unit

Unit Size	Sprocket Pitch		Min. Allowable Sprocket Teeth and Length of Bushing Required for Chain Number 35	41	40	50	60	80	100	120	140	160
TT25	Min. Teeth	STOCK ★	25	19	19	16						
		MTO ●	25	19	19	16						
	Length of Bushing Required		1/8	1/8	1/4	1/4						
TT35	Min. Teeth	STOCK ★	35	25	26	21	18	15				
		MTO ●●	33	25	26	21	18	15				
	Length of Bushing Required		1/8	1/8	1/4	1/4	3/8	3/8				
TT50	Min. Teeth	STOCK ★	48	35	35	29	25	19				
		MTO ●●	46	35	35	29	25	19				
	Length of Bushing Required		1/8	1/8	1/4	1/4	3/8	3/8				
TT70	Min. Teeth	STOCK ★			48	38	33	26	21	18	16	14
		MTO ●●			48	38	33	26	21	18	16	14
	Length of Bushing Required				1/4	1/4	3/8	3/8	1/2	7/8 ✱	7/8 ✱	1 ◆◆

★ Min. number of teeth on sprocket stocked by Martin which can be used w/Torque-Limiter clutch.

● Min. number of teeth on made-to-order sprocket which will permit chain to clear friction disc.

✱ Use one 3/8" long bushing and one 1/2" long.

◆◆ Use two 1/2" long bushings.

Double Pitch
All Steel Stock Sprockets

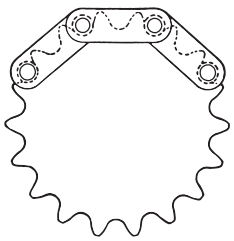


Standard Roller
Double Duty

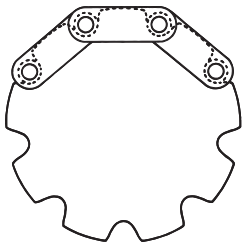


Carrier
Roller

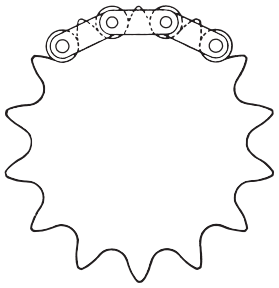
Double-Pitch Sprockets



Standard Roller



Double Pitch
Single Duty
Made-To-Order



Carrier
Rollers

Series C-2000 chains have rollers of the same diameters and widths as American Standard Roller Chains of one half the conveyor chain pitch. Engaged by every other tooth, double duty sprockets have two teeth per chain pitch. During each revolution only half the teeth function effectively. Sprockets with odd numbers of teeth will allow any given tooth to engage only on every other revolution, automatically increasing sprocket life. Double duty sprockets with even number of teeth may be manually advanced one tooth periodically to increase sprocket life. Martin Stock C-2000 series sprockets are furnished double duty only.

Sprockets for the C-2002 series chain with carrier rollers are cut with space cutters or standard hobs for the American Standard roller Chain of the same diameter. Each sprocket tooth meshes with these chains. Double duty sprockets cannot be made for double pitch chain with Carrier Rollers.

NOTE: For drives of 31 teeth or more we recommend using Standard sprockets with series C-2000 chains.

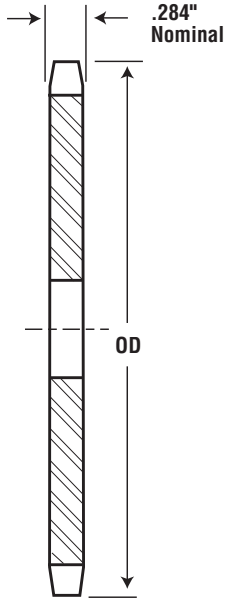
All altered double pitch sprockets requiring a keyway will be furnished with keyway on center line of tooth, unless otherwise specified.

Double Pitch
All Steel Stock Sprockets

1-Inch Double-Pitch
Conveyor or Drive Series — Standard Roller
Double Pitch — 2040/C2040

No. Teeth	Eff. No. Teeth	OD	PD	Catalog Number	Type	Bore		Hub		Wt. lb (Approx.)
						Stock	Rec. Max	Diameter	LTB	
11	5.5	2.000	1.852	2040B11	B	0.5	0.813	1.375★	.875	.34
12	6.0	2.170	2.000	2040B12	B	0.5	0.813	1.563★	.875	.44
13	6.5	2.330	2.152	2040B13	B	0.5	0.656	1.563★	.875	.48
14	7.0	2.490	2.305	2040B14	B	0.5	1.031	1.688★	.875	.60
15	7.5	2.650	2.458	2040B15	B	0.625	1.219	1.719	.875	.66
16	8.0	2.810	2.613	2040B16	B	0.625	1.281	1.875	.875	.76
17	8.5	2.980	2.768	2040B17	B	0.625	1.313	2.047	1	1.00
18	9.0	3.140	2.924	2040B18	B	0.625	1.469	2.219	1	1.16
19	9.5	3.300	3.080	2040B19	B	0.625	1.625	2.375	1	1.36
20	10.0	3.460	3.236	2040B20	B	0.625	1.75	2.547	1	1.54
21	10.5	3.620	3.392	2040B21	B	0.625	1.781	2.703	1	1.74
22	11.0	3.780	3.549	2040B22	B	0.625	1.875	2.875	1	1.92
23	11.5	3.940	3.706	2040B23	B	0.625	2	3	1	2.16
24	12.0	4.100	3.864	2040B24	B	0.625	2.25	3.25	1	2.44
25	12.5	4.260	4.021	2040B25	B	0.625	2.25	3.25	1	2.48
26	13.0	4.420	4.179	2040B26	B	0.625	2.25	3.25	1	2.60
28	14.0	4.740	4.494	2040B28	B	0.625	2.25	3.25	1	2.74
30	15.0	5.060	4.810	2040B30	B	0.625	2.25	3.25	1	2.92

★ Has recessed groove in hub for chain clearance.



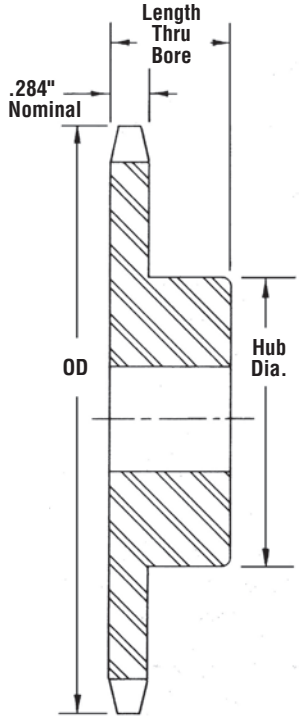
Type A

Conveyor Series — Carrier Roller
Double Pitch — 2042/C2042

No. Teeth	OD	PD	Catalog Number	Type	Bore		Hub		Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
Actual					Stock	Rec. Max	Dia.	LTB					
8	3.010	2.613	2042B8	B	.625	1.281	1.875	.875	.72	–	–	–	–
9	3.350	2.924	2042B9	B	.625	1.469	2.219	.875	1.02	–	–	–	–
10	3.680	3.236	2042B10	B	.625	1.75	2.547	1	1.5	–	–	–	–
11	4.000	3.549	2042B11	B	.625	1.875	2.625	1	1.68	–	–	–	–
12	4.330	3.864	2042B12	B	.625	2.25	3.063	1	2.22	–	–	–	–
13	4.660	4.179	2042B13	B	.625	2.25	3.25	1	2.56	–	–	–	–
14	4.980	4.494	2042B14	B	.625	2.25	3.25	1	2.72	–	–	–	–
15	5.300	4.810	2042B15	B	.625	2.25	3.25	1	2.9	–	–	–	–
16	5.630	5.126	2042B16	B	.625	2.25	3.25	1	3.1	A	2042A16	.594	1.38
17	5.950	5.442	2042B17	B	.625	2.25	3.25	1	3.4	A	2042A17	.594	1.66
18	6.270	5.759	2042B18	B	.625	2.25	3.25	1	3.56	A	2042A18	.594	1.88
19	6.590	6.076	2042B19	B	.625	2.25	3.25	1	3.72	A	2042A19	.594	2.06
20	6.910	6.392	2042B20	B	.75	2.375	3.5	1.125	4.72	A	2042A20	.719	2.40
21	7.240	6.710	2042B21	B	.75	2.375	3.5	1.125	4.84	A	2042A21	.719	2.62
22	7.560	7.027	2042B22	B	.75	2.375	3.5	1.125	5.18	A	2042A22	.719	2.88
23	7.880	7.344	2042B23	B	.75	2.375	3.5	1.125	5.04	A	2042A23	.719	3.14
24	8.200	7.661	2042B24	B	.75	2.375	3.5	1.125	5.58	A	2042A24	.719	3.22
25	8.520	7.979	2042B25	B	.75	2.375	3.5	1.125	5.96	A	2042A25	.719	3.50
26	8.840	8.296	2042B26	B	.75	2.375	3.5	1.125	6.22	A	2042A26	.719	3.74
28	9.480	8.931	2042B28	B	.75	2.375	3.5	1.125	6.78	A	2042A28	.719	4.76
30	10.110	9.567	2042B30	B	.75	2.375	3.5	1.125	7.56	A	2042A30	.719	5.08

★ Has recessed groove in hub for chain clearance.

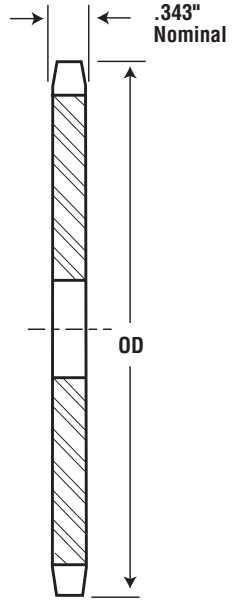
Maximum bores shown will accommodate standard keyseat and setscrew over keyseat.
Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.



Type B

1.25-Inch Double-Pitch

Conveyor or Drive Series — Standard Roller
Double Pitch — 2050/C2050

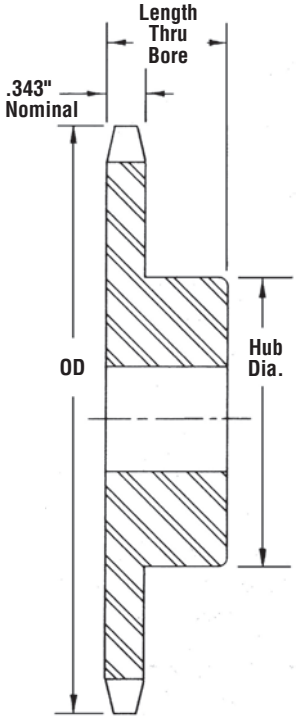


Type A

No. Teeth Actual	Eff. No. Teeth	OD	PD	Catalog Number	Type	Bore Stock	Bore Rec. Max	Hub Dia.	Hub LTB	Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
11	5.5	2.500	2.315	2050B11	B	.625	.813	1.75★	1	.62	–	–	–	–
12	6.0	2.710	2.500	2050B12	B	.625	1	1.984	1	.80	–	–	–	–
13	6.5	2.910	2.690	2050B13	B	.625	1.219	1.719	1	.82	–	–	–	–
14	7.0	3.110	2.881	2050B14	B	.625	1.281	1.938	1	1.00	–	–	–	–
15	7.5	3.320	3.073	2050B15	B	.625	1.406	2.156	1	1.22	–	–	–	–
16	8.0	3.520	3.266	2050B16	B	.625	1.594	2.359	1	1.44	–	–	–	–
17	8.5	3.720	3.460	2050B17	B	.625	1.75	2.563	1	1.68	–	–	–	–
18	9.0	3.920	3.655	2050B18	B	.625	1.781	2.781	1	1.94	–	–	–	–
19	9.5	4.120	3.850	2050B19	B	.625	1.969	2.984	1	2.24	–	–	–	–
20	10.0	4.320	4.045	2050B20	B	.75	2	3	1	2.30	–	–	–	–
21	10.5	4.520	4.241	2050B21	B	.75	2	3	1	2.40	–	–	–	–
22	11.0	4.720	4.437	2050B22	B	.75	2	3	1	2.54	–	–	–	–
23	11.5	4.920	4.633	2050B23	B	.75	2	3	1	2.66	–	–	–	–
24	12.0	5.120	4.830	2050B24	B	.75	2	3	1.25	3.30	A	2050A24	.719	1.58
25	12.5	5.320	5.026	2050B25	B	.75	2	3	1.25	3.42	A	2050A25	.719	1.68
26	13.0	5.520	5.223	2050B26	B	.75	2	3	1.25	3.62	A	2050A26	.719	1.88
28	14.0	5.920	5.617	2050B28	B	.75	2	3	1.25	3.78	A	2050A28	.719	2.22
30	15.0	6.320	6.012	2050B30	B	.75	2.25	3.25	1.25	4.58	A	2050A30	.719	2.54

★ Has recessed groove in hub for chain clearance.

Conveyor Series — Carrier Roller
Double Pitch — 2052/C2052



Type B

No. Teeth Actual	OD	PD	Catalog Number	Type	Bore Stock	Bore Rec. Max	Hub Dia.	Hub LTB	Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
8	3.770	3.266	2052B8	B	.625	1.594	2.359	1	1.38	–	–	–	–
9	4.190	3.655	2052B9	B	.625	1.781	3	1	1.92	–	–	–	–
10	4.600	4.045	2052B10	B	.625	2	3	1	2.30	–	–	–	–
11	5.010	4.437	2052B11	B	.625	2	3	1	2.54	–	–	–	–
12	5.420	4.830	2052B12	B	.75	2	3	1.25	3.20	A	2052A12	.719	1.58
13	5.820	5.223	2052B13	B	.75	2	3	1.25	3.48	A	2052A13	.719	1.82
14	6.230	5.617	2052B14	B	.75	2	3	1.25	3.88	A	2052A14	.719	2.28
15	6.630	6.012	2052B15	B	.75	2.25	3.25	1.25	4.46	A	2052A15	.719	2.46
16	7.030	6.407	2052B16	B	.75	2.25	3.25	1.25	4.80	A	2052A16	.719	2.88
17	7.440	6.803	2052B17	B	.75	2.25	3.25	1.25	5.34	A	2052A17	.719	3.28
18	7.840	7.198	2052B18	B	.75	2.25	3.25	1.25	5.64	A	2052A18	.719	3.64
19	8.240	7.595	2052B19	B	.75	2.25	3.25	1.25	6.04	A	2052A19	.719	4.12
20	8.640	7.991	2052B20	B	.75	2.25	3.25	1.25	6.48	A	2052A20	.719	4.72
21	9.040	8.387	2052B21	B	.75	2.25	3.25	1.25	7.00	A	2052A21	.719	5.08
22	9.440	8.783	2052B22	B	.75	2.25	3.25	1.25	7.30	A	2052A22	.719	5.20
23	9.850	9.180	2052B23	B	1	2.75	3.75	1.25	8.66	A	2052A23	.938	5.84
24	10.250	9.577	2052B24	B	.938	2.75	3.75	1.25	9.32	A	2052A24	.938	6.70
25	10.650	9.973	2052B25	B	.938	2.75	3.75	1.25	10.30	A	2052A25	.938	7.54
26	11.050	10.370	2052B26	B	.938	2.75	3.75	1.25	11.00	A	2052A26	.938	8.24
28	11.840	11.164	2052B28	B	.938	2.75	3.75	1.25	11.70	A	2052A28	.938	8.70
30	12.640	11.958	2052B30	B	.938	2.75	3.75	1.25	12.90	A	2052A30	.938	9.92

★ Has recessed groove in hub for chain clearance.

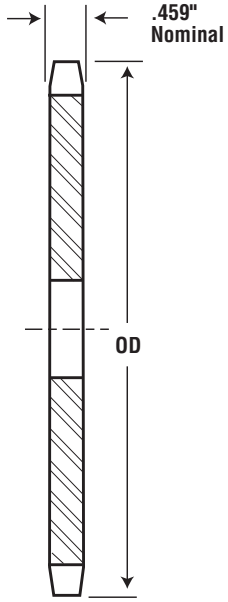
Maximum bores shown will accommodate standard keyseat and setscrew over keyseat.
Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

Double Pitch
All Steel Stock Sprockets

1.5-Inch Double-Pitch
Conveyor or Drive Series — Standard Roller
Double Pitch — 2060/C2060

No. Teeth Actual	Eff. No. Teeth	OD	PD	Catalog Number	Type	Bore Stock	Bore Rec. Max	Hub Dia.	Hub LTB	Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
11	5.500	3.000	2.773	2060B11	B	.75	1	2.063★	1.25	1.14	–	–	–	–
12	6.000	3.250	3.000	2060B12	B	.75	1.25	2.375★	1.25	1.46	–	–	–	–
13	6.500	3.490	3.228	2060B13	B	.75	1.313	2.078	1.25	1.52	–	–	–	–
14	7.000	3.740	3.457	2060B14	B	.75	1.563	2.328	1.25	1.86	–	–	–	–
15	7.500	3.980	3.688	2060B15	B	.75	1.75	2.594	1.25	2.24	–	–	–	–
16	8.000	4.220	3.920	2060B16	B	.75	1.844	2.844	1.25	2.64	–	–	–	–
17	8.500	4.460	4.152	2060B17	B	.75	2.094	3.094	1.25	3.08	–	–	–	–
18	9.000	4.700	4.386	2060B18	B	.75	2.281	3.344	1.25	3.56	–	–	–	–
19	9.500	4.940	4.620	2060B19	B	.75	2.344	3.5	1.25	3.94	–	–	–	–
20	10.000	5.190	4.854	2060B20	B	.75	2.563	3.875	1.25	4.50	–	–	–	–
21	10.500	5.430	5.089	2060B21	B	.75	2.75	4	1.25	5.02	–	–	–	–
22	11.000	5.670	5.324	2060B22	B	.75	2.75	4	1.25	5.26	–	–	–	–
23	11.500	5.910	5.560	2060B23	B	.75	2.75	4	1.25	5.54	–	–	–	–
24	12.000	6.150	5.796	2060B24	B	.75	2.75	4	1.25	5.90	A	2060A24	.719	3.02
25	12.500	6.390	6.032	2060B25	B	.75	2.75	4	1.25	6.08	A	2060A25	.719	3.36
26	13.000	6.630	6.268	2060B26	B	.75	2.75	4	1.25	6.36	A	2060A26	.719	3.58
28	14.000	7.110	6.741	2060B28	B	.75	2.75	4	1.25	7.02	A	2060A28	.719	4.12
30	15.000	7.590	7.215	2060B30	B	.75	2.75	4	1.25	7.54	A	2060A30	.719	4.88

★ Has recessed groove in hub for chain clearance.



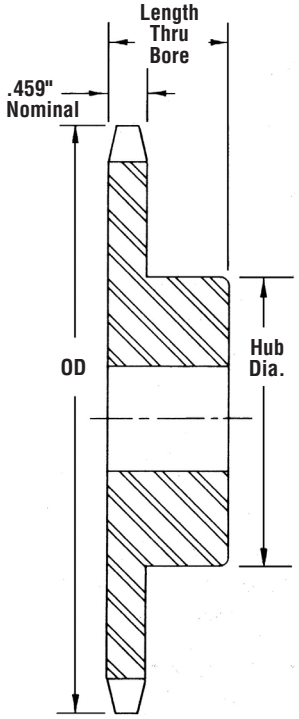
Type A

Conveyor Series — Carrier Roller
Double Pitch — 2062/C2062

No. Teeth Actual	OD	PD	Catalog Number	Type	Bore Stock	Bore Rec. Max	Hub Dia.	Hub LTB	Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
8	4.520	3.920	2062B8	B	0.75	1.844	2.844	1.25	2.60	–	–	–	–
9	5.020	4.386	2062B9	B	0.75	2.281	3.344	1.25	3.48	–	–	–	–
10	5.520	4.854	2062B10	B	0.75	2.563	3.828	1.25	4.54	–	–	–	–
11	6.010	5.324	2062B11	B	0.75	2.75	4	1.25	5.20	–	–	–	–
12	6.500	5.796	2062B12	B	0.75	2.75	4	1.25	5.70	A	2062A12	0.719	2.98
13	6.990	6.268	2062B13	B	0.75	2.75	4	1.25	6.28	A	2062A13	0.719	3.60
14	7.470	6.741	2062B14	B	0.75	2.75	4	1.25	6.82	A	2062A14	0.719	4.02
15	7.960	7.215	2062B15	B	0.75	2.75	4	1.25	7.48	A	2062A15	0.719	4.76
16	8.440	7.689	2062B16	B	0.75	2.75	4	1.25	8.18	A	2062A16	0.719	5.70
17	8.920	8.163	2062B17	B	1	2.75	4	1.25	8.82	A	2062A17	0.938	6.16
18	9.410	8.638	2062B18	B	1	2.75	4	1.25	9.36	A	2062A18	0.938	6.96
19	9.890	9.113	2062B19	B	1	2.75	4.25	1.25	11.10	A	2062A19	0.938	8.00
20	10.370	9.589	2062B20	B	1.313	2.75	4.25	1.25	11.66	A	2062A20	0.938	8.46
21	10.850	10.064	2062B21	B	1.313	2.75	4.25	1.25	13.24	A	2062A21	0.938	8.93
22	11.330	10.540	2062B22	B	1.313	2.75	4.25	1.25	13.78	A	2062A22	0.938	10.74
23	11.810	11.016	2062B23	B	1.313	2.75	4.25	1.25	14.90	A	2062A23	0.938	11.64
24	12.290	11.492	2062B24	B	1.313	2.75	4.25	1.25	15.66	A	2062A24	0.938	12.64
25	12.770	11.968	2062B25	B	1.313	2.75	4.25	1.25	16.80	A	2062A25	0.938	13.78
26	13.250	12.444	2062B26	B	1.313	2.75	4.25	1.75	20.20	A	2062A26	0.938	15.00
28	14.210	13.397	2062B28	B	1.25	2.75	4.25	1.75	21.86	A	2062A28	1.25	17.32
30	15.170	14.350	2062B30	B	1.25	2.75	4.25	1.75	26.00	A	2062A30	1.25	19.50

★ Has recessed groove in hub for chain clearance.

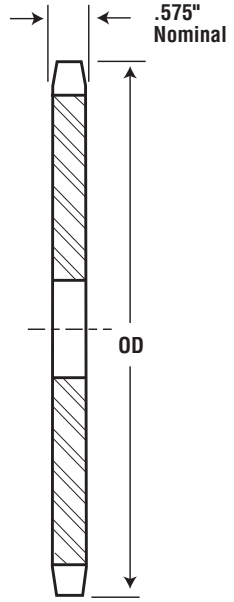
Maximum bores shown will accommodate standard keyseat and setscrew over keyseat.
Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.



Type B

2-Inch Double-Pitch

Conveyor or Drive Series — Standard Roller
Double Pitch — 2080/C2080

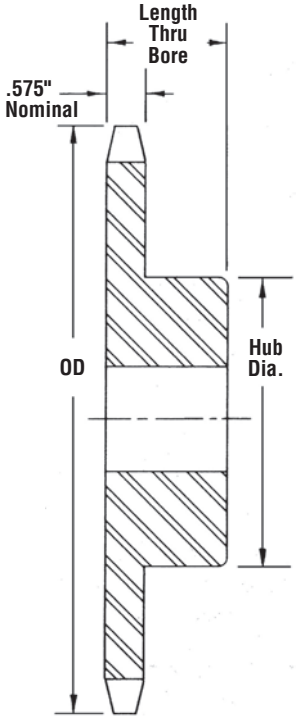


Type A

No. Teeth	Eff. No. Teeth	OD	PD	Catalog Number	Type	Bore		Hub		Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
Actual						Stock	Rec. Max	Dia.	LTB					
11	5.500	4.010	3.694	2080B11	B	1	1.5	2.813★	1.625	2.5	–	–	–	–
12	6.000	4.330	4.000	2080B12	B	1	1.688	3.125★	1.625	3.2	–	–	–	–
13	6.500	4.660	4.304	2080B13	B	1	1.781	2.781	1.5	3.3	–	–	–	–
14	7.000	4.980	4.610	2080B14	B	1	2.125	3.125	1.5	4.0	–	–	–	–
15	7.500	5.300	4.917	2080B15	B	1	2.281	3.453	1.5	4.8	–	–	–	–
16	8.000	5.630	5.226	2080B16	B	1	2.531	3.797	1.5	5.7	–	–	–	–
17	8.500	5.950	5.536	2080B17	B	1	2.75	4	1.5	6.4	A	2080A17	0.938	3.4
18	9.000	6.270	5.848	2080B18	B	1	2.75	4.25	1.5	7.4	A	2080A18	0.938	3.8
19	9.500	6.590	6.160	2080B19	B	1	2.75	4.25	1.5	7.7	A	2080A19	0.938	4.3
20	10.000	6.910	6.472	2080B20	B	1	2.75	4.25	1.5	8.3	A	2080A20	0.938	4.8
21	10.500	7.230	6.785	2080B21	B	1	2.75	4.25	1.75	9.4	A	2080A21	0.938	5.3
22	11.000	7.560	7.099	2080B22	B	1	2.75	4.25	1.75	10.0	A	2080A22	0.938	5.8
23	11.500	7.880	7.413	2080B23	B	1	2.75	4.25	1.75	10.5	A	2080A23	0.938	6.4
24	12.000	8.200	7.727	2080B24	B	1	2.75	4.25	1.75	11.1	A	2080A24	0.938	7.1
25	12.500	8.520	8.042	2080B25	B	1	2.75	4.25	1.75	12.0	A	2080A25	0.938	7.5
26	13.000	8.840	8.357	2080B26	B	1.25	3.25	4.75	2	14.8	A	2080A26	1.188	8.3
28	14.000	9.480	8.988	2080B28	B	1.188	3.25	4.75	2	16.6	A	2080A28	1.188	9.2
30	15.000	10.110	9.620	2080B30	B	1.188	3.25	4.75	2	17.8	A	2080A30	1.188	10.7

★ Has recessed groove in hub for chain clearance.

Conveyor Series — Carrier Roller
Double Pitch — 2082/C2082



Type B

No. Teeth	OD	PD	Catalog Number	Type	Bore		Hub		Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
Actual					Stock	Rec. Max	Dia.	LTB					
8	6.030	5.226	2082B8	B	1	2.531	3.797	1.75	6.4	–	–	–	–
9	6.700	5.848	2082B9	B	1	2.75	4.25	1.75	8.2	–	–	–	–
10	7.360	6.472	2082B10	B	1	2.75	4.25	1.75	9.2	–	–	–	–
11	8.010	7.099	2082B11	B	1	2.75	4.25	1.75	10.1	A	2082A11	0.938	5.7
12	8.660	7.727	2082B12	B	1	2.75	4.25	1.75	11.2	A	2082A12	0.938	6.8
13	9.310	8.357	2082B13	B	1.25	3.25	4.75	2	15.0	A	2082A13	0.813	7.7
14	9.960	8.988	2082B14	B	1.25	3.25	4.75	2	15.8	A	2082A14	0.813	9.1
15	10.610	9.620	2082B15	B	1.188	3.25	4.75	2	17.8	A	2082A15	0.813	10.7
16	11.250	10.252	2082B16	B	1.188	3.25	4.75	2	19.3	A	2082A16	0.813	12.4
17	11.900	10.885	2082B17	B	1.188	3.25	4.75	2	21.4	A	2082A17	0.813	14.1
18	12.540	11.518	2082B18	B	1.188	3.25	4.75	2	22.9	A	2082A18	0.813	15.4
19	13.190	12.151	2082B19	B	1.188	3.25	4.75	2	24.4	A	2082A19	0.813	18.0
20	13.830	12.785	2082B20	B	1.188	3.25	4.75	2	26.7	A	2082A20	0.813	19.2
21	14.470	13.419	2082B21	B	1.25	3.25	4.75	2	28.4	A	2082A21	1.250	20.8
22	15.110	14.053	2082B22	B	1.25	3.25	4.75	2	30.8	A	2082A22	1.250	23.7
23	15.750	14.688	2082B23	B	1.25	3.25	4.75	2	32.2	A	2082A23	1.250	24.9
24	16.390	15.323	2082B24	B	1.25	3.25	4.75	2	34.9	A	2082A24	1.250	27.6
25	17.030	15.958	2082B25	B	1.25	3.25	4.75	2	37.8	A	2082A25	1.250	30.2
26	17.670	16.593	2082B26	B	1.25	3.5	5.25	2	41.5	A	2082A26	1.250	32.8
28	18.950	17.863	2082B28	B	1.25	3.5	5.25	2	47.7	A	2082A28	1.25	38.6
30	20.230	19.134	2082B30	B	1.25	3.5	5.25	2	54.5	A	2082A30	1.25	43.8

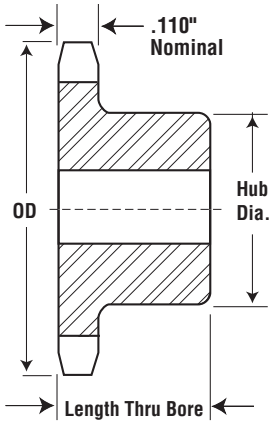
★ Has recessed groove in hub for chain clearance.

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat.
Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

No. 25
¼" Pitch

All Steel Stock Sprockets





Type B

Alteration Charges

See current discount sheet for alteration charges.

Single - Type B

Single - Type A

No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
				Stock	Rec. Max	Dia.	LTB					
9	25B9	.837	B	.25	.25	.438	.5	.03	–	–	–	–
10	25B10	.919	B	.25	.25	.5	.5	.03	–	–	–	–
11	25B11	1.002	B	.25	.313	.563	.5	.04	–	–	–	–
12	25B12	1.083	B	.25	.375	.625	.5	.06	–	–	–	–
13	25B13	1.167	B	.25	.438	.719	.5	.07	–	–	–	–
14	25B14	1.246	B	.25	.563	.813	.5	.08	–	–	–	–
15	25B15	1.326	B	.25	.563	.891	.5	.10	–	–	–	–
16	25B16	1.407	B	.25	.563	.969	.5	.12	–	–	–	–
17	25B17	1.487	B	.25	.625	1.031	.5	.14	–	–	–	–
18	25B18	1.568	B	.25	.75	1.125	.5	.16	A	25A18	.25	.04
19	25B19	1.648	B	.25	.813	1.219	.5	.19	A	25A19	.25	.04
20	25B20	1.729	B	.25	.875	1.281	.625	.25	A	25A20	.25	.04
21	25B21	1.809	B	.25	.875	1.375	.625	.28	A	25A21	.375	.04
22	25B22	1.889	B	.25	.938	1.438	.625	.31	A	25A22	.375	.06
23	25B23	1.969	B	.25	1	1.5	.625	.32	A	25A23	.375	.06
24	25B24	2.049	B	.375	1	1.5	.625	.33	A	25A24	.375	.08
25	25B25	2.129	B	.375	1	1.5	.625	.34	A	25A25	.375	.08
26	25B26	2.209	B	.375	1	1.5	.625	.35	A	25A26	.375	.09
28	25B28	2.369	B	.375	1	1.5	.625	.36	A	25A28	.375	.10
30	25B30	2.529	B	.375	1	1.5	.625	.38	A	25A30	.375	.12
32	25B32	2.688	B	.375	1	1.5	.625	.40	A	25A32	.375	.14
35	–	2.928	–	–	–	–	–	–	A	25A35	.375	.16
36	25B36	3.008	B	.375	1	1.5	.75	.50	A	25A36	.375	.18
40	25B40	3.327	B	.5	1.375	2	.75	.53	A	25A40	.5	.20
42	–	3.486	–	–	–	–	–	–	A	25A42	.5	.24
45	25B45	3.725	B	.5	1.375	2	.75	.56	A	25A45	.5	.25
48	25B48	3.964	B	.5	1.375	2	.75	.56	A	25A48	.5	.32
54	25B54	4.442	B	.5	1.375	2	.75	1.00	A	25A54	.5	.38
60	25B60	4.920	B	.5	1.375	2	.75	1.10	A	25A60	.5	.54
70	25B70	5.717	B	.5	1.375	2	.75	1.25	–	–	–	–
72	25B72	5.876	B	.5	1.375	2	.75	1.30	A	25A72	.5	.74

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

Stainless Steel Stock Sprockets

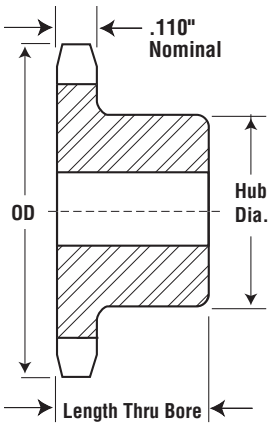
No. 25 ¼" Pitch

Alteration Charges

See current discount sheet for alteration charges.



Stainless Steel



Type B

Single - Type B — Stainless

No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb (Approx.)
				Stock	Rec. Max	Dia.	LTB	
9	25B9SS	0.837	B	.25	.25	.438	.5	.03
10	25B10SS	0.919	B	.25	.25	.5	.5	.03
11	25B11SS	1.001	B	.25	.313	.563	.5	.03
12	25B12SS	1.083	B	.25	.375	.625	.5	.06
13	25B13SS	1.164	B	.25	.438	.719	.5	.07
14	25B14SS	1.245	B	.25	.563	.813	.5	.08
15	25B15SS	1.326	B	.25	.563	.891	.5	.10
16	25B16SS	1.407	B	.25	.563	.969	.5	.12
17	25B17SS	1.487	B	.25	.625	1.031	.5	.14
18	25B18SS	1.568	B	.25	.75	1.125	.5	.16
19	25B19SS	1.648	B	.25	.813	1.219	.5	.19
20	25B20SS	1.728	B	.25	.875	1.281	.625	.25
21	25B21SS	1.809	B	.25	.875	1.375	.625	.28
22	25B22SS	1.889	B	.25	.938	1.438	.625	.31
23	25B23SS	1.969	B	.25	1	1.5	.625	.32
24	25B24SS	2.049	B	.375	1	1.5	.625	.33
25	25B25SS	2.129	B	.375	1	1.5	.625	.34
26	25B26SS	2.209	B	.375	1	1.5	.625	.35
28	25B28SS	2.369	B	.375	1	1.5	.625	.36
30	25B30SS	2.529	B	.375	1	1.5	.625	.38
32	25B32SS	2.688	B	.375	1	1.5	.625	.40
35	25B35SS	2.928	B	.375	1	1.5	.75	.48
36	25B36SS	3.008	B	.375	1	1.5	.75	.50
40	25B40SS	3.327	B	.5	1.375	2	.75	.53
45	25B45SS	3.725	B	.5	1.375	2	.75	.56
60	25B60SS	4.920	B	.5	1.375	2	.75	1.10

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

No. 35
3/8" Pitch

All Steel Stock Sprockets

Single - Type BS — 2 Setscrews — Bored-To-Size

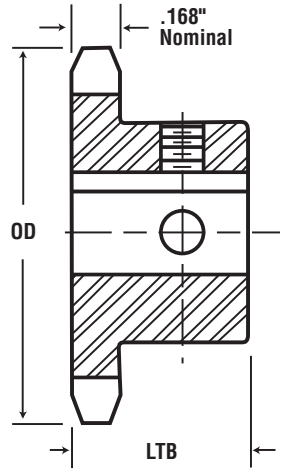
No. Teeth	Catalog Number	OD	LTB	Wt. lb (Approx.)	Stock Finished Bores Includes Keyway and 2 Setscrews								
9	35BS9	1.260	.75	0.10	★.375								
10	35BS10	1.380	.75	0.11	★.375	★.5	† .625						
11	35BS11	1.500	.75	0.15	★.375	★.5	† .625	† .75					
12	35BS12	1.630	.75	0.18		★.5	.625	† .75					
13	35BS13	1.750	.75	0.20		★.5	.625	.75					
14	35BS14	1.870	.75	0.22		★.5	.625	.75					
15	35BS15	1.990	.75	0.24		★.5	.625	.75	.875	1			
16	35BS16	2.110	.75	0.29		★.5	.625	.75	.875	1			
17	35BS17	2.230	.75	0.36		★.5	.625	.75	.875	1			
18	35BS18	2.350	.75	0.39		★.5	.625	.75	.875	1			
19	35BS19	2.470	.75	0.44		★.5	.625	.75		1			
20	35BS20	2.590	.75	0.51		★.5	.625	.75		1			
21	35BS21	2.710	.875	0.75		★.5	.625	.75		1			
22	35BS22	2.830	.875	0.78		★.5	.625	.75		1			
23	35BS23	2.950	.875	0.78		★.5	.625	.75		1			
24	35BS24	3.070	.875	0.79		★.5	.62 5	.75		1			
25	35BS25	3.190	.875	0.80		★.5	.625	.75		1			
26	35BS26	3.310	.875	0.84			.625	.75	.875	1	1.125	1.1875	1.25
27	35BS27	3.430	.875	0.88			.625	.75	.875	1	1.125	1.1875	1.25
28	35BS28	3.550	.875	0.86			.625	.75	.875	1	1.125	1.1875	1.25
30	35BS30	3.790	.875	0.96			.625	.75	.875	1	1.125	1.1875	1.25
32	35BS32	4.030	.875	1.14			.625	.75	.875	1	1.125	1.1875	1.25
35	35BS35	4.390	.875	1.38			.625	.75	.875	1	1.125	1.1875	1.25
36	35BS36	4.510	.875	1.41			.625	.75	.875	1	1.125	1.1875	1.25
40	35BS40	4.990	1	1.56			.625	.75	.875	1	1.125	1.1875	1.25
42	35BS42	5.230	1	1.64			.625	.75	.875	1	1.125	1.1875	1.25
45	35BS45	5.590	1	1.74			.625	.75	.875	1	1.125	1.1875	1.25
48	35BS48	5.950	1	1.86			.625	.75	.875	1	1.125	1.1875	1.25
54	35BS54	6.660	1	1.98			.625	.75	.875	1	1.125	1.1875	1.25
60	35BS60	7.380	1	2.34				.75	.875	1	1.125	1.1875	1.25
70	35BS70	8.580	1	3.14				.75	.875	1	1.125	1.1875	1.25
72	35BS72	8.810	1	3.30				.75	.875	1	1.125	1.1875	1.25
80	35BS80	9.770	1	3.94				.75	.875	1	1.125	1.1875	1.25
84	35BS84	10.250	1	4.26				.75	.875	1	1.125	1.1875	1.25
96	35BS96	11.680	1	5.22				.75	.875	1	1.125	1.1875	1.25
112	35BS112	13.590	1	6.50				.75	.875	1	1.125	1.1875	1.25

★ Indicates no keyway. (2) .25" setscrews only in .5" & .375" bore.

† Keyway with Setscrew at 90°.

Hub diameters vary to suit different bore sizes.

NOTE: KEYWAY IS ON CENTER LINE OF TOOTH.



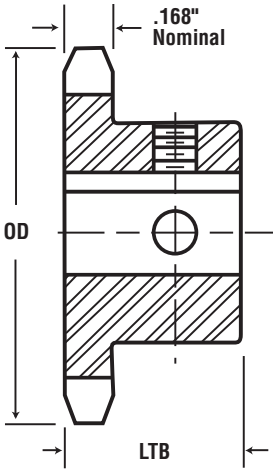
Type BS



Bored-To-Size

All Steel Stock Sprockets

No. 35 3/8" Pitch



Type BS



Bored-To-Size

SABER TOOTH®

No. 35 - Hardened Teeth — 2 Setscrews — Bored-To-Size

No. Teeth	Catalog Number	OD	LTB	Wt. lb (Approx.)	Stock Finished Bores Includes Keyway and 2 Setscrews										
9	35BS9HT	1.260	.75	0.10	★.375										
10	35BS10HT	1.380	.75	0.11	★.375	—	★ .5	—	† .625						
11	35BS11HT	1.500	.75	0.15	★.375	—	★ .5	—	† .625	—	† .75				
12	35BS12HT	1.630	.75	0.18		—	★ .5	—	.625	—	† .75				
13	35BS13HT	1.750	.75	0.20		—	★ .5	—	.625	—	.75				
14	35BS14HT	1.870	.75	0.22		—	★ .5	—	.625	—	.75				
15	35BS15HT	1.990	.75	0.24		—	★ .5	—	.625	—	.75	—	.875	—	1
16	35BS16HT	2.110	.75	0.29		—	★ .5	—	.625	—	.75	—	.875	—	1
17	35BS17HT	2.230	.75	0.36		—	★ .5	—	.625	—	.75	—	.875	—	1
18	35BS18HT	2.350	.75	0.39		—	★ .5	—	.625	—	.75	—	.875	—	1
19	35BS19HT	2.470	.75	0.44					.625	—	.75	—		—	1
20	35BS20HT	2.590	.75	0.51					.625	—	.75	—		—	1
21	35BS21HT	2.710	.875	0.75					.625	—	.75	—		—	1
22	35BS22HT	2.830	.875	0.76					.625	—	.75	—		—	1
23	35BS23HT	2.950	.875	0.78					.625	—	.75	—		—	1
24	35BS24HT	3.070	.875	0.79					.625		.75	—		—	1
25	35BS25HT	3.190	.875	0.80					.625	—	.75	—		—	1
26	35BS26HT	3.310	.875	0.84					.625	—	.75	—		—	1
28	35BS28HT	3.550	.875	0.88					.625	—	.75	—		—	1
30	35BS30HT	3.790	.875	0.96					.625	—	.75	—		—	1

★ Indicates no keyway. (2) .25" setscrews only in .5" & .375" bore at 90°.
† Keyway with Setscrew at 90° & 180°.
Hub diameters vary to suit different bore sizes.
NOTE: KEYWAY IS ON CENTER LINE OF TOOTH.

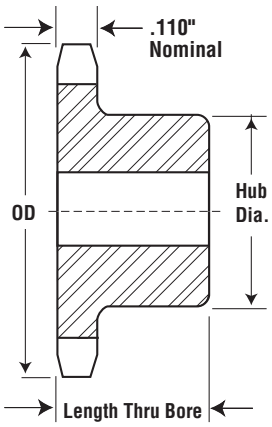
Martin stock hardened teeth sprockets afford longer chain and sprocket life. Hardened teeth on the smaller sprocket of a roller chain drive are recommended if the drive ratio is four to one or greater or if the smaller sprocket has 24 teeth or less and is running at a speed of over 600 RPM

No. 35
3/8" Pitch

Stainless Steel Stock Sprockets



Stainless Steel



Type B

Alteration Charges

See current discount sheet for alteration charges.

Single - Type B — Stainless

Single - Type A

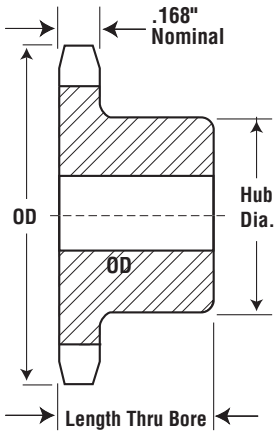
No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
				Stock	Rec. Max	Dia.	LTB					
9	35B9SS	1.260	B	.375	.375	0.844 ★	.75	0.10				
10	35B10SS	1.380	B	.375	.563	0.969 ★	.75	0.15				
11	35B11SS	1.500	B	.375	.563	1.063 ★	.75	0.20				
12	35B12SS	1.630	B	.5	.625	1.219 ★	.75	0.22				
13	35B13SS	1.750	B	.5	.75	1.25 ★	.75	0.25				
14	35B14SS	1.870	B	.5	.875	1.25	.75	0.26				
15	35B15SS	1.990	B	.5	.875	1.344	.75	0.30				
16	35B16SS	2.110	B	.5	.938	1.469	.75	0.40				
17	35B17SS	2.230	B	.5	1.063	1.594	.75	0.43				
18	35B18SS	2.350	B	.5	1.188	1.719	.75	0.50				
19	35B19SS	2.470	B	.5	1.25	1.844	.75	0.56				
20	35B20SS	2.590	B	.5	1.313	1.938	.75	0.68				
21	35B21SS	2.710	B	.5	1.375	2	.875	0.80				
22	35B22SS	2.830	B	.5	1.375	2	.875	0.82				
23	35B23SS	2.950	B	.5	1.375	2	.875	0.87				
24	35B24SS	3.070	B	.5	1.375	2	.875	0.89				
25	35B25SS	3.190	B	.5	1.375	2	.875	0.91				
26	35B26SS	3.310	B	.5	1.375	2	.875	0.93				
28	35B28SS	3.550	B	.5	1.375	2	.875	1.00				
30	35B30SS	3.790	B	.5	1.375	2	.875	1.06				
32	35B32SS	4.032	B	.5	1.375	2	.875	1.24				
35	35B35SS	4.390	B	.625	1.5	2.25	.875	1.56				
36	35B36SS	4.551	B	.625	1.5	2.25	.875	1.60				
40	35B40SS	4.990	B	.625	1.5	2.25	1	1.70	A	35A40SS	0.594	1.04
45	35B45SS	5.590	B	.625	1.5	2.25	1	2.18	A	35A45SS	0.594	1.26
60	35B60SS	7.380	B	.75	1.5	2.25	1	3.00	A	35A60SS	0.719	2.10

★ Has recessed groove in hub for chain clearance.

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat. Sprockets altered at factory (rebored with keyway and setscrew added) will be supplied with stainless setscrew.

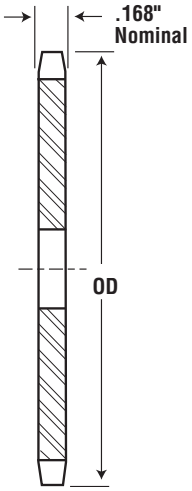
All Steel Stock Sprockets

No. 35 3/8" Pitch



Type B





Type A



Alteration Charges

See current discount sheet for alteration charges.

Single - Type B — Stainless

Single - Type A

No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
				Stock	Rec. Max	Dia.	LTB					
8	35B8	1.130	B	.375	.375	.75	.75	.07				
9	35B9	1.260	B	.375	.375	.844	.75	.09				
10	35B10	1.380	B	.375	.563	.969	.75	.14				
11	35B11	1.500	B	.375	.563	1.063	.75	.17				
12	35B12	1.630	B	.5	.563	1.219	.75	.20				
13	35B13	1.750	B	.5	.688	1.25	.75	.23				
14	35B14	1.870	B	.5	.875	1.25	.75	.25				
15	35B15	1.990	B	.5	.875	1.344	.75	.29	A	35A15	.5	.10
16	35B16	2.110	B	.5	.938	1.469	.75	.35	A	35A16	.5	.12
17	35B17	2.230	B	.5	1.063	1.594	.75	.42	A	35A17	.5	.12
18	35B18	2.350	B	.5	1.188	1.719	.75	.48	A	35A18	.5	.14
19	35B19	2.470	B	.5	1.25	1.844	.75	.54	A	35A19	.5	.16
20	35B20	2.590	B	.5	1.313	1.938	.75	.59	A	35A20	.5	.20
21	35B21	2.710	B	.5	1.375	2	.875	.80	A	35A21	.5	.20
22	35B22	2.830	B	.5	1.375	2	.875	.80	A	35A22	.5	.22
23	35B23	2.950	B	.5	1.375	2	.875	.82	A	35A23	.5	.24
24	35B24	3.070	B	.5	1.375	2	.875	.88	A	35A24	.5	.26
25	35B25	3.190	B	.5	1.375	2	.875	.88	A	35A25	.5	.28
26	35B26	3.310	B	.5	1.375	2	.875	.90	A	35A26	.5	.28
27	35B27	3.430	B	.5	1.375	2	.875	.94	A	35A27	.5	.34
28	35B28	3.550	B	.5	1.375	2	.875	.94	A	35A28	.5	.34
30	35B30	3.790	B	.5	1.375	2	.875	1.02	A	35A30	.5	.46
32	35B32	4.030	B	.5	1.375	2	.875	1.24	A	35A32	.625	.46
35	35B35	4.390	B	.625	1.5	2.25	.875	1.50	A	35A35	.625	.60
36	35B36	4.510	B	.625	1.5	2.25	.875	1.56	A	35A36	.625	.62
40	35B40	4.990	B	.625	1.5	2.25	1	1.62	A	35A40	.594	.70
42	35B42	5.230	B	.625	1.5	2.25	1	1.68	A	35A42	.594	.78
45	35B45	5.590	B	.625	1.5	2.25	1	1.78	A	35A45	.594	.88
48	35B48	5.950	B	.625	1.5	2.25	1	1.88	A	35A48	.594	1.21
54	35B54	6.660	B	.625	1.5	2.25	1	2.20	A	35A54	.594	1.32
60	35B60	7.380	B	.75	1.5	2.25	1	2.48	A	35A60	.719	1.66
70	35B70	8.580	B	.75	1.5	2.25	1	3.12	A	35A70	.719	2.30
72	35B72	8.810	B	.75	1.5	2.25	1	3.42	A	35A72	.719	2.56
80	35B80	9.770	B	.75	1.5	2.25	1	3.82	A	35A80	.719	3.16
84	35B84	10.250	B	.75	1.5	2.25	1	4.24	A	35A84	.719	3.26
96	35B96	11.680	B	.75	1.5	2.25	1	5.16	A	35A96	.719	4.64
112	35B112	13.590	B	.75	1.5	2.25	1	6.70	A	35A112	.719	5.05

★ Has recessed groove in hub for chain clearance.

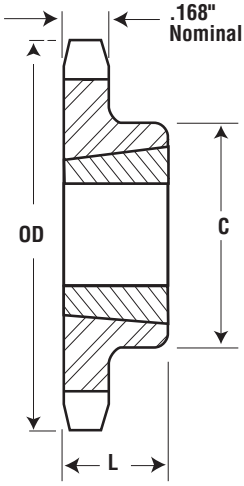
Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

No. 35
3/8" Pitch

All Steel Stock Sprockets

Single - Taper Bushed





Type B

Single - Taper Bushed

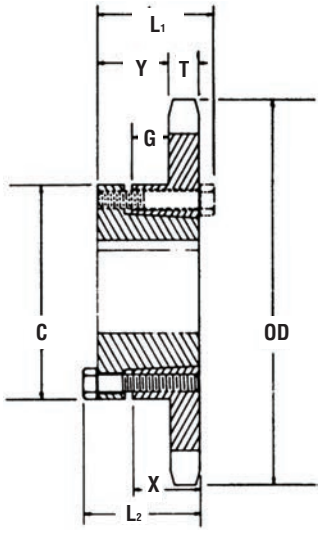
No. Teeth	Catalog Number	Bushing	Diameter		Max. Bore	Dimensions		Type	Wt. lb (Approx.)	
			OD	PD		L	C		Rim Only	Bushing Only
18	35BTB18	1008	2.352	2.159	1	.875	1.875 ★	B	0.4	0.3
19	35BTB19	1008	2.472	2.278	1	.875	1.813	B	0.5	0.3
20	35BTB20	1008	2.593	2.397	1	.875	1.938	B	0.6	0.3
21	35BTB21	1008	2.713	2.516	1	.875	2.063	B	0.7	0.3
22	35BTB22	1210	2.883	2.635	1.25	1	2.375 ★	B	0.8	0.6
23	35BTB23	1210	2.954	2.754	1.25	1	2.438	B	0.9	0.6
24	35BTB24	1210	3.074	2.873	1.25	1	2.438	B	0.9	0.6
25	35BTB25	1210	3.194	2.992	1.25	1	2.438	B	1.2	0.6
26	35BTB26	1610	3.314	3.111	1.625	1	2.875 ★	B	1.1	0.9
28	35BTB28	1610	3.553	3.349	1.625	1	2.875	B	1.2	0.9
30	35BTB30	1610	3.793	3.588	1.625	1	3.125	B	1.2	0.9
32	35BTB32	1610	4.032	3.826	1.625	1	3.25	B	1.3	0.9
35	35BTB35	1610	4.392	4.183	1.625	1	3.25	B	1.4	0.9
36	35BTB36	1610	4.511	4.303	1.625	1	3.25	B	1.4	0.9
40	35BTB40	1610	4.990	4.786	1.625	1	3.25	B	1.9	0.9
42	35BTB42	1610	5.229	5.018	1.625	1	3.25	B	2.0	0.9
45	35BTB45	1610	5.588	5.376	1.625	1	3.25	B	2.1	0.9
48	35BTB48	1610	5.946	5.734	1.625	1	3.25	B	2.3	0.9
54	35BTB54	1610	6.663	6.449	1.625	1	3.25	B	2.6	0.9
60	35BTB60	1610	7.380	7.165	1.625	1	3.25	B	3.0	0.9
70	35BTB70	1610	8.575	8.358	1.625	1	3.25	B	3.7	0.9
72	35BTB72	1610	8.814	8.597	1.625	1	3.25	B	3.9	0.9
80	35BTB80	1610	9.770	9.552	1.625	1	3.25	B	4.5	0.9
84	35BTB84	1610	10.247	10.029	1.625	1	3.25	B	4.9	0.9
96	35BTB96	1610	11.680	11.461	1.625	1	3.25	B	6.0	0.9
112	35BTB112	1610	13.590	13.371	1.625	1	3.25	B	7.8	0.9

★ Has recessed groove in hub for chain clearance.

All Steel Stock Sprockets

No. 35 3/8" Pitch





QD — Type B

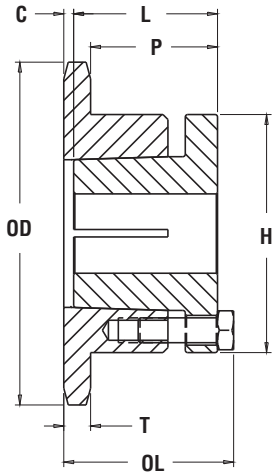
Single - Type QD

No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions							Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	G	X	T	With Hub	Rim Only
19	35JA19	JA	2.470	2.278	B	1.25	1.125	1.125	2.063	.828	.453	.625	0.168	1.18	0.28
20	35JA20	JA	2.590	2.397	B	1.25	1.125	1.125	2.063	.828	.453	.625	0.168	1.22	0.32
21	35JA21	JA	2.710	2.516	B	1.25	1.125	1.125	2.063	.828	.453	.625	0.168	1.24	0.34
22	35JA22	JA	2.830	2.635	B	1.25	1.125	1.125	2.063	.828	.453	.625	0.168	1.26	0.36
23	35JA23	JA	2.950	2.754	B	1.25	1.125	1.125	2.063	.828	.453	.625	0.168	1.28	0.38
24	35JA24	JA	3.070	3.873	B	1.25	1.125	1.125	2.063	.828	.453	.625	0.168	1.30	0.40
25	35JA25	JA	3.190	2.992	B	1.25	1.125	1.125	2.063	.828	.453	.625	0.168	1.34	0.44
26	35JA26	JA	3.310	3.111	B	1.25	1.125	1.125	2.063	.828	.453	.625	0.168	1.36	0.46
27	35JA27	JA	3.430	3.230	B	1.25	1.125	1.125	2.063	.828	.453	.625	0.168	1.38	0.48
28	35JA28	JA	3.550	3.349	B	1.25	1.125	1.125	2.063	.828	.453	.625	0.168	1.42	0.52
30	35JA30	JA	3.790	3.588	B	1.25	1.125	1.125	2.063	.828	.453	.625	0.168	1.46	0.56
32	35JA32	JA	4.030	3.826	B	1.25	1.125	1.125	2.063	.828	.453	.625	0.168	1.68	0.78
35	35JA35	JA	4.390	4.183	B	1.25	1.125	1.125	2.063	.828	.453	.625	0.168	1.94	1.04
36	35SH36	SH	4.510	4.303	B	1.625	1.438	1.438	2.688	.234	.641	.813	0.168	2.06	1.06
40	35SH40	SH	4.990	4.780	B	1.625	1.438	1.438	2.688	.234	.641	.813	0.168	2.18	1.18
42	35SH42	SH	5.230	5.018	B	1.625	1.438	1.438	2.688	.234	.641	.813	0.168	2.26	1.26
45	35SH45	SH	5.590	5.376	B	1.625	1.438	1.438	2.688	.234	.641	.813	0.168	2.40	1.40
48	35SH48	SH	5.950	5.734	B	1.625	1.438	1.438	2.688	.234	.641	.813	0.168	2.58	1.58
54	35SH54	SH	6.660	6.449	B	1.625	1.438	1.438	2.688	.234	.641	.813	0.168	2.88	1.88
60	35SH60	SH	7.380	7.165	B	1.625	1.438	1.438	2.688	.234	.641	.813	0.168	3.28	2.28
70	35SH70	SH	8.580	8.358	B	1.625	1.438	1.438	2.688	.234	.641	.813	0.168	3.94	2.94
72	35SH72	SH	8.810	8.597	B	1.625	1.438	1.438	2.688	.234	.641	.813	0.168	4.14	3.14
80	35SH80	SH	9.770	9.552	B	1.625	1.438	1.438	2.688	.234	.641	.813	0.168	4.68	3.68
84	35SH84	SH	10.250	10.029	B	1.625	1.438	1.438	2.688	.234	.641	.813	0.168	4.86	3.96
96	35SH96	SH	11.680	11.461	B	1.625	1.438	1.438	2.688	.234	.641	.813	0.168	6.38	5.38
112	35SH112	SH	13.590	13.371	B	1.625	1.438	1.438	2.688	.234	.641	.813	0.168	7.60	6.60

No. 35
3/8" Pitch

MST® Sprockets





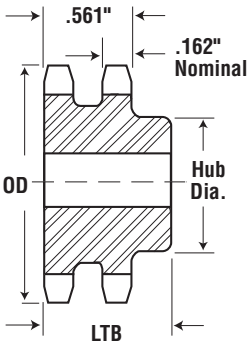
Type 3

Single - MST® Sprockets

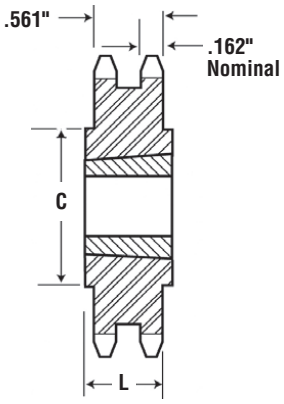
No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions						Wt. lb (Approx.)	
			OD	PD			OL	L	C	H	P	T (Nom.)	With Hub	Rim Only
19	35H19	H	2.470	2.278	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	1.3	0.5
20	35H20	H	2.590	2.397	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	1.3	0.5
21	35H21	H	2.710	2.516	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	1.4	0.6
22	35H22	H	2.830	2.635	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	1.5	0.7
23	35H23	H	2.950	2.754	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	1.5	0.7
24	35H24	H	3.070	2.873	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	1.6	0.8
25	35H25	H	3.190	2.992	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	1.6	0.8
26	35H26	H	3.310	3.111	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	1.6	0.8
28	35H28	H	3.550	3.349	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	1.7	0.9
30	35H30	H	3.790	3.588	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	1.7	0.9
32	35H32	H	4.030	3.826	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	1.7	0.9
35	35H35	H	4.390	4.183	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	1.8	1.0
36	35H36	H	4.510	4.303	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	1.8	1.0
40	35H40	H	4.990	4.780	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	2.0	1.2
42	35H42	H	5.230	5.018	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	2.0	1.2
45	35H45	H	5.590	5.376	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	2.2	1.4
48	35H48	H	5.950	5.734	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	2.3	1.5
54	35H54	H	6.660	6.449	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	2.6	1.8
60	35H60	H	7.380	7.165	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	3.1	2.3
70	35H70	H	8.580	8.358	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	3.6	2.8
72	35H72	H	8.810	8.597	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	3.8	3.0
80	35H80	H	9.770	9.552	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	4.6	3.8
84	35H84	H	10.250	10.029	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	4.8	4.0
96	35H96	H	11.680	11.461	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	6.1	5.3
112	35H112	H	13.590	13.371	3	1.5	1.5	1.25	.063	2.5	1.156	0.168	7.6	6.8

All Steel Stock Sprockets

No. 35-2 3/8" Pitch



TYPE B



TAPER BUSHED TYPE B

Double - Type B

No. Teeth	Catalog Number	OD	Type	Bore (inches)		Hub (inches)		Wt. lb (Approx.)
				Stock	Rec. Max.	Dia.	Length Thru	
12	D35B12H	1.630	B	.5	.563	.984	1.25	0.32
13	D35B13H	1.750	B	.5	.688	1.109	1.25	0.36
14	D35B14H	1.870	B	.5	.875	1.25	1.25	0.44
15	D35B15H	1.990	B	.5	.938	1.406	1.25	0.56
16	D35B16H	2.110	B	.5	.938	1.469	1.25	0.64
17	D35B17H	2.230	B	.5	1.063	1.594	1.25	0.74
18	D35B18H	2.350	B	.5	1.188	1.719	1.25	0.84
19	D35B19H	2.470	B	.5	1.313	1.875	1.25	0.96
20	D35B20H	2.590	B	.75	1.313	1.938	1.375	1.08
21	D35B21H	2.710	B	.75	1.375	2.063	1.375	1.24
22	D35B22H	2.830	B	.75	1.438	2.188	1.375	1.42
23	D35B23H	2.950	B	.75	1.5	2.25	1.375	1.54
24	D35B24H	3.070	B	.75	1.5	2.25	1.375	1.62
25	D35B25H	3.190	B	.75	1.5	2.25	1.375	1.66
26	D35B26	3.310	B	.75	1.75	2.5	1.375	1.98
30	D35B30	3.790	B	.75	1.75	2.5	1.375	2.34
36	D35B36	4.510	B	.75	1.75	2.5	1.375	3.00
42	D35B42	5.230	B	.75	1.75	2.5	1.375	3.80
48	D35B48	5.950	B	.75	1.75	2.5	1.375	4.66
52	D35B52	6.430	B	.75	1.75	2.5	1.375	5.40
60	D35B60	7.380	B	.75	1.75	2.5	1.375	6.84
68	D35B68	8.340	B	.75	2.375	3.5	1.5	10.01
72	D35B72	8.810	B	.75	2.375	3.5	1.5	11.04
76	D35B76	9.290	B	.75	2.375	3.5	1.5	11.94
84	D35B84	10.250	B	.75	2.375	3.5	1.5	14.98
95	D35B95	11.560	B	1	2.375	3.5	1.5	17.42
96	D35B96	11.680	B	1	2.375	3.5	1.5	18.14
102	D35B102	12.400	B	1	2.375	3.5	1.5	19.92

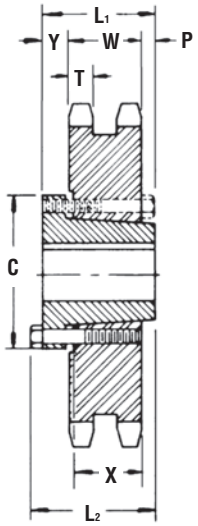
Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

Sprockets with "H" suffix have hardened teeth.

Double - Taper Bushed

No. Teeth	Catalog Number	Bushing	Diameter		Max. Bore	Dimensions		Type	Wt. lb (Approx.)	
			OD	PD		L	C		Rim Only	Bushing Only
19	D35BTB19H	1008	2.472	2.278	1	.875	1.828	B	0.6	0.3
20	D35BTB20H	1008	2.593	2.397	1	.875	1.938	B	0.8	0.3
21	D35BTB21H	1008	2.713	2.516	1	.875	2.063	B	1.4	0.3
22	D35BTB22H	1008	2.833	2.635	1	.875	2.188	B	1.7	0.3
24	D35BTB24H	1210	3.074	2.873	1.25	1	2.438	B	1.8	0.6
26	D35BTB26	1210	3.314	3.111	1.25	1	2.625	B	2.0	0.6
30	D35BTB30	1610	3.793	3.588	1.625	1	3.125	B	1.8	0.9
32	D35BTB32	1610	4.032	3.826	1.625	1	3.25	B	2.0	0.9
35	D35BTB35	1610	4.392	4.183	1.625	1	3.25	B	2.3	0.9
40	D35BTB40	1610	4.990	4.780	1.625	1	3.25	B	2.9	0.9
45	D35BTB45	1610	5.588	5.376	1.625	1	3.25	B	3.2	0.9
48	D35BTB48	1610	5.946	5.734	1.625	1	3.625	B	3.5	0.9
54	D35BTB54	1610	6.663	6.449	1.625	1	3.625	B	3.9	0.9
60	D35BTB60	1610	7.380	7.165	1.625	1	3.625	B	4.9	0.9
70	D35BTB70	1610	8.575	8.358	1.625	1	3.625	B	6.3	0.9
80	D35BTB80	1610	9.770	9.552	1.625	1	3.625	B	7.9	0.9
96	D35BTB96	1610	11.680	11.461	1.625	1	3.625	B	9.9	0.9
112	D35BTB112	1610	13.590	13.371	1.625	1	3.625	B	10.9	0.9

Sprockets with "H" suffix have hardened teeth.



QD – TYPE C

Double - Type QD

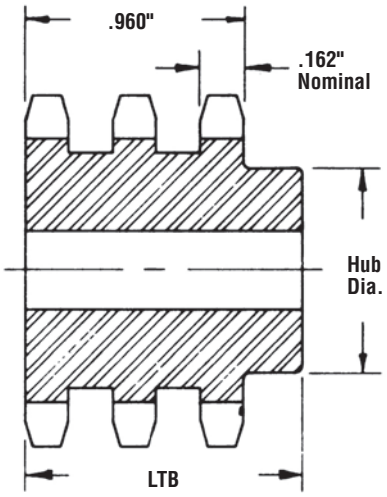
No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions								Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	P	X	T	W	With Hub	Rim Only
68	D35SDS68	SDS	8.340	8.120	C	2	1.5	1.5	3.188	.563	.188	.75	0.162	0.561	8.40	7.40
72	D35SDS72	SDS	8.810	8.597	C	2	1.5	1.5	3.188	.563	.188	.75	0.162	0.561	9.28	8.28
76	D35SDS76	SDS	9.290	9.074	C	2	1.5	1.5	3.188	.563	.188	.75	0.162	0.561	10.32	9.32
84	D35SK84	SK	10.250	10.029	C	2.625	2.125	2.125	3.875	.625	.688	1.25	0.162	0.561	13.94	11.94
95	D35SK95	SK	11.560	11.342	C	2.625	2.125	2.125	3.875	.625	.688	1.25	0.162	0.561	17.22	15.22
96	D35SK96	SK	11.680	11.461	C	2.625	2.125	2.125	3.875	.625	.688	1.25	0.162	0.561	17.74	15.74
102	D35SK102	SK	12.400	12.177	C	2.625	2.125	2.125	3.875	.625	.688	1.25	0.162	0.561	19.76	17.76

No. 35-3
3/8" Pitch

All Steel Stock Sprockets

Triple - Type B

No. Teeth	Catalog Number	OD	Type	Bore (inches)		Hub (inches)		Wt. lb (Approx.)
				Stock	Rec. Max.	Dia.	Length Thru	
13	E35B13H	1.750	B	.5	.688	.266	1.75	0.50
14	E35B14H	1.870	B	.5	.875	1.25	1.75	0.62
15	E35B15H	1.990	B	.5	.938	1.406	1.75	0.78
16	E35B16H	2.110	B	.5	.938	1.469	1.75	0.82
17	E35B17H	2.230	B	.5	1.063	1.594	1.75	1.04
18	E35B18H	2.350	B	.5	1.188	1.719	1.75	1.22
19	E35B19H	2.470	B	.5	1.313	1.875	1.75	1.40
20	E35B20H	2.590	B	.75	1.313	1.938	1.875	1.50
21	E35B21H	2.710	B	.75	1.375	2.063	1.875	1.72
22	E35B22H	2.830	B	.75	1.438	2.188	1.875	1.96
23	E35B23H	2.950	B	.75	1.5	2.25	1.875	2.12
24	E35B24H	3.070	B	.75	1.5	2.25	1.875	2.26
25	E35B25H	3.190	B	.75	1.5	2.25	1.875	2.42
26	E35B26	3.310	B	.75	1.5	2.5	1.875	2.78
30	E35B30	3.790	B	.75	1.75	2.5	1.875	3.42
36	E35B36	4.510	B	.75	1.75	2.5	1.875	4.52
42	E35B42	5.230	B	.75	1.75	2.5	1.875	5.88
48	E35B48	5.950	B	.75	1.75	2.5	1.875	7.42
52	E35B52	6.430	B	.75	1.75	2.5	1.875	8.52
60	E35B60	7.380	B	.75	1.75	2.5	1.875	11.22
68	E35B68	8.340	B	.75	2.375	3.5	1.875	15.38
72	E35B72	8.810	B	.75	2.375	3.5	1.875	17.34
76	E35B76	9.290	B	.75	2.375	3.5	1.875	18.90
84	E35B84	10.250	B	.75	2.375	3.5	1.875	22.82
95	E35B95	11.560	B	1	2.5	3.75	2.125	29.32
96	E35B96	11.680	B	1	2.5	3.75	2.125	30.06
102	E35B102	12.400	B	1	2.5	3.75	2.125	33.36



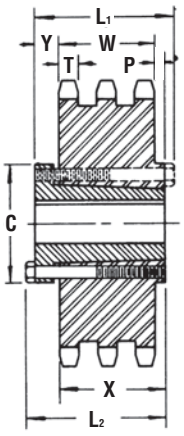
TYPE B

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat.

Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

NOTE: Triple 35 stock sprockets with 25 teeth or less have hardened teeth.

Sprockets with "H" suffix have hardened teeth.



QD — Type C

Alteration Charges

See current discount sheet for alteration charges.

Triple - Type QD

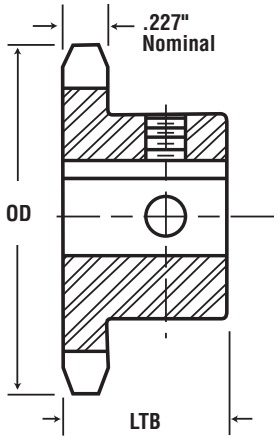
No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions								Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	P	X	T	W	With Hub	Rim Only
68	E35SK68	SK	8.340	8.120	C	2.625	2.125	2.125	3.875	.625	.297	1.25	0.162	0.960	13.90	11.90
72	E35SK72	SK	8.810	8.597	C	2.625	2.125	2.125	3.875	.625	.297	1.25	0.162	0.960	15.56	13.56
76	E35SK76	SK	9.290	9.074	C	2.625	2.125	2.125	3.875	.625	.297	1.25	0.162	0.960	17.42	15.42
84	E35SK84	SK	10.250	10.029	C	2.625	2.125	2.125	3.875	.625	.297	1.25	0.162	0.960	20.92	18.92
95	E35SK95	SK	11.560	11.342	C	2.625	2.125	2.125	3.875	.625	.297	1.25	0.162	0.960	26.76	24.76
96	E35SK96	SK	11.680	11.461	C	2.625	2.125	2.125	3.875	.625	.297	1.25	0.162	0.960	27.58	25.58
102	E35SK102	SK	12.400	12.177	C	2.625	2.125	2.125	3.875	.625	.297	1.25	0.162	0.960	31.18	29.18

All Steel Stock Sprockets

No. 41 ½" Pitch



Bored-To-Size



TYPE BS

No. 35 - Hardened Teeth — 2 Setscrews — Bored-To-Size

No. Teeth	Catalog Number	OD	LTB	Wt. lb (Approx.)	Stock Finished Bores Includes Keyway and 2 Setscrews										
9	35BS9HT	1.260	.75	0.10	★.375										
10	35BS10HT	1.380	.75	0.11	★.375	—	★ .5	—	† .625						
11	35BS11HT	1.500	.75	0.15	★.375	—	★ .5	—	† .625	—	† .75				
12	35BS12HT	1.630	.75	0.18		—	★ .5	—	.625	—	† .75				
13	35BS13HT	1.750	.75	0.20		—	★ .5	—	.625	—	.75				
14	35BS14HT	1.870	.75	0.22		—	★ .5	—	.625	—	.75				
15	35BS15HT	1.990	.75	0.24		—	★ .5	—	.625	—	.75	—	.875	—	1
16	35BS16HT	2.110	.75	0.29		—	★ .5	—	.625	—	.75	—	.875	—	1
17	35BS17HT	2.230	.75	0.36		—	★ .5	—	.625	—	.75	—	.875	—	1
18	35BS18HT	2.350	.75	0.39		—	★ .5	—	.625	—	.75	—	.875	—	1
19	35BS19HT	2.470	.75	0.44					.625	—	.75	—		—	1
20	35BS20HT	2.590	.75	0.51					.625	—	.75	—		—	1
21	35BS21HT	2.710	.875	0.75					.625	—	.75	—		—	1
22	35BS22HT	2.830	.875	0.76					.625	—	.75	—		—	1
23	35BS23HT	2.950	.875	0.78					.625	—	.75	—		—	1
24	35BS24HT	3.070	.875	0.79					.625		.75	—		—	1
25	35BS25HT	3.190	.875	0.80					.625	—	.75	—		—	1
26	35BS26HT	3.310	.875	0.84					.625	—	.75	—		—	1
28	35BS28HT	3.550	.875	0.88					.625	—	.75	—		—	1
30	35BS30HT	3.790	.875	0.96					.625	—	.75	—		—	1

★ Indicates no keyway. (2) .25" setscrews only in .5" & .375" bore at 90°.

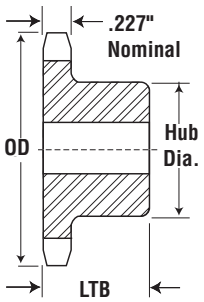
† Keyway with Setscrew at 90° & 180°.

Hub diameters vary to suit different bore sizes.

NOTE: KEYWAY IS ON CENTER LINE OF TOOTH.

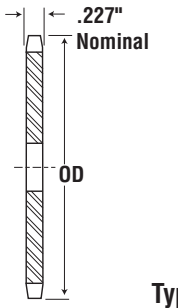
No. 41
½" Pitch

All Steel & Stainless Steel Stock Sprockets





Type B





Type A

Single - Type B

No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb (Approx.)
				Stock	Rec. Max	Dia.	LTB	
6	41B6	1.170	B	.375	.375	.656 ★	.875	0.07
7	41B7	1.340	B	.375	.375	.75 ★	.875	0.10
8	41B8	1.510	B	.5	.5	.984 ★	.875	0.19
9	41B9	1.670	B	.5	.625	1.125 ★	.875	0.20
10	41B10	1.840	B	.5	.75	1.25 ★	.875	0.27
11	41B11	2.000	B	.5	.875	1.438 ★	.875	0.35
12	41B12	2.170	B	.5	.938	1.563 ★	.875	0.44
13	41B13	2.330	B	.5	1	1.563	.875	0.50
14	41B14	2.490	B	.5	1.25	1.75	.875	0.57
15	41B15	2.650	B	.5	1.313	1.906	.875	0.72
16	41B16	2.810	B	.625	1.375	2.063	.875	0.91
17	41B17	2.970	B	.625	1.5	2.234	1	1.09
18	41B18	3.140	B	.625	1.625	2.375	1	1.25
19	41B19	3.300	B	.625	1.75	2.469	1	1.49
20	41B20	3.460	B	.625	1.875	2.75	1	1.64
21	41B21	3.620	B	.625	1.875	2.875	1	1.81
22	41B22	3.780	B	.625	2	3	1	1.93
23	41B23	3.940	B	.625	2.25	3.188	1	2.25
24	41B24	4.100	B	.625	2.25	3.25	1	2.33
25	41B25	4.260	B	.625	2.25	3.25	1	2.46
26	41B26	4.420	B	.625	2.25	3.25	1	2.50
27	41B27	4.580	B	.625	2.25	3.25	1	2.56
28	41B28	4.740	B	.625	2.25	3.25	1	2.64
30	41B30	5.060	B	.625	2.25	3.25	1	2.80
32	41B32	5.380	B	.625	2.25	3.25	1	2.96
35	41B35	5.860	B	.625	2.375	3.25	1	3.12
36	41B36	6.020	B	.625	2.375	3.25	1	3.32
40	41B40	6.650	B	.75	2.375	3.25	1.063	4.06
42	41B42	6.970	B	.75	2.375	3.5	1.063	4.10
45	41B45	7.450	B	.75	2.375	3.5	1.063	4.18
48	41B48	7.930	B	.75	2.375	3.5	1.063	4.92
54	41B54	8.880	B	.75	2.375	3.5	1.063	5.68
60	41B60	9.840	B	.75	2.375	3.5	1.063	6.78
70	41B70	11.430	B	.75	2.75	4	1.188	9.54
72	41B72	11.750	B	.75	2.75	4	1.188	9.64
80	41B80	13.030	B	.75	2.75	4	1.188	11.54
84	41B84	13.660	B	.75	2.75	4	1.188	12.20
96	41B96	15.570	B	1	2.75	4	1.188	14.86
112	41B112	18.120	B	1	2.75	4	1.188	19.16

Single - Type A

Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
A	41A15	.625	0.28
A	41A16	.625	0.34
A	41A17	.625	0.36
A	41A18	.625	0.44
A	41A19	.625	0.46
A	41A20	.625	0.52
A	41A21	.625	0.60
A	41A22	.625	0.66
A	41A23	.625	0.72
A	41A24	.625	0.82
A	41A25	.625	0.88
A	41A26	.625	0.94
A	41A27	.625	1.00
A	41A28	.625	1.08
A	41A30	.594	1.20
A	41A32	.594	1.44
A	41A35	.594	1.70
A	41A36	.594	1.84
A	41A40	.719	2.22
A	41A42	.719	2.50
A	41A45	.719	2.52
A	41A48	.719	2.92
A	41A54	.719	3.54
A	41A60	.719	4.60
A	41A70	.719	6.22
A	41A72	.719	6.32
A	41A80	.719	8.46
A	41A84	.719	9.12
A	41A96	.938	11.84
A	41A112	.938	15.84

Single - Type B — Stainless

No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb (Approx.)
				Stock	Rec. Max	Dia.	LTB	
9	41B9SS	1.670	B	.5	.625	1.125 ★	.875	0.20
10	41B10SS	1.840	B	.5	.75	1.25 ★	.875	0.27
11	41B11SS	2.000	B	.5	.875	1.438 ★	.875	0.35
12	41B12SS	2.170	B	.5	.938	1.563 ★	.875	0.44
13	41B13SS	2.330	B	.5	1	1.563	.875	0.50
14	41B14SS	2.490	B	.5	1.25	1.75	.875	0.57
15	41B15SS	2.650	B	.5	1.313	1.906	.875	0.72
16	41B16SS	2.810	B	.625	1.375	2.063	.875	0.91
17	41B17SS	2.970	B	.625	1.5	2.234	1	1.09
18	41B18SS	3.140	B	.625	1.625	2.375	1	1.25
19	41B19SS	3.300	B	.625	1.75	2.469	1	1.49
20	41B20SS	3.460	B	.625	1.875	2.75	1	1.64

★ Has recessed groove in hub for chain clearance.

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat.

Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

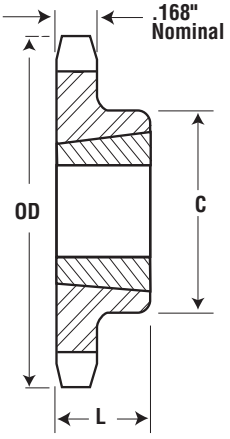
All Steel Stock Sprockets

No. 41 ½" Pitch

Single - Taper Bushed

No. Teeth	Catalog Number	Bushing	Diameter		Max. Bore	Dimensions		Type	Wt. lb (Approx.)	
			OD	PD		L	C		Rim Only	Bushing Only
14	41BTB14	1008	2.490	2.247	1	.875	1.875 ★	B	0.4	0.3
15	41BTB15	1008	2.650	2.405	1	.875	1.875	B	0.5	0.3
16	41BTB16	1008	2.810	2.503	1	.875	2	B	0.6	0.3
17	41BTB17	1210	2.970	2.721	1.25	1	2.375 ★	B	0.7	0.6
18	41BTB18	1210	3.140	2.879	1.25	1	2.375	B	0.9	0.6
19	41BTB19	1210	3.300	3.038	1.25	1	2.5	B	1.1	0.6
20	41BTB20	1610	3.460	3.196	1.625	1	2.875 ★	B	1.1	0.9
21	41BTB21	1610	3.620	3.355	1.625	1	3 ★	B	1.2	0.9
22	41BTB22	1610	3.780	3.513	1.625	1	3	B	1.3	0.9
23	41BTB23	1610	3.940	3.672	1.625	1	3	B	1.4	0.9
24	41BTB24	1610	4.100	3.831	1.625	1	3	B	1.4	0.9
25	41BTB25	1610	4.260	3.989	1.625	1	3	B	1.5	0.9
26	41BTB26	1610	4.420	4.148	1.625	1	3	B	1.5	0.9
28	41BTB28	1610	4.740	4.466	1.625	1	3	B	1.7	0.9
30	41BTB30	1610	5.060	4.783	1.625	1	3	B	1.8	0.9
32	41BTB32	1610	5.380	5.101	1.625	1	3	B	1.9	0.9
35	41BTB35	1610	5.860	5.578	1.625	1	3	B	2.3	0.9
36	41BTB36	1610	6.020	5.737	1.625	1	3	B	2.4	0.9
40	41BTB40	1610	6.650	6.373	1.625	1	3	B	2.7	0.9
45	41BTB45	1610	7.450	7.168	1.625	1	3	B	3.5	0.9
48	41BTB48	1610	7.930	7.645	1.625	1	3	B	4.1	0.9
54	41BTB54	1610	8.880	8.599	1.625	1	3	B	4.9	0.9
60	41BTB60	1610	9.840	9.554	1.625	1	3	B	5.7	0.9
70	41BTB70	1610	11.430	11.145	1.625	1	3	B	7.4	0.9
72	41BTB72	1610	11.750	11.463	1.625	1	3	B	8.2	0.9
80	41BTB80	1610	13.030	12.736	1.625	1	3	B	9.6	0.9
96	41BTB96	1610	15.570	15.282	1.625	1	3	B	13.1	0.9

★ Has recessed groove in hub for chain clearance.

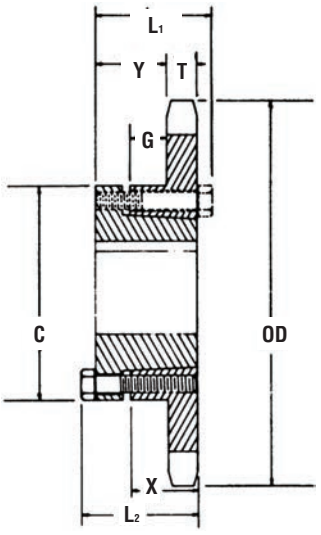


Type B



Single - Type QD

No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions							Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	G	X	T	With Hub	Rim Only
15	41JA15	JA	2.650	2.405	B	1.25	1.125	1.125	2.063	.765	.391	.625	.227	1.22	0.32
16	41JA16	JA	2.810	2.563	B	1.25	1.125	1.125	2.063	.765	.391	.625	.227	1.30	0.40
17	41JA17	JA	2.980	2.721	B	1.25	1.125	1.125	2.063	.765	.391	.625	.227	1.40	0.50
18	41JA18	JA	3.140	2.879	B	1.25	1.125	1.125	2.063	.765	.391	.625	.227	1.50	0.60
19	41JA19	JA	3.300	3.038	B	1.25	1.125	1.125	2.063	.765	.391	.625	.227	1.58	0.68
20	41SH20	SH	3.460	3.196	B	1.625	1.438	1.438	2.688	1.031	.578	.813	.227	1.78	0.78
21	41SH21	SH	3.620	3.355	B	1.625	1.438	1.438	2.688	1.031	.578	.813	.227	1.82	0.82
22	41SH22	SH	3.780	3.513	B	1.625	1.438	1.438	2.688	1.031	.578	.813	.227	2.06	1.06
23	41SH23	SH	3.940	3.672	B	1.625	1.438	1.438	2.688	1.031	.578	.813	.227	2.14	1.14
24	41SH24	SH	4.100	3.831	B	1.625	1.438	1.438	2.688	1.031	.578	.813	.227	2.16	1.16
25	41SH25	SH	4.260	3.989	B	1.625	1.438	1.438	2.688	1.031	.578	.813	.227	2.22	1.22
26	41SH26	SH	4.420	4.148	B	1.625	1.438	1.438	2.688	1.031	.578	.813	.227	2.26	1.26
27	41SH27	SH	4.580	4.307	B	1.625	1.438	1.438	2.688	1.031	.578	.813	.227	2.40	1.40
28	41SH28	SH	4.740	4.466	B	1.625	1.438	1.438	2.688	1.031	.578	.813	.227	2.54	1.54
30	41SH30	SH	5.060	4.783	B	1.625	1.438	1.438	2.688	1.031	.578	.813	.227	2.58	1.58
32	41SH32	SH	5.380	5.101	B	1.625	1.438	1.438	2.688	1.031	.578	.813	.227	2.68	1.68
35	41SH35	SH	5.860	5.578	B	1.625	1.438	1.438	2.688	1.031	.578	.813	.227	2.79	1.79
36	41SDS36	SDS	6.020	5.737	B	2	1.5	1.5	3.188	1.094	.531	.75	.227	2.92	1.92
40	41SDS40	SDS	6.650	6.373	B	2	1.5	1.5	3.188	1.094	.531	.75	.227	3.32	2.32
42	41SDS42	SDS	6.970	6.691	B	2	1.5	1.5	3.188	1.094	.531	.75	.227	3.44	2.44
45	41SDS45	SDS	7.450	7.168	B	2	1.5	1.5	3.188	1.094	.531	.75	.227	3.76	2.76
48	41SDS48	SDS	7.930	7.645	B	2	1.5	1.5	3.188	1.094	.531	.75	.227	4.36	3.36
54	41SDS54	SDS	8.890	8.599	B	2	1.5	1.5	3.188	1.094	.531	.75	.227	4.98	3.98
60	41SDS60	SDS	9.840	9.554	B	2	1.5	1.5	3.188	1.094	.531	.75	.227	6.54	5.54
70	41SK70	SK	11.430	11.145	B	2.625	2.125	2.125	3.875	1.641	1.031	1.25	.227	9.42	7.42
72	41SK72	SK	11.750	11.463	B	2.625	2.125	2.125	3.875	1.641	1.031	1.25	.227	10.02	8.02
80	41SK80	SK	13.030	12.736	B	2.625	2.125	2.125	3.875	1.641	1.031	1.25	.227	11.64	9.64
84	41SK84	SK	13.660	13.372	B	2.625	2.125	2.125	3.875	1.641	1.031	1.25	.227	12.40	10.40
96	41SK96	SK	15.570	15.281	B	2.625	2.125	2.125	3.875	1.641	1.031	1.25	.227	14.82	12.82
112	41SK112	SK	18.120	17.828	B	2.625	2.125	2.125	3.875	1.641	1.031	1.25	.227	19.28	17.28



QD — Type B



No. 40
½" Pitch

All Steel Stock Sprockets

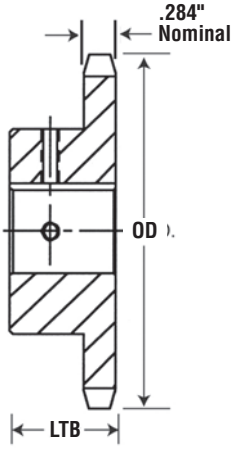
Single - Type BS— 2 Setscrews — Bored-To-Size

No. Teeth	Catalog Number	OD	LTB	Wt. lb (Approx.)	Stock Finished Bores Includes Keyway and 2 Setscrews										
9	40BS9	1.67	.875	0.16	★.5	.625									
10	40BS10	1.84	.875	0.24	★.5	.625	.75								
11	40BS11	2	.875	0.28	★.5	.625	.75	.875							
12	40BS12	2.17	.875	0.34	★.5	.625	.75	.875	1						
13	40BS13	2.33	.875	0.45	★.5	.625	.75	.875	1						
14	40BS14	2.49	.875	0.51	★.5	.625	.75	.875	1	1.125					
15	40BS15	2.65	.875	0.53	★.5	.625	.75	.875	1	1.125	1.188	1.25			
16	40BS16	2.81	.875	0.66		.625	.75	.875	1	1.125	1.188	1.25			
17	40BS17	2.97	1	0.88		.625	.75	.875	1	1.125	1.188	1.25			
18	40BS18	3.14	1	1.03		.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5
19	40BS19	3.3	1	1.17		.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5
20	40BS20	3.46	1	1.33		.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5
21	40BS21	3.62	1	1.53		.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5
22	40BS22	3.78	1	1.66		.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5
23	40BS23	3.94	1	1.92		.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5
24	40BS24	4.1	1	2.1		.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5
25	40BS25	4.26	1	2.22		.625	.75	.875	1	1.125	1.188	1.25		1.438	1.5
26	40BS26	4.42	1	2.34		.625	.75	.875	1	1.125	1.188	1.25		1.438	1.5
27	40BS27	4.58	1	2.42		.625	.75	.875	1	1.125	1.188	1.25		1.438	1.5
28	40BS28	4.74	1	2.5		.625	.75	.875	1	1.125	1.188	1.25		1.438	1.5
29	40BS29	4.9	1	2.6		.625	.75	.875	1	1.125	1.188	1.25		1.438	1.5
30	40BS30	5.06	1	2.7		.625	.75	.875	1	1.125	1.188	1.25		1.438	1.5
31	40BS31	5.22	1	2.88		.625	.75	.875	1	1.125	1.188	1.25		1.438	1.5
32	40BS32	5.38	1	3		.625	.75	.875	1	1.125	1.188	1.25		1.438	1.5
33	40BS33	5.54	1	3.03		.625	.75	.875	1	1.125	1.188	1.25		1.438	1.5
34	40BS34	5.7	1	3.11		.625	.75	.875	1	1.125	1.188	1.25		1.438	1.5
35	40BS35	5.86	1	3.2		.625	.75	.875	1	1.125	1.188	1.25		1.438	1.5
36	40BS36	6.02	1	3.39		.625	.75	.875	1	1.125	1.188	1.25		1.438	1.5
37	40BS37	6.17	1	3.45		.625	.75	.875	1	1.125	1.188	1.25		1.438	1.5
38	40BS38	6.33	1	3.5		.625	.75	.875	1	1.125	1.188	1.25		1.438	1.5
39	40BS39	6.49	1	4		.625	.75	.875	1	1.125	1.188	1.25		1.438	1.5
40	40BS40	6.65	1.125	4.28			.75	.875	1	1.125	1.188	1.25		1.438	1.5
41	40BS41	6.81	1.125	4.58			.75	.875	1	1.125	1.188	1.25		1.438	1.5
42	40BS42	6.97	1.125	4.64			.75	.875	1	1.125	1.188	1.25		1.438	1.5
43	40BS43	7.13	1.125	4.8			.75	.875	1	1.125	1.188	1.25		1.438	1.5
44	40BS44	7.29	1.125	4.96			.75	.875	1	1.125	1.188	1.25		1.438	1.5
45	40BS45	7.45	1.125	5.06			.75	.875	1	1.125	1.188	1.25		1.438	1.5
46	40BS46	7.61	1.125	5.19			.75	.875	1	1.125	1.188	1.25		1.438	1.5
47	40BS47	7.77	1.125	5.26			.75	.875	1	1.125	1.188	1.25		1.438	1.5
48	40BS48	7.93	1.125	5.66			.75	.875	1	1.125	1.188	1.25		1.438	1.5
49	40BS49	8.09	1.125	5.72			.75	.875	1	1.125	1.188	1.25		1.438	1.5
50	40BS50	8.25	1.125	5.78			.75	.875	1	1.125	1.188	1.25		1.438	1.5
51	40BS51	8.41	1.125	5.9			.75	.875	1	1.125	1.188	1.25		1.438	1.5
52	40BS52	8.57	1.125	5.94			.75	.875	1	1.125	1.188	1.25		1.438	1.5
53	40BS53	8.73	1.125	6.12			.75	.875	1	1.125	1.188	1.25		1.438	1.5
54	40BS54	8.88	1.125	6.24			.75	.875	1	1.125	1.188	1.25		1.438	1.5
55	40BS55	9.04	1.125	6.66			.75	.875	1	1.125	1.188	1.25		1.438	1.5
56	40BS56	9.2	1.125	6.71			.75	.875	1	1.125	1.188	1.25		1.438	1.5
57	40BS57	9.36	1.125	6.94			.75	.875	1	1.125	1.188	1.25		1.438	1.5
58	40BS58	9.52	1.125	7.17			.75	.875	1	1.125	1.188	1.25		1.438	1.5
59	40BS59	9.68	1.125	7.38			.75	.875	1	1.125	1.188	1.25		1.438	1.5
60	40BS60	9.84	1.125	7.68			.75	.875	1	1.125	1.188	1.25		1.438	1.5
70	40BS70	11.43	1.25	10.8			.75	.875	1	1.125	1.188	1.25		1.438	1.5
72	40BS72	11.75	1.25	11.3			.75	.875	1	1.125	1.188	1.25		1.438	1.5
80	40BS80	13.03	1.25	13.2			.75	.875	1	1.125	1.188	1.25		1.438	1.5
84	40BS84	13.66	1.25	13.84			.75	.875	1	1.125	1.188	1.25		1.438	1.5
96	40BS96	15.57	1.25	17.44					1	1.125	1.188	1.25		1.438	1.5
112	40BS112	18.12	1.25	22.45					1	1.125	1.188	1.25		1.438	1.5

★ Indicates no keyway. (2) 1/4" setscrews only.
Hub diameters vary to suit different bore sizes.
NOTE: KEYWAY IS ON CENTER LINE OF TOOTH.



Bored-To-Size



Type BS

All Steel Stock Sprockets

No. 40 ½" Pitch



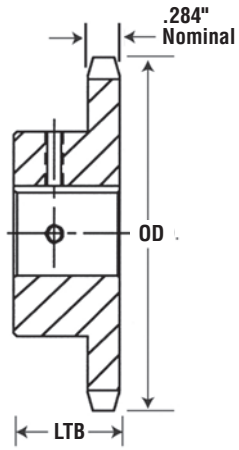
SABER TOOTH®

No. 40-Hardened Teeth — 2 Setscrews — Bored-To-Size

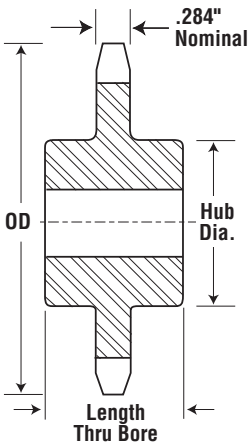
No. Teeth	Catalog Number	OD	LTB	Wt. lb	Stock Finished Bores Includes Keyway and 2 Setscrews										
9	40BS9HT	1.670	.875	0.16	★.5	.625									
10	40BS10HT	1.840	.875	0.24	★.5	.625	.75								
11	40BS11HT	2.000	.875	0.28	★.5	.625	.75	.875							
12	40BS12HT	2.170	.875	0.34	★.5	.625	.75	.875	1						
13	40BS13HT	2.330	.875	0.45	★.5	.625	.75	.875	1						
14	40BS14HT	2.490	.875	0.51	★.5	.625	.75	.875	1	1.125					
15	40BS15HT	2.650	.875	0.53	★.5	.625	.75	.875	1	1.125	1.188	1.25			
16	40BS16HT	2.810	.875	0.66		.625	.75	.875	1	1.125	1.188	1.25			
17	40BS17HT	2.970	1	0.88		.625	.75	.875	1	1.125	1.188	1.25			
18	40BS18HT	3.140	1	1.03		.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5
19	40BS19HT	3.292	1	1.17		.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5
20	40BS20HT	3.460	1	1.33		.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5
21	40BS21HT	3.620	1	1.53		.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5
22	40BS22HT	3.780	1	1.66		.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5
23	40BS23HT	3.940	1	1.92		.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5
24	40BS24HT	4.100	1	2.10		.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5
25	40BS25HT	4.260	1	2.22			.75	.875	1	1.125	1.188	1.25		1.438	1.5
26	40BS26HT	4.420	1	2.34			.75	.875	1	1.125	1.188	1.25		1.438	1.5
28	40BS28HT	4.740	1	2.50			.75	.875	1	1.125	1.188	1.25		1.438	1.5
30	40BS30HT	5.060	1	2.70			.75	.875	1	1.125	1.188	1.25		1.438	1.5

★ Indicates no keyway. (2) 1/4" setscrews only in 1/2" & 3/8" bore at 90°.

NOTE: KEYWAY IS ON CENTER LINE OF TOOTH.



Type BS



Type C

Martin stock hardened teeth sprockets afford longer chain and sprocket life. Hardened teeth on the smaller sprocket of a roller chain drive are recommended if the drive ratio is four to one or greater or if the smaller sprocket has 24 teeth or less and is running at a speed of over 600 RPM

Single - Type C — Steel

No. Teeth	Catalog Number	OD	Bore (Inches)		Hub (Inches)		Wt. lb (Approx.)
			Stock	Rec. Max.	Diameter	Length	
12	40C12	2.170	.5	1	1.609 ★	1.5	0.75
13	40C13	2.330	.5	1.063	1.75	1.5	0.94
14	40C14	2.490	.5	1.125	1.688	1.5	0.91
15	40C15	2.650	.5	1.25	1.875	1.5	1.19
16	40C16	2.810	.5	1.375	2	1.5	1.34
17	40C17	2.970	.625	1.438	2.125	1.5	1.50
18	40C18	3.140	.625	1.5	2.313	1.5	1.80

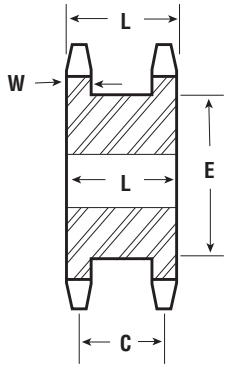
★ Has recessed groove in hub for chain clearance.

No. 40
½" Pitch

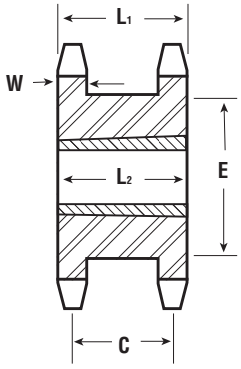
All Steel Stock Sprockets



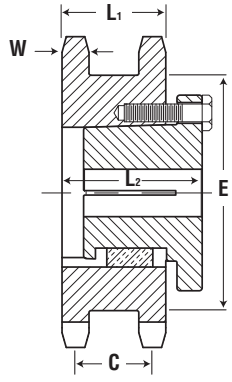




Type A



Taper Bush
Type A



MST® Type B

Double Single - Type A — Steel

No. Teeth	Catalog Number	Diameter		Type	Min. Bore	Max. Bore	Dimensions				Wt. lb (Approx.)
		OD	PD				L	C	E	W (Nom.)	
15	DS40A15	2.650	2.405	A	.5	1.25	1.406	1.125	1.813	.284	1.2
16	DS40A16	2.810	2.563	A	.5	1.25	1.406	1.125	2	.284	1.4
17	DS40A17	2.980	2.721	A	.5	1.313	1.406	1.125	2.125	.284	1.6
18	DS40A18	3.140	2.879	A	.5	1.5	1.406	1.125	2.313	.284	1.8
19	DS40A19	3.300	3.038	A	.625	1.688	1.406	1.125	2.5	.284	2.2
20	DS40A20	3.460	3.196	A	.625	1.75	1.406	1.125	2.625	.284	2.6
21	DS40A21	3.620	3.355	A	.625	1.75	1.406	1.125	2.781	.284	2.9
22	DS40A22	3.780	3.513	A	.625	1.813	1.406	1.125	2.938	.284	3.0
23	DS40A23	3.940	3.672	A	.625	2.063	1.406	1.125	3.094	.284	3.5
24	DS40A24	4.100	3.831	A	.625	2.25	1.406	1.125	3.266	.284	4.0
25	DS40A25	4.260	3.989	A	.625	2.25	1.406	1.125	3.438	.284	4.5

Double Single - Taper Bushed— Steel

No. Teeth	Catalog Number	Bushing Size	Diameter		Min. Bore	Max. Bore	Type	Dimensions					Wt.
			OD	PD				L_1	C	E	L_2	W (Nom.)	Rim Only
18	DS40ATB18H	1215	3.140	2.879	.5	1.25	A	1.688	1.125	2.313	1.5	.284	1.0
19	DS40ATB19H	1215	3.300	3.038	.5	1.25	A	1.688	1.125	2.5	1.5	.284	1.1
20	DS40ATB20H	1215	3.460	3.196	.5	1.25	A	1.688	1.125	2.625	1.5	.284	1.3
21	DS40ATB21H	1615	3.620	3.355	.5	1.625	A	1.688	1.125	2.781	1.5	.284	1.3
23	DS40ATB23H	1615	3.940	3.672	.5	1.625	A	1.688	1.125	3.156	1.5	.284	1.5
24	DS40ATB24H	1615	4.100	3.831	.5	1.625	A	1.688	1.125	3.266	1.5	.284	1.7

Double Single - MST®— Steel

No. Teeth	Catalog Number	Bushing Size	Diameter		Min. Bore	Max. Bore	Type	Dimensions					Wt.
			OD	PD				L_1	C	E	L_2	W (Nom.)	Rim Only
19	DS40H19H	H	3.300	3.038	.375	1.5	BH	1.688	1.125	2.5	2.031	.284	1.5
21	DS40H21H	H	3.620	3.355	.375	1.5	BH	1.688	1.125	2.781	2.031	.284	2.0
23	DS40P23H	P1	3.940	3.672	.5	1.75	B	1.688	1.125	3.156	2.281	.284	2.3
24	DS40P24H	P1	4.100	3.831	.5	1.75	B	1.688	1.125	3.266	2.281	.284	2.5

Stainless Steel Stock Sprockets

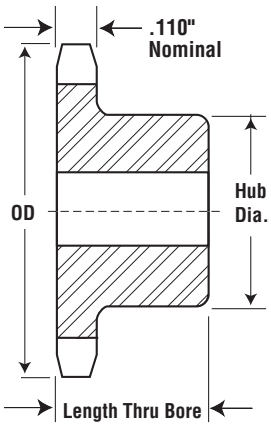
No. 40 ½" Pitch

Alteration Charges

See current discount sheet for alteration charges.



Stainless Steel



Type B

Single - Type B — Stainless

Single - Type A

No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
				Stock	Rec. Max	Dia.	LTB					
8	40B8SS	1.507	B	.5	.5	.969	.875	0.18				
9	40B9SS	1.840	B	.5	.563	1.063	.875	0.20				
10	40B10SS	1.840	B	.5	.75	1.25 ★	.875	0.28				
11	40B11SS	2.000	B	.5	.813	1.375 ★	.875	0.36				
12	40B12SS	2.170	B	.5	.938	1.563 ★	.875	0.44				
13	40B13SS	2.330	B	.5	1.063	1.563	.875	0.50	A	40A13SS	.5	0.22
14	40B14SS	2.490	B	.5	1.125	1.688	.875	0.60	A	40A14SS	.5	0.26
15	40B15SS	2.650	B	.5	1.25	1.813	.875	0.68	A	40A15SS	.625	0.30
16	40B16SS	2.810	B	.625	1.375	2	.875	0.82	A	40A16SS	.625	0.34
17	40B17SS	2.980	B	.625	1.438	2.125	1	1.06	A	40A17SS	.625	0.36
18	40B18SS	3.140	B	.625	1.5	2.313	1	1.24	A	40A18SS	.625	0.44
19	40B19SS	3.300	B	.625	1.75	2.5	1	1.42	A	40A19SS	.625	0.46
20	40B20SS	3.460	B	.625	1.875	2.625	1	1.60	A	40A20SS	.625	0.56
21	40B21SS	3.620	B	.625	1.875	2.75	1	1.68	A	40A21SS	.625	0.58
22	40B22SS	3.780	B	.625	1.875	2.875	1	1.81	A	40A22SS	.625	0.66
23	40B23SS	3.940	B	.625	2	3	1	2.14	A	40A23SS	.625	0.72
24	40B24SS	4.100	B	.625	2.25	3.25	1	2.46	A	40A24SS	.625	0.82
25	40B25SS	4.260	B	.625	2.25	3.25	1	2.55	A	40A25SS	.625	0.88
26	40B26SS	4.420	B	.625	2.25	3.25	1	2.62	A	40A26SS	.594	1.31
28	40B28SS	4.740	B	.625	2.25	3.25	1	2.75	A	40A28SS	.594	1.35
30	40B30SS	5.060	B	.625	2.25	3.25	1	2.88	A	40A30SS	.594	1.39
32	40B32SS	5.376	B	.625	2.25	3.25	1	3.16	A	40A32SS	.594	1.48
35	40B35SS	5.860	B	.625	2.25	3.25	1	3.32	A	40A35SS	.594	1.92
36	40B36SS	6.015	B	.625	2.25	3.25	1	3.58	A	40A36SS	.594	1.84
40	40B40SS	6.650	B	.75	2.375	3.5	1.125	4.28	A	40.656	.719	2.36
45	40B45SS	7.450	B	.75	2.375	3.5	1.125	4.68	A	40.656	.719	3.13
48	40B48SS	7.928	B	.75	2.375	3.5	1.125	5.84	A	40.656	.719	3.22
54	40B54SS	8.884	B	.75	2.375	3.5	1.125	6.42	A	40.656	.719	4.44
60	40B60SS	9.840	B	.75	2.375	3.5	1.125	7.00	A	40.656	.719	5.50

★ Has recessed groove in hub for chain clearance.

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

Sprockets altered at factory (rebored with keyway and setscrew added) will be supplied with stainless setscrew.

No. 40
½" Pitch

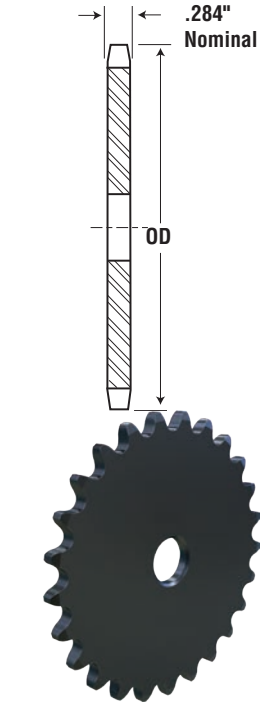
All Steel Stock Sprockets

Martin

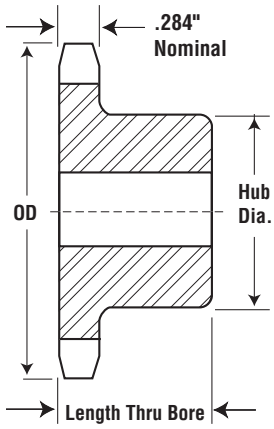
Single - Type B

Single - Type A

No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
				Stock	Rec. Max	Dia.	LTB					
8	40B8	1.510	B	.5	.5	.984 ★	.875	0.18				
9	40B9	1.670	B	.5	.563	1.063 ★	.875	0.20				
10	40B10	1.840	B	.5	.75	1.25 ★	.875	0.27				
11	40B11	2.000	B	.5	.875	1.75 ★	.875	0.35				
12	40B12	2.170	B	.5	1	1.563 ★	.875	0.45	A	40A12	.5	0.18
13	40B13	2.330	B	.5	1.063	1.563	.875	0.50	A	40A13	.5	0.22
14	40B14	2.490	B	.5	1.125	1.344	.875	0.59	A	40A14	.5	0.26
15	40B15	2.650	B	.5	1.25	113/16	.875	0.70	A	40A15	.625	0.30
16	40B16	2.810	B	.625	1.75	2	.875	0.79	A	40A16	.625	0.34
17	40B17	2.980	B	.625	1.219	2.125	1	1.04	A	40A17	.625	0.36
18	40B18	3.140	B	.625	1.5	2.156	1	1.22	A	40A18	.625	0.44
19	40B19	3.300	B	.625	1.75	2.5	1	1.43	A	40A19	.625	0.46
20	40B20	3.460	B	.625	1.875	2.625	1	1.56	A	40A20	.625	0.56
21	40B21	3.620	B	.625	1.875	2.75	1	1.73	A	40A21	.625	0.58
22	40B22	3.780	B	.625	1.875	2.875	1	1.96	A	40A22	.625	0.66
23	40B23	3.940	B	.625	2	3	1	2.13	A	40A23	.625	0.72
24	40B24	4.100	B	.625	2.25	3.25	1	2.41	A	40A24	.625	0.82
25	40B25	4.260	B	.625	2.25	3.25	1	2.54	A	40A25	.625	0.88
26	40B26	4.420	B	.625	2.25	3.25	1	2.58	A	40A26	.625	0.94
27	40B27	4.580	B	.625	2.25	3.25	1	2.66	A	40A27	.625	0.98
28	40B28	4.740	B	.625	2.25	3.25	1	2.73	A	40A28	.625	1.10
29	40B29	4.900	B	.625	2.25	3.25	1	2.80	A	40A29	.564	1.22
30	40B30	5.060	B	.625	2.25	3.25	1	2.98	A	40A30	.564	1.26
31	40B31	5.220	B	.625	2.25	3.25	1	3.10	A	40A31	.564	1.40
32	40B32	5.380	B	.625	2.25	3.25	1	3.16	A	40A32	.564	1.48
33	40B33	5.540	B	.625	2.25	3.25	1	3.22	A	40A33	.564	1.56
34	40B34	5.700	B	.625	2.25	3.25	1	3.30	A	40A34	.564	1.64
35	40B35	5.860	B	.625	2.25	3.25	1	3.46	A	40A35	.564	1.70
36	40B36	6.020	B	.625	2.25	3.25	1	3.58	A	40A36	.564	1.84
37	40B37	6.180	B	.625	2.25	3.25	1	3.62	A	40A37	.564	1.92
38	40B38	6.330	B	.625	2.25	3.25	1	3.70	A	40A38	.564	2.00
39	40B39	6.490	B	.625	2.25	3.25	1	3.76	A	40A39	.564	2.02
40	40B40	6.650	B	.75	2.75	3.5	1.125	4.69	A	40A40	.719	2.22
41	40B41	6.810	B	.75	2.75	3.5	1.125	4.76	A	40A41	.719	2.40
42	40B42	6.970	B	.75	2.75	3.5	1.125	4.82	A	40A42	.719	2.52
43	40B43	7.130	B	.75	2.75	3.5	1.125	5.12	A	40A43	.719	2.64
44	40B44	7.290	B	.75	2.75	3.5	1.125	5.15	A	40A44	.719	2.81
45	40B45	7.450	B	.75	2.75	3.5	1.125	5.30	A	40A45	.719	2.90
46	40B46	7.610	B	.75	2.75	3.5	1.125	5.57	A	40A46	.719	3.03
47	40B47	7.770	B	.75	2.75	3.5	1.125	5.44	A	40A47	.719	3.17
48	40B48	7.930	B	.75	2.75	3.5	1.125	5.84	A	40A48	.719	3.31
49	40B49	8.090	B	.75	2.75	3.5	1.125	5.90	A	40A49	.719	3.45
50	40B50	8.250	B	.75	2.75	3.5	1.125	5.96	A	40A50	.719	3.60
51	40B51	8.410	B	.75	2.75	3.5	1.125	6.08	A	40A51	.719	3.75
52	40B52	8.570	B	.75	2.75	3.5	1.125	6.28	A	40A52	.719	3.90
53	40B53	8.730	B	.75	2.75	3.5	1.125	6.33	A	40A53	.719	4.05
54	40B54	8.890	B	.75	2.75	3.5	1.125	6.42	A	40A54	.719	4.44
55	40B55	9.040	B	.75	2.75	3.5	1.125	6.46	A	40A55	.719	4.54
56	40B56	9.200	B	.75	2.75	3.5	1.125	6.89	A	40A56	.719	4.84
57	40B57	9.360	B	.75	2.75	3.5	1.125	7.02	A	40A57	.719	5.00
58	40B58	9.520	B	.75	2.75	3.5	1.125	7.36	A	40A58	.719	5.12
59	40B59	9.680	B	.75	2.75	3.5	1.125	7.45	A	40A59	.719	5.30
60	40B60	9.840	B	.75	2.75	3.5	1.125	7.86	A	40A60	.719	5.48
70	40B70	11.430	B	.75	2.75	4	1.25	11.00	A	40A70	.719	7.24
72	40B72	11.750	B	.75	2.75	4	1.25	11.50	A	40A72	.719	7.56
80	40B80	13.030	B	.75	2.75	4	1.25	13.40	A	40A80	.719	10.20
84	40B84	13.660	B	.75	2.75	4	1.25	14.04	A	40A84	.719	10.07
96	40B96	15.570	B	1	2.75	4	1.25	17.56	A	40A96	.938	12.15
112	40B112	18.120	B	1	2.75	4	1.25	22.56	A	40A112	.938	20.00



Type A





Type B

★ Has recessed groove in hub for chain clearance.

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

All Steel Stock Sprockets

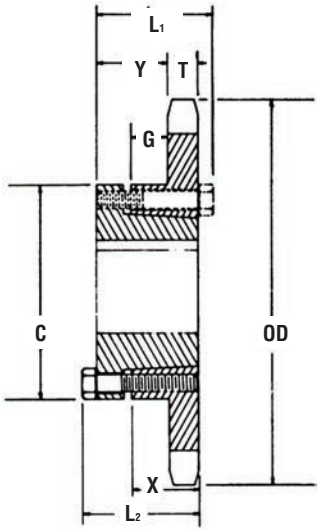
No. 40 ½" Pitch

Single - Type QD with Hardened Teeth

No. Teeth	Catalog Number
15	40JA15H
16	40JA16H
17	40JA17H
18	40JA18H
19	40JA19H
20	40SH20H
21	40SH21H
22	40SH22H
23	40SH23H
24	40SH24H
25	40SH25H
26	40SH26H
27	40SH27H
28	40SH28H
30	40SH30H

SABER TOOTH





QD — Type B

Single - Type QD

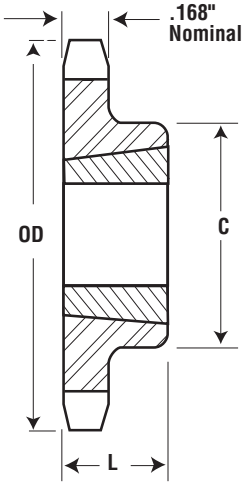
No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions							Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	G	X	T	With Hub	Rim Only
15	40JA15	JA	2.650	2.405	B	1.25	1.125	1.125	2.063	.719	.344	.625	0.284	1.24	0.34
16	40JA16	JA	2.810	2.563	B	1.25	1.125	1.125	2.063	.719	.344	.625	0.284	1.30	0.40
17	40JA17	JA	2.980	2.721	B	1.25	1.125	1.125	2.063	.719	.344	.625	0.284	1.38	0.48
18	40JA18	JA	3.140	2.879	B	1.25	1.125	1.125	2.063	.719	.344	.625	0.284	1.44	0.54
19	40JA19	JA	3.300	3.038	B	1.25	1.125	1.125	2.063	.719	.344	.625	0.284	1.50	0.60
20	40SH20	SH	3.460	3.196	B	1.625	1.438	1.438	2.688	.969	.531	.813	0.284	1.76	0.76
21	40SH21	SH	3.620	3.355	B	1.625	1.438	1.438	2.688	.969	.531	.813	0.284	1.84	0.84
22	40SH22	SH	3.780	3.513	B	1.625	1.438	1.438	2.688	.969	.531	.813	0.284	1.92	0.92
23	40SH23	SH	3.940	3.672	B	1.625	1.438	1.438	2.688	.969	.531	.813	0.284	2.14	1.14
24	40SH24	SH	4.100	3.831	B	1.625	1.438	1.438	2.688	.969	.531	.813	0.284	2.22	1.22
25	40SH25	SH	4.260	3.989	B	1.625	1.438	1.438	2.688	.969	.531	.813	0.284	2.30	1.30
26	40SH26	SH	4.420	4.148	B	1.625	1.438	1.438	2.688	.969	.531	.813	0.284	2.44	1.44
27	40SH27	SH	4.580	4.307	B	1.625	1.438	1.438	2.688	.969	.531	.813	0.284	2.46	1.46
28	40SH28	SH	4.740	4.466	B	1.625	1.438	1.438	2.688	.969	.531	.813	0.284	2.54	1.54
30	40SH30	SH	5.060	4.783	B	1.625	1.438	1.438	2.688	.969	.531	.813	0.284	2.72	1.72
32	40SH32	SH	5.380	5.101	B	1.625	1.438	1.438	2.688	.969	.531	.813	0.284	2.90	1.90
35	40SH35	SH	5.860	5.578	B	1.625	1.438	1.438	3	.969	.531	.813	0.284	3.22	2.22
36	40SDS36	SDS	6.020	5.737	B	2	1.5	1.5	3.156	1.031	.469	.75	0.284	3.20	2.20
40	40SDS40	SDS	6.650	6.373	B	2	1.5	1.5	3.156	1.031	.469	.75	0.284	3.72	2.72
42	40SDS42	SDS	6.970	6.691	B	2	1.5	1.5	3.156	1.031	.469	.75	0.284	3.92	2.92
45	40SDS45	SDS	7.450	7.168	B	2	1.5	1.5	3.156	1.031	.469	.75	0.284	4.32	3.32
48	40SDS48	SDS	7.930	7.645	B	2	1.5	1.5	3.156	1.031	.469	.75	0.284	4.70	3.70
54	40SDS54	SDS	8.890	8.599	B	2	1.5	1.5	3.156	1.031	.469	.75	0.284	5.78	4.78
60	40SDS60	SDS	9.840	9.554	B	2	1.5	1.5	3.156	1.031	.469	.75	0.284	6.86	5.86
70	40SK70	SK	11.430	11.145	B	2.625	2.125	2.125	3.875	1.594	.969	1.25	0.284	10.68	8.68
72	40SK72	SK	11.750	11.463	B	2.625	2.125	2.125	3.875	1.594	.969	1.25	0.284	10.84	8.84
80	40SK80	SK	13.030	12.736	B	2.625	2.125	2.125	3.875	1.594	.969	1.25	0.284	13.20	11.20
84	40SK84	SK	13.660	13.372	B	2.625	2.125	2.125	3.875	1.594	.969	1.25	0.284	13.56	11.56
96	40SK96	SK	15.570	15.282	B	2.625	2.125	2.125	3.875	1.594	.969	1.25	0.284	17.76	15.76
112	40SK112	SK	18.120	17.828	B	2.625	2.125	2.125	3.875	1.594	.969	1.25	0.284	22.28	20.28

No. 40
½" Pitch

All Steel Stock Sprockets

Single - Taper Bushed with Hardened Teeth





Type B

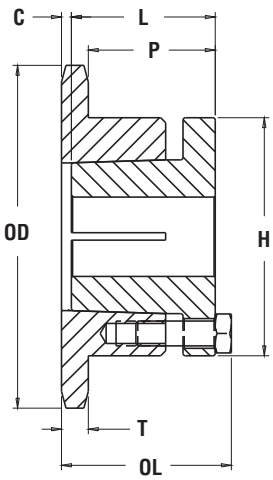
SABER TOOTH

No. Teeth	Catalog Number
14	40BTB14H
15	40BTB15H
16	40BTB16H
17	40BTB17H
18	40BTB18H
19	40BTB19H
20	40BTB20H
21	40BTB21H
22	40BTB22H
23	40BTB23H
24	40BTB24H
25	40BTB25H
26	40BTB26H
28	40BTB28H
30	40BTB30H

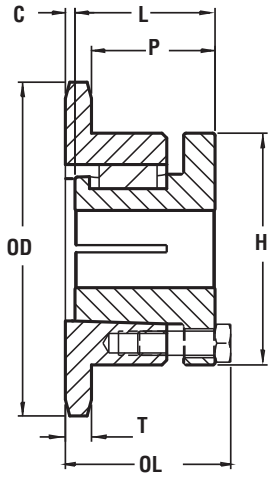
Single - Taper Bushed

No. Teeth	Catalog Number	Bushing	Diameter		Max. Bore	Dimensions		Type	Wt. lb (Approx.)	
			OD	PD		L	C		Rim Only	Bushing Only
14	40BTB14	1008	2.491	2.247	1	.875	★ 1.813	B	0.3	0.3
15	40BTB15	1008	2.652	2.405	1	.875	1.813	B	0.4	0.3
16	40BTB16	1008	2.814	2.563	1	.875	1.938	B	0.5	0.3
17	40BTB17	1210	2.975	2.721	1.25	1	★ 2.375	B	0.5	0.3
18	40BTB18	1210	3.135	2.879	1.25	1	★ 2.469	B	0.6	0.6
19	40BTB19	1210	3.296	3.038	1.25	1	2.469	B	0.7	0.6
20	40BTB20	1610	3.457	3.196	1.625	1	★ 2.781	B	0.7	0.9
21	40BTB21	1610	3.617	3.355	1.625	1	2.781	B	0.8	0.9
22	40BTB22	1610	3.778	3.513	1.625	1	2.781	B	0.9	0.9
23	40BTB23	1610	3.938	3.672	1.625	1	3.094	B	1.0	0.9
24	40BTB24	1610	4.098	3.831	1.625	1	3.25	B	1.4	0.9
25	40BTB25	1610	4.258	3.989	1.625	1	3.406	B	1.5	0.9
26	40BTB26	1610	4.418	4.148	1.625	1	3.5	B	1.7	0.9
28	40BTB28	1610	4.738	4.466	1.625	1	3.5	B	1.8	0.9
30	40BTB30	1610	5.057	4.783	1.625	1	3.5	B	1.9	0.9
32	40BTB32	1610	5.377	5.101	1.625	1	3.5	B	1.9	0.9
35	40BTB35	1610	5.855	5.578	1.625	1	3.5	B	2.3	0.9
36	40BTB36	1610	6.015	5.737	1.625	1	3	B	2.4	0.9
40	40BTB40	1610	6.653	6.373	1.625	1	3	B	2.8	0.9
42	40BTB42	1610	6.972	6.691	1.625	1	3	B	2.9	0.9
45	40BTB45	1610	7.451	7.168	1.625	1	3	B	3.5	0.9
48	40BTB48	1610	7.928	7.645	1.625	1	3	B	4.0	0.9
54	40BTB54	1610	8.885	8.599	1.625	1	3	B	4.9	0.9
60	40BTB60	1610	9.841	9.554	1.625	1	3	B	6.0	0.9
70	40BTB70	2012	11.434	11.145	2	1.25	3.563	B	8.2	1.7
72	40BTB72	2012	11.752	11.463	2	1.25	3.563	B	9.0	1.7
80	40BTB80	2012	13.026	12.736	2	1.25	3.563	B	10.8	1.7
84	40BTB84	2012	13.663	13.372	2	1.25	3.563	B	11.3	1.7
96	40BTB96	2012	15.573	15.282	2	1.25	3.563	B	14.6	1.7
112	40BTB112	2517	18.122	17.828	2.5	1.75	4.25	B	20.5	1.7

★ Has recessed groove in hub for chain clearance.



Type 3



Type 4

Single - MST® Sprockets

No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions						Wt. lb (Approx.)	
			OD	PD			OL	L	C	H	P	T (nom.)	With Hub	Rim Only
15	40H15H	H	2.650	2.405	3	1.5	1.594	1.25	.156	2.5	1.125	.284	1.3	0.5
16	40H16H	H	2.810	2.563	3	1.5	1.594	1.25	.156	2.5	1.125	.284	1.4	0.6
17	40H17H	H	2.980	2.721	3	1.5	1.5	1.25	.063	2.5	1.031	.284	1.4	0.6
18	40H18H	H	3.140	2.879	3	1.5	1.5	1.25	.063	2.5	1.031	.284	1.4	0.6
18	40P18H	P1	3.140	2.879	3	1.75	2.188	1.938		3	1.656	.284	2.7	1.4
19	40H19H	H	3.300	3.038	3	1.5	1.5	1.25	.063	2.5	1.031	.284	1.6	0.8
19	40P19H	P1	3.300	3.038	4	1.75	2.188	1.938		3	1.656	.284	2.6	1.3
20	40H20H	H	3.460	3.196	3	1.5	1.5	1.25	.063	2.5	1.031	.284	1.7	0.9
20	40P20H	P1	3.460	3.196	4	1.75	2.188	1.938		3	1.656	.284	2.6	1.3
21	40H21H	H	3.620	3.355	3	1.5	1.5	1.25	.063	2.5	1.031	.284	1.7	0.9
21	40P21H	P1	3.620	3.355	4	1.75	2.188	1.938		3	1.656	.284	2.8	1.5
22	40H22H	H	3.780	3.513	3	1.5	1.5	1.25	.063	2.5	1.031	.284	1.8	1.0
22	40P22H	P1	3.780	3.513	4	1.75	2.188	1.938		3	1.656	.284	2.9	1.6
23	40H23H	H	3.940	3.672	3	1.5	1.5	1.25	.063	2.5	1.031	.284	1.8	1.0
23	40P23H	P1	3.940	3.672	4	1.75	2.188	1.938		3	1.656	.284	3.0	1.7
24	40H24H	H	4.100	3.831	3	1.5	1.5	1.25	.063	2.5	1.031	.284	1.9	1.1
24	40P24H	P1	4.100	3.831	4	1.75	2.188	1.938		3	1.656	.284	3.1	1.8
25	40H25H	H	4.260	3.989	3	1.5	1.5	1.25	.063	2.5	1.031	.284	2.1	1.3
25	40P25H	P1	4.260	3.989	4	1.75	2.188	1.938		3	1.656	.284	3.2	1.9
26	40H26H	H	4.420	4.148	3	1.5	1.5	1.25	.063	2.5	1.031	.284	2.1	1.3
26	40P26H	P1	4.420	4.148	4	1.75	2.188	1.938		3	1.656	.284	3.2	1.9
27	40H27H	H	4.580	4.307	3	1.5	1.5	1.25	.063	2.5	1.031	.284	2.2	1.4
28	40H28H	H	4.740	4.466	3	1.5	1.5	1.25	.063	2.5	1.031	.284	2.2	1.4
28	40P28H	P1	4.740	4.466	4	1.75	2.188	1.938		3	1.656	.284	3.4	2.1
29	40P29H	P1	4.900	4.625	4	1.75	2.188	1.938		3	1.656	.284	3.6	2.3
30	40H30H	H	5.060	4.783	3	1.5	1.5	1.25	.063	2.5	1.031	.284	2.4	1.6
30	40P30H	P1	5.060	4.783	4	1.75	2.188	1.938		3	1.656	.284	3.6	2.3
31	40P31	P1	5.220	4.942	4	1.75	2.188	1.938		3	1.656	.284	3.8	2.5
32	40H32H	H	5.380	5.101	3	1.5	1.5	1.25	.063	2.5	1.031	.284	2.6	1.8
32	40P32	P1	5.380	5.101	4	1.75	2.188	1.938		3	1.656	.284	3.9	2.6
33	40H33H	H	5.540	5.260	3	1.5	1.5	1.25	.063	2.5	1.031	.284	2.7	1.9
33	40P33	P1	5.540	5.260	4	1.75	2.188	1.938		3	1.656	.284	3.9	2.6
34	40P34	P1	5.700	5.419	4	1.75	2.188	1.938		3	1.656	.284	4.1	2.8
35	40H35H	H	5.860	5.578	3	1.5	1.5	1.25	.063	2.5	1.031	.284	2.9	2.1
35	40P35	P1	5.860	5.578	4	1.75	2.188	1.938		3	1.656	.284	4.2	2.9
36	40H36H	H	6.020	5.737	3	1.5	1.5	1.25	.063	2.5	1.031	.284	3.1	2.3
36	40P36	P1	6.020	5.737	4	1.75	2.188	1.938		3	1.656	.284	4.4	3.1
37	40P37	P1	6.180	5.896	4	1.75	2.188	1.938		3	1.656	.284	4.6	3.3
38	40H38H	H	6.330	6.055	3	1.5	1.5	1.25	.063	2.5	1.031	.284	3.4	2.6
38	40P38	P1	6.330	6.055	4	1.75	2.188	1.938		3	1.656	.284	4.6	3.3
40	40H40H	H	6.650	6.373	3	1.5	1.5	1.25	.063	2.5	1.031	.284	3.6	2.8
40	40P40	P1	6.650	6.373	4	1.75	2.188	1.938		3	1.656	.284	4.8	3.5
41	40P41	P1	6.810	6.532	4	1.75	2.188	1.938		3	1.656	.284	4.9	3.6
42	40P42	P1	6.970	6.691	4	1.75	2.188	1.938		3	1.656	.284	5.2	3.9
44	40P44	P1	7.290	7.009	4	1.75	2.188	1.938		3	1.656	.284	5.3	4.0
45	40P45	P1	7.450	7.168	4	1.75	2.188	1.938		3	1.656	.284	5.5	4.2
47	40P47	P1	7.770	7.486	4	1.75	2.188	1.938		3	1.656	.284	5.9	4.6
48	40P48	P1	7.930	7.645	4	1.75	2.188	1.938		3	1.656	.284	6.1	4.8
50	40P50	P1	8.250	7.963	4	1.75	2.188	1.938		3	1.656	.284	6.3	5.0
54	40P54	P1	8.890	8.599	4	1.75	2.188	1.938		3	1.656	.284	6.8	5.5
56	40P56	P1	9.200	8.917	4	1.75	2.188	1.938		3	1.656	.284	7.2	5.9
60	40P60	P1	9.840	9.554	4	1.75	2.188	1.938		3	1.656	.284	7.9	6.6
60	40Q60	Q1	9.840	9.554	4	2.688	2.781	2.5		4.125	2.219	.284	12.3	8.8
70	40P70	P1	11.430	11.145	4	1.75	2.188	1.938		3	1.656	.284	9.9	8.6
70	40Q70	Q1	11.430	11.145	4	2.688	2.781	2.5		4.125	2.219	.284	14.5	11.0
72	40Q72	Q1	11.750	11.463	4	2.688	2.781	2.5		4.125	2.219	.284	14.7	11.2
80	40Q80	Q1	13.030	12.736	4	2.688	2.781	2.5		4.125	2.219	.284	16.6	13.1
84	40Q84	Q1	13.660	13.372	4	2.688	2.781	2.5		4.125	2.219	.284	17.6	14.1
96	40Q96	Q1	15.570	15.281	4	2.688	2.781	2.5		4.125	2.219	.284	16.3	12.8
112	40Q112	Q1	18.120	17.828	4	2.688	2.781	2.5		4.125	2.219	.284	20.8	17.3

Sprockets with "H" suffix have hardened teeth.

No. 40-2
½" Pitch

All Steel Stock Sprockets

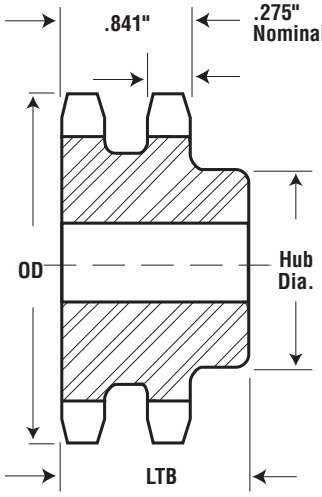
Double - Type B

No. Teeth	Catalog Number	OD	Type	Bore (Inches)		Hub (Inches)		Wt. lb (Approx.)
				Stock	Rec. Max.	Dia.	LTB	
11	D40B11H	2.000	B	.5	.75	1.438★	1.5	0.62
12	D40B12H	2.170	B	.5	.938	1.563★	1.5	0.76
13	D40B13H	2.330	B	.5	1	1.5	1.5	0.86
14	D40B14H	2.490	B	.5	1.125	1.688	1.5	1.08
15	D40B15H	2.650	B	.5	1.25	1.813	1.5	1.24
16	D40B16H	2.810	B	.625	1.375	2	1.5	1.42
17	D40B17H	2.980	B	.625	1.438	2.125	1.5	1.64
18	D40B18H	3.140	B	.625	1.5	2.313	1.5	1.92
19	D40B19H	3.300	B	.625	1.75	2.5	1.5	2.22
20	D40B20H	3.460	B	.625	1.875	2.625	1.625	2.64
21	D40B21H	3.620	B	.625	1.875	2.75	1.625	2.94
22	D40B22H	3.780	B	.625	1.875	2.875	1.625	3.18
23	D40B23H	3.940	B	.625	2	3	1.625	3.52
24	D40B24H	4.100	B	.625	2.25	3.25	1.625	4.04
25	D40B25H	4.260	B	.625	2.25	3.25	1.625	4.26
26	D40B26	4.420	B	.625	2.25	3.25	1.625	4.48
30	D40B30	5.060	B	.875	2.25	3.25	1.625	5.34
35	D40B35	5.860	B	.875	2.25	3.25	1.625	6.80
36	D40B36	6.020	B	.938	2.5	3.75	1.625	7.20
40	D40B40	6.650	B	.938	2.5	3.75	1.75	9.40
42	D40B42	6.970	B	.938	2.5	3.75	1.75	10.20
45	D40B45	7.450	B	.938	2.5	3.75	1.75	11.36
48	D40B48	7.930	B	.938	2.5	3.75	1.75	12.66
52	D40B52	8.570	B	.938	2.5	3.75	1.75	14.46
54	D40B54	8.890	B	.938	2.5	3.75	1.75	15.48
60	D40B60	9.840	B	.938	2.5	3.75	1.75	18.60
68	D40B68	11.120	B	1.188	2.75	4.25	2.125	24.96
72	D40B72	11.750	B	1.188	2.75	4.25	2.125	27.88
76	D40B76	12.390	B	1.188	2.75	4.25	2.125	30.18
84	D40B84	13.660	B	1.188	2.75	4.25	2.125	36.24
95	D40B95	15.410	B	1.188	2.75	4.25	2.125	38.84
96	D40B96	15.570	B	1.188	2.75	4.25	2.125	39.50
102	D40B102	16.530	B	1.188	2.75	4.25	2.125	42.72
112	D40B112	18.120	B	1.188	2.75	4.25	2.125	55.54

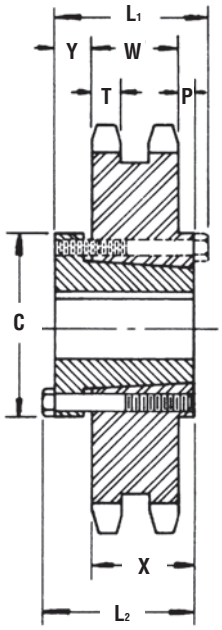
★ Has recessed groove in hub for chain clearance.

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

NOTE: Double 40 stock sprockets with 25 teeth or less have hardened teeth. As indicated by H suffix.



Type B



QD - Type C

Alteration Charges

See current discount sheet for alteration charges.

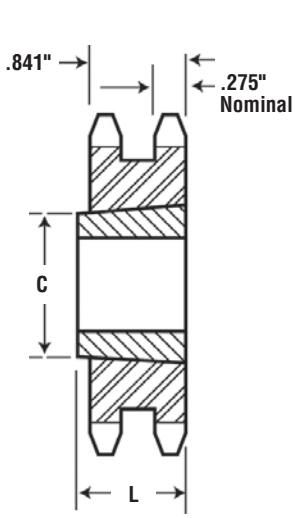
Double - Type QD

No. Teeth	Catalog Number	Bushing	Diameters		Type	Max. Bore	Dimensions								Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	P	X	T	W	With Hub	Rim Only
36	D40SK36	SK	6.020	5.737	C	2.625	2.125	2.125	3.875	.625	.406	1.25	0.275	0.841	6.68	4.68
40	D40SK40	SK	6.650	6.373	C	2.625	2.125	2.125	3.875	.625	.406	1.25	0.275	0.841	8.02	6.02
42	D40SK42	SK	6.970	6.691	C	2.625	2.125	2.125	3.875	.625	.406	1.25	0.275	0.841	8.82	6.82
45	D40SK45	SK	7.450	7.168	C	2.625	2.125	2.125	3.875	.625	.406	1.25	0.275	0.841	9.98	7.98
48	D40SK48	SK	7.930	7.645	C	2.625	2.125	2.125	3.875	.625	.406	1.25	0.275	0.841	11.22	9.22
52	D40SK52	SK	8.570	8.281	C	2.625	2.125	2.125	3.875	.625	.406	1.25	0.275	0.841	13.04	11.04
54	D40SK54	SK	8.890	8.599	C	2.625	2.125	2.125	3.875	.625	.406	1.25	0.275	0.841	14.06	12.06
60	D40SK60	SK	9.840	9.554	C	2.625	2.125	2.125	3.875	.625	.406	1.25	0.275	0.841	16.98	14.98
68	D40SF68	SF	11.180	10.826	C	2.938	2.25	2.25	4.625	.75	.406	1.25	2.750	0.841	22.72	19.72
72	D40SF72	SF	11.750	11.463	C	2.938	2.25	2.25	4.625	.75	.406	1.25	2.750	0.841	24.20	22.20
76	D40SF76	SF	12.390	12.099	C	2.938	2.25	2.25	4.625	.75	.406	1.25	2.750	0.841	28.20	25.20
84	D40SF84	SF	13.660	13.372	C	2.938	2.25	2.25	4.625	.75	.406	1.25	2.750	0.841	33.64	30.64
95	D40SF95	SF	15.410	15.122	C	2.938	2.25	2.25	4.625	.75	.406	1.25	2.750	0.841	40.22	37.22
102	D40SF102	SF	16.530	16.236	C	2.938	2.25	2.25	4.625	.75	.406	1.25	2.750	0.841	42.70	39.70
112	D40SF112	SF	18.120	17.828	C	2.938	2.25	2.25	4.625	.75	.406	1.25	2.750	0.841	52.60	49.60

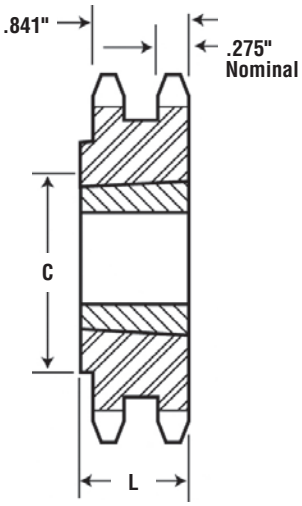
All Steel Stock Sprockets

No. 40-2 ½" Pitch

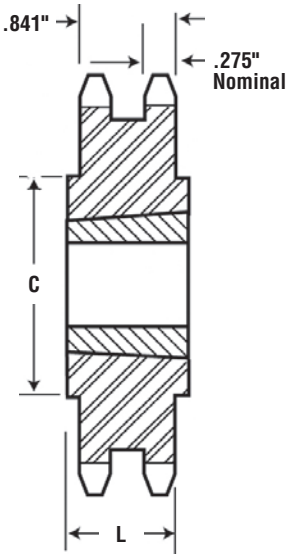




Type A



Type B



Type C

Double - Taper Bushed

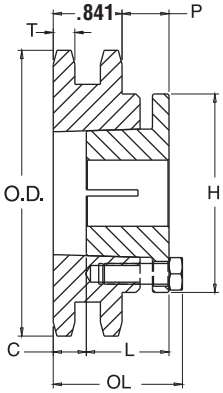
No. Teeth	Catalog Number	Bushing	Diameters		Max. Bore.	Dimensions		Type	Wt. lb (Approx.)	
			OD	PD		L	C		Rim Only	Bushing Only
15	D40ATB15H	1008	2.652	2.405	1	.875	1.266	A	0.5	0.3
16	D40ATB16H	1008	2.814	2.563	1	.875	1.266	A	0.6	0.3
17	D40ATB17H	1008	2.975	2.721	1	.875	1.266	A	0.7	0.3
18	D40BTB18H	1210	3.135	2.879	1.25	1	2.313	B	0.7	0.6
19	D40BTB19H	1210	3.296	3.038	1.25	1	2.5	B	0.9	0.6
20	D40BTB20H	1610	3.457	3.196	1.625	1	2.625	B	0.9	0.9
21	D40BTB21H	1610	3.617	3.355	1.625	1	2.75	B	1.0	0.9
23	D40BTB23H	1610	3.938	3.672	1.625	1	3	B	1.3	0.9
25	D40BTB25H	2012	4.258	3.989	2	1.25	3.406	B	1.6	1.7
30	D40BTB30	2012	5.057	4.783	2	1.25	4.234	B	3.4	1.7
36	D40BTB36	2012	6.015	5.737	2	1.25	5.156	B	5.9	1.7
42	D40CTB42	2517	6.972	6.691	2.5	1.75	4.25	C	7.0	3.5
48	D40CTB48	2517	7.928	7.645	2.5	1.75	4.25	C	9.6	3.5
52	D40CTB52	2517	8.566	8.281	2.5	1.75	4.25	C	11.4	3.5
60	D40CTB60	2517	9.841	9.554	2.5	1.75	4.25	C	15.4	3.5
68	D40CTB68	2517	11.115	10.826	2.5	1.75	4.25	C	20.5	3.5
76	D40CTB76	2517	12.389	12.099	2.5	1.75	4.25	C	25.7	3.5
84	D40CTB84	2517	13.663	13.372	2.5	1.75	4.25	C	31.6	3.5
95	D40CTB95	2517	15.414	15.122	2.5	1.75	4.25	C	34.1	3.5
102	D40CTB102	2517	16.529	16.236	2.5	1.75	4.25	C	36.8	3.5

NOTE: Double 40 stock sprockets with 25 teeth or less have hardened teeth. As indicated by H suffix.

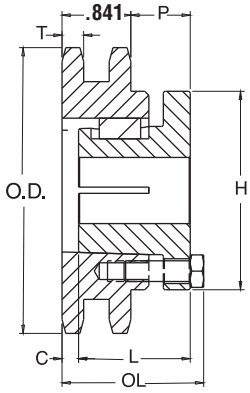
No. 40-2
½" Pitch

All Steel Stock Sprockets

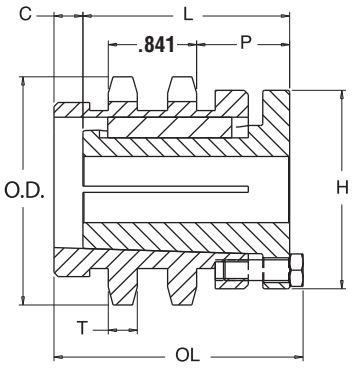




Type 11



Type 12



Type 16

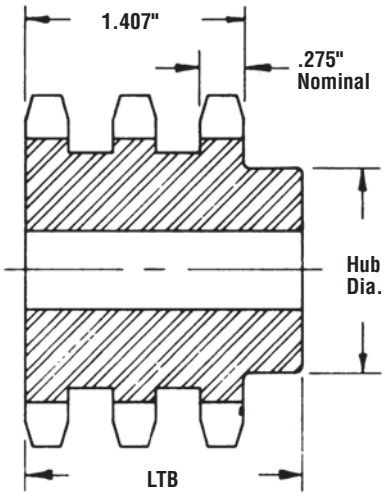
Double - MST® Sprockets

No. Teeth	Catalog Number	Bushing	Diameters		Type	Max. Bore	Dimensions						Wt. lb (Approx.)	
			OD	PD			OL	L	C	H	P	T (Nom.)	With Hub	Rim Only
15	D40H15H	H	2.650	2.405	11	1.5	2.094	1.25	.719	2.5	1.125	0.275	1.7	0.9
16	D40H16H	H	2.810	2.563	11	1.5	2.094	1.25	.719	2.5	1.125	0.275	1.8	1.0
17	D40H17H	H	2.980	2.721	11	1.5	2.094	1.25	.719	2.5	1.125	0.275	1.9	1.1
18	D40P18H	P1	3.140	2.879	16	1.75	3.188	1.938	1	3	1.375	0.275	3.1	1.8
19	D40P19H	P1	3.300	3.038	12	1.75	2.464	1.938	.281	3	1.375	0.275	2.7	1.4
20	D40P20H	P1	3.460	3.196	12	1.75	2.406	1.938	.219	3	1.375	0.275	2.9	1.6
21	D40P21H	P1	3.620	3.355	12	1.75	2.406	1.938	.219	3	1.375	0.275	3.1	1.8
22	D40P22H	P1	3.780	3.513	12	1.75	2.406	1.938	.219	3	1.375	0.275	3.3	2.0
23	D40P23H	P1	3.940	3.672	12	1.75	2.188	1.938		3	1.094	0.275	3.3	2.0
24	D40P24H	P1	4.100	3.831	12	1.75	2.188	1.938		3	1.094	0.275	3.5	2.2
25	D40P25H	P1	4.260	3.989	12	1.75	2.188	1.938		3	1.094	0.275	3.8	2.5
26	D40P26H	P1	4.420	4.148	12	1.75	2.188	1.938		3	1.094	0.275	4.0	2.7
28	D40P28H	P1	4.740	4.466	12	1.75	2.188	1.938		3	1.094	0.275	4.4	3.1
30	D40Q30H	Q1	5.060	4.783	12	2.688	2.781	2.5		4.125	1.656	0.275	7.7	4.2
32	D40Q32H	Q1	5.380	5.101	12	2.688	2.781	2.5		4.125	1.656	0.275	8.8	5.3
35	D40Q35H	Q1	5.860	5.578	12	2.688	2.781	2.5		4.125	1.656	0.275	9.6	6.1
36	D40Q36H	Q1	6.020	5.737	12	2.688	2.781	2.5		4.125	1.656	0.275	10.0	6.5
40	D40Q40H	Q1	6.650	6.373	12	2.688	2.781	2.5		4.125	1.656	0.275	11.4	7.9
42	D40Q42H	Q1	6.970	6.691	12	2.688	2.781	2.5		4.125	1.656	0.275	12.4	8.9
45	D40Q45H	Q1	7.450	7.168	12	2.688	2.781	2.5		4.125	1.656	0.275	13.6	10.1
48	D40Q48H	Q1	7.930	7.645	12	2.688	2.781	2.5		4.125	1.656	0.275	15.3	11.8
52	D40Q52H	Q1	8.570	8.281	12	2.688	2.781	2.5		4.125	1.656	0.275	16.1	12.6
54	D40Q54H	Q1	8.890	8.599	12	2.688	2.781	2.5		4.125	1.656	0.275	17.8	14.3
60	D40Q60H	Q1	9.840	9.554	12	2.688	2.781	2.5		4.125	1.656	0.275	20.9	17.4
68	D40Q68	Q1	11.120	10.826	12	2.688	2.781	2.5		4.125	1.656	0.275	25.0	21.5
72	D40Q72	Q1	11.750	11.463	12	2.688	2.781	2.5		4.125	1.656	0.275	28.5	25.0
76	D40Q76	Q1	12.390	12.099	12	2.688	2.781	2.5		4.125	1.656	0.275	30.4	26.9
84	D40Q84	Q1	13.660	13.372	12	2.688	2.781	2.5		4.125	1.656	0.275	37.6	34.1
95	D40Q95	Q1	15.410	15.122	12	2.688	2.781	2.5		4.125	1.656	0.275	45.5	42.0
96	D40Q96	Q1	15.570	15.281	12	2.688	2.781	2.5		4.125	1.656	0.275	47.6	44.
102	D40Q102	Q1	16.530	16.236	12	2.688	2.781	2.5		4.125	1.656	0.275	52.0	48.5
112	D40Q112	Q1	18.120	17.828	12	2.688	2.781	2.5		4.125	1.656	0.275	64.5	61.0

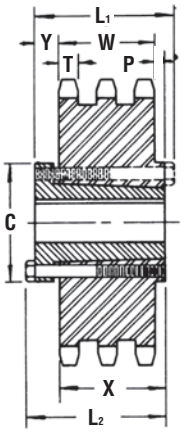
Sprockets with "H" suffix have hardened teeth.

All Steel Stock Sprockets

No. 40-3 ½" Pitch



Type B



QD — Type C

Alteration Charges

See current discount sheet for alteration charges.

Triple - Type B

No. Teeth	Catalog Number	OD	Type	Bore (inches)		Hub (inches)		Wt. lb (Approx.)
				Stock	Rec. Max.	Dia.	Length Thru	
11	E40B11H	2.000	B	.5	.75	1.438 ★	2.125	0.80
12	E40B12H	2.170	B	.5	.938	1.281 ★	2.125	1.10
13	E40B13H	2.330	B	.5	1	1.5	2.125	1.24
14	E40B14H	2.490	B	.5	1.125	1.344	2.125	1.50
15	E40B15H	2.650	B	.5	1.25	1.406	2.125	1.76
16	E40B16H	2.810	B	.625	1.375	2	2.125	2.04
17	E40B17H	2.980	B	.625	1.438	2.125	2.125	2.34
18	E40B18H	3.140	B	.625	1.5	2.313	2.125	2.72
19	E40B19H	3.300	B	.625	1.75	2.5	2.125	3.10
20	E40B20H	3.460	B	.625	1.875	2.625	2.25	3.72
21	E40B21H	3.620	B	.625	1.875	2.75	2.25	4.06
22	E40B22H	3.780	B	.625	1.875	2.875	2.25	4.52
23	E40B23H	3.940	B	.625	2	3	2.25	4.96
24	E40B24H	4.100	B	.625	2.25	3.25	2.25	5.64
25	E40B25H	4.260	B	.625	2.25	3.25	2.25	6.02
26	E40B26	4.420	B	.625	2.25	3.25	2.25	6.36
30	E40B30	5.060	B	.875	2.25	3.25	2.25	7.84
35	E40B35	5.860	B	.875	2.25	3.25	2.25	10.30
36	E40B36	6.020	B	.938	2.5	3.75	2.375	11.72
42	E40B42	6.970	B	.938	2.5	3.75	2.375	15.36
48	E40B48	7.930	B	.938	2.5	3.75	2.375	19.36
52	E40B52	8.570	B	.938	2.5	3.75	2.375	22.44
60	E40B60	9.840	B	.938	2.5	3.75	2.375	30.02
68	E40B68	11.120	B	1.188	2.75	4	2.625	38.44
72	E40B72	11.750	B	1.188	2.75	4	2.625	42.46
76	E40B76	12.390	B	1.188	2.75	4	2.625	46.90
84	E40B84	13.660	B	1.188	2.75	4.25	2.75	57.30
95	E40B95	15.410	B	1.188	2.75	4.25	2.75	62.18
102	E40B102	16.530	B	1.188	2.75	4.25	2.75	68.40

★ Has recessed groove in hub for chain clearance.

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

Note: Triple 40 stock sprockets with 25 teeth or less have hardened teeth. As indicated by H suffix.

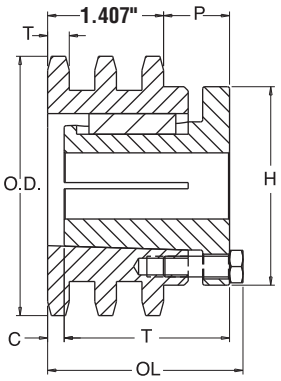
Triple - Type QD

No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions							Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	X	T	W	With Hub	Rim Only
36	E40SK36	SK	6.020	5.737	B	2.625	2.125	2.125	3.875	.469	1.25	0.275	1.407	8.16	6.16
42	E40SK42	SK	6.970	6.691	B	2.625	2.125	2.125	3.875	.469	1.25	0.275	1.407	11.92	9.52
48	E40SK48	SK	7.930	7.645	B	2.625	2.125	2.125	3.875	.469	1.25	0.275	1.407	15.13	13.16
52	E40SK52	SK	8.570	8.281	B	2.625	2.125	2.125	3.875	.469	1.25	0.275	1.407	18.08	16.08
60	E40SK60	SK	9.840	9.554	B	2.625	2.125	2.125	3.875	.469	1.25	0.275	1.407	24.60	22.60
68	E40SF68	SF	11.120	10.826	B	2 .938	2.25	2.25	4.625	.594	1.25	0.275	1.407	31.98	29.98
72	E40SF72	SF	11.750	11.463	B	2 .938	2.25	2.25	4.625	.594	1.25	0.275	1.407	37.40	34.40
76	E40SF76	SF	12.390	12.099	B	2 .938	2.25	2.25	4.625	.594	1.25	0.275	1.407	51.92	48.92
84	E40SF84	SF	13.660	13.372	B	2 .938	2.25	2.25	4.625	.594	1.25	0.275	1.407	56.70	53.78
95	E40SF95	SF	15.410	15.122	B	2 .938	2.25	2.25	4.625	.594	1.25	0.275	1.407	58.94	55.94
102	E40SF102	SF	16.530	16.236	B	2 .938	2.25	2.25	4.625	.594	1.25	0.275	1.407	62.24	59.24

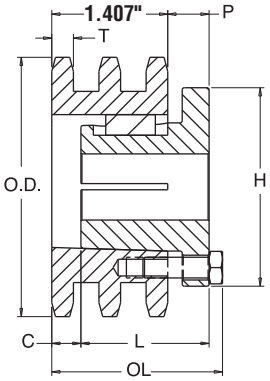
No. 40-3
½" Pitch

MST® Sprocket

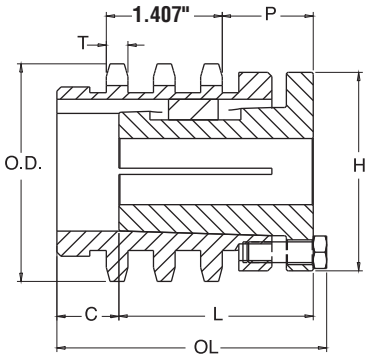




Type 11



Type 12



Type 27

Triple - MST® Sprockets

No. Teeth	Catalog Number	Bushing	Diameters		Type	Max. Bore	Dimensions						Wt. lb (Approx.)	
			OD	PD			OL	L	C	H	P	T (Nom.)	With Hub	Rim Only
18	E40P18H	P1	3.140	2.879	27	1.75	3.75	1.938	1.563	3	1.375	0.275	3.2	1.9
19	E40P19H	P1	3.300	3.038	22	1.75	3.031	1.938	.844	3	1.375	0.275	3.1	1.8
20	E40P20H	P1	3.460	3.196	22	1.75	2.969	1.938	.781	3	1.313	0.275	3.3	2.0
23	E40P23H	P1	3.940	3.672	23	1.75	2.281	1.938	.094	3	.625	0.275	3.6	2.3
24	E40P24H	P1	4.100	3.831	23	1.75	2.281	1.938	.094	3	.625	0.275	3.9	2.6
25	E40P25H	P1	4.260	3.989	23	1.75	2.281	1.938	.094	3	.625	0.275	4.3	3.0
27	E40P27H	P1	4.580	4.307	23	1.75	2.281	1.938	.094	3	.625	0.275	4.6	3.3
30	E40Q30H	Q1	5.060	4.783	22	2.344	2.781	2.5		4.125	1.094	0.275	8.0	4.5
35	E40Q35H	Q1	5.860	5.578	22	2.344	2.781	2.5		4.125	1.094	0.275	10.4	6.9
36	E40Q36H	Q1	6.020	5.737	22	2.344	2.781	2.5		4.125	1.094	0.275	11.1	7.6
42	E40Q42H	Q1	6.970	6.691	22	2.344	2.781	2.5		4.125	1.094	0.275	14.6	11.1
48	E40Q48H	Q1	7.930	7.645	22	2.344	2.781	2.5		4.125	1.094	0.275	18.7	15.2
52	E40Q52H	Q1	8.570	8.281	22	2.344	2.781	2.5		4.125	1.094	0.275	22.2	18.7
54	E40Q54H	Q1	8.890	8.599	22	2.344	2.781	2.5		4.125	1.094	0.275	23.4	19.9
60	E40Q60H	Q1	9.840	9.554	22	2.344	2.781	2.5		4.125	1.094	0.275	28.8	25.3
68	E40Q68	Q1	11.120	10.826	22	2.344	2.781	2.5		4.125	1.094	0.275	37.0	33.5
72	E40Q72	Q1	11.750	11.463	22	2.344	2.781	2.5		4.125	1.094	0.275	41.4	37.9
76	E40Q76	Q1	12.390	12.099	22	2.344	2.781	2.5		4.125	1.094	0.275	46.0	42.5
84	E40Q84	Q1	13.660	13.372	22	2.344	2.781	2.5		4.125	1.094	0.275	55.9	52.4
95	E40Q95	Q1	15.410	15.122	22	2.344	2.781	2.5		4.125	1.094	0.275	71.4	67.9
102	E40Q102	Q1	16.530	16.236	22	2.344	2.781	2.5		4.125	1.094	0.275	82.0	78.5

Sprockets with "H" suffix have hardened teeth.

Single - Type BS — 2 Setscrews — Bored-To-Size

No. Teeth	Catalog Number	OD	LTB	Wt. lb (Approx.)	Stock Finished Bores Includes Keyway and 2 Setscrews													
9	50BS9	2.090	1	0.30	.625	.75												
10	50BS10	2.300	1	0.30	.625	.75	.875	★ 1										
11	50BS11	2.500	1	0.60	.625	.75	.875	1										
12	50BS12	2.710	1	0.70	.625	.75	.875	1	1.125	1.188	1.25							
13	50BS13	2.910	1	0.80	.625	.75	.875	1	1.125	1.188	1.25							
14	50BS14	3.110	1	1.00	.625	.75	.875	1	1.125	1.188	1.25							
15	50BS15	3.320	1	1.20	.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5				
16	50BS16	3.520	1	1.45	.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5	1.625			
17	50BS17	3.720	1	1.60	.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5	1.625			
18	50BS18	3.920	1	1.90	.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5	1.625			
19	50BS19	4.120	1	2.00	.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5	1.625			
20	50BS20	4.320	1	2.10		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5	1.625			
21	50BS21	4.520	1	2.25		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5				
22	50BS22	4.720	1	2.40		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5				
23	50BS23	4.920	1	2.50		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5				
24	50BS24	5.120	1.25	3.00		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5				
25	50BS25	5.320	1.25	3.10		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5				
26	50BS26	5.520	1.25	3.30		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5				
27	50BS27	5.720	1.25	3.46		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5				
28	50BS28	5.920	1.25	3.60		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5				
29	50BS29	6.120	1.25	3.78		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5				
30	50BS30	6.320	1.25	3.90		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5				
31	50BS31	6.520	1.25	4.46		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
32	50BS32	6.720	1.25	4.70		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
33	50BS33	6.920	1.25	4.92		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
34	50BS34	7.120	1.25	5.06		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
35	50BS35	7.320	1.25	5.30		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
36	50BS36	7.520	1.25	5.50		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
37	50BS37	7.720	1.25	5.62		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
38	50BS38	7.920	1.25	5.80		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
39	50BS39	8.120	1.25	6.02		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
40	50BS40	8.320	1.25	6.20		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
41	50BS41	8.520	1.25	6.45		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
42	50BS42	8.720	1.25	6.68		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
43	50BS43	8.910	1.25	6.99		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
44	50BS44	9.110	1.25	7.30		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
45	50BS45	9.310	1.25	8.00		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
46	50BS46	9.510	1.25	8.51				1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
47	50BS47	9.710	1.25	8.76				1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
48	50BS48	9.910	1.25	9.03				1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
49	50BS49	10.110	1.25	9.33				1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
50	50BS50	10.310	1.25	9.63				1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
51	50BS51	10.510	1.25	9.81				1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
52	50BS52	10.710	1.25	9.99				1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
53	50BS53	10.910	1.25	10.37				1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
54	50BS54	11.110	1.25	10.75				1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
55	50BS55	11.310	1.25	11.08				1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
56	50BS56	11.500	1.25	11.41				1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
57	50BS57	11.700	1.25	11.75				1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
58	50BS58	11.900	1.25	12.08				1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
59	50BS59	12.100	1.25	12.41				1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
60	50BS60	12.300	1.25	13.50				1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
70	50BS70	14.290	1.75	17.81				1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
72	50BS72	14.690	1.75	19.13				1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
80	50BS80	16.280	1.75	24.39				1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
84	50BS84	17.080	1.75	25.15				1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
96	50BS96	19.470	1.75	32.57				1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	
112	50BS112	22.650	1.75	41.65				1	1.125	1.188	1.25	1.375	1.438	1.5		1.75	1.969	

★ Keyway with Setscrew at 90°.

Hub diameters vary to suit different bore sizes.

KEYWAY IS ON CENTER LINE OF TOOTH.

No. 50
5/8" Pitch

MST® Sprocket



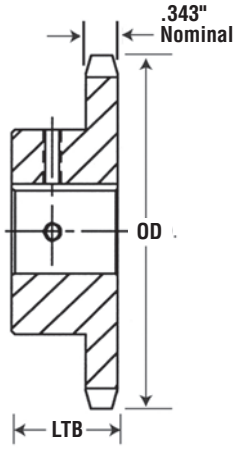
SABER TOOTH®

No. 50 — Hardened Teeth — 2 Setscrews — Bored-To-Size

No. Teeth	Catalog Number	OD	LTB	Wt. lb	Stock Finished Bores Includes Keyway and 2 Setscrews											
9	50BS9HT	2.09	1	0.3	.625	.75										
10	50BS10HT	2.30	1	0.3	.625	.75	.875	★ 1								
11	50BS11HT	2.50	1	0.6	.625	.75	.875	1								
12	50BS12HT	2.71	1	0.7	.625	.75	.875	1	1.125	1.188	1.25					
13	50BS13HT	2.91	1	0.8	.625	.75	.875	1	1.125	1.188	1.25					
14	50BS14HT	3.11	1	1.0	.625	.75	.875	1	1.125	1.188	1.25					
15	50BS15HT	3.32	1	1.2	.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5		
16	50BS16HT	3.52	1	1.5	.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	
17	50BS17HT	3.72	1	1.7	.625	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	
18	50BS18HT	3.92	1	2.0		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	
19	50BS19HT	4.12	1	2.2		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	
20	50BS20HT	4.32	1	2.5		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	
21	50BS21HT	4.52	1	2.6		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5		
22	50BS22HT	4.72	1	2.8		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5		
23	50BS23HT	4.92	1	3.2		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5		
24	50BS24HT	5.12	1.25	4.0		.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5		

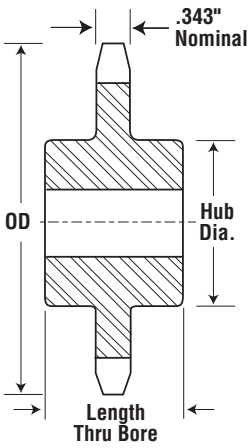
★ Setscrews at 90° and 180° to key.

NOTE: KEYWAY IS ON CENTER LINE OF TOOTH.



Type BS

Martin stock hardened teeth sprockets afford longer chain and sprocket life. Hardened teeth on the smaller sprocket of a roller chain drive are recommended if the drive ratio is four to one or greater or if the smaller sprocket has 24 teeth or less and is running at a speed of over 600 RPM



Type C

Single - Type C — Steel

No. Teeth	Catalog Number	OD	Bore (Inches)		Hub (Inches)		Wt. lb (Approx.)
			Stock	Rec. Max.	Diameter	Length	
12	50C12	2.710	.625	1.25	2 ★	1.625	1.25
13	50C13	2.910	.625	1.313	1.875	1.625	1.47
14	50C14	3.110	.625	1.438	2.125	1.625	1.69
15	50C15	3.320	.625	1.5	2.375	1.625	1.94
16	50C16	3.520	.625	1.75	2.5	1.625	2.42
17	50C17	3.720	.625	1.875	2.734	1.625	2.75
18	50C18	3.920	.625	1.875	2.469	1.625	3.25
19	50C19	4.120	.75	2	3.078	1.625	3.87
20	50C20	4.320	.75	2	3	1.625	4.40

★ Has recessed groove in hub for chain clearance.

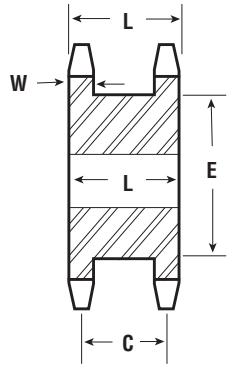
All Steel Stock Sprockets

No. 50 5/8" Pitch

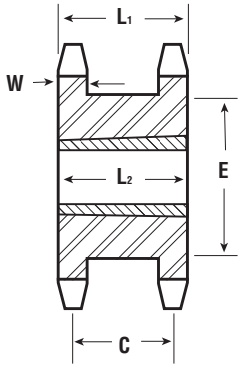




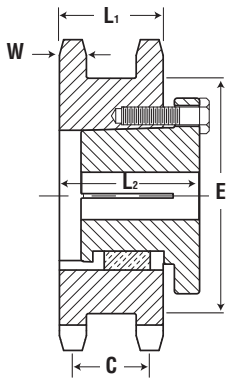




Type A



Taper Bush
Type A



MST® Type B

Double Single - Type A — Steel

No. Teeth	Catalog Number	Diameter		Type	Min. Bore	Max. Bore	Dimensions				Wt. lb (Approx.)
		OD	PD				L	C	E	W (Nom.)	
15	DS50A15	3.320	3.006	A	.625	1.5	1.656	1.313	2.375	.343	2.1
16	DS50A16	3.520	3.204	A	.625	1.688	1.656	1.313	2.484	.343	2.4
17	DS50A17	3.720	3.401	A	.625	1.75	1.656	1.313	2.688	.343	2.9
18	DS50A18	3.920	3.599	A	.625	1.875	1.656	1.313	2.891	.343	3.3
19	DS50A19	4.120	3.797	A	.625	2.063	1.656	1.313	3.078	.343	3.7
20	DS50A20	4.320	3.995	A	.625	2.25	1.656	1.313	3.281	.343	4.2
21	DS50A21	4.520	4.194	A	.625	2.25	1.656	1.313	3.484	.343	4.8
22	DS50A22	4.720	4.392	A	.625	2.438	1.656	1.313	3.688	.343	5.3
23	DS50A23	4.920	4.590	A	.625	2.625	1.656	1.313	3.891	.343	5.8
24	DS50A24	5.120	4.788	A	.625	2.75	1.656	1.313	4.078	.343	6.3

Double Single - Taper Bushed— Steel

No. Teeth	Catalog Number	Bushing Size	Diameter		Min. Bore	Max. Bore	Type	Dimensions					Wt.
			OD	PD				L_1	C	E	L_2	W Nom.	Rim Only
16	DS50ATB16H	1215	3.520	3.204	.5	1.625	A	1.656	1.313	2.484	1.5	.343	1.5
17	DS50ATB17H	1615	3.720	3.401	.5	1.625	A	1.656	1.313	2.688	1.5	.343	1.8
18	DS50ATB18H	1615	3.920	3.599	.5	1.625	A	1.656	1.313	2.891	1.5	.343	2.2
19	DS50ATB19H	1615	4.120	3.797	.5	1.625	A	1.656	1.313	3.078	1.5	.343	2.7
20	DS50ATB20H	1615	4.320	3.995	.5	1.625	A	1.656	1.313	3.281	1.5	.343	5.0
21	DS50ATB21H	2012	4.520	4.194	.5	2	A	1.656	1.313	3.484	1.25	.343	3.3
23	DS50ATB23H	2012	4.920	4.590	.5	2	A	1.656	1.313	3.891	1.25	.343	3.7
24	DS50ATB24H	2012	5.120	4.788	.5	2	A	1.656	1.313	4.078	1.25	.343	4.1

Sprockets with "H" suffix have hardened teeth.

Double Single - MST®— Steel

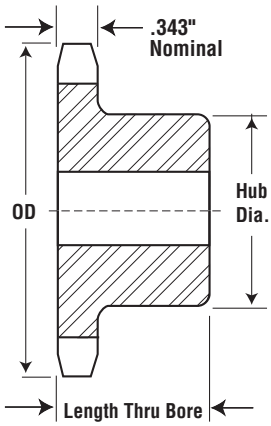
No. Teeth	Catalog Number	Bushing Size	Diameter		Min. Bore	Max. Bore	Type	Dimensions					Wt.
			OD	PD				L_1	C	E	L_2	W Nom.	Rim Only
17	DS50H17H	H	3.720	3.401	.375	1.5	BH	1.656	1.313	2.688	2.281	.343	2.3
19	DS50P19H	P1	4.120	3.797	.5	1.75	B	1.656	1.313	3.078	2.531	.343	2.8
21	DS50P21H	P1	4.520	4.194	.5	1.75	B	1.656	1.313	3.484	2.531	.343	3.8
23	DS50P23H	P1	4.920	4.590	.5	1.75	B	1.656	1.313	3.891	2.531	.343	4.6
24	DS50P24H	P1	5.120	4.788	.5	1.75	B	1.656	1.313	4.078	2.531	.343	5.0

Sprockets with "H" suffix have hardened teeth.

No. 50
5/8" Pitch

Stainless Steel Stock Sprockets





Stainless Steel **Type B**

Alteration Charges

See current discount sheet for alteration charges.

Single - Type B — Stainless

Single - Type A

No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
				Stock	Rec. Max	Dia.	LTB					
8	50B8SS	1.884	B	.625	.625	1.125	1	0.25				
9	50B9SS	2.093	B	.625	.75	1.375	1	0.36				
10	50B10SS	2.300	B	.625	.875	1.563 ★	1	0.50				
11	50B11SS	2.500	B	.625	1	1.75 ★	1	0.60				
12	50B12SS	2.710	B	.625	1.25	1.984 ★	1	0.70				
13	50B13SS	2.910	B	.625	1.313	1.875	1	0.80	A	50A13SS	.625	0.42
14	50B14SS	3.110	B	.625	1.438	2.125	1	1.00	A	50A14SS	.625	0.50
15	50B15SS	3.320	B	.625	1.5	2.375	1	1.30	A	50A15SS	.625	0.54
16	50B16SS	3.520	B	.625	1.75	2.5	1	1.50	A	50A16SS	.625	0.68
17	50B17SS	3.720	B	.625	1.875	2.688	1	1.80	A	50A17SS	.625	0.76
18	50B18SS	3.920	B	.625	1.875	2.875	1	2.00	A	50A18SS	.625	0.86
19	50B19SS	4.120	B	.625	1.75	2.5	1	2.23	A	50A19SS	.625	0.94
20	50B20SS	4.320	B	.75	1.75	3	1	2.30	A	50A20SS	.75	1.06
21	50B21SS	4.520	B	.75	2	3	1	2.42	A	50A21SS	.719	1.40
22	50B22SS	4.720	B	.75	2	3	1	2.54	A	50A22SS	.719	1.60
23	50B23SS	4.920	B	.75	2	3	1	2.67	A	50A23SS	.719	1.70
24	50B24SS	5.120	B	.75	2	3	1.25	3.38	A	50A24SS	.719	1.80
25	50B25SS	5.320	B	.75	2	3	1.25	3.42	A	50A25SS	.719	1.90
26	50B26SS	5.520	B	.75	2	3	1.25	3.57	A	50A26SS	.719	1.70
28	50B28SS	5.920	B	.75	2	3	1.25	3.88	A	50A28SS	.719	2.50
30	50B30SS	6.320	B	.75	2.25	3.25	1.25	4.54	A	50A30SS	.719	2.70
32	50B32SS	6.721	B	.75	2.25	3.25	1.25	4.96	A	50A32SS	.719	2.72
35	50B35SS	7.320	B	.75	2.25	3.25	1.25	5.44	A	50A35SS	.719	3.70
36	50B36SS	7.519	B	.75	2.25	3.25	1.25	5.64	A	50A36SS	.719	3.82
40	50B40SS	8.320	B	.75	2.25	3.25	1.25	6.50	A	50A40SS	.719	4.70
45	50B45SS	9.310	B	.75	2.5	3.75	1.25	8.50	A	50A45SS	.719	6.00
48	50B48SS	9.911	B	1	2.5	3.75	1.25	9.28	A	50A46SS	.938	6.58
54	50B54SS	11.106	B	1	2.5	3.75	1.25	11.00	A	50A54SS	.938	8.30
60	50B60SS	12.300	B	1	2.5	3.75	1.25	14.00	A	50A60SS	.938	10.80

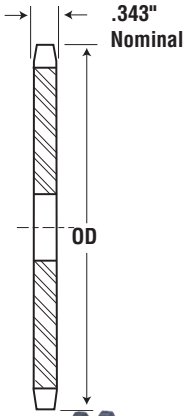
★ Has recessed groove in hub for chain clearance.

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

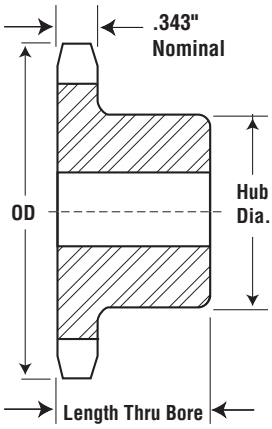
Sprockets altered at factory (rebored with keyway and setscrew added) will be supplied with stainless setscrew.

All Steel Stock Sprockets

No. 50 5/8" Pitch



Type A



Type B

Alteration Charges

See current discount sheet for alteration charges.

Single - Type B

Single - Type A

No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
				Stock	Rec. Max	Dia.	LTB					
8	50B8	1.880	B	.625	.625	1.125 ★	1	0.25				
9	50B9	2.090	B	.625	.75	1.3755 ★	1	0.36				
10	50B10	2.300	B	.625	.875	1.5635 ★	1	0.48				
11	50B11	2.500	B	.625	1	1.755 ★	1	0.64				
12	50B12	2.710	B	.625	1.25	1.9845 ★	1	0.83	A	50A12	.625	0.34
13	50B13	2.910	B	.625	1.313	1.875	1	0.88	A	50A13	.625	0.42
14	50B14	3.110	B	.625	1.438	2.125	1	1.13	A	50A14	.625	0.50
15	50B15	3.320	B	.625	1.5	2.375	1	1.34	A	50A15	.625	0.54
16	50B16	3.520	B	.625	1.75	2.5	1	1.51	A	50A16	.625	0.68
17	50B17	3.720	B	.625	1.875	2.688	1	1.74	A	50A17	.625	0.76
18	50B18	3.920	B	.625	1.875	2.875	1	2.00	A	50A18	.625	0.86
19	50B19	4.120	B	.625	2	3	1	2.22	A	50A19	.625	0.94
20	50B20	4.320	B	.75	2	3	1	2.28	A	50A20	.75	1.06
21	50B21	4.520	B	.75	2	3	1	2.40	A	50A21	.75	1.12
22	50B22	4.720	B	.75	2	3	1	2.56	A	50A22	.75	1.30
23	50B23	4.920	B	.75	2	3	1	2.66	A	50A23	.75	1.44
24	50B24	5.120	B	.75	2	3	1.25	3.30	A	50A24	.719	1.50
25	50B25	5.320	B	.75	2	3	1.25	3.40	A	50A25	.719	1.62
26	50B26	5.520	B	.75	2	3	1.25	3.44	A	50A26	.719	1.72
27	50B27	5.720	B	.75	2	3	1.25	3.74	A	50A27	.719	1.96
28	50B28	5.920	B	.75	2	3	1.25	3.80	A	50A28	.719	2.04
29	50B29	6.120	B	.75	2	3	1.25	4.06	A	50A29	.719	2.36
30	50B30	6.320	B	.75	2.25	3.25	1.25	4.56	A	50A30	.719	2.54
31	50B31	6.520	B	.75	2.25	3.25	1.25	4.74	A	50A31	.719	2.80
32	50B32	6.720	B	.75	2.25	3.25	1.25	4.96	A	50A32	.719	2.72
33	50B33	6.920	B	.75	2.25	3.25	1.25	5.20	A	50A33	.719	3.14
34	50B34	7.120	B	.75	2.25	3.25	1.25	5.14	A	50A34	.719	3.20
35	50B35	7.320	B	.75	2.25	3.25	1.25	5.44	A	50A35	.719	3.34
36	50B36	7.520	B	.75	2.25	3.25	1.25	5.64	A	50A36	.719	3.82
37	50B37	7.720	B	.75	2.25	3.25	1.25	5.90	A	50A37	.719	3.98
38	50B38	7.920	B	.75	2.25	3.25	1.25	6.08	A	50A38	.719	4.14
39	50B39	8.120	B	.75	2.25	3.25	1.25	6.30	A	50A39	.719	4.42
40	50B40	8.320	B	.75	2.25	3.25	1.25	6.50	A	50A40	.719	4.46
41	50B41	8.520	B	.75	2.25	3.25	1.25	6.64	A	50A41	.719	4.86
42	50B42	8.720	B	.75	2.25	3.25	1.25	6.96	A	50A42	.719	4.98
43	50B43	8.910	B	.75	2.25	3.25	1.25	7.06	A	50A43	.719	5.24
44	50B44	9.110	B	.75	2.25	3.25	1.25	7.58	A	50A44	.719	5.42
45	50B45	9.310	B	.75	2.5	3.75	1.25	8.58	A	50A45	.719	5.92
46	50B46	9.510	B	1	2.5	3.75	1.25	8.22	A	50A46	.938	6.42
47	50B47	9.710	B	1	2.5	3.75	1.25	8.48	A	50A47	.938	6.50
48	50B48	9.910	B	1	2.5	3.75	1.25	9.28	A	50A48	.938	6.58
49	50B49	10.110	B	1	2.5	3.75	1.25	9.22	A	50A49	.938	7.06
50	50B50	10.310	B	1	2.5	3.75	1.25	9.88	A	50A50	.938	7.10
51	50B51	10.510	B	1	2.5	3.75	1.25	9.70	A	50A51	.938	7.32
52	50B52	10.710	B	1	2.5	3.75	1.25	10.24	A	50A52	.938	7.98
53	50B53	10.910	B	1	2.5	3.75	1.25	10.48	A	50A53	.938	8.08
54	50B54	11.110	B	1	2.5	3.75	1.25	11.00	A	50A54	.938	8.30
55	50B55	11.310	B	1	2.5	3.75	1.25	10.93	A	50A55	.938	8.56
56	50B56	11.500	B	1	2.5	3.75	1.25	11.50	A	50A56	.938	8.90
57	50B57	11.700	B	1	2.5	3.75	1.25	12.00	A	50A57	.938	9.38
58	50B58	11.900	B	1	2.5	3.75	1.25	11.82	A	50A58	.938	10.30
59	50B59	12.100	B	1	2.5	3.75	1.25	12.32	A	50A59	.938	10.50
60	50B60	12.300	B	1	2.5	3.75	1.25	13.00	A	50A60	.938	10.80
70	50B70	14.290	B	1	2.5	3.75	1.75	18.16	A	50A70	.938	14.00
72	50B72	14.690	B	1	2.5	3.75	1.75	19.48	A	50A72	.938	15.24
76	50B76	15.486	B	1	2.5	3.75	1.75	21.00	A	50A76	.938	20.08
80	50B80	16.280	B	1	2.75	4.25	1.75	24.74	A	50A80	.938	21.00
84	50B84	17.080	B	1	2.75	4.25	1.75	25.50	A	50A84	.938	22.08
95	50B95	19.270	B	1	2.75	4.25	1.75	32.00	A	50A95	.938	27.00
96	50B96	19.470	B	1	2.75	4.25	1.75	32.92	A	50A96	.938	27.40
112	50B112	22.650	B	1	2.75	4.25	1.75	42.00	A	50A112	.938	37.70

★ Has recessed groove in hub for chain clearance.

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

No. 50
5/8" Pitch

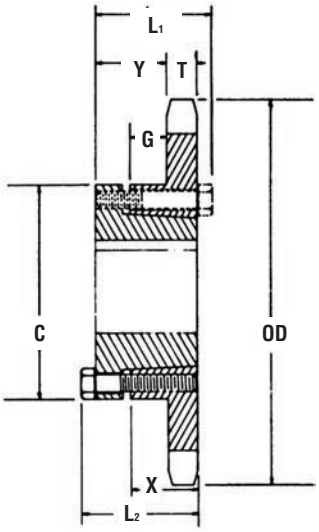
All Steel Stock Sprockets

Single - Type QD with Hardened Teeth

No. Teeth	Catalog Number
12	50JA12H
13	50JA13H
14	50JA14H
15	50JA15H
16	50JA16H
17	50SH17H
18	50SH18H
19	50SH19H
20	50SDS20H
21	50SDS21H
22	50SDS22H
23	50SDS23H
24	50SDS24H
25	50SDS25H
26	50SDS26H
27	50SDS27H
28	50SDS28H
30	50SDS30H

SABER TOOTH





QD — Type B

Single - Type QD

No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions							Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	G	X	T	With Hub	Rim Only
12	50JA12	JA	2.710	2.415	B	1.25	1.125	1.125	2.063	.656	.281	.625	0.343	1.24	0.34
13	50JA13	JA	2.910	2.612	B	1.25	1.125	1.125	2.063	.656	.281	.625	0.343	1.30	0.40
14	50JA14	JA	3.110	2.803	B	1.25	1.125	1.125	2.063	.656	.281	.625	0.343	1.45	0.52
15	50JA15	JA	3.320	3.006	B	1.25	1.125	1.125	2.063	.656	.281	.625	0.343	1.50	0.60
16	50JA16	JA	3.520	3.204	B	1.25	1.125	1.125	2.063	.656	.281	.625	0.343	1.58	0.68
17	50SH17	SH	3.720	3.401	B	1.625	1.438	1.438	2.688	.906	.469	.813	0.343	1.84	0.84
18	50SH18	SH	3.920	3.599	B	1.625	1.438	1.438	2.688	.906	.469	.813	0.343	2.04	1.04
19	50SH19	SH	4.120	3.797	B	1.625	1.438	1.438	2.688	.906	.469	.813	0.343	2.24	1.24
20	50SDS20	SDS	4.320	3.995	B	2	1.5	1.5	3.188	.969	.406	.75	0.343	2.20	1.20
21	50SDS21	SDS	4.520	4.194	B	2	1.5	1.5	3.188	.969	.406	.75	0.343	2.32	1.32
22	50SDS22	SDS	4.720	4.392	B	2	1.5	1.5	3.188	.969	.406	.75	0.343	2.48	1.42
23	50SDS23	SDS	4.920	4.590	B	2	1.5	1.5	3.188	.969	.406	.75	0.343	2.58	1.58
24	50SDS24	SDS	5.120	4.788	B	2	1.5	1.5	3.188	.969	.406	.75	0.343	2.70	1.70
25	50SDS25	SDS	5.320	4.987	B	2	1.5	1.5	3.188	.969	.406	.75	0.343	2.86	1.86
26	50SDS26	SDS	5.520	5.185	B	2	1.5	1.5	3.188	.969	.406	.75	0.343	3.00	2.00
27	50SDS27	SDS	5.720	5.384	B	2	1.5	1.5	3.188	.969	.406	.75	0.343	3.12	2.12
28	50SDS28	SDS	5.920	5.582	B	2	1.5	1.5	3.188	.969	.406	.75	0.343	3.32	2.32
30	50SDS30	SDS	6.320	5.979	B	2	1.5	1.5	3.188	.969	.406	.75	0.343	3.64	2.64
32	50SDS32	SDS	6.720	6.376	B	2	1.5	1.5	3.188	.969	.406	.75	0.343	3.98	2.98
35	50SDS35	SDS	7.320	6.972	B	2	1.5	1.5	3.188	.969	.406	.75	0.343	4.62	3.62
36	50SDS36	SDS	7.520	7.171	B	2	1.5	1.5	3.188	.969	.406	.75	0.343	4.64	3.64
40	50SDS40	SDS	8.320	7.966	B	2	1.5	1.5	3.188	.969	.406	.75	0.343	5.74	4.74
42	50SDS42	SDS	8.720	8.363	B	2	1.5	1.5	3.188	.969	.406	.75	0.343	6.40	5.40
45	50SDS45	SDS	9.310	8.960	B	2	1.5	1.5	3.188	.969	.406	.75	0.343	6.90	5.90
48	50SDS48	SDS	9.910	9.556	B	2	1.5	1.5	3.188	.969	.406	.75	0.343	7.66	6.66
54	50SK54	SK	11.110	10.749	B	2.625	2.125	2.125	3.875	1.531	.906	1.25	0.343	11.68	9.68
60	50SK60	SK	12.300	11.942	B	2.625	2.125	2.125	3.875	1.531	.906	1.25	0.343	13.88	11.88
70	50SK70	SK	14.290	13.931	B	2.625	2.125	2.125	3.875	1.531	.906	1.25	0.343	17.52	15.52
72	50SK72	SK	14.690	14.329	B	2.625	2.125	2.125	3.875	1.531	.906	1.25	0.343	18.44	16.44
80	50SF80	SF	16.280	15.920	B	2.938	2.25	2.25	4.625	1.656	.906	1.25	0.343	22.90	19.90
84	50SF84	SF	17.080	16.715	B	2.938	2.25	2.25	4.625	1.656	.906	1.25	0.343	25.98	22.98
96	50SF96	SF	19.470	19.102	B	2.938	2.25	2.25	4.625	1.656	.906	1.25	0.343	32.88	29.88
112	50SF112	SF	22.650	22.285	B	2.938	2.25	2.25	4.625	1.656	.906	1.25	0.343	43.10	40.10

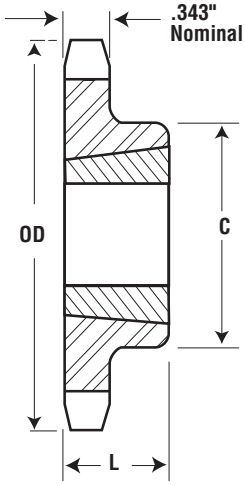
All Steel Stock Sprockets

No. 50 5/8" Pitch

Single - Taper Bushed with Hardened Teeth

No. Teeth	Catalog Number
12	50BTB12H
13	50BTB13H
14	50BTB14H
15	50BTB15H
16	50BTB16H
17	50BTB17H
18	50BTB18H
19	50BTB19H
20	50BTB20H
21	50BTB21H
22	50BTB22H
23	50BTB23H
24	50BTB24H
25	50BTB25H
26	50BTB26H
27	50BTB27H
28	50BTB28H
30	50BTB30H

SABER TOOTH



Type B



Single - Taper Bushed

No. Teeth	Catalog Number	Bushing	Diameter		Max. Bore	Dimensions		Type	Wt. lb (Approx.)	
			OD	PD		L	C		Rim Only	Bushing Only
12	50BTB12	1008	2.708	2.415	1	.875	1.938 ★	B	0.5	0.3
13	50BTB13	1008	2.911	2.612	1	.875	1.813	B	0.5	0.3
14	50BTB14	1008	3.113	2.809	1	.875	1.938	B	0.6	0.3
15	50BTB15	1210	3.315	3.006	1.25	1	2.469 ★	B	0.7	0.6
16	50BTB16	1610	3.517	3.204	1.625	1	2.781 ★	B	0.7	0.9
17	50BTB17	1610	3.719	3.401	1.625	1	2.781 ★	B	0.8	0.9
18	50BTB18	1610	3.920	3.599	1.625	1	2.781	B	0.9	0.9
19	50BTB19	1610	4.120	3.797	1.625	1	3	B	1.3	0.9
20	50BTB20	1610	4.321	3.995	1.625	1	3.25	B	1.6	0.9
21	50BTB21	1610	4.522	4.193	1.625	1	3.5	B	1.5	0.9
22	50BTB22	1610	4.722	4.392	1.625	1	3.5	B	1.6	0.9
23	50BTB23	2012	4.922	4.590	2	1.25	3.875	B	2.0	1.7
24	50BTB24	2012	5.122	4.788	2	1.25	4	B	2.2	1.7
25	50BTB25	2012	5.322	4.987	2	1.25	4	B	2.4	1.7
26	50BTB26	2012	5.522	5.185	2	1.25	4	B	2.5	1.7
27	50BTB27	2012	5.723	5.384	2	1.25	4	B	2.6	1.7
28	50BTB28	2012	5.922	5.582	2	1.25	4	B	2.8	1.7
30	50BTB30	2012	6.321	5.979	2	1.25	3.563	B	3.2	1.7
32	50BTB32	2012	6.721	6.376	2	1.25	3.563	B	3.6	1.7
35	50BTB35	2012	7.319	6.972	2	1.25	3.563	B	4.2	1.7
36	50BTB36	2012	7.519	7.171	2	1.25	3.563	B	4.3	1.7
40	50BTB40	2012	8.316	7.966	2	1.25	3.563	B	5.2	1.7
42	50BTB42	2012	8.715	8.363	2	1.25	3.563	B	5.9	1.7
45	50BTB45	2012	9.313	8.960	2	1.25	3.563	B	6.5	1.7
48	50BTB48	2012	9.911	9.556	2	1.25	3.563	B	7.3	1.7
54	50BTB54	2012	11.106	10.749	2	1.25	3.563	B	9.0	1.7
60	50BTB60	2012	12.301	11.942	2	1.25	3.563	B	10.8	1.7
70	50BTB70	2517	14.292	13.931	2.5	1.75	4.25	B	14.0	3.5
72	50BTB72	2517	14.690	14.329	2.5	1.75	4.25	B	15.5	3.5
80	50BTB80	2517	16.282	15.920	2.5	1.75	4.25	B	19.5	3.5
84	50BTB84	2517	17.079	16.715	2.5	1.75	4.25	B	22.5	3.5
96	50BTB96	2517	19.466	19.102	2.5	1.75	4.25	B	29.0	3.5
112	50BTB112	2517	22.651	22.285	2.5	1.75	4.25	B	38.7	3.5

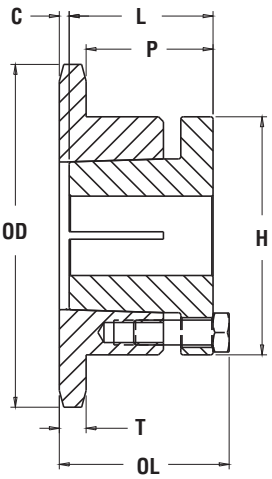
★ Has recessed groove in hub for chain clearance.

No. 50
5/8" Pitch

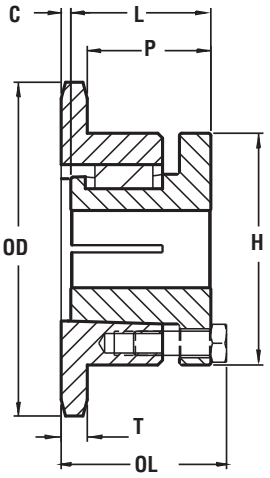
MST® Sprockets

No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions						Wt. lb (Approx.)	
			OD	PD			OL	L	C	H	P	T (nom.)	With Hub	Rim Only
13	50H13H	H	2.910	2.612	3	1.5	1.656	1.25	.219	2.5	1.125	0.343	1.4	0.6
14	50H14H	H	3.110	2.809	3	1.5	1.594	1.25	.156	2.5	1.063	0.343	1.4	0.6
15	50H15H	H	3.320	3.006	3	1.5	1.5	1.25	.063	2.5	.969	0.343	1.6	0.8
15	50P15H	P1	3.320	3.006	4	1.75	2.188	1.938		3	1.594	0.343	2.4	1.1
16	50H16H	H	3.520	3.204	3	1.5	1.5	1.25	.063	2.5	.969	0.343	1.7	0.9
16	50P16H	P1	3.520	3.204	4	1.75	2.188	1.938		3	1.594	0.343	2.7	1.4
17	50H17H	H	3.720	3.401	3	1.5	1.5	1.25	.063	2.5	.969	0.343	1.8	1.0
17	50P17H	P1	3.720	3.401	4	1.75	2.188	1.938		3	1.594	0.343	2.7	1.4
18	50H18H	H	3.920	3.599	3	1.5	1.5	1.25	.063	2.5	.969	0.343	1.9	1.1
18	50P18H	P1	3.920	3.599	4	1.75	2.188	1.938		3	1.594	0.343	3.1	1.8
19	50H19H	H	4.120	3.797	3	1.5	1.5	1.25	.063	2.5	.969	0.343	2.1	1.3
19	50P19H	P1	4.120	3.797	4	1.75	2.188	1.938		3	1.594	0.343	3.1	1.8
20	50H20H	H	4.320	3.995	3	1.5	1.5	1.25	.063	2.5	.969	0.343	2.3	1.5
20	50P20H	P1	4.320	3.995	4	1.75	2.188	1.938		3	1.594	0.343	3.3	2.0
21	50H21H	H	4.520	4.194	3	1.5	1.5	1.25	.063	2.5	.969	0.343	2.2	1.4
21	50P21H	P1	4.520	4.194	4	1.75	2.188	1.938		3	1.594	0.343	3.4	2.1
22	50H22H	H	4.720	4.392	3	1.5	1.5	1.25	.063	2.5	.969	0.343	2.3	1.5
22	50P22H	P1	4.720	4.392	4	1.75	2.188	1.938		3	1.594	0.343	3.5	2.2
23	50H23H	H	4.920	4.590	3	1.5	1.5	1.25	.063	2.5	.969	0.343	2.5	1.7
23	50P23H	P1	4.920	4.590	4	1.75	2.188	1.938		3	1.594	0.343	3.7	2.4
23	50Q23H	Q1	4.920	4.590	4	2.688	2.781	2.5		4.125	2.156	0.343	6.7	3.2
24	50H24H	H	5.120	4.788	3	1.5	1.5	1.25	.063	2.5	.969	0.343	2.6	1.8
24	50P24H	P1	5.120	4.788	4	1.75	2.188	1.938		3	1.594	0.343	3.9	2.6
24	50Q24H	Q1	5.120	4.788	4	2.688	2.781	2.5		4.125	2.156	0.343	7.0	3.5
25	50H25H	H	5.320	4.987	3	1.5	1.5	1.25	.063	2.5	.969	0.343	2.7	1.9
25	50P25H	P1	5.320	4.987	4	1.75	2.188	1.938		3	1.594	0.343	4.0	2.7
25	50Q25H	Q1	5.320	4.987	4	2.688	2.781	2.5		4.125	2.156	0.343	7.1	3.6
26	50H26H	H	5.520	5.185	3	1.5	1.5	1.25	.063	2.5	.969	0.343	2.8	2.0
26	50P26H	P1	5.520	5.185	4	1.75	2.188	1.938		3	1.594	0.343	4.1	2.8
26	50Q26H	Q1	5.520	5.185	4	2.688	2.781	2.5		4.125	2.156	0.343	7.2	3.7
27	50H27H	H	5.720	5.384	3	1.5	1.5	1.25	.063	2.5	.969	0.343	3.0	2.2
27	50P27H	P1	5.720	5.384	4	1.75	2.188	1.938		3	1.594	0.343	4.2	2.9
27	50Q27H	Q1	5.720	5.384	4	2.688	2.781	2.5		4.125	2.156	0.343	7.3	3.8
28	50H28H	H	5.920	5.582	3	1.5	1.5	1.25	.063	2.5	.969	0.343	3.3	2.5
28	50P28H	P1	5.920	5.582	4	1.75	2.188	1.938		3	1.594	0.343	4.3	3.0
28	50Q28H	Q1	5.920	5.582	4	2.688	2.781	2.5		4.125	2.156	0.343	7.5	4.0
29	50P29H	P1	6.120	5.781	4	1.75	2.188	1.938		3	1.594	0.343	4.7	3.4
30	50H30H	H	6.320	5.979	3	1.5	1.5	1.25	.063	2.5	.969	0.343	3.7	2.9
30	50P30H	P1	6.320	5.979	4	1.75	2.188	1.938		3	1.594	0.343	4.9	3.6
30	50Q30H	Q1	6.320	5.979	4	2.688	2.781	2.5		4.125	2.156	0.343	9.1	5.6
31	50P31	P1	6.520	6.178	4	1.75	2.188	1.938		3	1.594	0.343	4.9	3.6
32	50H32H	H	6.720	6.376	3	1.5	1.5	1.25	.063	2.5	.969	0.343	4.0	3.2
32	50P32	P1	6.720	6.376	4	1.75	2.188	1.938		3	1.594	0.343	5.2	3.9
32	50Q32	Q1	6.720	6.376	4	2.688	2.781	2.5		4.125	2.156	0.343	9.6	6.1
33	50H33H	H	6.920	6.575	3	1.5	1.5	1.25	.063	2.5	.969	0.343	4.2	3.4
33	50P33	P1	6.920	6.575	4	1.75	2.188	1.938		3	1.594	0.343	5.4	4.1
34	50H34H	H	7.120	6.774	3	1.5	1.5	1.25	.063	2.5	.969	0.343	4.5	3.7
34	50P34	P1	7.120	6.774	4	1.75	2.188	1.938		3	1.594	0.343	5.6	4.3
35	50H35H	H	7.320	6.972	3	1.5	1.5	1.25	.063	2.5	.969	0.343	4.6	3.8
35	50P35	P1	7.320	6.972	4	1.75	2.188	1.938		3	1.594	0.343	5.6	4.3
35	50Q35	Q1	7.320	6.972	4	2.688	2.781	2.5		4.125	2.156	0.343	10.3	6.8
36	50H36H	H	7.520	7.171	3	1.5	1.5	1.25	.063	2.5	.969	0.343	4.8	4.0
36	50P36	P1	7.520	7.171	4	1.75	2.188	1.938		3	1.594	0.343	6.1	4.8
36	50Q36	Q1	7.520	7.171	4	2.688	2.781	2.5		4.125	2.156	0.343	10.3	6.8
37	50Q37	Q1	7.720	7.370	4	2.688	2.781	2.5		4.125	2.156	0.343	10.5	7.0
38	50H38H	H	7.920	7.569	3	1.5	1.5	1.25	.063	2.5	.969	0.343	5.2	4.4
38	50Q38	Q1	7.920	7.569	4	2.688	2.781	2.5		4.125	2.156	0.343	10.9	7.4
39	50Q39	Q1	8.120	7.767	4	2.688	2.781	2.5		4.125	2.156	0.343	11.1	7.6
40	50H40H	H	8.320	7.966	3	1.5	1.5	1.25	.063	2.5	.969	0.343	5.6	4.8
40	50Q40	Q1	8.320	7.966	4	2.688	2.781	2.5		4.125	2.156	0.343	11.5	8.0
41	50Q41	Q1	8.520	8.165	4	2.688	2.781	2.5		4.125	2.156	0.343	11.7	8.2
42	50Q42	Q1	8.720	8.363	4	2.688	2.781	2.5		4.125	2.156	0.343	11.8	8.3
44	50Q44	Q1	9.110	8.761	4	2.688	2.781	2.5		4.125	2.156	0.343	12.1	8.6
45	50Q45	Q1	9.310	8.960	4	2.688	2.781	2.5		4.125	2.156	0.343	12.5	9.0
47	50Q47	Q1	9.710	9.357	4	2.688	2.781	2.5		4.125	2.156	0.343	12.8	9.3
48	50Q48	Q1	9.910	9.556	4	2.688	2.781	2.5		4.125	2.156	0.343	13.1	9.6
50	50Q50	Q1	10.310	9.954	4	2.688	2.781	2.5		4.125	2.156	0.343	13.3	9.8
54	50Q54	Q1	11.110	10.749	4	2.688	2.781	2.5		4.125	2.156	0.343	14.8	11.3
56	50Q56	Q1	11.500	11.147	4	2.688	2.781	2.5		4.125	2.156	0.343	15.8	12.3
60	50Q60	Q1	12.300	11.942	4	2.688	2.781	2.5		4.125	2.156	0.343	16.8	13.3
70	50Q70	Q1	14.290	13.931	4	2.688	2.781	2.5		4.125	2.156	0.343	20.4	16.9
72	50Q72	Q1	14.690	14.329	4	2.688	2.781	2.5		4.125	2.156	0.343	21.6	18.1
80	50Q80	Q1	16.280	15.920	4	2.688	2.781	2.5		4.125	2.156	0.343	24.6	21.1
84	50Q84	Q1	17.080	16.715	4	2.688	2.781	2.5		4.125	2.156	0.343	27.8	24.3
96	50Q96	Q1	19.470	19.102	4	2.688	2.781	2.5		4.125	2.156	0.343	33.3	29.0
112	50Q112	Q1	22.650	22.285	4	2.688	2.781	2.5		4.125	2.156	0.343	42.8	39.3

Single MST® Sprockets



Type 3

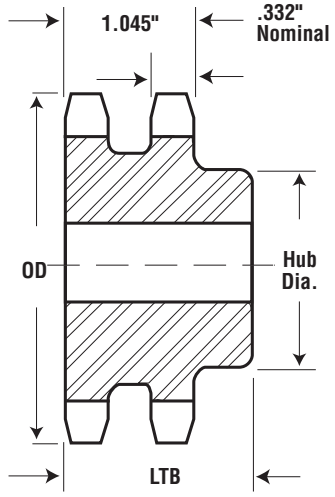


Type 4

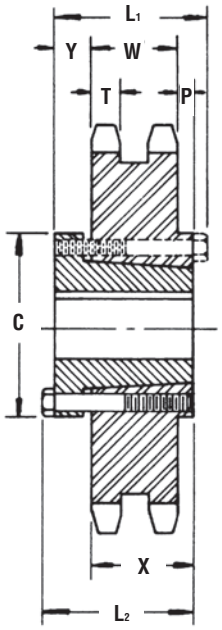
Sprockets with "H" suffix have hardened teeth.

All Steel Stock Sprockets

No. 50-2 5/8" Pitch



Type B



QD - Type C

Alteration Charges

See current discount sheet for alteration charges.

Double - Type B

No. Teeth	Catalog Number	OD	Type	Bore (Inches)		Hub (Inches)		Wt. lb (Approx.)
				Stock	Rec. Max.	Dia.	LTB	
11	D50B11H	2.500	B	.625	.406	1.469	1.75	0.96
12	D50B12H	2.710	B	.625	1.125	1.688	1.75	1.25
13	D50B13H	2.910	B	.625	1.313	1.875	1.75	1.56
14	D50B14H	3.110	B	.625	1.375	2.063	1.75	1.86
15	D50B15H	3.320	B	.75	1.5	2.313	1.75	2.22
16	D50B16H	3.520	B	.75	1.75	2.5	1.75	2.62
17	D50B17H	3.720	B	.75	1.875	2.688	1.75	3.04
18	D50B18H	3.920	B	.75	1.406	2.875	1.75	3.58
19	D50B19H	4.120	B	1	2.125	3.125	1.75	3.90
20	D50B20H	4.320	B	1	2.25	3.25	1.75	4.26
21	D50B21H	4.520	B	1	2.375	3.5	1.75	4.90
22	D50B22H	4.720	B	1	2.375	3.563	1.875	5.58
23	D50B23H	4.920	B	1	2.5	3.625	1.875	6.10
24	D50B24H	5.120	B	1	2.5	3.625	1.875	6.50
25	D50B25H	5.320	B	1	2.5	3.625	1.875	6.94
26	D50B26	5.520	B	1	2.5	3.75	1.875	7.54
30	D50B30	6.320	B	1	2.5	3.75	1.875	9.40
32	D50B32	6.720	B	1	2.5	3.75	1.875	10.46
35	D50B35	7.320	B	1	2.5	3.75	1.875	12.28
36	D50B36	7.520	B	1.094	2.75	4	2.125	13.94
40	D50B40	8.320	B	1.094	2.75	4	2.125	16.54
42	D50B42	8.720	B	1.094	2.75	4	2.125	17.92
45	D50B45	9.310	B	1.094	2.75	4	2.125	20.30
48	D50B48	9.910	B	1.094	2.75	4.25	2.375	24.08
52	D50B52	10.710	B	1.094	2.75	4.25	2.375	27.42
54	D50B54	11.110	B	1.094	2.75	4.25	2.375	29.16
60	D50B60	12.300	B	1.313	3	4.5	2.375	35.88
68	D50B68	13.890	B	1.313	3	4.5	2.375	44.98
72	D50B72	14.690	B	1.313	3	4.5	2.375	50.22
76	D50B76	15.490	B	1.313	3	4.5	2.375	45.64
84	D50B84	17.080	B	1.313	3	4.5	2.375	51.64
95	D50B95	19.270	B	1.313	3	4.5	2.375	64.32
96	D50B96	19.470	B	1.313	3	4.5	2.375	67.42
102	D50B102	20.660	B	1.313	3	4.5	2.375	72.68
112	D50B112	22.650	B	1.313	3.313	5.25	2.375	90.22

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

NOTE: Double 50 stock sprockets with 25 teeth or less have hardened teeth, as indicated by H suffix.

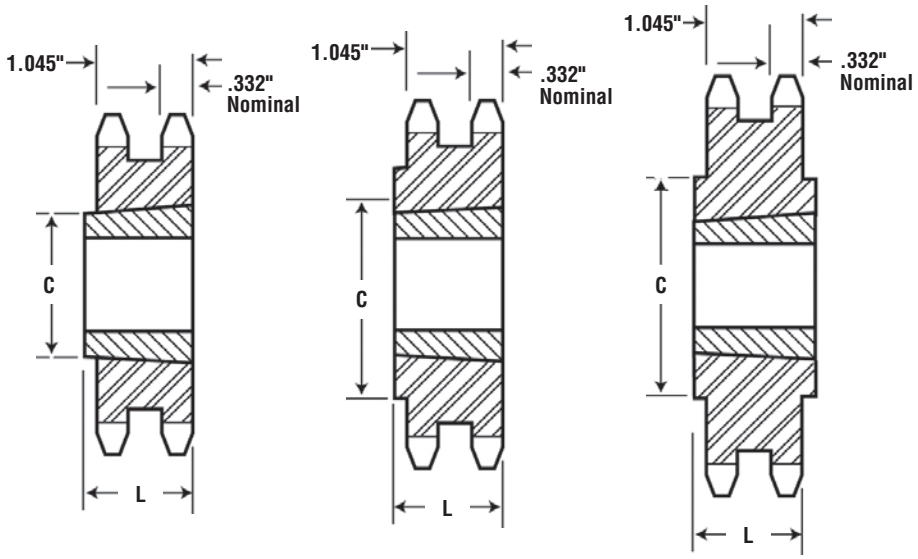
Double - Type QD

No. Teeth	Catalog Number	Bushing	Diameters		Type	Max. Bore	Dimensions								Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	P	X	T	W	With Hub	Rim Only
36	D50SK36	SK	7.520	7.171	C	2.625	2.125	2.125	3.875	.625	13/64	1.25	0.332	1.045	11.08	9.08
42	D50SK42	SK	8.720	8.363	C	2.625	2.125	2.125	3.875	.625	13/64	1.25	0.332	1.045	15.16	13.16
48	D50SK48	SK	9.910	9.556	C	2.625	2.125	2.125	3.875	.625	13/64	1.25	0.332	1.045	19.90	17.90
52	D50SF52	SF	10.710	10.351	C	2.406	2.25	2.25	4.625	.75	13/64	1.25	0.332	1.045	24.26	21.26
54	D50SF54	SF	11.110	10.749	C	2.406	2.25	2.25	4.625	.75	13/64	1.25	0.332	1.045	26.18	23.18
60	D50SF60	SF	12.300	11.942	C	2.406	2.25	2.25	4.625	.75	13/64	1.25	0.332	1.045	32.12	29.12
68	D50SF68	SF	13.890	13.533	C	2.406	2.25	2.25	4.625	.75	13/64	1.25	0.332	1.045	41.16	38.16
72	D50SF72	SF	14.690	14.329	C	2.406	2.25	2.25	4.625	.75	13/64	1.25	0.332	1.045	46.28	43.26
76	D50SF76	SF	15.490	15.124	C	2.406	2.25	2.25	4.625	.75	13/64	1.25	0.332	1.045	47.00	44.00
84	D50SF84	SF	17.080	16.715	C	2.406	2.25	2.25	4.625	.75	13/64	1.25	0.332	1.045	48.89	45.88
95	D50SF95	SF	19.270	18.903	C	2.406	2.25	2.25	4.625	.75	13/64	1.25	0.332	1.045	61.80	58.88
102	D50SF102	SF	20.660	20.295	C	2.406	2.25	2.25	4.625	.75	13/64	1.25	0.332	1.045	69.02	66.02
112	D50SF112	SF	22.650	22.285	C	2.406	2.25	2.25	4.625	.75	13/64	1.25	0.332	1.045	88.26	85.26

No. 50-2
5/8" Pitch

All Steel Stock Sprockets





Double - Taper Bushed

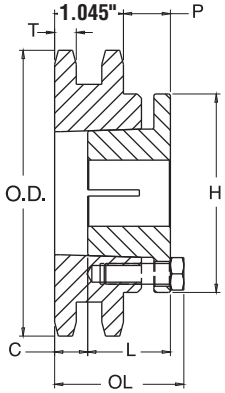
No. Teeth	Catalog Number	Bushing	Diameters		Max. Bore.	Dimensions		Type	Wt. lb (Approx.)	
			OD	PD		L	C		Rim Only	Bushing Only
14	D50ATB14H	1008	3.113	2.809	1	.875	–	A	0.8	0.3
15	D50ATB15H	1210	3.315	3.006	1.25	1	–	A	0.9	0.6
16	D50ATB16H	1210	3.517	3.204	1.25	1	–	A	1.1	0.6
17	D50ATB17H	1610	3.719	3.410	1.625	1	–	A	1.1	0.6
18	D50ATB18H	1610	3.920	3.599	1.625	1	–	A	1.3	0.9
19	D50ATB19H	1610	4.120	3.797	1.625	1	–	A	1.6	0.9
20	D50BTB20H	2012	4.321	3.995	2	1.25	3.25	B	1.5	1.7
21	D50BTB21H	2012	4.522	4.193	2	1.25	3.5	B	1.9	1.7
25	D50BTB25H	2012	5.322	4.987	2	1.25	4.281	B	3.8	1.7
30	D50BTB30	2517	6.321	5.979	2.5	1.75	5.281	B	7.5	3.5
36	D50CTB36	2517	7.519	7.171	2.5	1.75	4.25	C	9.4	3.5
42	D50CTB42	2517	8.715	8.363	2.5	1.75	4.25	C	13.4	3.5
48	D50CTB48	2517	9.911	9.556	2.5	1.75	4.25	C	18.6	3.5
52	D50CTB52	2517	10.707	10.351	2.5	1.75	4.375	C	22.2	3.5
60	D50CTB60	2517	12.301	11.942	2.5	1.75	4.375	C	30.3	3.5
68	D50CTB68	2517	13.893	13.533	2.5	1.75	4.375	C	39.4	3.5
76	D50CTB76	2517	15.486	15.124	2.5	1.75	4.375	C	41.2	3.5
84	D50CTB84	2517	17.079	16.715	2.5	1.75	4.375	C	45.3	3.5
95	D50CTB95	2517	19.267	18.903	2.5	1.75	4.375	C	58.8	3.5
102	D50CTB102	2517	20.661	20.295	2.5	1.75	4.375	C	67.1	3.5

NOTE: Double 50 stock sprockets with 25 teeth or less have hardened teeth, as indicated by H suffix.

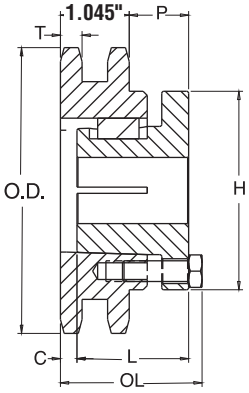
MST® Sprockets

No. 50-2
5/8" Pitch

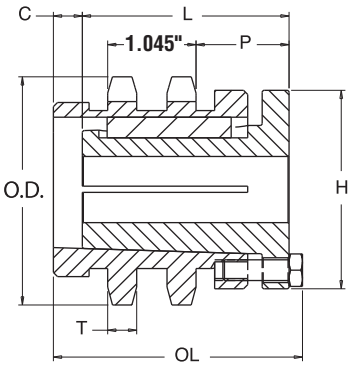




Type 11



Type 12



Type 16

Double - MST® Sprockets

No. Teeth	Catalog Number	Bushing	Diameters		Type	Max. Bore	Dimensions						Wt. lb (Approx.)	
			OD	PD			OL	L	C	H	P	T (Nom.)	With Hub	Rim Only
14	D50H14H	H	3.110	2.809	11	1.5	2.313	1.25	.875	2.5	1.094	0.332	2.0	1.2
15	D50P15H	P1	3.320	3.006	16	1.75	3.438	1.938	1.25	3	1.406	0.332	3.3	2.0
16	D50P16H	P1	3.520	3.204	12	1.75	2.688	1.938	.5	3	1.406	0.332	2.9	1.6
17	D50P17H	P1	3.720	3.401	12	1.75	2.688	1.938	.5	3	1.406	0.332	3.4	2.1
18	D50P18H	P1	3.920	3.599	12	1.75	2.688	1.938	.5	3	1.406	0.332	3.8	2.5
19	D50P19H	P1	4.120	3.797	12	1.75	2.188	1.938		3	.906	0.332	3.3	2.0
20	D50P20H	P1	4.320	3.995	12	1.75	2.188	1.938		3	.906	0.332	3.8	2.5
21	D50P21H	P1	4.520	4.194	12	1.75	2.188	1.938		3	.906	0.332	4.1	2.8
22	D50P22H	P1	4.720	4.392	12	1.75	2.188	1.938		3	.906	0.332	4.5	3.2
23	D50P23H	P1	4.920	4.590	12	1.75	2.188	1.938		3	.906	0.332	4.9	3.6
24	D50Q24H	Q1	5.120	4.788	12	2.688	2.781	2.5		4.125	1.469	0.332	7.5	4.0
25	D50Q25H	Q1	5.320	4.987	12	2.688	2.781	2.5		4.125	1.469	0.332	8.0	4.5
26	D50Q26H	Q1	5.520	5.185	12	2.688	2.781	2.5		4.125	1.469	0.332	8.8	5.3
27	D50Q27H	Q1	5.720	5.384	12	2.688	2.781	2.5		4.125	1.469	0.332	9.4	5.9
28	D50Q28H	Q1	5.920	5.582	12	2.688	2.781	2.5		4.125	1.469	0.332	9.8	6.3
30	D50Q30H	Q1	6.320	5.979	12	2.688	2.781	2.5		4.125	1.469	0.332	11.0	7.5
32	D50Q32H	Q1	6.720	6.376	12	2.688	2.781	2.5		4.125	1.469	0.332	12.0	8.5
35	D50Q35H	Q1	7.320	6.972	12	2.688	2.781	2.5		4.125	1.469	0.332	13.9	10.4
36	D50Q36H	Q1	7.520	7.171	12	2.688	2.781	2.5		4.125	1.469	0.332	14.5	11.0
40	D50Q40H	Q1	8.320	7.966	12	2.688	2.781	2.5		4.125	1.469	0.332	17.1	13.6
42	D50Q42H	Q1	8.720	8.363	12	2.688	2.781	2.5		4.125	1.469	0.332	18.5	15.0
45	D50Q45H	Q1	9.310	8.960	12	2.688	2.781	2.5		4.125	1.469	0.332	21.0	17.5
48	D50Q48H	Q1	9.910	9.556	12	2.688	2.781	2.5		4.125	1.469	0.332	23.9	20.4
52	D50Q52	Q1	10.710	10.351	12	2.688	2.781	2.5		4.125	1.469	0.332	26.8	23.3
54	D50Q54	Q1	11.110	10.749	12	2.688	2.781	2.5		4.125	1.469	0.332	26.8	23.3
60	D50Q60	Q1	12.300	11.942	12	2.688	2.781	2.5		4.125	1.469	0.332	29.0	25.5
72	D50Q72	Q1	14.690	14.329	12	2.688	2.781	2.5		4.125	1.469	0.332	46.6	43.1
76	D50Q76	Q1	15.490	15.124	12	2.688	2.781	2.5		4.125	1.469	0.332	49.5	46.0
84	D50Q84	Q1	17.080	16.715	12	2.688	2.781	2.5		4.125	1.469	0.332	60.2	56.7
95	D50R95	R1	19.270	18.903	12	3.75	3.156	2.875		5.375	2.094	0.332	79.8	72.3
96	D50R96	R1	19.470	19.102	12	3.75	3.156	2.875		5.375	2.094	0.332	88.2	80.7
102	D50R102	R1	20.660	20.295	12	3.75	3.156	2.875		5.375	2.094	0.332	92.0	84.5
112	D50R112	R1	22.650	22.285	12	3.75	3.156	2.875		5.375	2.094	0.332	100.7	93.2

Sprockets with "H" suffix have hardened teeth.

No. 50-3
5/8" Pitch

All Steel Stock Sprockets

Triple - Type B & C

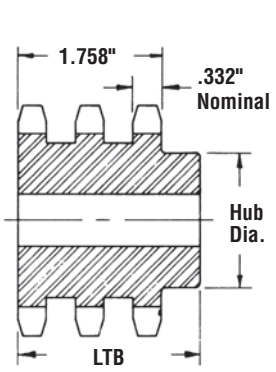
No. Teeth	Catalog Number	OD	Type	Bore (inches)		Hub (inches)		Wt. lb (Approx.)
				Stock	Rec. Max.	Dia.	Length Thru	
11	E50B11H	2.500	B	.625	.938	1.469	2.5	1.42
12	E50B12H	2.710	B	.625	1.125	1.063	2.5	1.84
13	E50B13H	2.910	B	.625	1.313	1.875	2.5	2.28
14	E50B14H	3.110	B	.625	1.375	2.063	2.5	2.72
15	E50B15H	3.320	B	.75	1.5	2.313	2.5	3.24
16	E50B16H	3.520	B	.75	1.75	2.5	2.5	3.76
17	E50B17H	3.720	B	.75	1.875	2.688	2.5	4.38
18	E50B18H	3.920	B	.75	1.938	2.938	2.5	5.10
19	E50B19H	4.120	B	1	2.125	3.125	2.5	5.60
20	E50B20H	4.320	B	1	2.25	3.25	2.625	6.42
21	E50B21H	4.520	B	1	2.375	3.5	2.625	7.42
22	E50B22H	4.720	B	1	2.375	3.563	2.625	8.13
23	E50B23H	4.920	B	1	2.5	3.625	2.625	8.85
24	E50B24H	5.120	B	1	2.5	3.625	2.625	9.42
25	E50B25H	5.320	B	1	2.5	3.625	2.625	10.16
26	E50B26	5.520	B	1	2.5	3.75	2.625	11.02
30	E50B30	6.320	B	1	2.5	3.75	2.625	14.24
35	E50B35	7.320	B	1	2.5	3.75	2.625	19.09
36	E50B36	7.520	B	1.188	2.75	4	2.75	20.60
42	E50B42	8.720	B	1.188	2.75	4	2.75	27.46
48	E50B48	9.910	B	1.188	2.75	4	3.125	36.64
52	E50B52	10.710	B	1.188	2.75	4	3.125	42.54
60	E50B60	12.300	B	1.313	3	4.5	3.125	57.17
68	E50B68	13.890	B	1.313	3	4.5	3.125	73.21
72	E50C72	14.690	C	1.313	3	4.75	3.5	57.04
76	E50C76	15.490	C	1.313	3	4.75	3.5	61.57
84	E50C84	17.080	C	1.313	3	4.75	3.5	62.86
95	E50C95	19.270	C	1.313	3	4.75	3.75	75.01
102	E50C102	20.660	C	1.313	3	4.75	3.75	86.26

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

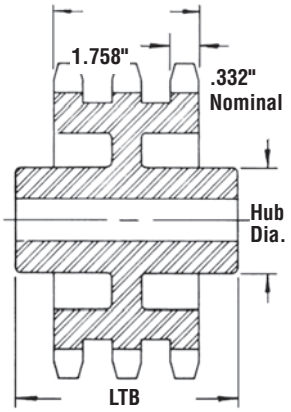
NOTE: Triple 50 stock sprockets with 25 teeth or less have Hardened Teeth. As indicated by H suffix.

Alteration Charges

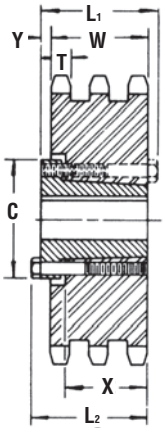
See current discount sheet for alteration charges.



Type B



Type C



QD — Type B

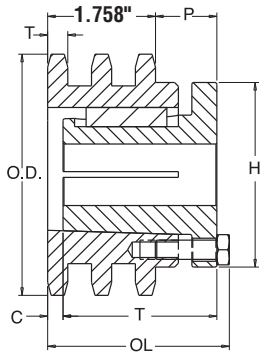
Triple - Type QD

No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions								Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	V	X	T	W	With Hub	Rim Only
36	E50SK36	SK	7.520	7.171	B	2.625	2.125	2.125	3.875	.125		1.25	.332	1.758	14.8	12.8
42	E50SK42	SK	8.720	8.363	B	2.625	2.125	2.125	3.875	.125		1.25	.332	1.758	21.5	19.5
48	E50SK48	SK	9.910	9.556	B	2.625	2.125	2.125	3.875	.125		1.25	.332	1.758	29.6	27.6
52	E50SF52	SF	10.710	10.351	B	2.938	2.25	2.25	4.625	.25		1.25	.332	1.758	31.6	28.6
60	E50SF60	SF	12.300	11.942	B	2.938	2.25	2.25	4.625	.25		1.25	.332	1.758	42.1	41.3
68	E50SF68	SF	13.890	13.533	B	2.938	2.25	2.25	4.625	.25		1.25	.332	1.758	53.8	45.3
72	E50SF72	SF	14.690	14.329	B	2.938	2.25	2.25	4.625	.25	.5	1.25	.332	1.758	46.6	60.2
76	E50SF76	SF	15.490	15.124	B	2.938	2.25	2.25	4.625	.25	.5	1.25	.332	1.758	49.9	67.3
84	E50SF84	SF	17.080	16.715	B	2.938	2.25	2.25	4.625	.25	.5	1.25	.332	1.758	53.9	72.4
95	E50SF95	SF	19.270	18.903	B	2.938	2.25	2.25	4.625	.25	.5	1.25	.332	1.758	62.3	91.4
102	E50SF102	SF	20.660	20.295	B	2.938	2.25	2.25	4.625	.25	.5	1.25	.332	1.758	69.3	103.2

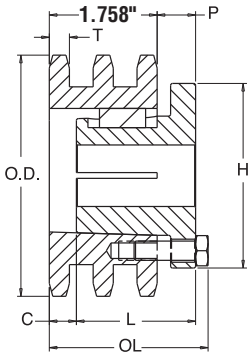
NOTE: Triple 50 stock sprockets with 25 teeth or less have hardened teeth.

MST® Sprockets

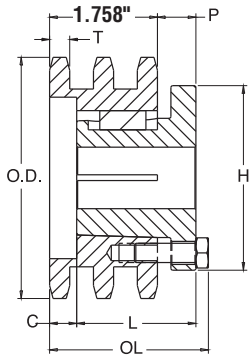
No. 50-3
5/8" Pitch



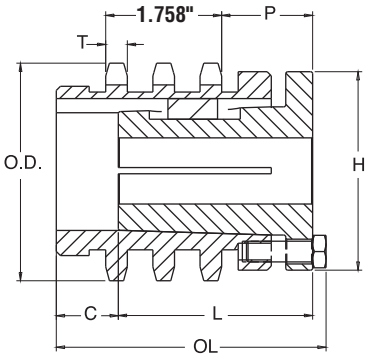
Type 22



Type 23



Type 24



Type 27

Triple - MST® Sprockets

No. Teeth	Catalog Number	Bushing	Diameters		Type	Max. Bore	Dimensions						Wt. lb (Approx.)	
			OD	PD			OL	L	C	H	P	T (Nom.)	With Hub	Rim Only
15	E50P15H	P2	3.320	3.006	27	1.75	4.125	2.938	.938	3	1.375	.332	4.0	2.5
16	E50P16H	P2	3.520	3.204	22	1.75	3.375	2.938	.188	3	1.375	.332	3.9	2.4
17	E50P17H	P2	3.720	3.401	22	1.75	3.375	2.938	.188	3	1.375	.332	4.3	2.8
18	E50P18H	P2	3.920	3.599	22	1.75	3.375	2.938	.188	3	1.375	.332	4.9	3.4
19	E50P19H	P1	4.120	3.797	24	1.75	2.625	1.938	.438	3	.625	.332	4.2	2.9
20	E50P20H	P1	4.320	3.995	24	1.75	2.625	1.938	.438	3	.625	.332	4.4	3.1
21	E50P21H	P1	4.520	4.194	24	1.75	2.625	1.938	.438	3	.625	.332	4.8	3.5
23	E50P23H	P1	4.920	4.590	24	1.75	2.625	1.938	.438	3	.625	.332	5.8	4.5
24	E50Q24H	Q1	5.120	4.788	23	2.688	2.781	2.5		4.125	.75	.332	8.2	4.7
25	E50Q25H	Q1	5.320	4.987	23	2.688	2.781	2.5		4.125	.75	.332	8.5	5.0
26	E50Q26H	Q1	5.520	5.185	23	2.688	2.781	2.5		4.125	.75	.332	9.4	5.9
28	E50Q28H	Q1	5.920	5.582	23	2.688	2.781	2.5		4.125	.75	.332	10.8	7.3
30	E50Q30H	Q1	6.320	5.979	23	2.688	2.781	2.5		4.125	.75	.332	12.3	8.8
32	E50Q32H	Q1	6.720	6.376	23	2.688	2.781	2.5		4.125	.75	.332	14.4	10.9
35	E50Q35H	Q1	7.320	6.972	23	2.688	2.781	2.5		4.125	.75	.332	17.2	13.7
36	E50Q36H	Q1	7.520	7.171	23	2.688	2.781	2.5		4.125	.75	.332	18.1	14.6
40	E50Q40H	Q1	8.320	7.966	23	2.688	2.781	2.5		4.125	.75	.332	22.6	19.1
42	E50Q42H	Q1	8.720	8.363	23	2.688	2.781	2.5		4.125	.75	.332	25.0	21.5
48	E50Q48H	Q1	9.910	9.556	23	2.688	2.781	2.5		4.125	.75	.332	33.1	29.6
52	E50Q52	Q1	10.710	10.351	23	2.688	2.781	2.5		4.125	.75	.332	39.9	36.4
60	E50R60	R1	12.300	11.942	22	3.75	2.156	2.875		5.375	1.125	.332	55.5	48.0
68	E50R68	R1	13.890	13.533	22	3.75	2.156	2.875		5.375	1.125	.332	71.0	63.5
72	E50R72	R1	14.690	14.329	22	3.75	2.156	2.875		5.375	1.125	.332	79.5	72.0
76	E50R76	R1	15.490	15.124	22	3.75	2.156	2.875		5.375	1.125	.332	88.5	81.0
84	E50R84	R1	17.080	16.715	22	3.75	2.156	2.875		5.375	1.125	.332	107.5	100.0
95	E50R95	R1	19.270	18.903	22	3.75	2.156	2.875		5.375	1.125	.332	137.5	130.0
102	E50R102	R1	20.660	20.295	22	3.75	2.156	2.875		5.375	1.125	.332	158.5	151.0

Sprockets with "H" suffix have hardened teeth.

No. 60
¾" Pitch

All Steel Stock Sprockets

Single - Type BS — 2 Setscrews — Bored-To-Size

No. Teeth	Catalog Number	OD	LTB	Wt. lb (Approx.)	Stock Finished Bores Includes Keyway and 2 Setscrews														
9	60BS9	2.510	1.25	0.6	.75	.875	1												
10	60BS10	2.760	1.25	0.7	.75	.875	1	1.125	1.188	1.25									
11	60BS11	3.000	1.25	0.9	.75	.875	1	1.125	1.188	1.25									
11	60BS11W	3.000	1.25	0.8						1.25									
12	60BS12	3.250	1.25	1.3	.75	.875	1	1.125	1.188	1.25		1.438							
12	60BS12W	3.250	1.25	1.1						1.25									
13	60BS13	3.490	1.25	1.3	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5						
14	60BS14	3.740	1.25	1.6	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5	1.625					
15	60BS15	3.980	1.25	1.7	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75				
16	60BS16	4.220	1.25	2.1	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938			
17	60BS17	4.460	1.25	2.4			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938			
18	60BS18	4.700	1.25	2.6			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938			
18	60BS18W	4.700	1.25	2.6						1.25									
19	60BS19	4.950	1.25	3.4			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938			
20	60BS20	5.190	1.25	3.9			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938			
21	60BS21	5.430	1.25	4.4			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938			
22	60BS22	5.670	1.25	4.7			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938			
23	60BS23	5.910	1.25	5.0			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938			
24	60BS24	6.150	1.25	5.3			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938			
25	60BS25	6.390	1.25	5.4			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938			
26	60BS26	6.630	1.25	5.8			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938			
27	60BS27	6.870	1.25	6.3			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938			
28	60BS28	7.110	1.25	6.4			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938			
29	60BS29	7.350	1.25	6.9			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938			
30	60BS30	7.590	1.25	7.1			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938			
31	60BS31	7.830	1.25	7.4			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938			
32	60BS32	8.070	1.25	7.8			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938			
33	60BS33	8.300	1.25	8.2			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938			
34	60BS34	8.540	1.25	8.5			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938			
35	60BS35	8.780	1.25	8.8			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938			
36	60BS36	9.020	1.25	9.2			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
37	60BS37	9.260	1.25	9.9			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
38	60BS38	9.500	1.25	10.5			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
39	60BS39	9.740	1.25	10.9			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
40	60BS40	9.980	1.25	11.2			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
41	60BS41	10.220	1.25	11.8			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
42	60BS42	10.460	1.25	12.4			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
43	60BS43	10.700	1.25	13.0			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
44	60BS44	10.940	1.25	13.5			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
45	60BS45	11.180	1.25	13.8			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
46	60BS46	11.420	1.25	14.1			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
47	60BS47	11.650	1.25	14.6			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
48	60BS48	11.890	1.25	15.4			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
49	60BS49	12.130	1.25	16.4			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
50	60BS50	12.370	1.25	17.3			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
51	60BS51	12.610	1.25	18.3			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
52	60BS52	12.850	1.25	19.3			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
53	60BS53	13.090	1.25	20.3			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
54	60BS54	13.330	1.75	21.0			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
55	60BS55	13.570	1.75	21.2							1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
56	60BS56	13.810	1.75	21.3							1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
57	60BS57	14.040	1.75	22.2							1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
58	60BS58	14.280	1.75	23.0							1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
59	60BS59	14.520	1.75	23.8							1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
60	60BS60	14.760	1.75	25.0							1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
70	60BS70	17.150	1.75	31.4							1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
72	60BS72	17.630	2	33.5							1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
80	60BS80	19.540	2	41.2							1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
84	60BS84	20.490	2	45.8							1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
96	60BS96	23.360	2.25	62.3							1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438
112	60BS112	27.180	2.25	81.0							1.375	1.438	1.5	1.625	1.75	1.938	2	2.188	2.438

Hub diameters vary to suit different bore sizes.

KEYWAY IS ON CENTER LINE OF TOOTH

W = Winch sprockets – KW 5/16 × 5/32 – One SS at 90°.

All Steel Stock Sprockets

No. 60 ¾" Pitch



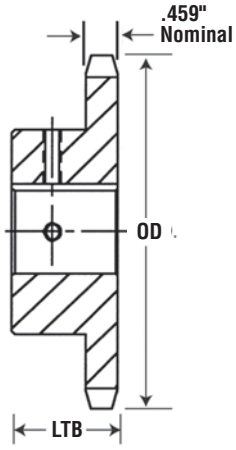
SABER TOOTH®

No. 60 — Hardened Teeth — 2 Setscrews

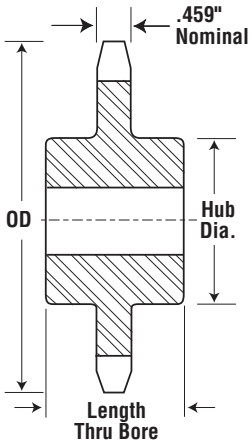
No. Teeth	Catalog Number	OD	LTB	Wt. lb	Stock Finished Bores Includes Keyway and 2 Setscrews										
9	60BS9HT	2.51	1.25	0.6	.75	.875	1								
10	60BS10HT	2.76	1.25	0.7	.75	.875	1	1.125	1.188	1.25					
11	60BS11HT	3.00	1.25	0.9	.75	.875	1	1.125	1.188	1.25					
12	60BS12HT	3.25	1.25	1.3	.75	.875	1	1.125	1.188	1.25		1.438			
13	60BS13HT	3.49	1.25	1.3	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5		
14	60BS14HT	3.74	1.25	1.6	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	
15	60BS15HT	3.98	1.25	1.7	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75
16	60BS16HT	4.22	1.25	2.1	.75	.875	1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938
17	60BS17HT	4.46	1.25	2.4			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938
18	60BS18HT	4.70	1.25	2.6			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938
19	60BS19HT	4.95	1.25	3.4			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938
20	60BS20HT	5.19	1.25	3.9			1	1.125	1.188	1.25	1.375	1.438	1.5	1.625	1.75	1.938

★ Setscrews at 90° and 180° to key.

NOTE: KEYWAY IS ON CENTER LINE OF TOOTH.



Type BS



Type C

Martin stock hardened teeth sprockets afford longer chain and sprocket life. Hardened teeth on the smaller sprocket of a roller chain drive are recommended if the drive ratio is four to one or greater or if the smaller sprocket has 24 teeth or less and is running at a speed of over 600 RPM

Single - Type C — Steel

No. Teeth	Catalog Number	OD	Bore (Inches)		Hub (Inches)		Wt. lb (Approx.)
			Stock	Rec. Max.	Diameter	Length	
12	60C12	3.250	.75	1.375	2.375 ★	2	2.25
13	60C13	3.490	.75	1.5	2.348	2	2.75
14	60C14	3.740	.75	1.75	2.563	2	3.19
15	60C15	3.980	.75	1.875	2.875	2	3.10
16	60C16	4.220	.75	2	3.0625	2	4.19
17	60C17	4.460	.75	2.25	3.25	2	4.81
18	60C18	4.700	.75	2.375	3.5	2	5.62

★ Has recessed groove in hub for chain clearance.

No. 60
¾" Pitch

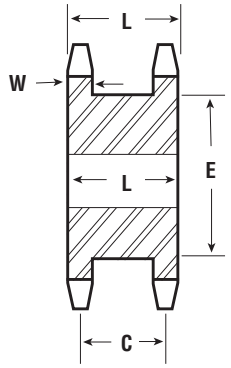
All Steel Stock Sprockets





Double Single - Type A — Steel

No. Teeth	Catalog Number	Diameter		Type	Min. Bore	Max. Bore	Dimensions				Wt. lb (Approx.)
		OD	PD				L	C	E	W (Nom.)	
13	DS60A13	3.490	3.134	A	.750	1.25	1.938	1.484	2.344	.459	2.6
14	DS60A14	3.740	3.371	A	.750	1.313	1.938	1.484	2.563	.459	3.2
15	DS60A15	3.980	3.607	A	.750	1.5	1.938	1.484	2.875	.459	3.8
16	DS60A16	4.220	3.844	A	.750	1.688	1.938	1.484	3.047	.459	4.5
17	DS60A17	4.460	4.082	A	.750	1.75	1.938	1.484	3.250	.459	5.3
18	DS60A18	4.700	4.319	A	.750	1.875	1.938	1.484	3.500	.459	6.5
19	DS60A19	4.950	4.557	A	.750	2.063	1.938	1.484	3.703	.459	6.8
20	DS60A20	5.190	4.794	A	.750	2.25	1.938	1.484	3.953	.459	7.0
21	DS60A21	5.430	5.032	A	.750	2.75	1.938	1.484	4.188	.459	7.5
22	DS60A22	5.670	5.270	A	.750	2.75	1.938	1.484	4.438	.459	11.0
23	DS60A23	5.910	5.508	A	.750	2.75	1.938	1.484	4.656	.459	11.5
24	DS60A24	6.150	5.749	A	.750	2.75	1.938	1.484	4.906	.459	12.0

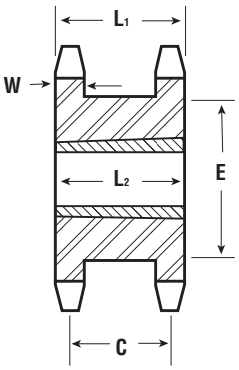


Type A

Double Single - Taper Bushed — Steel

No. Teeth	Catalog Number	Bushing Size	Diameter		Min. Bore	Max. Bore	Type	Dimensions					Wt.
			OD	PD				L_1	C	E	L_2	W Nom.	Rim Only
16	DS60ATB16H	1615	4.220	3.844	.5	1.625	A	1.938	1.484	2.984	1.5	.459	4.5
17	DS60ATB17H	1615	4.460	4.002	.5	1.625	A	1.938	1.484	3.219	1.5	.459	4.5
18	DS60ATB18H	2012	4.700	4.319	.5	2	A	1.938	1.484	3.469	1.25	.459	5.0
19	DS60ATB19H	2012	4.950	4.557	.5	2	A	1.938	1.484	3.703	1.25	.459	5.8
20	DS60ATB20H	2517	5.190	4.794	.5	2.5	A	1.938	1.484	3.953	1.75	.459	5.6
21	DS60ATB21H	2517	5.430	5.032	.5	2.5	A	1.938	1.484	4.188	1.75	.459	6.4
23	DS60ATB23H	2517	5.910	5.508	.5	2.5	A	1.938	1.484	4.672	1.75	.459	7.3
24	DS60ATB24H	2517	6.150	5.746	.5	2.5	A	1.938	1.484	4.906	1.75	.459	8.2

Sprockets with "H" suffix have hardened teeth.

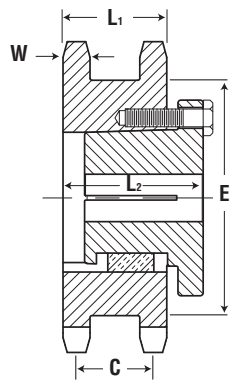


Taper Bush
Type A

Double Single - MST®— Steel

No. Teeth	Catalog Number	Bushing Size	Diameter		Min. Bore	Max. Bore	Type	Dimensions					Wt.
			OD	PD				L_1	C	E	L_2	W Nom.	Rim Only
17	DS60P17H	P1	4.460	4.002	.50	1.75	B	1.938	1.484	3.219	1.938	.459	3.9
19	DS60P19H	P1	4.950	4.557	.50	1.75	B	1.938	1.484	3.703	1.938	.459	5.3
21	DS60Q21H	Q1	5.430	5.032	.75	2.688	B	1.938	1.484	4.188	2.5	.459	5.4
22	DS60Q22H	Q1	5.670	5.270	.75	2.688	B	1.938	1.484	4.422	2.5	.459	6.2
23	DS60Q23H	Q1	5.910	5.508	.75	2.688	B	1.938	1.484	4.672	2.5	.459	6.9
24	DS60Q24H	Q1	6.150	5.746	.75	2.688	B	1.938	1.484	4.906	2.5	.459	7.6

Sprockets with "H" suffix have hardened teeth.

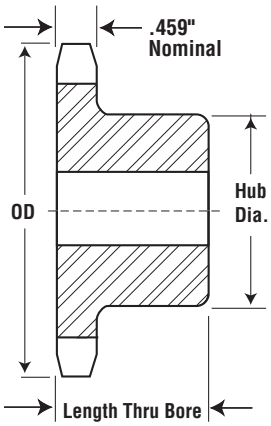


MST® Type B

Stainlessa Steel Stock Sprockets

No. 60 ¾" Pitch





Stainless Steel **Type B**

Alteration Charges

See current discount sheet for alteration charges.

Single - Type B — Stainless

Single - Type A

No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
				Stock	Rec. Max	Dia.	LTB					
8	60B8SS	2.261	B	.625	.625	1.469 ★	1.25	.54	–	–	–	–
9	60B9SS	2.511	B	.75	.875	1.563 ★	1.25	.64	–	–	–	–
10	60B10SS	2.759	B	.75	1.125	1.938 ★	1.25	.99	–	–	–	–
11	60B11SS	3.005	B	.75	1.313	2.063 ★	1.25	1.16	–	–	–	–
12	60B12SS	3.249	B	.75	1.375	2.375 ★	1.25	1.50	–	–	–	–
13	60B13SS	3.493	B	.75	1.5	2.344	1.25	1.71	–	–	–	–
14	60B14SS	3.736	B	.75	1.75	2.563	1.25	2.05	A	60A13SS	.75	.80
15	60B15SS	3.978	B	.75	1.875	2.875	1.25	2.51	A	60A14SS	.75	.94
16	60B16SS	4.220	B	.75	2	3.063	1.25	2.88	A	60A15SS	.75	1.08
17	60B17SS	4.462	B	.75	2.25	3.25	1.25	3.27	A	60A16SS	.75	1.24
18	60B18SS	4.703	B	.75	2.375	3.5	1.25	3.77	A	60A17SS	.75	1.44
19	60B19SS	4.945	B	.75	2.375	3.5	1.25	3.98	A	60A18SS	.75	1.62
20	60B20SS	5.186	B	.75	2.625	3.875	1.25	4.69	A	60A20SS	.75	1.84
21	60B21SS	5.426	B	.75	2.75	4	1.25	5.10	A	60A21SS	.75	2.34
22	60B22SS	5.666	B	.75	2.75	4	1.25	5.34	A	60A22SS	.75	2.56
23	60B23SS	5.907	B	.75	2.75	4	1.25	5.59	A	60A23SS	.75	2.81
24	60B24SS	6.147	B	.75	2.75	4	1.25	5.59	A	60A24SS	.719	3.08
25	60B25SS	6.387	B	.75	2.75	4	1.25	6.13	A	60A25SS	.719	3.35
26	60B26SS	6.627	B	.75	2.75	4	1.25	6.42	A	60A26SS	.719	3.67
28	60B28SS	7.106	B	.75	2.75	4	1.25	7.03	A	60A28SS	.719	4.28
30	60B30SS	7.586	B	.75	2.75	4	1.25	7.69	A	60A30SS	.719	4.94
32	60B32SS	8.065	B	.75	2.75	4	1.25	5.26	A	60A32SS	.719	5.52
35	60B35SS	8.783	B	1	2.75	4	1.25	9.41	A	60A35SS	.938	6.74
36	60B36SS	9.023	B	1	2.75	4	1.25	9.60	A	60A36SS	.938	6.82
40	60B40SS	9.980	B	1	2.75	4.25	1.25	11.91	A	60A40SS	.938	8.88
45	60B45SS	11.176	B	1	2.75	4.25	1.25	14.34	A	60A45SS	.938	11.30
60	60B60SS	14.761	B	1.25	2.75	4.25	1.75	25.05	A	60A60SS	1.25	20.08

★ Has recessed groove in hub for chain clearance.

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

Sprockets altered at factory (rebored with keyway and setscrew added) will be supplied with stainless setscrew.

No. 60
¾" Pitch

All Steel Stock Sprockets

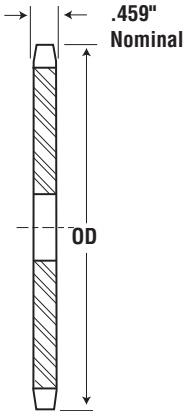
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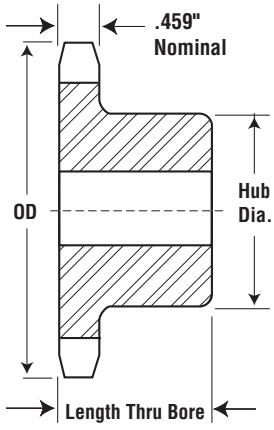
Single - Type B

No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb (Approx.)
				Stock	Rec. Max	Dia.	LTB	
8	60B8	2.260	B	.625	.625	1.469 ★	1.25	.54
9	60B9	2.510	B	.75	.875	1.563 ★	1.25	.64
10	60B10	2.760	B	.75	1.125	1.938 ★	1.25	.99
11	60B11	3.000	B	.75	1.313	2.063 ★	1.25	1.16
12	60B12	3.250	B	.75	1.375	2.375 ★	1.25	1.47
13	60B13	3.490	B	.75	1.5	2.344	1.25	1.66
14	60B14	3.740	B	.75	1.75	2.563	1.25	2.00
15	60B15	3.980	B	.75	1.875	2.875	1.25	2.51
16	60B16	4.220	B	.75	2	3.063	1.25	2.81
17	60B17	4.460	B	.75	2.25	3.25	1.25	3.22
18	60B18	4.700	B	.75	2.375	3.5	1.25	3.72
19	60B19	4.950	B	.75	2.375	3.5	1.25	3.92
20	60B20	5.190	B	.75	2.625	3.875	1.25	4.63
21	60B21	5.430	B	.75	2.75	4	1.25	5.00
22	60B22	5.670	B	.75	2.75	4	1.25	5.25
23	60B23	5.910	B	.75	2.75	4	1.25	5.48
24	60B24	6.150	B	.75	2.75	4	1.25	5.78
25	60B25	6.390	B	.75	2.75	4	1.25	6.13
26	60B26	6.630	B	.75	2.75	4	1.25	6.38
27	60B27	6.870	B	.75	2.75	4	1.25	6.72
28	60B28	7.110	B	.75	2.75	4	1.25	6.88
29	60B29	7.350	B	.75	2.75	4	1.25	7.28
30	60B30	7.590	B	.75	2.75	4	1.25	7.58
31	60B31	7.830	B	.75	2.75	4	1.25	7.72
32	60B32	8.070	B	.75	2.75	4	1.25	8.26
33	60B33	8.300	B	1	2.75	4	1.25	8.42
34	60B34	8.540	B	1	2.75	4	1.25	8.80
35	60B35	8.780	B	1	2.75	4	1.25	9.04
36	60B36	9.020	B	1	2.75	4	1.25	9.60
37	60B37	9.260	B	1	2.75	4	1.25	10.24
38	60B38	9.500	B	1	2.75	4.25	1.25	10.84
39	60B39	9.740	B	1	2.75	4.25	1.25	11.36
40	60B40	9.980	B	1	2.75	4.25	1.25	11.50
41	60B41	10.220	B	1	2.75	4.25	1.25	12.14
42	60B42	10.460	B	1	2.75	4.25	1.25	12.74
43	60B43	10.700	B	1	2.75	4.25	1.25	13.00
44	60B44	10.940	B	1.313	2.75	4.25	1.25	13.88
45	60B45	11.180	B	1.313	2.75	4.25	1.25	13.98
46	60B46	11.420	B	1.313	2.75	4.25	1.25	14.60
47	60B47	11.650	B	1.313	2.75	4.25	1.25	15.00
48	60B48	11.890	B	1.313	2.75	4.25	1.25	15.82
49	60B49	12.130	B	1.313	2.75	4.25	1.25	15.90
50	60B50	12.370	B	1.313	2.75	4.25	1.25	17.66
51	60B51	12.610	B	1.313	2.75	4.25	1.25	16.98
52	60B52	12.850	B	1.313	2.75	4.25	1.25	17.93
53	60B53	13.090	B	1.313	2.75	4.25	1.25	17.99
54	60B54	13.330	B	1.313	2.75	4.25	1.75	21.60
55	60B55	13.570	B	1.25	2.75	4.25	1.75	21.14
56	60B56	13.810	B	1.25	2.75	4.25	1.75	21.88
57	60B57	14.040	B	1.25	2.75	4.25	1.75	22.26
58	60B58	14.280	B	1.25	2.75	4.25	1.75	22.80
59	60B59	14.520	B	1.25	2.75	4.25	1.75	23.86
60	60B60	14.760	B	1.25	2.75	4.25	1.75	25.22
64	60B64	15.720	B	1.25	2.75	4.25	1.75	27.40
65	60B65	15.960	B	1.25	2.75	4.25	1.75	28.92
66	–	–	–	–	–	–	–	–
68	60B68	16.670	B	1.25	2.75	4.25	1.75	30.38
70	60B70	17.150	B	1.25	2.75	4.25	1.75	31.98
72	60B72	17.630	B	1.25	2.75	4.25	2	34.18
76	60B76	18.580	B	1.25	2.75	4.25	2	38.06
80	60B80	19.540	B	1.25	2.75	4.25	2	41.88
84	60B84	20.490	B	1.25	3.25	4.75	2	46.46
90	60B90	21.930	B	1.25	3.313	5	2.25	63.20
96	60B96	23.360	B	1.25	3.75	5.5	2.25	63.08
112	60B112	27.180	B	1.25	3.75	5.5	2.25	81.78

Single - Type A

Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
–	–	–	–
–	–	–	–
A	60A10	.75	.44
A	60A11	.75	.54
A	60A12	.75	.68
A	60A13	.75	.80
A	60A14	.75	.94
A	60A15	.75	1.08
A	60A16	.75	1.24
A	60A17	.75	1.44
A	60A18	.75	1.62
A	60A19	.75	1.84
A	60A20	.75	2.12
A	60A21	.75	2.28
A	60A22	.75	2.48
A	60A23	.75	2.68
A	60A24	.719	3.00
A	60A25	.719	3.34
A	60A26	.719	3.54
A	60A27	.719	3.96
A	60A28	.719	4.14
A	60A29	.719	4.40
A	60A30	.719	4.78
A	60A31	.719	5.24
A	60A32	.719	5.52
A	60A33	.938	5.86
A	60A34	.938	6.16
A	60A35	.938	6.78
A	60A36	.938	6.82
A	60A37	.938	7.52
A	60A38	.938	7.84
A	60A39	.938	8.28
A	60A40	.938	8.56
A	60A41	.938	9.10
A	60A42	.938	9.84
A	60A43	.938	9.74
A	60A44	.938	10.76
A	60A45	.938	11.08
A	60A46	.938	11.50
A	60A47	.938	12.32
A	60A48	.938	12.42
A	60A49	.938	12.92
A	60A50	.938	13.98
A	60A51	.938	14.58
A	60A52	.938	14.60
A	60A53	.938	15.84
A	60A54	.938	15.92
A	60A55	1.25	16.96
A	60A56	1.25	17.60
A	60A57	1.25	17.62
A	60A58	1.25	19.00
A	60A59	1.25	19.20
A	60A60	1.25	20.02
A	60A64	1.25	23.00
A	60A65	1.25	23.24
A	60A66	1.25	24.42
A	60A68	1.25	25.54
A	60A70	1.25	27.20
A	60A72	1.25	28.90
A	60A76	1.25	32.34
A	60A80	1.25	45.50
A	60A84	1.25	40.18
A	60A90	1.25	43.44
A	60A96	1.25	52.02
A	60A112	1.25	70.80





Alteration Charges

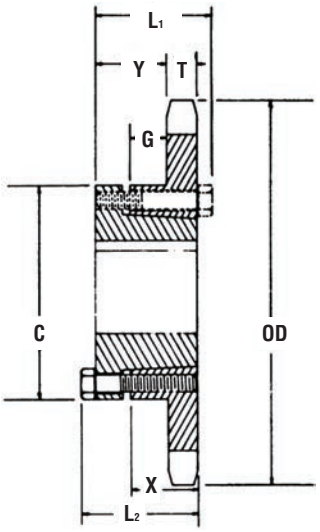
See current discount sheet for alteration charges.

★ Has recessed groove in hub for chain clearance.

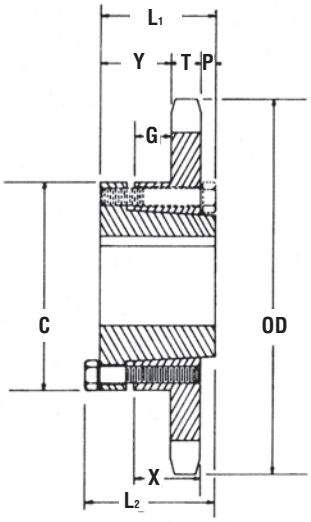
Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

Single - Type QD With Hardened Teeth

No. Teeth	Catalog Number
11	60JA11H
12	60JA12H
13	60JA13H
14	60SH14H
15	60SH15H
16	60SH16H
17	60SDS17H
18	60SDS18H
19	60SDS19H
20	60SDS20H
21	60SDS21H
22	60SDS22H
23	60SDS23H
24	60SDS24H
25	60SDS25H
26	60SK26H
27	60SK27H
28	60SK28H
30	60SK30H



QD — Type B



QD — Type B1

SABER TOOTH



Single - Type QD

No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions							Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	G	X	T	With Hub	Rim Only
11	60JA11	JA	3.000	2.662	B	1.25	1.125	1.125	2.063	.547	.172	.625	.459	1.36	.46
12	60JA12	JA	3.250	2.898	B	1.25	1.125	1.125	2.063	.547	.172	.625	.459	1.5	.60
13	60JA13	JA	3.490	3.134	B	1.25	1.125	1.125	2.063	.547	.172	.625	.459	1.66	.76
14	60SH14	SH	3.740	3.371	B	1.625	1.438	1.438	2.688	.797	.359	.813	.459	1.88	.88
15	60SH15	SH	3.980	3.607	B	1.625	1.438	1.438	2.688	.797	.359	.813	.459	2.08	1.08
16	60SH16	SH	4.220	3.844	B	1.625	1.438	1.438	2.688	.797	.359	.813	.459	2.26	1.26
17	60SDS17	SDS	4.460	4.082	B	2	1.5	1.5	3.188	.859	.297	.75	.459	2.38	1.38
18	60SDS18	SDS	4.700	4.319	B	2	1.5	1.5	3.188	.859	.297	.75	.459	2.56	1.56
19	60SDS19	SDS	4.950	4.557	B	2	1.5	1.5	3.188	.859	.297	.75	.459	2.76	1.76
20	60SDS20	SDS	5.190	4.794	B	2	1.5	1.5	3.188	.859	.297	.75	.459	3.	2.00
21	60SDS21	SDS	5.430	5.032	B	2	1.5	1.5	3.188	.859	.297	.75	.459	3.20	2.20
22	60SDS22	SDS	5.670	5.270	B	2	1.5	1.5	3.188	.859	.297	.75	.459	3.44	2.44
23	60SDS23	SDS	5.910	5.508	B	2	1.5	1.5	3.188	.859	.297	.75	.459	3.70	2.70
24	60SDS24	SDS	6.150	5.746	B	2	1.5	1.5	3.188	.859	.297	.75	.459	3.94	2.94
25	60SDS25	SDS	6.390	5.984	B	2	1.5	1.5	3.188	.859	.297	.75	.459	4.24	3.24
26	60SK26	SK	6.630	6.222	B	2.625	2.125	2.125	3.875	1.422	.797	1.25	.459	6.18	4.18
27	60SK27	SK	6.870	6.460	B	2.625	2.125	2.125	3.875	1.422	.797	1.25	.459	6.52	4.52
28	60SK28	SK	7.110	6.699	B	2.625	2.125	2.125	3.875	1.422	.797	1.25	.459	6.72	4.72
30	60SK30	SK	7.590	7.175	B	2.625	2.125	2.125	3.875	1.422	.797	1.25	.459	7.34	5.34
32	60SK32	SK	8.070	7.652	B	2.625	2.125	2.125	3.875	1.422	.797	1.25	.459	8.1	6.10
35	60SK35	SK	8.780	8.367	B	2.625	2.125	2.125	3.875	1.422	.797	1.25	.459	9.42	7.42
36	60SK36	SK	9.020	8.605	B	2.625	2.125	2.125	3.875	1.422	.797	1.25	.459	9.70	7.70
40	60SK40	SK	9.980	9.559	B	2.625	2.125	2.125	3.875	1.422	.797	1.25	.459	11.56	9.56
42	60SF42	SF	10.460	10.036	B	2.938	2.25	2.25	4.625	1.547	.797	1.25	.459	13.78	10.78
45	60SF45	SF	11.180	10.752	B	2.938	2.25	2.25	4.625	1.547	.797	1.25	.459	15.40	12.40
48	60SF48	SF	11.890	11.467	B	2.938	2.25	2.25	4.625	1.547	.797	1.25	.459	17.26	14.26
54	60SF54	SF	13.330	12.899	B	2.938	2.25	2.25	4.625	1.547	.797	1.25	.459	20.02	17.02
60	60SF60	SF	14.760	14.331	B	2.938	2.25	2.25	4.625	1.547	.797	1.25	.459	23.76	20.76
70	60SF70	SF	17.150	16.717	B	2.938	2.25	2.25	4.625	1.547	.797	1.25	.459	31.60	28.60
72	60SF72	SF	17.630	17.194	B	2.938	2.25	2.25	4.625	1.547	.797	1.25	.459	32.58	29.58
80	60SF80	SF	19.540	19.103	B	2.938	2.25	2.25	4.625	1.547	.797	1.25	.459	41.24	38.24
84	60SF84	SF	20.490	20.058	B	2.938	2.25	2.25	4.625	1.547	.797	1.25	.459	43.94	40.94
96	60SF96	SF	23.360	22.922	B	2.938	2.25	2.25	4.625	1.547	.797	1.25	.459	55.40	52.40
112	60E112	E	27.180	26.742	B1	3.5	2.625	2.938	6	2.188	1.172	1.625	.459	83.76	73.76

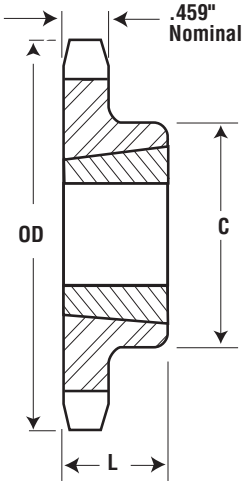
No. 60
¾" Pitch

All Steel Stock Sprockets

Single - Taper Bushed with Hardened Teeth

No. Teeth	Catalog Number
11	60BTB11H
12	60BTB12H
13	60BTB13H
14	60BTB14H
15	60BTB15H
16	60BTB16H
17	60BTB17H
18	60BTB18H
19	60BTB19H
20	60BTB20H
21	60BTB21H
22	60BTB22H
23	60BTB23H
24	60BTB24H
25	60BTB25H
26	60BTB26H
27	60BTB27H
28	60BTB28H
30	60BTB30H

SABER TOOTH



Type B



Single - Taper Bushed

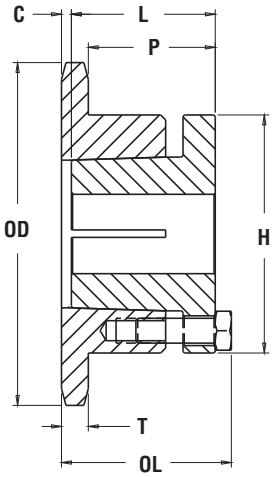
No. Teeth	Catalog Number	Bushing	Diameter		Max. Bore	Dimensions		Type	Wt. lb (Approx.)	
			OD	PD		L	C		Rim Only	Bushing Only
11	60BTB11	1008	3.004	2.662	1	0.875	1.813	B	0.6	0.3
12	60BTB12	1008	3.249	2.898	1	0.875	1.938	B	0.8	0.3
13	60BTB13	1210	3.493	3.134	1.25	1	2.469 ★	B	0.8	0.6
14	60BTB14	1210	3.736	3.371	1.25	1	2.594	B	1.0	0.6
15	60BTB15	1610	3.979	3.607	1.625	1	2.781	B	1.0	0.9
16	60BTB16	1610	4.221	3.844	1.625	1	3	B	1.4	0.9
17	60BTB17	1610	4.462	4.082	1.625	1	3.25	B	1.8	0.9
18	60BTB18	1610	4.704	4.319	1.625	1	3.5	B	1.9	0.9
19	60BTB19	1610	4.945	4.557	1.625	1	3.5	B	2.2	0.9
20	60BTB20	2012	5.185	4.794	2	1.25	3.938	B	2.2	1.7
21	60BTB21	2012	5.426	5.032	2	1.25	4	B	2.5	1.7
22	60BTB22	2012	5.666	5.270	2	1.25	4	B	2.8	1.7
23	60BTB23	2012	5.907	5.508	2	1.25	4	B	3.1	1.7
24	60BTB24	2012	6.147	5.746	2	1.25	3.563	B	3.4	1.7
25	60BTB25	2012	6.387	5.984	2	1.25	3.563	B	3.7	1.7
26	60BTB26	2012	6.627	6.222	2	1.25	3.563	B	4.0	1.7
27	60BTB27	2012	6.867	6.416	2	1.25	3.563	B	4.2	1.7
28	60BTB28	2012	7.107	6.699	2	1.25	3.563	B	4.6	1.7
30	60BTB30	2012	7.586	7.175	2	1.25	3.563	B	5.2	1.7
32	60BTB32	2012	8.065	7.652	2	1.25	3.563	B	5.6	1.7
35	60BTB35	2012	8.783	8.367	2	1.25	3.563	B	6.4	1.7
36	60BTB36	2012	9.022	8.605	2	1.25	3.563	B	6.6	1.7
40	60BTB40	2012	9.980	9.559	2	1.25	3.563	B	8.3	1.7
42	60BTB42	2012	10.458	10.036	2	1.25	3.563	B	10.0	1.7
45	60BTB45	2012	11.175	10.752	2	1.25	3.563	B	11.5	1.7
48	60BTB48	2012	11.893	11.467	2	1.25	3.563	B	13.2	1.7
54	60BTB54	2517	13.327	12.899	2.5	1.75	4.25	B	17.1	3.5
60	60BTB60	2517	14.761	14.330	2.5	1.75	4.25	B	21.0	3.5
70	60BTB70	2517	17.150	16.717	2.5	1.75	4.25	B	27.6	3.5
72	60BTB72	2517	17.628	17.194	2.5	1.75	4.25	B	30.0	3.5
80	60BTB80	2517	19.539	19.103	2.5	1.75	4.25	B	36.3	3.5
84	60BTB84	2517	20.494	20.058	2.5	1.75	4.25	B	40.6	3.5

★ Has recessed groove in hub for chain clearance.

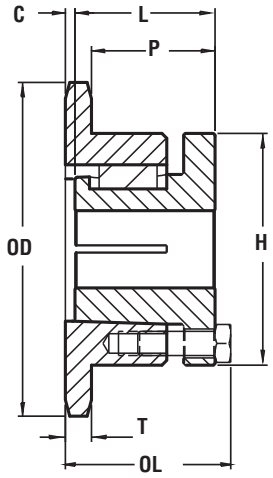
MST® Stock Sprockets

No. 60 ¾" Pitch

Single - MST® Sprockets



Type 3



Type 4

No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions						Wt. lb (Approx.)	
			OD	PD			OL	L	C	H	P	T (nom.)	With Hub	Rim Only
11	60H11H	H	3.000	2.662	3	1.5	1.813	1.25	0.375	2.5	1.156	.459	1.5	0.7
12	60H12H	H	3.250	2.898	3	1.5	1.75	1.25	0.313	2.5	1.094	.459	1.6	0.8
13	60H13H	H	3.490	3.134	3	1.5	1.5	1.25	0.063	2.5	.844	.459	1.6	0.8
13	60P13H	P1	3.490	3.134	4	1.75	2.188	1.938	–	3	1.469	.459	2.5	1.2
14	60H14H	H	3.740	3.371	3	1.5	1.5	1.25	0.063	2.5	.844	.459	1.9	1.1
14	60P14H	P1	3.740	3.371	4	1.75	2.188	1.938	–	3	1.469	.459	2.7	1.4
15	60H15H	H	3.980	3.607	3	1.5	1.5	1.25	0.063	2.5	.844	.459	2.2	1.4
15	60P15H	P1	3.980	3.607	4	1.75	2.188	1.938	–	3	1.469	.459	3.0	1.7
16	60H16H	H	4.220	3.844	3	1.5	1.5	1.25	0.063	2.5	.844	.459	2.1	1.3
16	60P16H	P1	4.220	3.844	4	1.75	2.188	1.938	–	3	1.469	.459	3.1	1.8
17	60H17H	H	4.460	4.082	3	1.5	1.5	1.25	0.063	2.5	.844	.459	2.3	1.5
17	60P17H	P1	4.460	4.082	4	1.75	2.188	1.938	–	3	1.469	.459	3.4	2.1
18	60H18H	H	4.700	4.319	3	1.5	1.5	1.25	0.063	2.5	.844	.459	2.5	1.7
18	60P18H	P1	4.700	4.319	4	1.75	2.188	1.938	–	3	1.469	.459	3.5	2.2
19	60H19H	H	4.950	4.557	3	1.5	1.5	1.25	0.063	2.5	.844	.459	2.7	1.9
19	60P19H	P1	4.950	4.557	4	1.75	2.188	1.938	–	3	1.469	.459	3.8	2.5
20	60H20H	H	5.190	4.794	3	1.5	1.5	1.25	0.063	2.5	.844	.459	2.9	2.1
20	60P20H	P1	5.190	4.794	4	1.75	2.188	1.938	–	3	1.469	.459	4.4	3.1
20	60Q20H	Q1	5.190	4.794	4	2.688	2.781	2.5	–	4.125	2.031	.459	7.0	3.5
21	60P21H	P1	5.430	5.032	4	1.75	2.188	1.938	–	3	1.469	.459	4.2	2.9
21	60Q21H	Q1	5.430	5.032	4	2.688	2.781	2.5	–	4.125	2.031	.459	7.1	3.6
22	60H22H	H	5.670	5.270	3	1.5	1.5	1.25	0.063	2.5	.844	.459	3.4	2.6
22	60P22H	P1	5.670	5.270	4	1.75	2.188	1.938	–	3	1.469	.459	4.5	3.2
22	60Q22H	Q1	5.670	5.270	4	2.688	2.781	2.5	–	4.125	2.031	.459	7.5	4.0
23	60P23H	P1	5.910	5.508	4	1.75	2.188	1.938	–	3	1.469	.459	4.8	3.5
23	60Q23H	Q1	5.910	5.508	4	2.688	2.781	2.5	–	4.125	2.031	.459	7.6	4.1
24	60H24H	H	6.150	5.746	3	1.5	1.5	1.25	0.063	2.5	.844	.459	3.8	3.0
24	60P24H	P1	6.150	5.746	4	1.75	2.188	1.938	–	3	1.469	.459	5.1	3.8
24	60Q24H	Q1	6.150	5.746	4	2.688	2.781	2.5	–	4.125	2.031	.459	8.0	4.5
25	60P25H	P1	6.390	5.984	4	1.75	2.188	1.938	–	3	1.469	.459	5.4	4.1
25	60Q25H	Q1	6.390	5.984	4	2.688	2.781	2.5	–	4.125	2.031	.459	9.4	5.9
26	60P26H	P1	6.630	6.222	4	1.75	2.188	1.938	–	3	1.469	.459	5.6	4.3
26	60Q26H	Q1	6.630	6.222	4	2.688	2.781	2.5	–	4.125	2.031	.459	9.8	6.3
27	60P27H	P1	6.870	6.460	4	1.75	2.188	1.938	–	3	1.469	.459	5.8	4.5
27	60Q27H	Q1	6.870	6.460	4	2.688	2.781	2.5	–	4.125	2.031	.459	9.9	6.4
28	60P28H	P1	7.110	6.699	4	1.75	2.188	1.938	–	3	1.469	.459	6.2	4.9
28	60Q28H	Q1	7.110	6.699	4	2.688	2.781	2.5	–	4.125	2.031	.459	10.4	6.9
29	60Q29H	Q1	7.350	6.937	4	2.688	2.781	2.5	–	4.125	2.031	.459	10.8	7.3
30	60P30H	P1	7.590	7.175	4	1.75	2.188	1.938	–	3	1.469	.459	6.9	5.6
30	60Q30H	Q1	7.590	7.175	4	2.688	2.781	2.5	–	4.125	2.031	.459	11.1	7.6
31	60Q31	Q1	7.830	7.413	4	2.688	2.781	2.5	–	4.125	2.031	.459	11.3	7.8
32	60Q32	Q1	8.070	7.652	4	2.688	2.781	2.5	–	4.125	2.031	.459	11.8	8.3
33	60Q33	Q1	8.300	7.890	4	2.688	2.781	2.5	–	4.125	2.031	.459	12.2	8.7
34	60Q34	Q1	8.540	8.129	4	2.688	2.781	2.5	–	4.125	2.031	.459	12.6	9.1
35	60Q35	Q1	8.780	8.367	4	2.688	2.781	2.5	–	4.125	2.031	.459	12.8	9.3
36	60Q36	Q1	9.020	8.605	4	2.688	2.781	2.5	–	4.125	2.031	.459	13.4	9.9
37	60Q37	Q1	9.260	8.844	4	2.688	2.781	2.5	–	4.125	2.031	.459	13.8	10.3
38	60Q38	Q1	9.500	9.082	4	2.688	2.781	2.5	–	4.125	2.031	.459	14.1	10.6
39	60Q39	Q1	9.740	9.321	4	2.688	2.781	2.5	–	4.125	2.031	.459	14.6	11.1
40	60Q40	Q1	9.980	9.559	4	2.688	2.781	2.5	–	4.125	2.031	.459	15.1	11.6
41	60Q41	Q1	10.220	9.798	4	2.688	2.781	2.5	–	4.125	2.031	.459	15.4	11.9
42	60Q42	Q1	10.460	10.036	4	2.688	2.781	2.5	–	4.125	2.031	.459	16.1	12.6
44	60Q44	Q1	10.940	10.513	4	2.688	2.781	2.5	–	4.125	2.031	.459	16.9	13.4
45	60Q45	Q1	11.180	10.752	4	2.688	2.781	2.5	–	4.125	2.031	.459	17.4	13.9
47	60Q47	Q1	11.650	11.229	4	2.688	2.781	2.5	–	4.125	2.031	.459	19.8	16.3
48	60Q48	Q1	11.890	11.467	4	2.688	2.781	2.5	–	4.125	2.031	.459	19.9	16.4
50	60Q50	Q1	12.370	11.945	4	2.688	2.781	2.5	–	4.125	2.031	.459	20.4	16.9
54	60Q54	Q1	13.330	12.899	4	2.688	2.781	2.5	–	4.125	2.031	.459	23.1	19.6
56	60Q56	Q1	13.810	13.376	4	2.688	2.781	2.5	–	4.125	2.031	.459	23.8	20.3
60	60Q60	Q1	14.760	14.331	4	2.688	2.781	2.5	–	4.125	2.031	.459	26.4	22.9
70	60Q70	Q1	17.150	16.717	4	2.688	2.781	2.5	–	4.125	2.031	.459	34.4	30.9
70	60R70	R1	17.150	16.717	4	3.75	3.156	2.875	–	5.375	2.406	.459	39.3	31.8
72	60Q72	Q1	17.630	17.194	4	2.688	2.781	2.5	–	4.125	2.031	.459	35.4	31.9
72	60R72	R1	17.630	17.194	4	3.75	3.156	2.875	–	5.375	2.406	.459	41.6	34.1
80	60Q80	Q1	19.540	19.103	4	2.688	2.781	2.5	–	4.125	2.031	.459	42.6	39.1
80	60R80	R1	19.540	19.103	4	3.75	3.156	2.875	–	5.375	2.406	.459	49.0	41.5
84	60Q84	Q1	20.490	20.058	4	2.688	2.781	2.5	–	4.125	2.031	.459	45.1	41.6
84	60R84	R1	20.490	20.058	4	3.75	3.156	2.875	–	5.375	2.406	.459	52.3	44.8
96	60Q96	Q1	23.360	22.922	4	2.688	2.781	2.5	–	4.125	2.031	.459	57.5	54.0
96	60R96	R1	23.360	22.922	4	3.75	3.156	2.875	–	5.375	2.406	.459	63.5	56.0
112	60Q112	Q1	27.180	26.742	4	2.688	2.781	2.5	–	4.125	2.031	.459	76.5	73.0
112	60R112	R1	27.180	26.742	4	3.75	3.156	2.875	–	5.375	2.406	.459	82.0	74.5

Sprockets with "H" suffix have hardened teeth.

No. 60-2
¾" Pitch

All Steel Stock Sprockets

Double - Type B

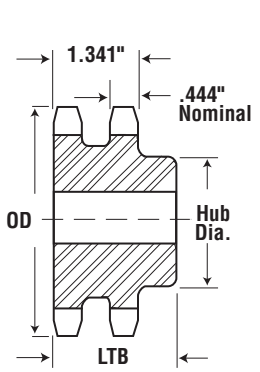
No. Teeth	Catalog Number	OD	Type	Bore (Inches)		Hub (Inches)		Wt. lb (Approx.)
				Stock	Rec. Max.	Dia.	LTB	
11	D60B11H	3.000	B	1	1.25	1.813	2.125	1.62
12	D60B12H	3.250	B	1	1.438	2.125	2.125	2.20
13	D60B13H	3.490	B	1	1.5	2.25	2.125	2.60
14	D60B14H	3.740	B	1	1.75	2.5	2.125	3.24
15	D60B15H	3.980	B	1	1.875	2.813	2.125	3.96
16	D60B16H	4.220	B	1	2	3	2.125	4.62
17	D60B17H	4.460	B	1	2.25	3.25	2.125	5.40
18	D60B18H	4.700	B	1	2.375	3.5	2.125	6.24
19	D60B19H	4.950	B	1	2.5	3.688	2.125	7.00
20	D60B20H	5.190	B	1	2.5	3.75	2.125	7.72
21	D60B21H	5.430	B	1	2.75	4.125	2.125	8.82
22	D60B22H	5.670	B	1	2.75	4.25	2.125	9.68
23	D60B23H	5.910	B	1	2.75	4.25	2.125	10.30
24	D60B24H	6.150	B	1	2.75	4.25	2.125	11.14
25	D60B25H	6.390	B	1	2.75	4.25	2.125	11.96
26	D60B26	6.630	B	1	2.75	4.25	2.125	12.70
30	D60B30	7.590	B	1	2.75	4.25	2.125	16.36
32	D60B32	8.070	B	1.25	3	4.5	2.375	19.52
35	D60B35	8.780	B	1.25	3	4.5	2.375	22.80
36	D60B36	9.020	B	1.25	3	4.5	2.375	23.82
40	D60B40	9.980	B	1.25	3.25	4.75	2.75	30.84
42	D60B42	10.460	B	1.25	3.25	4.75	2.75	33.08
45	D60B45	11.180	B	1.25	3.25	4.75	2.75	37.08
52	D60B52	12.850	B	1.25	3.25	4.75	2.75	48.70
60	D60B60	14.760	B	1.25	3.25	4.75	2.75	63.10
68	D60C68	16.670	C	1.25	3.313	5	3	53.68
72	D60C72	17.630	C	1.25	3.313	5	3	53.74
76	D60C76	18.580	C	1.25	3.313	5	3	60.28
95	D60C95	23.120	C	1.25	3.75	5.5	3.5	87.14

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

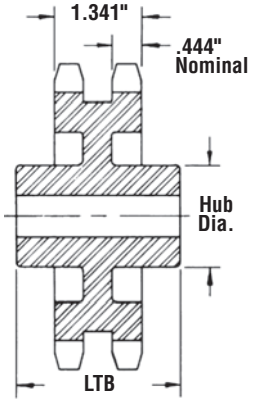
NOTE: Double 50 stock sprockets with 25 teeth or less have hardened teeth, as indicated by H suffix.

Alteration Charges

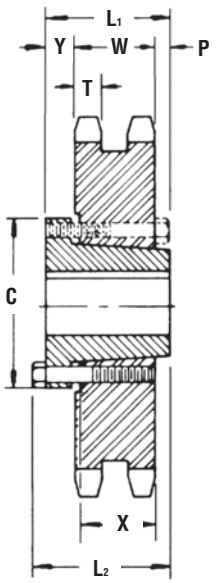
See current discount sheet for alteration charges.



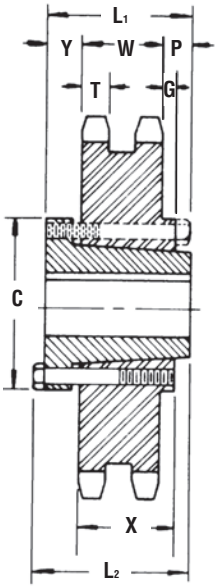
Type B



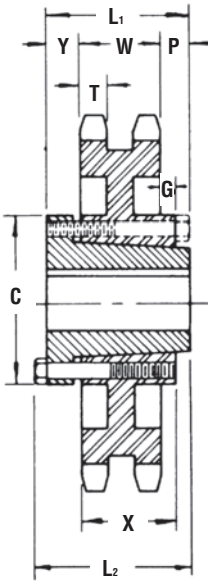
Type C



QD - Type C_1



QD - Type C_2



QD - Type C_4

Double - Type QD

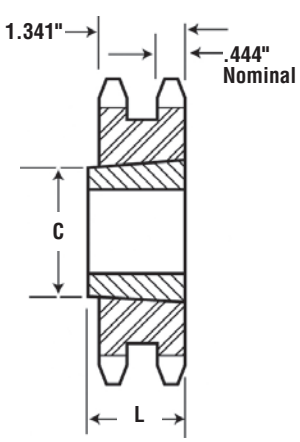
No. Teeth	Catalog Number	Bushing	Diameters		Type	Max. Bore	Dimensions									Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	P	G	X	T	W	With Hub	Rim Only
14	D60SH14H	SH	3.740	3.371	B ★	1.625	1.969	1.969	2.688	.5	–	–	–	.444	1.341	2.50	1.50
22	D60SDS22H	SDS	5.670	5.270	B ★	2	1.531	1.469	3.188	–	–	–	.75	.444	1.341	5.44	4.44
36	D60SF36	SF	9.020	8.605	C1	2.938	2	2.25	4.625	0.75	–	–	1.25	.444	1.341	19.26	16.26
42	D60E42	E	10.460	10.036	C2	3.5	2.625	2.938	6	.875	.406	.281	1.625	.444	1.341	34.04	24.04
45	D60E45	E	11.180	10.752	C2	3.5	2.625	2.938	6	.875	.406	.281	1.625	.444	1.341	38.26	28.36
52	D60E52	E	12.850	12.422	C2	3.5	2.625	2.938	6	.875	.406	.281	1.625	.444	1.341	49.52	39.52
60	D60E60	E	14.760	14.331	C2	3.5	2.625	2.938	6	.875	.406	.281	1.625	.444	1.341	63.39	53.74
68	D60E68	E	16.670	16.240	C4	3.5	2.625	2.938	6	.875	.406	.281	1.625	.444	1.341	54.32	44.32
76	D60E76	E	18.580	18.149	C4	3.5	2.625	2.938	6	.875	.406	.281	1.625	.444	1.341	61.48	51.48
95	D60E95	E	23.120	22.683	C4	3.5	2.625	2.938	6	.875	.406	.281	1.625	.444	1.341	82.96	72.96

★ Not illustrated. Dimensions listed correspond approximately to illustrations shown.

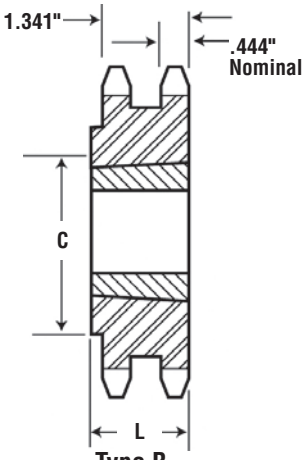
All Steel Stock Sprockets

No. 60-2 ¾" Pitch

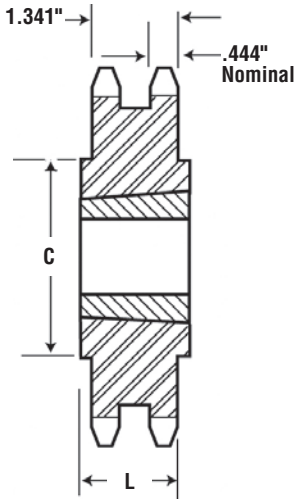




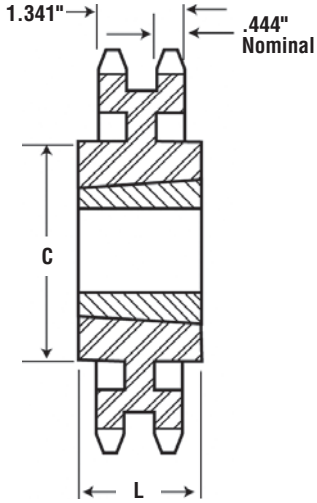
Type A



Type B



Type C_1



Type C

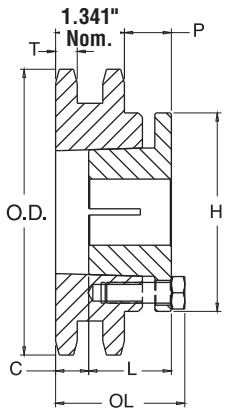
Double - Taper Bushed

No. Teeth	Catalog Number	Bushing	Diameters		Max. Bore.	Dimensions		Type	Wt. lb (Approx.)	
			OD	PD		L	C		Rim Only	Bushing Only
13	D60BTB13H	1215	3.493	3.134	1.25	1.5	2.25	B	1.2	1.6
14	D60BTB14H	1215	3.736	3.371	1.25	1.5	2.5	B	1.6	1.7
15	D60BTB15H	1615	3.979	3.607	1.625	1.5	2.813	B	1.3	1.8
16	D60BTB16H	1615	4.221	3.844	1.625	1.5	3	B	2.2	2.3
17	D60BTB17H	1615	4.462	4.082	1.625	1.5	3.25	B	2.5	2.8
18	D60ATB18H	2012	4.704	4.319	2	1.25	–	A	3.0	2.4
19	D60ATB19H	2012	4.945	4.557	2	1.25	–	A	3.5	2.9
20	D60BTB20H	2517	5.185	4.794	2.5	1.75	3.953	B	4.0	2.9
21	D60BTB21H	2517	5.426	5.032	2.5	1.75	4.188	B	5.0	3.8
25	D60BTB25H	2517	6.387	4.984	2.5	1.75	5.156	B	7.5	7.4
30	D60BTB30	2517	7.586	7.175	2.5	1.75	6.344	B	13.5	13.3
36	D60CTB36	2517	9.022	8.605	2.5	1.75	4.25	C1	17.5	17.4
42	D60CTB42	2517	10.458	10.036	2.5	1.75	4.25	C1	25.5	25.0
45	D60CTB45	2517	11.176	10.752	2.5	1.75	4.25	C1	29.5	29.3
52	D60CTB52	2517	12.849	12.422	2.5	1.75	4.25	C1	41.0	40.3
60	D60CTB60	2517	14.761	14.330	2.5	1.75	4.25	C	32.5	33.5
68	D60CTB68	2517	16.672	16.240	2.5	1.75	4.5	C	36.5	43.2
76	D60CTB76	3020	18.583	18.149	3	2	5.25	C	42.5	47.8
95	D60CTB95	3020	23.121	22.684	3	2	5.25	C	48.5	69.8

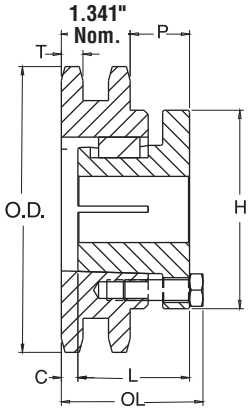
NOTE: Double 60 stock sprockets with 25 teeth or less have hardened teeth, as indicated by H suffix.

No. 60-2
¾" Pitch

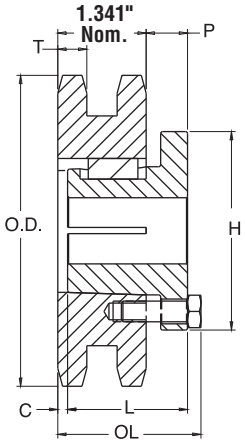
MST® Sprockets



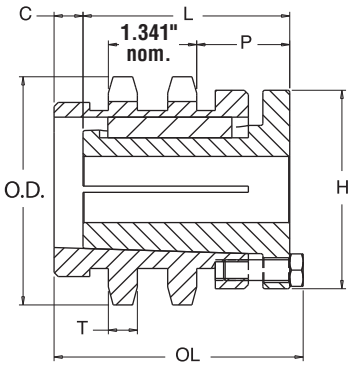
Type 11



Type 12



Type 13



Type 16

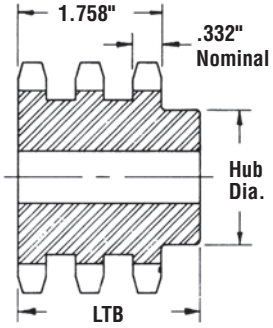
Double - MST® Sprockets

No. Teeth	Catalog Number	Bushing	Diameters		Type	Max. Bore	Dimensions						Wt. lb (Approx.)	
			OD	PD			OL	L	C	H	P	T (Nom.)	With Hub	Rim Only
13	D60P13H	P1	3.490	3.134	16	1.75	3.813	1.938	1.625	3	1.406	.444	3.8	2.5
14	D60P14H	P1	3.740	3.371	12	1.75	3	1.938	.813	3	1.406	.444	3.6	2.3
15	D60P15H	P1	3.980	3.607	12	1.75	3	1.938	.813	3	1.406	.444	4.0	2.7
16	D60P16H	P1	4.220	3.844	13	1.75	2.219	1.938	.031	3	.625	.444	3.7	2.4
17	D60P17H	P1	4.460	4.082	13	1.75	2.219	1.938	.031	3	.625	.444	4.1	2.8
18	D60P18H	P1	4.700	4.319	13	1.75	2.219	1.938	.031	3	.625	.444	4.7	3.4
19	D60P19H	P1	4.95	4.557	13	1.75	2.219	1.938	.031	3	.625	.444	5.3	4.0
20	D60P20H	P1	5.190	4.794	13	1.75	2.219	1.938	.031	3	.625	.444	6.0	4.7
21	D60Q21H	Q1	5.430	5.032	12	2.688	2.781	2.5		4.125	1.156	.444	8.3	4.8
22	D60Q22H	Q1	5.670	5.270	12	2.688	2.781	2.5		4.125	1.156	.444	9.1	5.6
23	D60Q23H	Q1	5.910	5.508	12	2.688	2.781	2.5		4.125	1.156	.444	9.8	6.3
24	D60Q24H	Q1	6.15	5.746	12	2.688	2.781	2.5		4.125	1.156	.444	10.5	7.0
25	D60Q25H	Q1	6.390	5.984	12	2.688	2.781	2.5		4.125	1.156	.444	11.4	7.9
26	D60Q26H	Q1	6.630	6.222	12	2.688	2.781	2.5		4.125	1.156	.444	12.3	8.8
27	D60Q27H	Q1	6.870	6.460	12	2.688	2.781	2.5		4.125	1.156	.444	13.1	9.6
28	D60Q28H	Q1	7.110	6.699	12	2.688	2.781	2.5		4.125	1.156	.444	14.0	10.5
30	D60Q30H	Q1	7.590	7.175	12	2.688	2.781	2.5		4.125	1.156	.444	15.8	12.3
32	D60Q32H	Q1	8.070	7.652	12	2.688	2.781	2.5		4.125	1.156	.444	17.8	14.3
35	D60Q35H	Q1	8.780	8.367	12	2.688	2.781	2.5		4.125	1.156	.444	21.2	17.7
36	D60Q36H	Q1	9.020	8.605	12	2.688	2.781	2.5		4.125	1.156	.444	21.9	18.4
40	D60Q40H	Q1	9.980	9.559	12	2.688	2.781	2.5		4.125	1.156	.444	27.4	23.9
42	D60Q42	Q1	10.460	10.036	12	2.688	2.781	2.5		4.125	1.156	.444	29.8	26.3
42	D60R42	R1	10.460	10.036	12	3.75	3.156	2.875		5.375	1.531	.444	33.2	25.7
45	D60R45	R1	11.180	10.752	12	3.75	3.156	2.875		5.375	1.531	.444	37.7	30.2
48	D60R48	R1	11.890	11.467	12	3.75	3.156	2.875		5.375	1.531	.444	42.6	35.1
52	D60R52	R1	12.85	12.422	12	3.75	3.156	2.875		5.375	1.531	.444	49.3	41.8
54	D60R54	R1	13.330	12.899	12	3.75	3.156	2.875		5.375	1.531	.444	52.6	45.1
60	D60R60	R1	14.760	14.331	12	3.75	3.156	2.875		5.375	1.531	.444	62.3	54.8
68	D60R68	R1	16.670	16.240	12	3.75	3.156	2.875		5.375	1.531	.444	81.3	73.8
72	D60R72	R1	17.630	17.194	12	3.75	3.156	2.875		5.375	1.531	.444	89.3	81.8
76	D60R76	R1	18.580	18.149	12	3.75	3.156	2.875		5.375	1.531	.444	100.5	93.0
84	D60R84	R1	20.490	20.058	12	3.75	3.156	2.875		5.375	1.531	.444	118.5	111.0
95	D60R95	R1	23.120	22.683	12	3.75	3.156	2.875		5.375	1.531	.444	155.5	148.0
96	D60R96	R1	23.360	22.922	12	3.75	3.156	2.875		5.375	1.531	.444	162.5	155.0

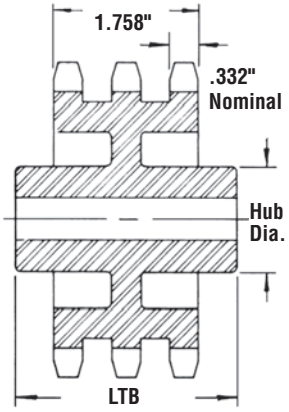
Sprockets with "H" suffix have hardened teeth.

All Steel Stock Sprockets

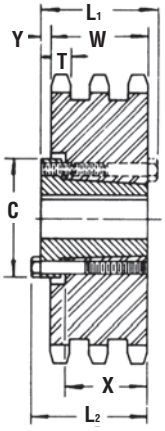
No. 60-2 ¾" Pitch



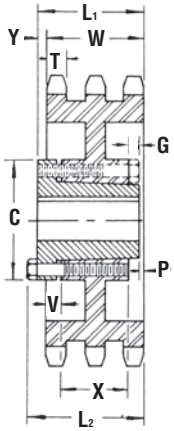
Type B



Type C



QD — Type B



QD — Type B1

Triple - Type B & C

No. Teeth	Catalog Number	OD	Type	Bore (inches)		Hub (inches)		Wt. lb (Approx.)
				Stock	Rec. Max.	Dia.	Length Thru	
11	E60B11H	3.000	B	1	1.25	1.813	3	2.5
12	E60B12H	3.250	B	1	1.438	2.125	3	3.3
13	E60B13H	3.490	B	1	1.5	2.25	3	3.9
14	E60B14H	3.740	B	1	1.75	2.5	3	4.5
15	E60B15H	3.980	B	1	1.875	2.813	3	5.4
16	E60B16H	4.220	B	1	2	3	3	6.5
17	E60B17H	4.460	B	1	2.25	3.25	3	7.7
18	E60B18H	4.700	B	1	2.375	3.5	3	8.5
19	E60B19H	4.950	B	1	2.5	3.688	3	10.0
20	E60B20H	5.190	B	1	2.5	3.75	3	11.2
21	E60B21H	5.430	B	1	2.75	4.125	3	12.5
22	E60B22H	5.670	B	1	2.75	4.25	3	13.2
23	E60B23H	5.910	B	1	2.75	4.25	3	14.6
24	E60B24H	6.150	B	1	2.75	4.25	3	15.8
25	E60B25H	6.390	B	1	2.75	4.25	3	17.0
26	E60B26	6.630	B	1	2.75	4.25	3	18.6
30	E60B30	7.590	B	1	2.75	4.25	3	23.2
35	E60B35	8.780	B	1.25	3	4.5	3.25	34.5
36	E60B36	9.020	B	1.25	3	4.5	3.25	37.0
42	E60B42	10.460	B	1.25	3.25	4.75	3.625	49.0
45	E60B45	11.180	B	1.25	3.25	4.75	3.625	57.0
52	E60C52	12.850	C	1.25	3.25	4.75	3.5	73.0
60	E60C60	14.760	C	1.25	3.25	4.75	3.5	63.0
68	E60C68	16.670	C	1.25	3.25	5	3.5	73.0
72	E60C72	17.630	C	1.25	3.25	5	3.5	85.0
76	E60C76	18.580	C	1.5	3.75	5.5	3.5	82.0
95	E60C95	23.120	C	1.5	3.75	5.5	4	105.0

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

NOTE: Triple 60 stock sprockets with 25 teeth or less have Hardened Teeth. As indicated by H suffix.

Alteration Charges

See current discount sheet for alteration charges.



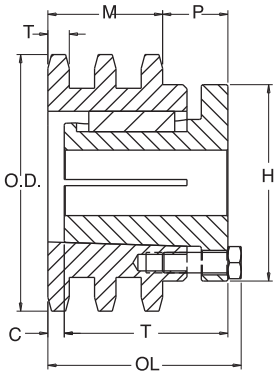
Triple - Type QD

No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions										Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	P	G	V	X	T	W	With Hub	Rim Only
36	E60E36	E	9.020	8.605	B	3.5	2.625	2.938	6	.266	.125	–	–	1.625	.444	2.238	49.0	37.0
42	E60E42	E	10.460	10.036	B	3.5	2.625	2.938	6	.266	.125	–	–	1.625	.444	2.238	62.0	50.0
52	E60E52	E	12.850	12.422	B	3.5	2.625	2.938	6	.266	.125	–	–	1.625	.444	2.238	80.0	68.0
68	E60E68	E	16.670	16.240	B1	3.5	2.813	3.109	6	.563	.188	.125	.313	1.625	.444	2.238	83.0	71.0
76	E60E76	E	18.580	18.149	B1	3.5	2.813	3.109	6	.563	.188	.125	.313	1.625	.444	2.238	99.0	87.0
95	E60E95	E	23.120	22.683	B1	3.5	2.813	3.109	6	.563	.188	.125	.313	1.625	.444	2.238	129.0	117.0

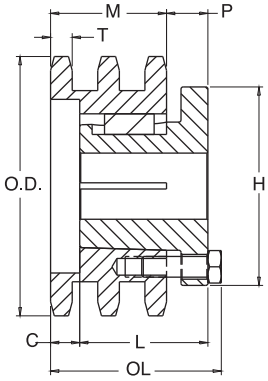
NOTE: Triple 60 stock sprockets with 25 teeth or less have hardened teeth.

No. 60-3
¾" Pitch

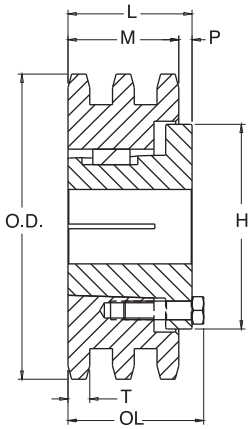
MST® Sprockets



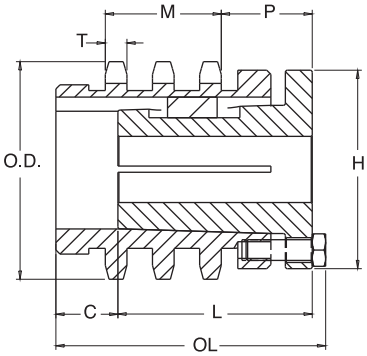
Type 22



Type 24



Type 25



Type 27

Triple - MST® Sprockets

No. Teeth	Catalog Number	Bushing	Diameters		Type	Max. Bore	Dimensions						Wt. lb (Approx.)	
			OD	PD			OL	L	C	H	P	T (Nom.)	With Hub	Rim Only
13	E60P13H	P2	3.49	3.134	27	1.75	4.7188	2.9375	1.5313	3	1.4063	.444	4.8	3.3
14	E60P14H	P2	3.74	3.371	22	1.75	3.9063	2.9375	1.7188	3	1.4063	.444	4.8	3.3
15	E60P15H	P2	3.98	3.607	22	1.75	3.9063	2.9375	1.7188	3	1.4063	.444	5.5	4.0
16	E60P16H	P1	4.22	3.844	24	1.75	3	1.9375	.9375	3	.625	.444	4.7	3.4
17	E60Q17H	Q1	4.46	4.082	27	2.6875	5	3.5	.4063	4.125	1.6563	.444	8.1	4.6
18	E60Q18H	Q1	4.7	4.319	22	2.6875	4.1875	3.5	.4063	4.125	1.6563	.444	8.5	5.0
19	E60Q19H	Q1	4.95	4.557	22	2.6875	4.1875	3.5	.4063	4.125	1.6563	.444	9.4	5.9
20	E60Q20H	Q1	5.19	4.794	22	2.6875	4.1875	3.5	.4063	4.125	1.6563	.444	10.5	6.2
21	E60Q21H	Q1	5.43	5.032	24	2.6875	3.25	2.5	.4688	4.125	.75	.444	9.2	6.4
22	E60Q22H	Q1	5.67	5.27	24	2.6875	3.25	2.5	.4688	4.125	.75	.444	10.1	6.6
23	E60Q23H	Q1	5.91	5.508	25	2.6875	2.7813	2.5		4.125	.25	.444	11.2	7.7
24	E60Q24H	Q1	6.15	5.746	25	2.6875	2.7813	2.5		4.125	.25	.444	12.3	8.8
25	E60Q25H	Q1	6.39	5.984	25	2.6875	2.7813	2.5		4.125	.25	.444	13.5	10.0
26	E60Q26H	Q1	6.63	6.222	25	2.6875	2.7813	2.5		4.125	.25	.444	14.6	11.1
27	E60Q27H	Q1	6.87	6.46	25	2.6875	2.7813	2.5		4.125	.25	.444	15.9	12.4
28	E60Q28H	Q1	7.11	6.699	25	2.6875	2.7813	2.5		4.125	.25	.444	17.1	13.6
30	E60R30H	R1	7.59	7.175	25	3.75	3.1563	2.875		5.375	.625	.444	21.5	14.0
32	E60R32H	R1	8.07	7.652	25	3.75	3.1563	2.875		5.375	.625	.444	26.5	19.0
35	E60R35H	R1	8.78	8.367	25	3.75	3.1563	2.875		5.375	.625	.444	29.5	22.0
36	E60R36H	R1	9.02	8.605	25	3.75	3.1563	2.875		5.375	.625	.444	30.9	23.4
40	E60R40	R1	9.98	9.559	25	3.75	3.1563	2.875		5.375	.625	.444	38.8	31.3
42	E60R42	R1	10.46	10.036	25	3.75	3.1563	2.875		5.375	.625	.444	42.8	35.3
52	E60R52	R1	12.85	12.422	25	3.75	3.1563	2.875		5.375	.625	.444	70.7	63.2

Sprockets with "H" suffix have hardened teeth.

All Steel Stock Sprockets

No. 80 1" Pitch

Single - Type BS — 2 Setscrews — Bored-To-Size

No. Teeth	Catalog Number	OD	LTB	Wt. lb (Approx.)	Stock Finished Bores Includes Keyway and 2 Setscrews													
9	80BS9	3.350	1.625	1.6	1	1.125	1.1875	1.25										
10	80BS10	3.680	1.625	1.7	1	1.125	1.1875	1.25										
10	80BS10W★	3.680	1.625	1.7				1.25										
11	80BS11	4.010	1.625	1.8	1	1.125	1.1875	1.25	1.375	1.4375	1.5	1.625						
11	80BS11WH★	4.010	1.625	1.8				1.25										
12	80BS12	4.330	1.625	3.0	1	1.125	1.1875	1.25	1.375	1.4375	1.5	1.625	1.75					
12	80BS12W★	4.330	1.625	3.0				1.25										
13	80BS13	4.660	1.5	3.5	1	1.125	1.1875	1.25	1.375	1.4375	1.5	1.625	1.75	1.875	1.9375	2		
14	80BS14	4.980	1.5	4.1	1	1.125	1.1875	1.25	1.375	1.4375	1.5	1.625	1.75	1.875	1.9375	2		
15	80BS15	5.300	1.5	5.2	1	1.125	1.1875	1.25	1.375	1.4375	1.5	1.625	1.75	1.875	1.9375	2		
15	80BS15W★	5.300	1.5	5.3				1.25										
16	80BS16	5.630	1.5	5.5	1		1.1875	1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	
17	80BS17	5.950	1.5	6.0	1		1.1875	1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375
18	80BS18	6.270	1.5	6.5	1		1.1875	1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375
18	80BS18W★	6.270	1.5	6.0				1.25			1.5							
19	80BS19	6.590	1.5	7.0	1		1.1875	1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375
20	80BS20	6.910	1.5	8.0	1		1.1875	1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375
21	80BS21	7.240	1.75	8.9	1		1.1875	1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375
22	80BS22	7.560	1.75	9.5	1		1.1875	1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375
23	80BS23	7.880	1.75	10.2	1		1.1875	1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375
24	80BS24	8.200	1.75	10.8	1		1.1875	1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375
25	80BS25	8.520	1.75	11.4	1		1.1875	1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375
26	80BS26	8.840	2	14.0				1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
27	80BS27	9.160	2	14.7				1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
28	80BS28	9.480	2	15.3				1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
29	80BS29	9.800	2	16.4				1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
30	80BS30	10.110	2	16.7				1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
31	80BS31	10.430	2	18.0				1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
32	80BS32	10.750	2	18.8				1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
33	80BS33	11.070	2	18.9				1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
34	80BS34	11.390	2	20.6				1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
35	80BS35	11.710	2	21.4				1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
36	80BS36	12.030	2	22.4				1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
37	80BS37	12.350	2	23.9				1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
38	80BS38	12.670	2	24.0				1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
39	80BS39	12.990	2	24.9				1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
40	80BS40	13.310	2	26.0				1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
41	80BS41	13.630	2	27.1					1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
42	80BS42	13.940	2	28.0					1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
43	80BS43	14.260	2	29.3					1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
44	80BS44	14.580	2	29.3					1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
45	80BS45	14.900	2	30.7					1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
46	80BS46	15.220	2	32.4					1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
47	80BS47	15.540	2	33.3					1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
48	80BS48	15.860	2	34.8					1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
49	80BS49	16.180	2	35.1					1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
50	80BS50	16.500	2	36.6					1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
51	80BS51	16.810	2	38.5					1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
52	80BS52	17.130	2	40.3					1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
53	80BS53	17.450	2	42.2					1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
54	80BS54	17.770	2	44.0					1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
55	80BS55	18.090	2	46.3					1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
56	80BS56	18.410	2	47.3					1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
57	80BS57	18.730	2	48.9					1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
58	80BS58	19.040	2	50.6					1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
59	80BS59	19.360	2	52.2					1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375
60	80BS60	19.680	2	58.8					1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.1875	2.4375	2.9375

★ W = Winch Sprockets — KW 5/16 × 5/32 – One S.S. at 90°

Hub diameters vary to suit different bore sizes.

KEYWAY IS ON CENTER LINE OF TOOTH.

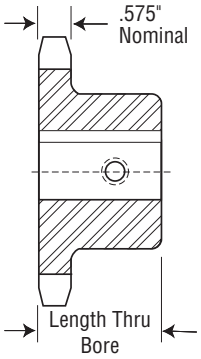
No. 80
1" Pitch

All Steel Stock Sprockets

Single Type BS Winch — 1 Setscrew

No. Teeth	Catalog Number	OD	LTB	Wt. lb (Approx.)	Stock Finished Bores Includes Keyway (see Footnote) and Set Screw at 90° from Keyway	
10	80BS10W	3.680	1.625	1.7	1.25	
11	80BS11W	4.010	1.625	1.8	1.25	
12	80BS12W	4.330	1.625	3.0	1.25	
15	80BS15W	5.300	1.5	5.2	1.25	
18	80BS18W	6.270	1.5	7.8	1.25	1.5

Keyway is on center line of tooth.



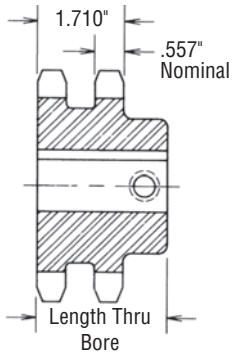
Single Type BS

Double Type BS Winch (Hardened Teeth) — 1 Setscrew

No. Teeth	Catalog Number	OD	LTB	Wt. lb (Approx.)	Stock Finished Bores Includes Keyway (see Footnote) and Set Screw at 90° from Keyway			
12	D80BS12HW	3.680	2.5	5.2	1.25	1.5	1.75	
15	D80BS15HW	5.300	2.5	9.2	1.25	1.5	1.75	
18	D80BS18HW	6.270	2.75	13.5		1.5	1.75	2
20	D80BS20HW	6.910	2.75	16.2		1.5	1.75	2
24	D80BS24HW	8.200	2.75	23.2		1.5		2

Keyway is on center line of tooth.

Footnote: 1.25" bore has a 5/16 × 5/32" keyway
1.5" bore has a 5/16 × 5/32" keyway
1.75" bore has a 3/8 × 3/16" keyway
2" bore has a 3/8 × 3/16" keyway



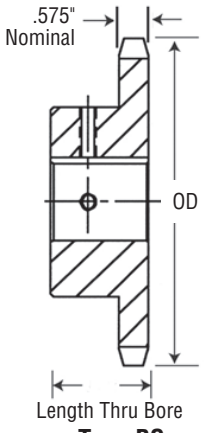
Double Type BS

SABER TOOTH®

Single - Type BS — 2 Setscrews — Bored-To-Size

No. Teeth	Catalog Number	OD	LTB	Wt. lb	Stock Finished Bores Includes Keyway and 2 Setscrews												
9	80BS9HT	3.350	1.625	1.6	1	1.125	1.1875	1.25									
10	80BS10HT	3.368	1.625	1.7	1	1.125	1.1875	1.25									
11	80BS11HT	4.010	1.625	1.8	1	1.125	1.1875	1.25	1.375	1.4375	1.5	1.625					
12	80BS12HT	4.330	1.625	3.0	1	1.125	1.1875	1.25	1.375	1.4375	1.5	1.625	1.75				
13	80BS13HT	4.660	1.5	3.5	1	1.125	1.1875	1.25	1.375	1.4375	1.5	1.625	1.75	1.875	1.9375	2	
14	80BS14HT	4.980	1.5	4.1	1	1.125	1.1875	1.25	1.375	1.4375	1.5	1.625	1.75	1.875	1.9375	2	
15	80BS15HT	5.300	1.5	5.2	1	1.125	1.1875	1.25	1.375	1.4375	1.5	1.625	1.75	1.875	1.9375	2	
16	80BS16HT	5.630	1.5	6.1	1			1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	
17	80BS17HT	5.950	1.5	7.0	1			1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.4375
18	80BS18HT	6.270	1.5	7.8	1			1.25	1.375	1.4375	1.5	1.625	1.75		1.9375	2	2.4375
19	80BS19HT	6.590	1.5	8.3				1.25		1.4375	1.5	1.625	1.75		1.9375	2	2.4375
20	80BS20HT	6.910	1.5	9.5						1.4375	1.5	1.625	1.75		1.9375	2	2.4375

Keyway is on center line of tooth.



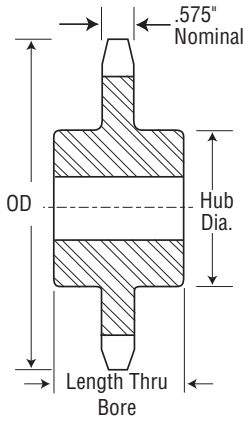
Type BS

Martin stock hardened teeth sprockets afford longer chain and sprocket life. Hardened teeth on the smaller sprocket of a roller chain drive are recommended if the drive ratio is four to one or greater or if the smaller sprocket has 24 teeth or less and is running at a speed of over 600 RPM.

Single - Type C — Steel

No. Teeth	Catalog Number	OD	Bore (inches)		Hub (inches)		Wt. lb (Approx.)
			Stock	Rec. Max.	Diameter	Length	
11	80C11	4.010	1	1.625	2.9062 ★	2.375	3.87
12	80C12	4.330	1	1.875	3.125 ★	2.375	4.31
13	80C13	4.660	1	2	3.0156	2.375	5.32
14	80C14	4.980	1	2.25	3.3438	2.375	6.44
15	80C15	5.300	1	2.5	3.8125	2.375	7.75
16	80C16	5.630	1	2.75	4	2.375	8.81

★ Has recessed groove in hub for chain clearance.



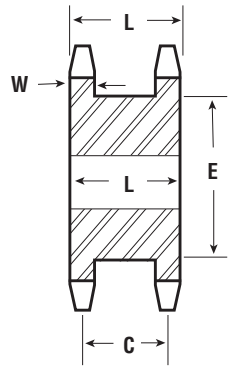
All Steel Stock Sprockets

No. 80 1" Pitch

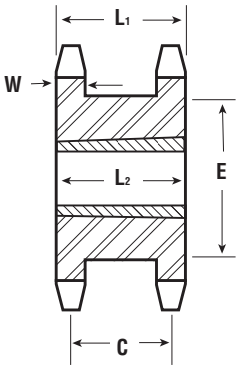




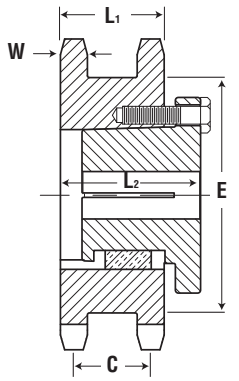




Type A



Taper Bush
Type A



MST® Type B

Double Single - Type A — Steel

No. Teeth	Catalog Number	Diameter		Type	Min. Bore	Max. Bore	Dimensions				Wt. lb (Approx.)
		OD	PD				L	C	E	W (Nom.)	
13	DS80A13	4.660	4.179	A	1	2	2.1875	1.625	3.0156	0.575	6.5
14	DS80A14	4.980	4.494	A	1	2.25	2.1875	1.625	3.3438	0.575	7.7
15	DS80A15	5.300	4.810	A	1	2.375	2.1875	1.625	3.8125	0.575	9.1
16	DS80A16	5.630	5.126	A	1	2.6875	2.1875	1.625	4	0.575	9.5
17	DS80A17	5.950	5.442	A	1	2.8125	2.1875	1.625	4.3125	0.575	10.8
18	DS80A18	6.270	5.759	A	1	3.125	2.1875	1.625	4.6406	0.575	12.1
19	DS80A19	6.590	6.076	A	1	3.25	2.1875	1.625	4.9531	0.575	12.8
20	DS80A20	6.910	6.392	A	1	3.5	2.1875	1.625	5.2813	0.575	14.0
21	DS80A21	7.240	6.710	A	1	3.75	2.1875	1.625	5.5938	0.575	16.5
22	DS80A22	7.560	7.027	A	1	3.875	2.1875	1.625	5.9219	0.575	18.4
23	DS80A23	7.880	7.344	A	1	3.875	2.1875	1.625	6.2344	0.575	20.5

Double Single - Taper Bushed— Steel

No. Teeth	Catalog Number	Bushing Size	Diameter		Min. Bore	Max. Bore	Type	Dimensions					Wt.
			OD	PD				L_1	C	E	L_2	W (Nom.)	Rim Only
17	DS80ATB17H	2517	5.950	5.442	.5	2.5	A	2.1875	1.625	4.3125	1.75	0.575	7.6
18	DS80ATB18H	2517	6.270	5.759	.5	2.5	A	2.1875	1.625	4.6406	1.75	0.575	8.7
19	DS80ATB19H	3020	6.590	6.076	.9375	3	A	2.1875	1.625	4.9531	2	0.575	9.7
20	DS80ATB20H	3020	6.910	6.392	.9375	3	A	2.1875	1.625	5.2813	2	0.575	10.0
21	DS80ATB21H	3020	7.240	6.710	.9375	3	A	2.1875	1.625	5.5938	2	0.575	12.0
22	DS80ATB22H	3020	7.560	7.027	.9375	3	A	2.1875	1.625	5.9219	2	0.575	13.0
23	DS80ATB23H	3020	7.880	7.344	.9375	3	A	2.1875	1.625	6.2344	2	0.575	14.5

Sprockets with "H" suffix have hardened teeth.

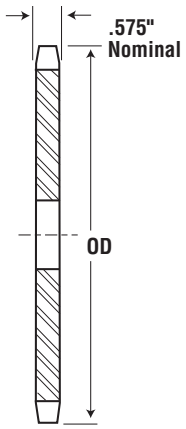
Double Single - MST®— Steel

No. Teeth	Catalog Number	Bushing Size	Diameter		Min. Bore	Max. Bore	Type	Dimensions					Wt.
			OD	PD				L_1	C	E	L_2	W (Nom.)	Rim Only
17	DS80Q17H	Q1	5.950	5.442	.75	2.6875	B	2.1875	1.625	4.3125	3.2344	0.575	7.2
19	DS80Q19H	Q1	6.590	6.076	.75	2.6875	B	2.1875	1.625	4.9531	3.2344	0.575	10.5
20	DS80Q20H	Q1	6.910	6.392	.75	2.6875	B	2.1875	1.625	5.2813	3.2344	0.575	12.2
21	DS80R21H	R1	7.240	6.710	1.125	3.75	B	2.1875	1.625	5.5938	3.3594	0.575	12.8
23	DS80R23H	R1	7.880	7.344	1.125	3.75	B	2.1875	1.625	6.2344	3.3594	0.575	13.3

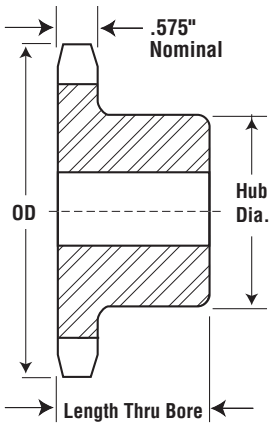
Sprockets with "H" suffix have hardened teeth.

No. 80
1" Pitch

Stainless Steel Stock Sprockets



Type A



Type B

Single - Type B — Stainless

Single - Type A

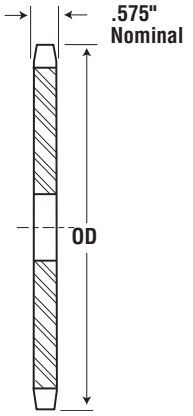
No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
				Stock	Rec. Max	Dia.	LTB					
10	80B10SS	3.680	B	1	1.5	2.5625 ★	1.625	2.14	–	–	–	–
11	80B11SS	4.010	B	1	1.625	2.8125 ★	1.625	2.72	–	–	–	–
12	80B12SS	4.330	B	1	1.875	3.125 ★	1.625	3.42	A	80A12SS	.9375	1.50
13	80B13SS	4.660	B	1	2	3	1.5	3.53	A	80A13SS	.9375	1.80
14	80B14SS	4.980	B	1	2.25	3.25	1.5	4.19	A	80A14SS	.9375	2.20
15	80B15SS	5.300	B	1	2.5	3.8125	1.5	5.38	A	80A15SS	.9375	2.50
16	80B16SS	5.630	B	1	2.75	4	1.5	6.07	A	80A16SS	.9375	2.90
17	80B17SS	5.950	B	1	2.75	4	1.5	6.45	A	80A17SS	.9375	3.30
18	80B18SS	6.270	B	1	2.75	4.25	1.5	7.34	A	80A18SS	.9375	3.70
19	80B19SS	6.590	B	1	2.75	4.25	1.5	7.80	A	80A19SS	.9375	4.10
20	80B20SS	6.910	B	1	2.75	4.25	1.5	8.22	A	80A20SS	.9375	4.70
21	80B21SS	7.240	B	1	2.75	4.25	1.75	9.40	A	80A21SS	.9375	5.10
22	80B22SS	7.560	B	1	2.75	4.25	1.75	10.00	A	80A22SS	.9375	5.61
23	80B23SS	7.880	B	1	2.75	4.25	1.75	10.70	A	80A23SS	.9375	6.10
24	80B24SS	8.200	B	1	2.75	4.25	1.75	11.36	A	80A24SS	.9375	6.73
25	80B25SS	8.520	B	1	2.75	4.25	1.75	11.90	A	80A25SS	.9375	7.26
26	80B26SS	8.840	B	1.25	3.25	4.75	2	14.57	A	80A26SS	1.1875	6.73
30	80B30SS	10.110	B	1.1875	3.25	4.75	2	17.50	A	80A30SS	1.1875	10.53
35	80B35SS	11.710	B	1.1875	3.25	4.75	2	21.48	A	80A35SS	1.1875	13.07
40	80B40SS	13.310	B	1.1875	3.25	4.75	2	26.00	A	80A40SS	1.1875	19.22

★ Has recessed groove in hub for chain clearance.

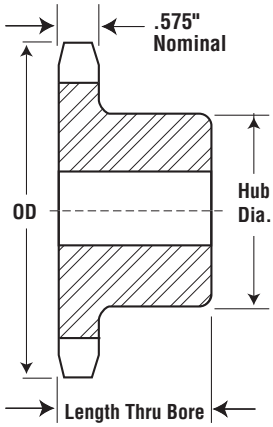
Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

All Steel Stock Sprockets

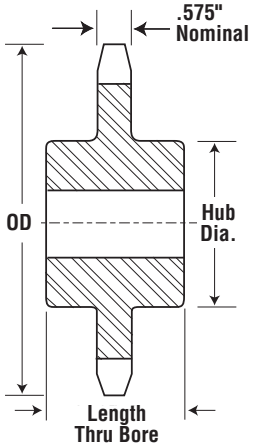
No. 80 1" Pitch



Type A



Type B



Type C

Single - Type B & C

Single - Type A

No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
				Stock	Rec. Max	Dia.	LTB					
8	80B8	3.010	B	1	1	1.9375 ★	1.625	1.4	–	–	–	–
9	80B9	3.350	B	1	1.3125	2.25 ★	1.625	1.6	A	80A9	.9375	.8
10	80B10	3.680	B	1	1.5	2.5625 ★	1.625	2.2	A	80A10	.9375	1.0
11	80B11	4.010	B	1	1.625	2.8125 ★	1.625	3.2	A	80A11	.9375	1.3
12	80B12	4.330	B	1	1.875	3.125 ★	1.625	3.4	A	80A12	.9375	1.5
13	80B13	4.660	B	1	2	3	1.5	3.5	A	80A13	.9375	1.8
14	80B14	4.980	B	1	2.25	3.25	1.5	4.1	A	80A14	.9375	2.2
15	80B15	5.300	B	1	2.5	3.8125	1.5	5.3	A	80A15	.9375	2.5
16	80B16	5.630	B	1	2.75	4	1.5	5.9	A	80A16	.9375	2.9
17	80B17	5.950	B	1	2.75	4	1.5	6.6	A	80A17	.9375	3.3
18	80B18	6.270	B	1	2.75	4.25	1.5	7.3	A	80A18	.9375	3.7
19	80B19	6.590	B	1	2.75	4.25	1.5	7.8	A	80A19	.9375	4.1
20	80B20	6.910	B	1	2.75	4.25	1.5	8.4	A	80A20	.9375	4.7
21	80B21	7.240	B	1	2.75	4.25	1.75	9.4	A	80A21	.9375	4.9
22	80B22	7.560	B	1	2.75	4.25	1.75	10.0	A	80A22	.9375	5.5
23	80B23	7.880	B	1	2.75	4.25	1.75	10.7	A	80A23	.9375	6.3
24	80B24	8.200	B	1	2.75	4.25	1.75	11.3	A	80A24	.9375	6.7
25	80B25	8.520	B	1	2.75	4.25	1.75	11.9	A	80A25	.9375	7.2
26	80B26	8.840	B	1.25	3.25	4.75	2	14.3	A	80A26	1.1875	7.8
27	80B27	9.160	B	1.25	3.25	4.75	2	15.4	A	80A27	1.1875	8.6
28	80B28	9.480	B	1.25	3.25	4.75	2	16.0	A	80A28	1.1875	9.3
29	80B29	9.800	B	1.1875	3.25	4.75	2	17.1	A	80A29	1.1875	9.8
30	80B30	10.110	B	1.1875	3.25	4.75	2	17.4	A	80A30	1.1875	10.7
31	80B31	10.430	B	1.1875	3.25	4.75	2	18.7	A	80A31	1.1875	11.3
32	80B32	10.750	B	1.1875	3.25	4.75	2	19.5	A	80A32	1.1875	12.1
33	80B33	11.070	B	1.1875	3.25	4.75	2	19.6	A	80A33	1.1875	13.6
34	80B34	11.390	B	1.1875	3.25	4.75	2	21.3	A	80A34	1.1875	14.3
35	80B35	11.710	B	1.1875	3.25	4.75	2	22.1	A	80A35	1.1875	14.8
36	80B36	12.030	B	1.1875	3.25	4.75	2	23.1	A	80A36	1.1875	16.1
37	80B37	12.350	B	1.1875	3.25	4.75	2	23.8	A	80A37	1.1875	16.8
38	80B38	12.670	B	1.1875	3.25	4.75	2	24.7	A	80A38	1.1875	17.2
39	80B39	12.990	B	1.1875	3.25	4.75	2	25.6	A	80A39	1.1875	17.9
40	80B40	13.310	B	1.1875	3.25	4.75	2	26.7	A	80A40	1.1875	18.9
41	80B41	13.630	B	1.25	3.25	4.75	2	27.8	A	80A41	1.25	21.0
42	80B42	13.940	B	1.25	3.25	4.75	2	28.7	A	80A42	1.25	21.8
43	80B43	14.260	B	1.25	3.25	4.75	2	29.4	A	80A43	1.25	23.6
44	80B44	14.580	B	1.25	3.25	4.75	2	29.9	A	80A44	1.25	24.3
45	80B45	14.900	B	1.25	3.25	4.75	2	31.4	A	80A45	1.25	25.2
46	80B46	15.220	B	1.25	3.25	4.75	2	33.1	A	80A46	1.25	26.6
47	80B47	15.540	B	1.25	3.25	4.75	2	34.0	A	80A47	1.25	26.4
48	80B48	15.860	B	1.25	3.25	4.75	2	35.5	A	80A48	1.25	27.8
49	80B49	16.180	B	1.25	3.25	4.75	2	35.8	A	80A49	1.25	28.9
50	80B50	16.500	B	1.25	3.25	4.75	2	37.3	A	80A50	1.25	30.9
51	80B51	16.810	B	1.25	3.25	4.75	2	38.6	A	80A51	1.25	32.2
52	80B52	17.130	B	1.25	3.25	4.75	2	39.4	A	80A52	1.25	33.0
53	80B53	17.450	B	1.25	3.25	4.75	2	41.3	A	80A53	1.25	34.9
54	80B54	17.770	B	1.25	3.5	5.25	2	44.7	A	80A54	1.25	36.6
55	80B55	18.090	B	1.25	3.5	5.25	2	45.6	A	80A55	1.25	37.5
56	80B56	18.410	B	1.25	3.5	5.25	2	47.5	A	80A56	1.25	39.4
57	80B57	18.730	B	1.25	3.5	5.25	2	48.5	A	80A57	1.25	40.4
58	80B58	19.040	B	1.25	3.5	5.25	2	50.5	A	80A58	1.25	41.3
59	80B59	19.360	B	1.25	3.5	5.25	2	52.1	A	80A59	1.25	42.9
60	80B60	19.680	B	1.25	3.5	5.25	2	54.5	A	80A60	1.25	45.3
65	80B65	21.270	B	1.25	3.5	5.25	2	61.8	A	80A65	1.25	52.2
70	80C70	22.870	C	1.5	4.25	6.25	3.5	75.7	A	80A70	1.5	59.8
72	80C72	23.500	C	1.5	4.25	6.25	3.5	81.4	A	80A72	1.5	65.7
76	80C76	24.780	C	1.5	4.25	6.25	3.5	87.8	A	80A76	1.5	70.2
80	80C80	26.050	C	1.5	4.25	6.25	3.5	89.9	A	80A80	1.5	79.6
84	80C84	27.330	C	1.5	4.25	6.25	3.5	99.2	A	80A84	1.5	86.1
90	80C90	29.240	C	1.5	4.25	6.25	3.5	106.0	A	80A90	1.5	101.0
96	80C96	31.150	C	1.5	4.25	6.25	3.5	117.0	A	80A96	1.5	120.0
112	80C112	36.240	C	1.5	4.25	6.25	3.5	154.0	A	80A112	1.5	165.0

★ Has recessed groove in hub for chain clearance.

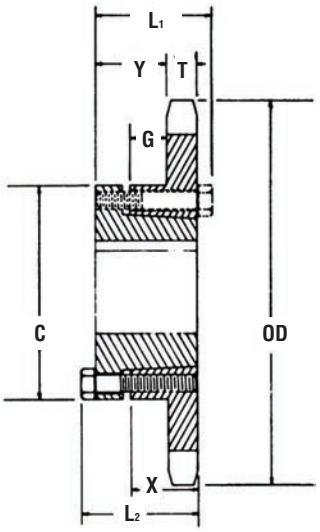
Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

No. 80
1" Pitch

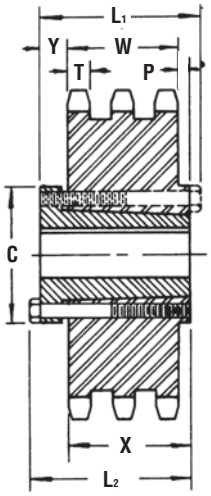
All Steel Stock Sprockets

Single - Type QD With Hardened Teeth

No. Teeth	Catalog Number
11	80SH11H
12	80SH12H
13	80SDS13H
14	80SDS14H
15	80SK15H
16	80SK16H
17	80SK17H
18	80SK18H
19	80SK19H
20	80SF20H
21	80SF21H
22	80SF22H
23	80SF23H
24	80SF24H
25	80SF25H
26	80SF26H
27	80SF27H
28	80SF28H
30	80SF30H



QD — Type B



QD — Type C

SABER TOOTH



Single - Type QD

No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions								Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	P	G	X	T	With Hub	Rim Only
11	80SH11	SH	4.010	3.550	B	1.625	1.4375	1.4375	2.6875	0.6563	-	0.2344	0.8125	0.575	2.0	1.0
12	80SH12	SH	4.330	3.864	B	1.625	1.4375	1.4375	2.6875	0.6563	-	0.2344	0.8125	0.575	2.4	1.4
13	80SDS13	SDS	4.660	4.179	B	2	1.5	1.5	3.1875	0.7344	-	0.1719	0.75	0.575	2.5	1.5
14	80SDS14	SDS	4.980	4.494	B	2	1.5	1.5	3.1875	0.7344	-	0.1719	0.75	0.575	2.8	1.8
15	80SK15	SK	5.300	4.810	B	2.625	2.125	2.1250	3.875	1.2969	-	0.6563	1.25	0.575	4.5	2.5
16	80SK16	SK	5.630	5.126	B	2.625	2.125	2.125	3.875	1.2969	-	0.6563	1.25	0.575	5.1	3.1
17	80SK17	SK	5.950	5.442	B	2.625	2.125	2.125	3.875	1.2969	-	0.6563	1.25	0.575	5.5	3.5
18	80SK18	SK	6.270	5.759	B	2.625	2.125	2.125	3.875	1.2969	-	0.6563	1.25	0.575	5.9	3.9
19	80SK19	SK	6.590	6.076	B	2.625	2.125	2.125	3.875	1.2969	-	0.6563	1.25	0.575	6.4	4.4
20	80SF20	SF	6.910	6.392	B	2.9375	2.25	2.25	4.625	1.4219	-	0.6563	1.25	0.575	8.3	5.3
21	80SF21	SF	7.240	6.710	B	2.9375	2.25	2.25	4.625	1.4219	-	0.6563	1.25	0.575	8.7	5.7
22	80SF22	SF	7.560	7.027	B	2.9375	2.25	2.25	4.625	1.4219	-	0.6563	1.25	0.575	9.3	6.3
23	80SF23	SF	7.880	7.344	B	2.9375	2.25	2.25	4.625	1.4219	-	0.6563	1.25	0.575	9.8	6.8
24	80SF24	SF	8.200	7.661	B	2.9375	2.25	2.25	4.625	1.4219	-	0.6563	1.25	0.575	10.5	7.5
25	80SF25	SF	8.520	7.979	B	2.9375	2.25	2.25	4.625	1.4219	-	0.6563	1.25	0.575	11.0	8.0
26	80SF26	SF	8.840	8.296	B	2.9375	2.25	2.25	4.625	1.4219	-	0.6563	1.25	0.575	11.6	8.6
27	80SF27	SF	9.160	8.614	B	2.9375	2.25	2.25	4.625	1.4219	-	0.6563	1.25	0.575	12.4	9.4
28	80SF28	SF	9.480	8.931	B	2.9375	2.25	2.25	4.625	1.4219	-	0.6563	1.25	0.575	13.2	10.2
30	80SF30	SF	10.110	9.567	B	2.9375	2.25	2.25	4.625	1.4219	-	0.6563	1.25	0.575	14.3	11.3
32	80SF32	SF	10.750	10.202	B	2.9375	2.25	2.25	4.625	1.4219	-	0.6563	1.25	0.575	16.0	13.0
33	80SF33	SF	11.070	10.520	B	2.9375	2.25	2.25	4.625	1.4219	-	0.6563	1.25	0.575	16.5	13.5
34	80SF34	SF	11.390	10.838	B	2.9375	2.25	2.25	4.625	1.4219	-	0.6563	1.25	0.575	17.1	14.1
35	80SF35	SF	11.710	11.156	B	2.9375	2.25	2.25	4.625	1.4219	-	0.6563	1.25	0.575	18.5	15.5
36	80SF36	SF	12.030	11.474	B	2.9375	2.25	2.25	4.625	1.4219	-	0.6563	1.25	0.575	19.9	16.9
40	80SF40	SF	13.310	12.746	B	2.9375	2.25	2.25	4.625	1.4219	-	0.6563	1.25	0.575	23.6	20.6
42	80SF42	SF	13.940	13.382	B	2.9375	2.25	2.25	4.625	1.4219	-	0.6563	1.25	0.575	25.4	22.4
45	80SF45	SF	14.900	14.336	B	2.9375	2.25	2.25	4.625	1.4219	-	0.6563	1.25	0.575	28.1	25.1
48	80SF48	SF	15.860	15.290	B	2.9375	2.25	2.25	4.625	1.4219	-	0.6563	1.25	0.575	31.6	28.6
54	80SF54	SF	17.770	17.198	B	2.9375	2.25	2.25	4.625	1.4219	-	0.6563	1.25	0.575	39.8	36.8
60	80SF60	SF	19.680	19.107	B	2.9375	2.25	2.25	4.625	1.4219	-	0.6563	1.25	0.575	48.8	45.8
70	80E70	E	22.870	22.289	C	3.5	2.625	2.9375	6	0.875	1.1875	1.0469	1.625	0.575	65.6	55.6
72	80E72	E	23.500	22.926	C	3.5	2.625	2.9375	6	0.875	1.1875	1.0469	1.625	0.575	69.3	59.3
80	80E80	E	26.050	25.471	C	3.5	2.625	2.9375	6	0.875	1.1875	1.0469	1.625	0.575	79.2	69.2
84	80E84	E	27.330	26.744	C	3.5	2.625	2.9375	6	0.875	1.1875	1.0469	1.625	0.575	84.9	74.9
96	80E96	E	31.150	30.563	C	3.5	2.625	2.9375	6	0.875	1.1875	1.0469	1.625	0.575	108.0	97.5
112	80F112	F	36.240	35.655	C	3.9375	3.625	4	6.625	1	2.0625	1.9219	2.5	0.575	145.0	134.0

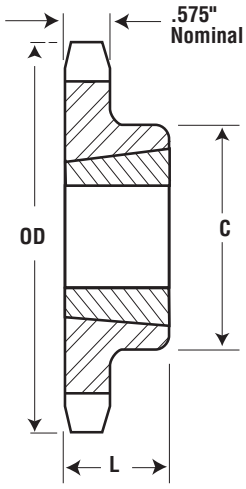
All Steel Stock Sprockets

No. 80 1" Pitch

Single - Taper Bushed with Hardened Teeth

No. Teeth	Catalog Number
10	80BTB10H
11	80BTB11H
12	80BTB12H
13	80BTB13H
14	80BTB14H
15	80BTB15H
16	80BTB16H
17	80BTB17H
18	80BTB18H
19	80BTB19H
20	80BTB20H
21	80BTB21H
22	80BTB22H
23	80BTB23H
24	80BTB24H
25	80BTB25H
26	80BTB26H
27	80BTB27H
28	80BTB28H
30	80BTB30H

SABER TOOTH



Type B



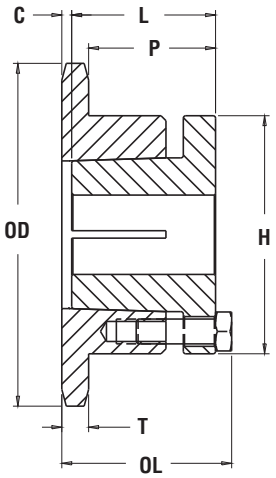
Single - Taper Bushed

No. Teeth	Catalog Number	Bushing	Diameter		Max. Bore	Dimensions		Type	Wt. lb (Approx.)	
			OD	PD		L	C		Rim Only	Bushing Only
10	80BTB10	1215	3.678	3.236	1.25	1.5	2.375 ★	B	1.1	0.8
11	80BTB11	1215	4.006	3.549	1.25	1.5	2.4688 ★	B	1.5	0.8
12	80BTB12	1615	4.332	3.864	1.625	1.5	3 ★	B	1.8	1.2
13	80BTB13	1615	4.657	4.179	1.625	1.5	3	B	2.3	1.2
14	80BTB14	1615	4.982	4.494	1.625	1.5	3.3438	B	2.5	1.2
15	80BTB15	1615	5.305	4.810	1.625	1.5	3.5	B	2.7	1.2
16	80BTB16	2012	5.627	5.126	2	1.25	4	B	2.8	1.7
17	80BTB17	2012	5.950	5.442	2	1.25	4	B	3.1	1.7
18	80BTB18	2012	6.271	5.759	2	1.25	3.5625	B	2.6	1.7
19	80BTB19	2012	6.593	6.076	2	1.25	3.5625	B	4.1	1.7
20	80BTB20	2517	6.914	6.392	2.5	1.75	4.25	B	5.5	1.7
21	80BTB21	2517	7.235	6.710	2.5	1.75	4.25	B	6.0	3.5
22	80BTB22	2517	7.555	7.027	2.5	1.75	4.25	B	6.5	3.5
23	80BTB23	2517	7.875	7.344	2.5	1.75	4.25	B	7.0	3.5
24	80BTB24	2517	8.196	7.661	2.5	1.75	4.25	B	7.5	3.5
25	80BTB25	2517	8.516	7.979	2.5	1.75	4.25	B	8.1	3.5
26	80BTB26	2517	8.836	8.296	2.5	1.75	4.25	B	8.8	3.5
27	80BTB27	2517	9.156	8.614	2.5	1.75	4.25	B	9.0	3.5
28	80BTB28	2517	9.475	8.931	2.5	1.75	4.25	B	9.5	3.5
30	80BTB30	2517	10.114	9.567	2.5	1.75	4.25	B	11.5	3.5
32	80BTB32	2517	10.753	10.202	2.5	1.75	4.25	B	12.0	3.5
35	80BTB35	2517	11.711	11.156	2.5	1.75	4.25	B	15.2	3.5
36	80BTB36	2517	12.030	11.474	2.5	1.75	4.25	B	17.0	3.5
40	80BTB40	2517	13.306	12.746	2.5	1.75	4.25	B	21.0	3.5
45	80BTB45	2517	14.901	14.336	2.5	1.75	4.25	B	26.5	3.5
48	80BTB48	2517	15.857	15.290	2.5	1.75	4.25	B	29.5	3.5
54	80BTB54	2517	17.769	17.198	2.5	1.75	4.25	B	38.5	3.5
60	80BTB60	2517	19.681	19.107	2.5	1.75	4.25	B	45.0	3.5
70	80BTB70	3020	22.867	22.289	3	2	5.25	B	52.3	6.5
80	80BTB80	3020	26.052	25.471	3	2	5.25	B	69.2	6.5

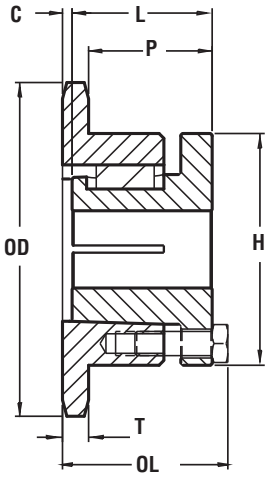
★ Has recessed groove in hub for chain clearance.

No. 80
1" Pitch

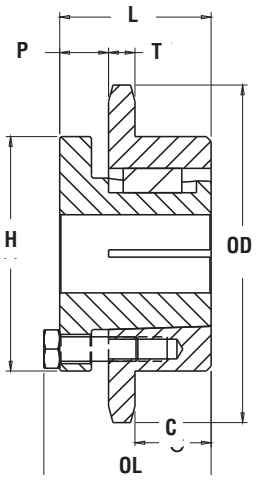
MST® Sprockets



Type 3



Type 4



Type 5

Sprockets with "H" suffix have hardened teeth.

No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions						Wt. lb (Approx.)	
			OD	PD			OL	L	C	H	P	T	With Hub	Rim Only
10	80H10H	H	3.68	3.236	3	1.5	2.0938	1.25	.6563	2.5	1.3281	.575	2.8	2
11	80H11H	H	4.01	3.55	3	1.5	1.5	1.25	.0625	2.5	.75	.575	2.1	1.3
11	80P11H	P	4.01	3.55	4	1.75	2.3	1.9	.1563	3	1.5313	.575	2.4	1.6
12	80P12H	P1	4.33	3.864	4	1.75	2.2	1.9		3	1.375	.575	3.3	2
13	80P13H	P1	4.66	4.179	4	1.75	2.188	1.9375		3	1.375	.575	3.7	2.4
14	80P14H	P1	4.98	4.494	4	1.75	2.188	1.938		3	1.375	.575	3.9	2.6
14	80Q14H	Q1	4.98	4.494	4	2.6875	2.781	2.5		4.125	1.9375	.575	6.4	2.9
15	80P15H	P1	5.3	4.81	4	1.75	2.188	1.938		3	1.375	.575	4.3	3
15	80Q15H	Q1	5.3	4.81	4	2.6875	2.781	2.5		4.125	1.9375	.575	6.9	3.4
16	80P16H	P1	5.63	5.126	4	1.75	2.19	1.94		3	1.375	.575	4.8	3.5
16	80Q16H	Q1	5.63	5.126	4	2.6875	2.78	2.5		4.125	1.9375	.575	8.1	4.6
17	80P17H	P1	5.95	5.442	4	1.75	2.19	1.94		3	1.375	.575	5.1	3.8
17	80Q17H	Q1	5.95	5.442	4	2.6875	2.78	2.5		4.125	1.9375	.575	8.8	5.3
18	80P18H	P1	6.27	5.759	4	1.75	2.19	1.94		3	1.375	.575	5.7	4.4
18	80Q18H	Q1	6.27	5.759	4	2.6875	2.78	2.5		4.125	1.9375	.575	9.5	6
19	80P19H	P1	6.59	6.076	4	1.75	2.19	1.94		3	1.375	.575	6.2	4.9
19	80Q19H	Q1	6.59	6.076	4	2.6875	2.78	2.5		4.125	1.9375	.575	10	6.5
20	80Q20H	Q1	6.91	6.392	4	2.6875	2.78	2.5		4.125	1.9375	.575	10.5	7
21	80Q21H	Q1	7.24	6.71	4	2.6875	2.78	2.5		4.125	1.9375	.575	10.8	7.3
22	80Q22H	Q1	7.56	7.027	4	2.6875	2.78	2.5		4.125	1.9375	.575	11.7	8.2
23	80Q23H	Q1	7.88	7.344	4	2.6875	2.78	2.5		4.125	1.9375	.575	12.3	8.8
24	80Q24H	Q1	8.2	7.661	4	2.6875	2.78	2.5		4.125	1.9375	.575	12.6	9.1
25	80Q25H	Q1	8.52	7.979	4	2.6875	2.78	2.5		4.125	1.9375	.575	13.1	9.6
26	80Q26H	Q1	8.84	8.296	4	2.6875	2.78	2.5		4.125	1.9375	.575	14.1	10.6
27	80Q27H	Q1	9.16	8.614	4	2.6875	2.78	2.5		4.125	1.9375	.575	14.4	10.9
28	80Q28H	Q1	9.48	8.931	4	2.6875	2.78	2.5		4.125	1.9375	.575	15.9	12.4
29	80Q29H	Q1	9.8	9.249	4	2.6875	2.78	2.5		4.125	1.9375	.575	16.1	12.6
30	80Q30H	Q1	10.11	9.567	4	2.6875	2.78	2.5		4.125	1.9375	.575	16.9	13.4
31	80Q31	Q1	10.43	9.885	4	2.6875	2.78	2.5		4.125	1.9375	.575	17.4	13.9
32	80Q32	Q1	10.75	10.202	4	2.6875	2.78	2.5		4.125	1.9375	.575	18.3	14.8
33	80Q33	Q1	11.07	10.52	4	2.6875	2.781	2.5		4.125	1.9375	.575	19	15.5
34	80Q34	Q1	11.39	10.838	4	2.6875	2.781	2.5		4.125	1.9375	.575	19.8	16.3
35	80Q35	Q1	11.71	11.156	4	2.6875	2.781	2.5		4.125	1.9375	.575	21.3	17.8
36	80Q36	Q1	12.03	11.474	4	2.6875	2.781	2.5		4.125	1.9375	.575	21.6	18.1
36	80R36	R1	12.03	11.474	4	3.75	3.156	2.875		5.375	2.3125	.575	27	19.5
37	80Q37	Q1	12.35	11.792	4	2.6875	2.781	3		4	1.9375	.575	22	18.5
38	80Q38	Q1	12.67	12.11	4	2.6875	2.7813	2.5		4.125	1.9375	.575	23.5	20
39	80R39	R1	12.99	12.428	4	3.75	3.1563	2.875		5.375	2.3125	.575	30.3	22.8
40	80Q40	Q1	13.31	12.746	4	2.6875	2.7813	2.5		4.125	1.9375	.575	25.4	21.9
40	80R40	R1	13.31	12.746	4	3.75	3.1563	2.875		5.375	2.3125	.575	30.9	23.4
41	80R41	R1	13.63	13.064	4	3.75	3.1563	2.875		5.375	2.3125	.575	31.4	23.9
42	80Q42	Q1	13.94	13.382	4	2.6875	2.7813	2.5		4.125	1.9375	.575	27.3	23.8
42	80R42	R1	13.94	13.382	4	3.75	3.1563	2.875		5.375	2.3125	.575	32.9	25.4
44	80R44	R1	14.58	14.018	4	3.75	3.1563	2.875		5.375	2.3125	.575	34.7	27.2
45	80Q45	Q1	14.9	14.336	4	2.6875	2.7813	2.5		4.125	1.9375	.575	31.3	27.8
45	80R45	R1	14.9	14.336	4	3.75	3.1563	2.875		5.375	2.3125	.575	36	28.5
47	80R47	R1	15.54	14.972	4	3.75	3.1563	2.875		5.375	2.3125	.575	38.5	31
48	80Q48	Q1	15.86	15.29	4	2.6875	2.7813	2.5		4.125	1.9375	.575	34.3	30.8
48	80R48	R1	15.86	15.29	4	3.75	3.1563	2.875		5.375	2.3125	.575	39.8	32.3
50	80R50	R1	16.5	15.926	4	3.75	3.1563	2.875		5.375	2.3125	.575	42.6	35.1
54	80Q54	Q1	17.77	17.198	4	2.6875	2.7813	2.5		4.125	1.9375	.575	42	38.5
54	80R54	R1	17.77	17.198	4	3.75	3.1563	2.875		5.375	2.3125	.575	48.3	40.8
56	80R56	R1	18.41	17.835	4	3.75	3.1563	2.875		5.375	2.3125	.575	51.5	44
60	80Q60	Q1	19.68	19.107	4	2.6875	2.7813	2.5		4.125	1.9375	.575	50.3	46.8
60	80R60	R1	19.68	19.107	4	3.75	3.1563	2.875		5.375	2.3125	.575	54.8	47.3
70	80Q70	Q1	22.87	22.289	4	2.6875	2.7813	2.5		4.125	2.3125	.575	63.5	60
70	80R70	R1	22.87	22.289	4	3.75	3.1563	2.875		5.375	2.3125	.575	71	63.5
72	80Q72	Q1	23.5	22.926	4	2.6875	2.7813	2.5		4.125	2.3125	.575	71	67.5
72	80R72	R1	23.5	22.926	5	3.75	3.1563	2.875	1.4375	5.375	.875	.575	76.9	69.4
80	80R80	R1	26.05	25.471	5	3.75	3.1563	2.875	1.4375	5.375	.875	.575	92.5	85
84	80R84	R1	27.33	26.744	5	3.75	3.1563	2.875	1.4375	5.375	.875	.575	97.5	90
96	80R96	R1	31.15	30.563	5	3.75	3.1563	2.875	1.4375	5.375	.875	.575	117.5	110
112	80S112	S1	36.24	36.655	5	4.25	4.75	4.375	2.75	6.375	1.125	.575	178.5	165

All Steel Stock Sprockets

No. 80-2 1" Pitch

Double - Type B & C

No. Teeth	Catalog Number	OD	Type	Bore (Inches)		Hub (Inches)		Wt. lb (Approx.)
				Stock	Rec. Max.	Dia.	LTB	
10	D80B10H	3.680	B	1	1.625	2.5625	2.75	3.6
11	D80B11H	4.010	B	1	1.75	2.5	2.5	4.0
12	D80B12H	4.330	B	1	1.875	2.8438	2.5	5.1
13	D80B13H	4.660	B	1	2.25	3.1563	2.5	6.3
14	D80B14H	4.980	B	1	2.375	3.4688	2.5	7.6
15	D80B15H	5.300	B	1	2.5	3.7969	2.5	9.0
16	D80B16H	5.630	B	1	2.75	4	2.75	11.0
17	D80B17H	5.950	B	1	3	4.4219	2.75	13.2
18	D80B18H	6.270	B	1	3.25	4.7344	2.75	15.0
19	D80B19H	6.590	B	1	3.3125	5	2.75	17.0
20	D80B20H	6.910	B	1	3.3125	5	2.75	18.2
21	D80B21H	7.240	B	1	3.3125	5	2.75	19.6
22	D80B22H	7.560	B	1	3.3125	5	2.75	21.0
23	D80B23H	7.880	B	1	3.3125	5	2.75	22.8
24	D80B24H	8.200	B	1	3.5	5.25	2.75	25.1
25	D80B25H	8.520	B	1	3.5	5.25	3	28.3
26	D80B26	8.840	B	1	3.5	5.25	3	29.9
30	D80B30	10.110	B	1.25	3.75	5.75	3	39.5
32	D80B32	10.750	B	1.25	3.75	5.75	3	43.8
35	D80B35	11.710	B	1.25	3.75	5.75	3	49.1
36	D80B36	12.030	B	1.25	3.75	5.75	3.125	54.2
42	D80B42	13.940	B	1.25	3.75	5.75	3.125	71.5
45	D80B45	14.900	B	1.25	3.75	5.75	3.125	73.5
52	D80C52	17.130	C	1.5	3.75	5.75	3.75	78.4
60	D80C60	19.680	C	1.5	3.75	5.75	3.75	93.3
68	D80C68	22.230	C	1.5	3.8125	6	4	96.2
76	D80C76	24.780	C	1.5	3.8125	6	4	113.0
95	D80C95	30.830	C	1.5	4	6	4.25	165.0

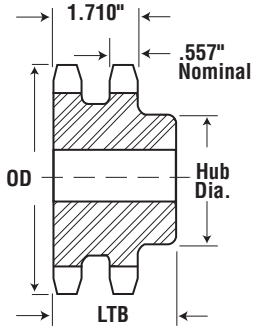
★ Has recessed groove in hub for chain clearance.

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

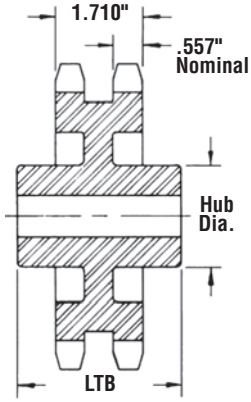
NOTE: Double 80 stock sprockets with 25 teeth or less have hardened teeth, as indicated by H suffix.

Alteration Charges

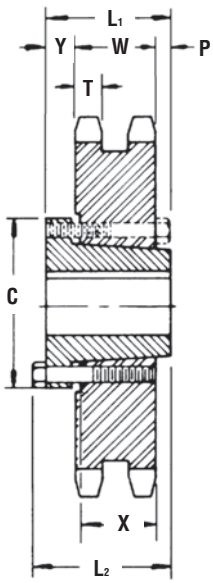
See current discount sheet for alteration charges.



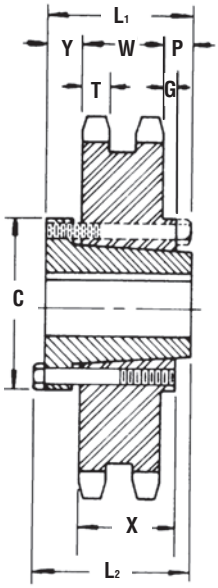
Type B



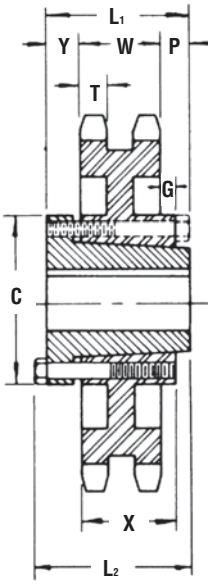
Type C



QD - Type C_1



QD - Type C_2



QD - Type C_4

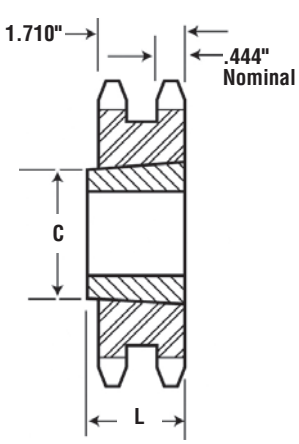
Double - Type QD

No. Teeth	Catalog Number	Bushing	Diameters		Type	Max. Bore	Dimensions										Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	P	G	V	X	T	W	With Hub	Rim Only
36	D80E36	E	12.030	11.474	C1	3.5	2.625	2.9375	6	.7969	.125	–	–	1.625	0.557	1.710	48.3	38.2
42	D80E42	E	13.940	13.382	C1	3.5	2.625	2.9375	6	.7969	.125	–	–	1.625	0.557	1.710	65.3	55.3
45	D80E45	E	14.900	14.336	C1	3.5	2.625	2.9375	6	.7969	.125	–	–	1.625	0.557	1.710	74.6	64.6
52	D80E52	E	17.130	16.562	C3	3.5	2.625	2.9375	6	.7969	.125	–	.0938	1.625	0.557	1.710	68.2	58.2
60	D80E60	E	19.680	19.107	C3	3.5	2.625	2.9375	6	.7969	.125	–	.0938	1.625	0.557	1.710	78.2	68.2
68	D80E68	E	22.230	21.653	C3	3.5	2.625	2.9375	6	.7969	.125	–	.0938	1.625	0.557	1.710	84.2	74.2
76	D80E76	E	24.780	24.198	C3	3.5	2.625	2.9375	6	.7969	.125	–	.0938	1.625	0.557	1.710	100.0	90.1
95	D80F95	F	30.830	30.245	C4	3.9375	3.625	4	6.625	1	.9219	.7969	–	2.5	0.557	1.710	152.0	140.0

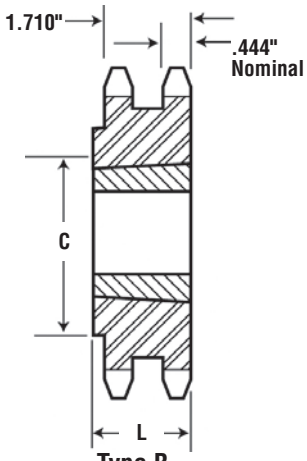
No. 80-2
1" Pitch

All Steel Stock Sprockets

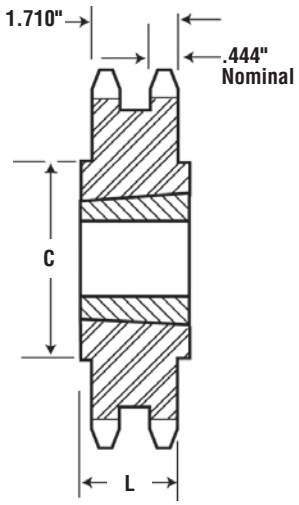




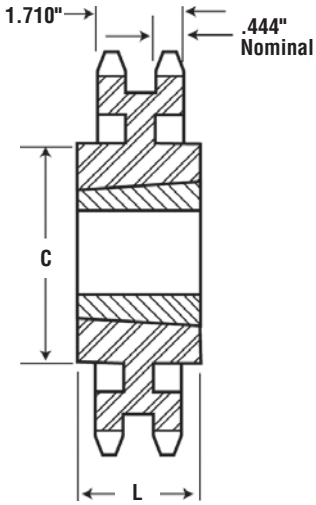
Type A



Type B



Type C_1



Type C

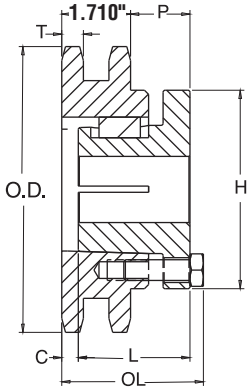
Double - Taper Bushed

No. Teeth	Catalog Number	Bushing	Diameters		Max. Bore.	Dimensions		Type	Wt. lb (Approx.)	
			OD	PD		L	C		Rim Only	Bushing Only
13	D80ATB13H	1615	4.657	4.179	1.625	1.5	–	A	3.4	1.2
14	D80ATB14H	2012	4.982	4.494	2	1.25	–	A	3.5	1.7
15	D80ATB15H	2012	5.305	4.810	2	1.25	–	A	4.3	1.7
16	D80ATB16H	2517	5.627	5.126	2.5	1.75	3.125	A	3.8	3.5
17	D80ATB17H	2517	5.950	5.442	2.5	1.75	3.125	A	5.1	3.5
18	D80ATB18H	2517	6.271	5.759	2.5	1.75	3.125	A	6.4	3.5
19	D80BTB19H	3020	6.593	6.076	3	2	5	B	5.6	6.5
20	D80BTB20H	3020	6.914	6.392	3	2	5.25	B	7.1	6.5
21	D80BTB21H	3020	7.235	6.710	3	2	5.5625	B	8.9	6.5
25	D80BTB25H	3020	8.516	7.979	3	2	6.875	B	16.5	6.5
30	D80CTB30	3020	10.114	9.567	3	2	5.25	C	25.1	6.5
36	D80CTB36	3020	12.030	11.474	3	2	5.25	C	39.4	6.5
42	D80CTB42	3020	13.944	13.392	3	2	5.25	C	36.4	6.5
45	D80CTB45	3020	14.901	14.336	3	2	5.25	C1	41.4	6.5
52	D80CTB52	3020	17.132	16.562	3	2	5.25	C1	56.2	6.5
60	D80CTB60	3020	19.681	19.107	3	2	5.25	C1	66.3	6.5
68	D80CTB68	3020	22.230	21.653	3	2	5.25	C1	72.0	6.5
76	D80CTB76	3020	24.778	24.198	3	2	5.25	C1	89.1	6.5
95	D80CTB95	3020	30.828	30.245	3	2	5.25	C1	112.0	6.5

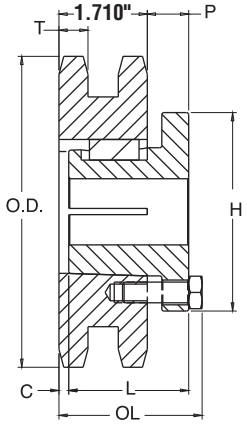
NOTE: Double 80 stock sprockets with 25 teeth or less have hardened teeth, as indicated by H suffix.

MST® Sprockets

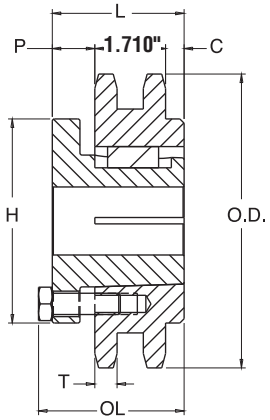
No. 80-2 1" Pitch



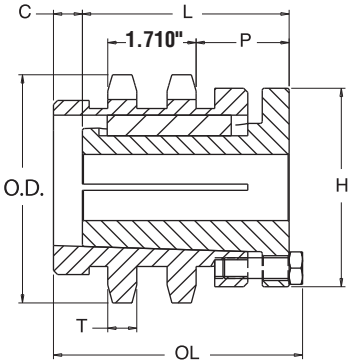
Type 12



Type 13



Type 15



Type 16

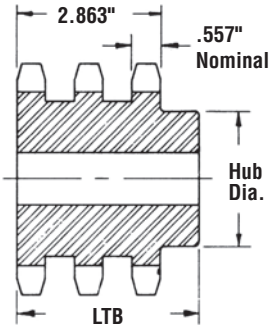
Double - MST® Sprockets

No. Teeth	Catalog Number	Bushing	Diameters		Type	Max. Bore	Dimensions						Wt. lb (Approx.)	
			OD	PD			OL	L	C	H	P	T (Nom.)	With Hub	Rim Only
13	D80P13H	P1	4.660	4.179	13	1.75	2.5938	1.9375	.4063	3	.625	0.557	4.9	3.6
14	D80Q14H	Q2	4.980	4.494	16	2.625	4.625	3.5	.8438	4.125	1.75	0.557	9.9	5.4
15	D80Q15H	Q2	5.300	4.810	12	2.625	3.7813	3.5	0	4.125	1.75	0.557	9.9	5.4
16	D80Q16H	Q1	5.630	5.126	13	2.6875	2.7813	2.5	0	4.125	.75	0.557	8.3	4.8
17	D80Q17H	Q1	5.950	5.442	13	2.6875	2.7813	2.5	0	4.125	.75	0.557	9.5	6.0
18	D80Q18H	Q1	6.270	5.759	13	2.6875	2.7813	2.5	0	4.125	.75	0.557	10.8	7.3
19	D80Q19H	Q1	6.590	6.076	13	2.6875	2.7813	2.5	0	4.125	.75	0.557	12.0	8.5
20	D80R20H	R1	6.910	6.392	12	3.75	3.1563	2.875	0	5.375	1.1563	0.557	15.3	7.8
21	D80R21H	R1	7.240	6.710	12	3.75	3.1563	2.875	0	5.375	1.1563	0.557	16.9	9.4
22	D80R22H	R1	7.560	7.027	12	3.75	3.1563	2.875	0	5.375	1.1563	0.557	18.3	10.8
23	D80R23H	R1	7.880	7.344	12	3.75	3.1563	2.875	0	5.375	1.1563	0.557	19.8	12.3
24	D80R24H	R1	8.200	7.661	12	3.75	3.1563	2.875	0	5.375	1.1563	0.557	21.6	14.1
25	D80R25H	R1	8.520	7.979	12	3.75	3.1563	2.875	0	5.375	1.1563	0.557	23.3	15.8
26	D80R26	R1	8.840	8.296	12	3.75	3.1563	2.875	0	5.375	1.1563	0.557	25.6	18.1
27	D80R27	R1	9.160	8.614	12	3.75	3.1563	2.875	0	5.375	1.1563	0.557	27.9	20.4
28	D80R28	R1	9.480	8.931	12	3.75	3.1563	2.875	0	5.375	1.1563	0.557	30.2	22.7
30	D80R30	R1	10.110	9.567	12	3.75	3.1563	2.875	0	5.375	1.1563	0.557	34.3	26.8
36	D80R36	R1	12.030	11.474	12	3.75	3.1563	2.875	0	5.375	1.1563	0.557	49.1	41.6
42	D80R42	R1	13.940	13.382	12	3.75	3.1563	2.875	0	5.375	1.1563	0.557	65.5	58.0
45	D80R45	R1	14.900	14.336	12	3.75	3.1563	2.875	0	5.375	1.1563	0.557	75.5	68.0
48	D80R48	R2	15.860	15.290	15	3.625	5.1563	4.875	2.2813	5.375	.875	0.557	97.0	86.0
52	D80R52	R2	17.130	16.562	15	3.625	5.1563	4.875	2.2813	5.375	.875	0.557	114.0	103.0
54	D80R54	R2	17.770	17.198	15	3.625	5.1563	4.875	2.2813	5.375	.875	0.557	122.0	111.0
60	D80R60	R2	19.680	19.107	15	3.625	5.1563	4.875	2.2813	5.375	.875	0.557	146.0	135.0
68	D80R68	R2	22.230	21.653	15	3.625	5.1563	4.875	2.2813	5.375	.875	0.557	187.0	176.0
72	D80R72	R2	23.500	22.926	15	3.625	5.1563	4.875	2.2813	5.375	.875	0.557	209.0	198.0
76	D80U76	U0	24.780	24.198	15	5.5	5.7188	5.25	2.0313	8.375	1.5	0.557	249.0	219.0
95	D80U95	U0	30.830	30.245	15	5.5	5.7188	5.25	2.0313	8.375	1.5	0.557	372.0	342.0

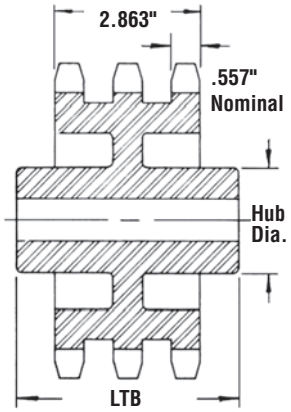
Sprockets with "H" suffix have hardened teeth.

No. 80-3
1" Pitch

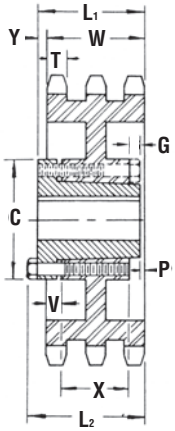
All Steel Stock Sprockets



Type B



Type C



QD — Type B1

Triple - Type B & C

No. Teeth	Catalog Number	OD	Type	Bore (inches)		Hub (inches)		Wt. lb (Approx.)
				Stock	Rec. Max.	Dia.	Length Thru	
11	E80B11H	4.010	B	1	1.75	2.5	3.625	5.9
12	E80B12H	4.330	B	1	1.875	2.8438	3.625	7.5
13	E80B13H	4.660	B	1	2.25	3.1563	3.625	9.2
14	E80B14H	4.980	B	1	2.375	3.4688	3.625	11.0
15	E80B15H	5.300	B	1	2.5	3.7969	3.625	13.1
16	E80B16H	5.630	B	1	2.75	4	3.875	15.8
17	E80B17H	5.950	B	1	3	4.4219	3.875	18.6
18	E80B18H	6.270	B	1	3.25	4.7344	3.875	21.2
19	E80B19H	6.590	B	1	3.3125	5	3.875	23.7
20	E80B20H	6.910	B	1	3.3125	5	3.875	26.0
21	E80B21H	7.240	B	1	3.3125	5	3.875	28.4
22	E80B22H	7.560	B	1	3.3125	5	3.875	31.0
23	E80B23H	7.880	B	1	3.3125	5	3.875	33.6
24	E80B24H	8.200	B	1	3.5	5.25	3.875	37.1
25	E80B25H	8.520	B	1	3.5	5.25	3.875	40.1
26	E80B26	8.840	B	1	3.5	5.25	3.875	42.9
30	E80B30	10.110	B	1.25	3.75	5.75	4.25	54.5
35	E80B35	11.710	B	1.25	3.75	5.75	4.25	79.5
36	E80B36	12.030	B	1.25	3.75	5.75	4.25	83.9
42	E80C42	13.940	C	1.25	3.8125	6	4.5	84.9
45	E80C45	14.900	C	1.25	3.8125	6	4.5	92.4
52	E80C52	17.130	C	1.5	3.8125	6	4.5	107.0
60	E80C60	19.680	C	1.5	4.25	6.25	4.75	128.0
68	E80C68	22.230	C	1.5	4.25	6.25	4.75	140.0
76	E80C76	24.780	C	1.5	4.25	6.25	4.75	165.0
95	E80C95	30.830	C	1.5	4.5	6.75	5	240.0

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.



Alteration Charges

See current discount sheet for alteration charges.

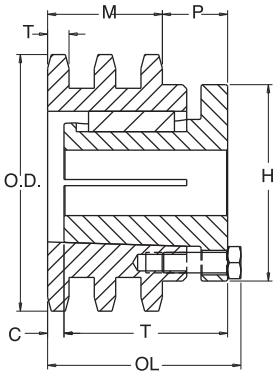
Triple - Type QD

No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions										Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	P	G	V	X	T	W	With Hub	Rim Only
36	E80E36	E	12.030	11.474	B	3.5	3.1094	3.4219	6	0.25	0.4844	0.125	0.625	1.625	0.557	2.863	65.1	55.1
42	E80E42	E	13.940	13.382	B	3.5	3.1094	3.4219	6	0.25	0.4844	0.125	0.625	1.625	0.557	2.863	81.9	71.9
45	E80E45	E	14.900	14.336	B1	3.5	3.1094	3.4219	6	0.25	0.4844	0.125	0.625	1.625	0.557	2.863	75.3	65.3
52	E80E52	E	17.130	16.562	B1	3.5	3.1094	3.4219	6	0.25	0.4844	0.125	0.625	1.625	0.557	2.863	90.0	80.0
60	E80F60	F	19.680	19.107	B1	3.9375	3.6719	4.0469	6.625	0.8125	0.0469	0.125	0.1875	2.5	0.557	2.863	112.0	100.0
68	E80F68	F	22.230	21.653	B1	3.9375	3.6719	4.0469	6.625	0.8125	0.0469	0.125	0.1875	2.5	0.557	2.863	132.0	120.0
76	E80F76	F	24.780	24.198	B1	3.9375	3.6719	4.0469	6.625	0.8125	0.0469	0.125	0.1875	2.5	0.557	2.863	150.0	138.0
95	E80F95	F	30.830	30.245	B1	3.9375	3.6719	4.0469	6.625	0.8125	0.0469	0.125	0.1875	2.5	0.557	2.863	208.0	196.0

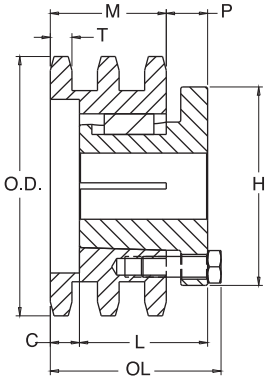
NOTE: Triple 60 stock sprockets with 25 teeth or less have hardened teeth.

MST® Sprockets

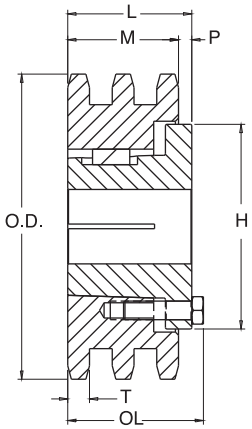
No. 80-3 1" Pitch



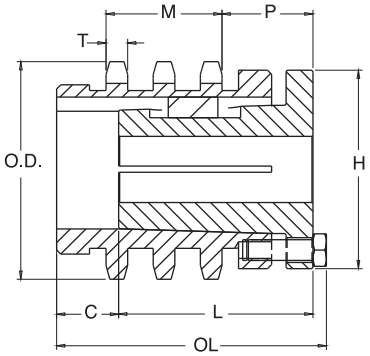
Type 22



Type 24



Type 25



Type 27

Triple - MST® Sprockets

No. Teeth	Catalog Number	Bushing	Diameters		Type	Max. Bore	Dimensions						Wt. lb (Approx.)	
			OD	PD			OL	L	C	H	P	T (Nom.)	With Hub	Rim Only
13	E80P13H	P2	4.660	4.179	24	1.75	3.75	2.9375	.5625	3	.625	.557	7.2	5.7
14	E80Q14H	Q2	4.980	4.494	27	2.625	5.7813	3.5	2	4.125	1.75	.557	12.0	7.5
15	E80Q15H	Q2	5.300	4.810	22	2.625	4.9063	3.5	1.125	4.125	1.75	.557	12.6	8.1
16	E80Q16H	Q2	5.630	5.126	25	2.625	3.875	3.5	.0938	4.125	.75	.557	13.8	9.3
17	E80Q17H	Q2	5.950	5.442	24	2.625	3.9063	3.5	.125	4.125	.75	.557	14.3	9.8
18	E80Q18H	Q2	6.270	5.759	24	2.625	3.9063	3.5	.125	4.125	.75	.557	16.5	12.0
19	E80Q19H	Q2	6.590	6.076	24	2.625	3.9063	3.5	.125	4.125	.75	.557	18.4	13.9
20	E80R20H	R1	6.910	6.392	24	3.75	4.0313	2.875	.875	5.375	.875	.557	17.7	10.2
21	E80R21H	R1	7.240	6.710	24	3.75	4.0313	2.875	.875	5.375	.875	.557	19.9	12.4
22	E80R22H	R1	7.560	7.027	24	3.75	4.0313	2.875	.875	5.375	.875	.557	22.1	14.6
23	E80R23H	R1	7.880	7.344	25	3.75	3.1563	2.875		5.375		.557	23.4	15.9
24	E80R24	R1	8.200	7.661	25	3.75	3.1563	2.875		5.375		.557	7.2	18.5
25	E80R25	R1	8.520	7.979	25	3.75	3.1563	2.875		5.375		.557	12.0	20.3
26	E80R26	R1	8.840	8.296	25	3.75	3.1563	2.875		5.375		.557	12.6	23.4
27	E80R27	R1	9.160	8.614	25	3.75	3.1563	2.875		5.375		.557	13.8	25.8
28	E80R28	R1	9.480	8.931	25	3.75	3.1563	2.875		5.375		.557	14.3	28.1
30	E80R30	R1	10.110	9.567	25	3.75	3.1563	2.875		5.375		.557	16.5	33.3
36	E80S36	S1	12.030	11.474	22	4.25	5.125	4.375		6.375	1.5	.557	18.4	67.0
42	E80S42	S1	13.940	13.382	22	4.25	5.125	4.375		6.375	1.5	.557	17.7	96.1
45	E80S45	S1	14.900	14.336	22	4.25	5.125	4.375		6.375	1.5	.557	19.9	112.0
52	E80U52	U0	17.130	16.562	22	5.5	5.7188	5.25		8.375	1.7813	.557	22.1	150.0
60	E80U60	U0	19.680	19.107	22	5.5	5.7188	5.25		8.375	1.7813	.557	23.4	207.0
68	E80U68	U0	22.230	21.653	22	5.5	5.7188	5.25		8.375	1.7813	.557	23.4	271.0
76	E80U76	U0	24.780	24.198	22	5.5	5.7188	5.25		8.375	1.7813	.557	23.4	344.0
95	E80U95	U0	30.830	30.245	25	5.5	5.8594	5.25	.0313	8.375	1.4063	.557	23.4	183.0

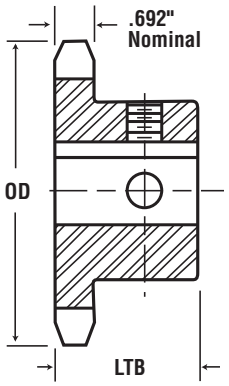
Sprockets with "H" suffix have hardened teeth.

No. 100
1¼" Pitch

All Steel Stock Sprockets



Bored-To-Size



Type BS

Single - Type BS — 2 Setscrews — Bored-To-Size

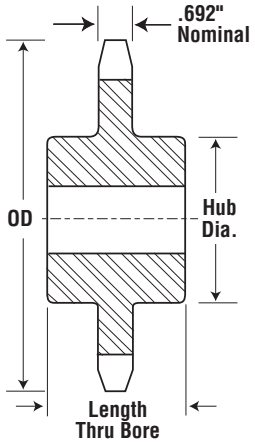
No. Teeth	Catalog Number	OD	LTB	Wt. lb (Approx.)	Stock Finished Bores Includes Keyway and 2 Setscrews								
8	100BS8	3.770	1.875	2.8	1	1.1875	1.25						
9	100BS9	4.180	1.875	3.0	1	1.1875	1.25	1.4375					
10	100BS10	4.600	1.875	3.9	1	1.1875	1.25	1.4375					
11	100BS11	5.010	1.875	4.9	1	1.1875	1.25	1.4375	1.9375	2	2.1875		
12	100BS12	5.420	1.875	6.0	1	1.1875	1.25	1.4375	1.9375	2	2.1875		
13	100BS13	5.820	1.625	6.2	1	1.1875	1.25	1.4375	1.9375	2	2.1875		
14	100BS14	6.230	1.625	6.6			1.25	1.4375	1.9375	2	2.1875		
15	100BS15	6.630	1.75	8.4			1.25	1.4375	1.9375	2	2.1875		
16	100BS16	7.030	1.75	9.0				1.4375	1.9375	2	2.1875	2.4375	2.9375
17	100BS17	7.440	1.75	9.9				1.4375	1.9375	2	2.1875	2.4375	2.9375
18	100BS18	7.840	1.75	10.6				1.4375	1.9375	2	2.1875	2.4375	2.9375
19	100BS19	8.240	2	12.1				1.4375	1.9375	2	2.1875	2.4375	2.9375
20	100BS20	8.640	2	13.2				1.4375	1.9375	2	2.1875	2.4375	2.9375
21	100BS21	9.040	2	14.3				1.4375	1.9375	2	2.1875	2.4375	2.9375
22	100BS22	9.440	2	15.1				1.4375	1.9375	2	2.1875	2.4375	2.9375
23	100BS23	9.840	2	16.1				1.4375	1.9375	2	2.1875	2.4375	2.9375
24	100BS24	10.250	2	18.1				1.4375	1.9375	2	2.1875	2.4375	2.9375
25	100BS25	10.650	2	18.4				1.4375	1.9375	2	2.1875	2.4375	2.9375

Hub diameters vary to suit different bore sizes.

NOTE: KEYWAY IS ON CENTER LINE OF TOOTH.

Single - Type C — Steel

No. Teeth	Catalog Number	OD	Bore (Inches)		Hub (Inches)		Wt. lb (Approx.)
			Stock	Rec. Max.	Diameter	Length	
10	100C10	4.600	1	1.875	3.2813	2.875	6.13
11	100C11	5.010	1	2.25	3.5625	2.875	7.12
12	100C12	5.420	1	2.25	4	2.875	8.37
13	100C13	5.820	1	2.375	3.1093	2.875	10.00
14	100C14	6.230	1	2.75	4.1875	2.875	12.19



Type C

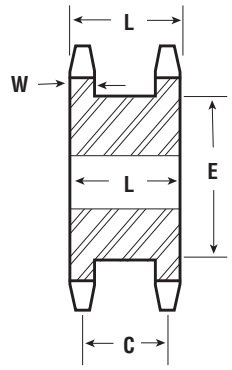
All Steel Stock Sprockets

No. 100 1¼" Pitch

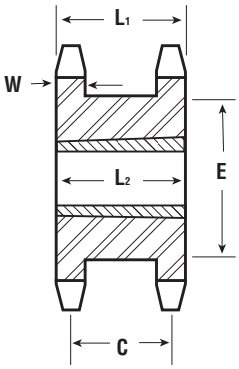




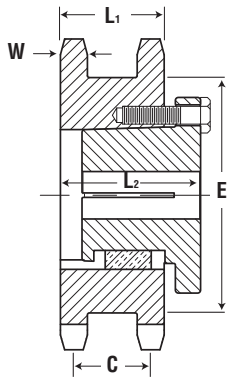




Type A



Taper Bush
Type A



MST® Type B

Double Single - Type A — Steel

No. Teeth	Catalog Number	Diameter		Type	Min. Bore	Max. Bore	Dimensions				Wt. lb (Approx.)
		OD	PD				L	C	E	W (Nom.)	
13	DS100A13	5.820	5.223	A	1	2.5	2.6875	2	3.7813	0.692	11.2
14	DS100A14	6.230	5.617	A	1.25	2.75	2.6875	2	4.1875	0.692	13.5
15	DS100A15	6.630	6.012	A	1.25	3.0625	2.6875	2	4.5938	0.692	16.8
16	DS100A16	7.030	6.407	A	1.25	3.25	2.6875	2	5	0.692	19.3
17	DS100A17	7.440	6.803	A	1.25	3.625	2.6875	2	5.4063	0.692	21.5
18	DS100A18	7.840	7.198	A	1.25	3.75	2.6875	2	5.7969	0.692	23.0
19	DS100A19	8.240	7.595	A	1.25	4.1875	2.6875	2	6.2031	0.692	25.0
20	DS100A20	8.640	7.991	A	1.25	4.1875	2.6875	2	6.6094	0.692	26.5
21	DS100A21	9.040	8.387	A	1.25	5.25	2.6875	2	7	0.692	29.0

Double Single - Taper Bushed— Steel

No. Teeth	Catalog Number	Bushing Size	Diameter		Min. Bore	Max. Bore	Type	Dimensions					Wt.
			OD	PD				L_1	C	E	L_2	W (Nom.)	Rim Only
15	DS100ATB15H	2517	6.630	6.012	.75	2.5	A	2.6875	2	4.5938	1.75	0.692	12.5
16	DS100ATB16H	2525	7.030	6.407	.75	2.5	A	2.6875	2	5	1.75	0.692	13.0
17	DS100ATB17H	3020	7.440	6.803	.9375	3	A	2.6875	2	5.4063	2	0.692	14.0
18	DS100ATB18H	3020	7.840	7.198	.9375	3	A	2.6875	2	5.7969	2	0.692	16.0
19	DS100ATB19H	3020	8.240	7.595	.9375	3	A	2.6875	2	6.2031	2	0.692	20.0
20	DS100ATB20H	3020	8.640	7.991	.9375	3	A	2.6875	2	6.6094	1.75	0.692	27.5
21	DS100ATB21H	3020	9.040	8.387	.9375	3	A	2.6875	2	7	2	0.692	27.5

Sprockets with "H" suffix have hardened teeth.

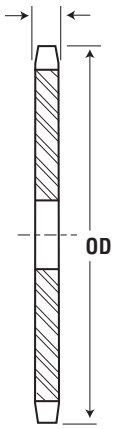
Double Single - MST®— Steel

No. Teeth	Catalog Number	Bushing Size	Diameter		Min. Bore	Max. Bore	Type	Dimensions					Wt.
			OD	PD				L_1	C	E	L_2	W (Nom.)	Rim Only
17	DS100R17H	R1	7.440	6.803	1.125	3.75	B	2.6875	2	5.4063	3.8438	0.692	12.5
19	DS100R19H	R1	8.240	7.595	1.125	3.75	B	2.6875	2	6.2031	3.8438	0.692	18.8
21	DS100R21H	R1	9.040	8.387	1.125	3.75	B	2.6875	2	7	3.8438	0.692	23.1

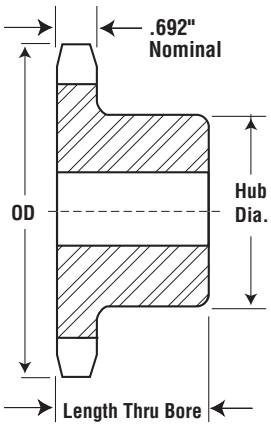
Sprockets with "H" suffix have hardened teeth.

No. 100
1¼" Pitch

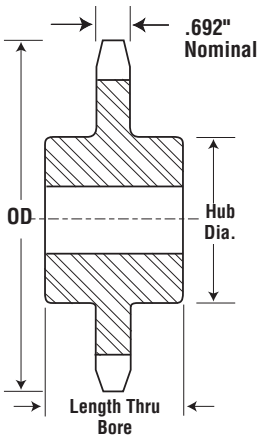
Stainless Steel Stock Sprockets



Type A



Type B



Type C

Single - Type B & C — Stainless

Single - Type A

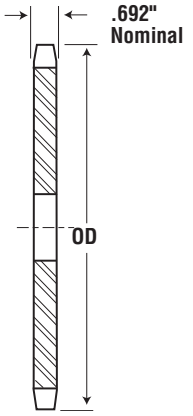
No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
				Stock	Rec. Max	Dia.	LTB					
11	100B11SS	5.010	B	1	2.25	3.5625 ★	1.875	5.3	–	–	–	–
12	100B12SS	5.420	B	1	2.25	4 ★	1.875	6.4	–	–	–	–
13	100B13SS	5.820	B	1	2.375	3.875	1.625	6.6	–	–	–	–
14	100B14SS	6.230	B	1.25	2.75	4.1875	1.625	7.4	–	–	–	–
15	100B15SS	6.630	B	1.25	3	4.5	1.75	9.2	–	–	–	–
16	100B16SS	7.030	B	1.3125	3	4.5	1.75	9.9	A	100A16SS	1.25	5.4
17	100B17SS	7.440	B	1.3125	3	4.5	1.75	10.8	A	100A17SS	1.25	6.1
18	100B18SS	7.840	B	1.3125	3	4.5	1.75	11.5	A	100A18SS	1.25	7.0
19	100B19SS	8.240	B	1.3125	3	4.5	2	13.1	A	100A19SS	1.25	7.8
20	100B20SS	8.640	B	1.3125	3	4.5	2	14.2	A	100A20SS	1.25	8.8
21	100B21SS	9.040	B	1.3125	3	4.5	2	15.3	A	100A21SS	1.25	9.8

★ Has recessed groove in hub for chain clearance.

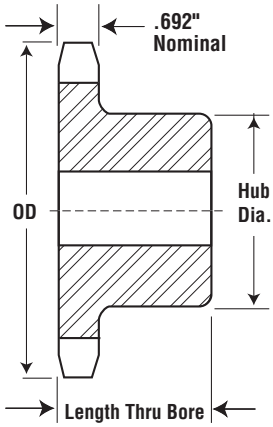
Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

All Steel Stock Sprockets

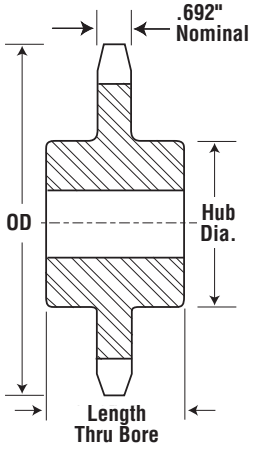
No. 100 1¼" Pitch



Type A



Type B



Type C

Single - Type B & C

Single - Type A

No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
				Stock	Rec. Max	Dia.	LTB					
7		3.350							A	100A7	1	1.2
8	100B8	3.770	B	1	1.25	2.4375 ★	1.875	2.3	A	100A8	1	1.4
9	100B9	4.180	B	1	1.625	21.1875 ★	1.875	3.2	A	100A9	1	1.6
10	100B10	4.600	B	1	1.875	3.25 ★	1.875	4.1	A	100A10	1	2.0
11	100B11	5.010	B	1	2.25	3.5625 ★	1.875	5.3	A	100A11	1.25	2.5
12	100B12	5.420	B	1	2.25	4 ★	1.875	6.4	A	100A12	1.25	3.0
13	100B13	5.820	B	1	2.375	3.875	1.625	6.6	A	100A13	1.25	3.5
14	100B14	6.230	B	1.25	2.75	4.1875	1.625	7.4	A	100A14	1.25	4.1
15	100B15	6.630	B	1.25	3	4.5	1.75	9.2	A	100A15	1.25	4.7
16	100B16	7.030	B	1.3125	3	4.5	1.75	9.9	A	100A16	1.25	5.4
17	100B17	7.440	B	1.3125	3	4.5	1.75	10.8	A	100A17	1.25	6.1
18	100B18	7.840	B	1.3125	3	4.5	1.75	11.5	A	100A18	1.25	7.0
19	100B19	8.240	B	1.3125	3	4.5	2	13.1	A	100A19	1.25	7.8
20	100B20	8.640	B	1.3125	3	4.5	2	14.2	A	100A20	1.25	8.8
21	100B21	9.040	B	1.3125	3	4.5	2	15.3	A	100A21	1.25	9.8
22	100B22	9.440	B	1.3125	3	4.5	2	16.1	A	100A22	1.25	10.5
23	100B23	9.840	B	1.25	3	4.5	2	17.2	A	100A23	1.25	11.8
24	100B24	10.250	B	1.25	3	4.5	2	19.2	A	100A24	1.25	12.8
25	100B25	10.650	B	1.25	3	4.5	2	19.5	A	100A25	1.25	13.9
26	100B26	11.050	B	1.25	3.3125	5	2	21.7	A	100A26	1.25	15.0
27	100B27	11.440	B	1.25	3.3125	5	2	23.0	A	100A27	1.25	16.0
28	100B28	11.840	B	1.25	3.3125	5	2	24.4	A	100A28	1.25	17.4
29	100B29	12.240	B	1.25	3.3125	5	2	25.0	A	100A29	1.25	19.6
30	100B30	12.640	B	1.25	3.3125	5	2	26.9	A	100A30	1.25	20.1
31		13.040							A	100A31	1.25	21.5
32	100B32	13.440	B	1.25	3.3125	5	2	29.8	A	100A32	1.25	22.6
33		13.840							A	100A33	1.25	24.1
34		14.240							A	100A34	1.25	26.0
35	100B35	14.640	B	1.25	3.3125	5	2.5	36.9	A	100A35	1.25	27.2
36	100B36	15.040	B	1.25	3.3125	5	2.5	38.6	A	100A36	1.25	30.0
37		15.440							A	100A37	1.25	31.0
38	100B38	15.840	B	1.25	3.3125	5	2.5	41.5	A	100A38	1.25	33.0
39	100B39	16.230	B	1.25	3.3125	5	2.5	43.6	A	100A39	1.25	35.0
40	100B40	16.630	B	1.25	3.3125	5	2.5	46.9	A	100A40	1.25	36.0
41		17.030							A	100A41	1.25	39.0
42	100B42	17.430	B	1.25	3.3125	5	2.5	50.4	A	100A42	1.25	40.0
43		17.830							A	100A43	1.5	43.0
44		18.230							A	100A44	1.5	45.0
45	100B45	18.630	B	1.5	3.3125	5	2.5	54.0	A	100A45	1.5	47.0
46		19.020							A	100A46	1.5	48.0
47		19.420							A	100A47	1.5	52.0
48	100B48	19.820	B	1.5	4	6	2.5	66.0	A	100A48	1.5	54.0
49		20.220							A	100A49	1.5	56.0
50		20.620							A	100A50	1.5	57.0
51		21.020							A	100A51	1.5	63.0
52		21.420							A	100A52	1.5	64.0
53		21.810							A	100A53	1.5	64.2
54	100C54	22.210	C	1.5	4	6	3.25	78.0	A	100A54	1.5	68.0
55		22.610							A	100A55	1.5	70.0
56		23.010							A	100A56	1.5	72.0
57		23.410							A	100A57	1.5	75.8
58		23.810							A	100A58	1.5	76.0
59		24.200							A	100A59	1.5	77.0
60	100C60	24.600	C	1.5	4	6	3.25	89.0	A	100A60	1.5	80.0
70	100C70	28.580	C	1.5	5.25	7	3.75	125.0	A	100A70	1.5	113
72	100C72	29.380	C	1.5	5.25	7	3.75	134.0	A	100A72	1.5	119
76	100C76	30.973	C	1.5	5.25	7	3.75	143.0	A	100A76	1.5	133
80	100C80	32.570	C	1.5	5.25	7	3.75	151.0	A	100A80	1.5	146
84	100C84	34.160	C	1.5	5.25	7	3.75	170.0	A	100A84	1.5	162
90	100C90	36.550	C	1.5	5.25	7	3.75	184.0	A	100A90	1.5	193
96	100C96	38.930	C	1.5	5.25	7	4.5	203.0	A	100A96	1.5	215

★ Has recessed groove in hub for chain clearance.

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

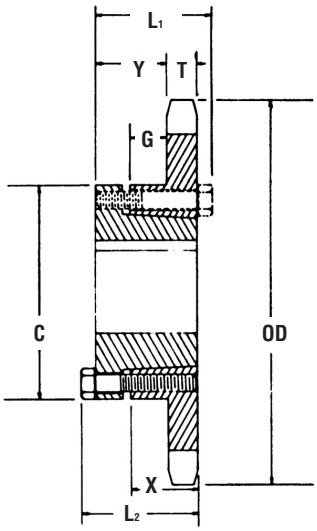
No. 100
1¼" Pitch

All Steel Stock Sprockets

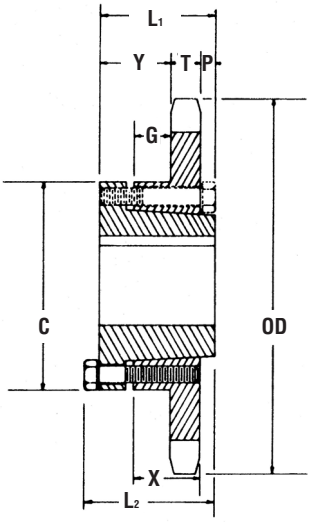
Single - Type QD With Hardened Teeth

No. Teeth	Catalog Number
11	100SDS11H
12	100SDS12H
13	100SK13H
14	100SK14H
15	100SF15H
16	100SF16H
17	100SF17H
18	100E18H
19	100E19H
20	100E20H
21	100E21H
22	100E22H
23	100E23H
24	100E24H
25	100E25H
26	100E26H
27	100E27H
28	100E28H
30	100E30H

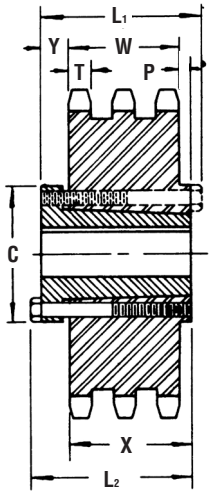
SABER TOOTH



QD — Type B



QD — Type B1



QD — Type C

Single - Type QD

No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions								Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	P	G	X	T	With Hub	Rim Only
11	100SDS11	SDS	5.010	4.437	B	2	1.5	1.5	3.1875	.625	–	.0625	.75	0.692	3.0	2.0
12	100SDS12	SDS	5.420	4.830	B	2	1.5	1.5	3.1875	.625	–	.0625	.75	0.692	3.6	2.6
13	100SK13	SK	5.820	5.223	B	2.625	2.125	2.125	3.875	1.2031	–	.5625	1.25	0.692	5.3	3.3
14	100SK14	SK	6.230	5.617	B	2.625	2.125	2.125	3.875	1.2031	–	.5625	1.25	0.692	6.1	4.1
15	100SF15	SF	6.630	6.012	B	2.9375	2.25	2.25	4.625	1.2969	–	.5625	1.25	0.692	7.8	4.8
16	100SF16	SF	7.030	6.407	B	2.9375	2.25	2.25	4.625	1.2969	–	.5625	1.25	0.692	8.6	5.6
17	100SF17	SF	7.440	6.803	B	2.9375	2.25	2.25	4.625	1.2969	–	.5625	1.25	0.692	9.5	6.5
18	100E18	E	7.840	7.198	B1	3.5	2.625	2.9375	6	1.8125	.125	.9375	1.625	0.692	19.0	9.0
19	100E19	E	8.240	7.595	B1	3.5	2.625	2.9375	6	1.8125	.125	.9375	1.625	0.692	20.2	10.2
20	100E20	E	8.640	7.991	B1	3.5	2.625	2.9375	6	1.8125	.125	.9375	1.625	0.692	21.6	11.6
21	100E21	E	9.040	8.387	B1	3.5	2.625	2.9375	6	1.8125	.125	.9375	1.625	0.692	22.5	12.5
22	100E22	E	9.440	8.783	B1	3.5	2.625	2.9375	6	1.8125	.125	.9375	1.625	0.692	23.5	13.5
23	100E23	E	9.840	9.180	B1	3.5	2.625	2.9375	6	1.8125	.125	.9375	1.625	0.692	24.6	14.6
24	100E24	E	10.250	9.577	B1	3.5	2.625	2.9375	6	1.8125	.125	.9375	1.625	0.692	25.7	15.7
25	100E25	E	10.650	9.973	B1	3.5	2.625	2.9375	6	1.8125	.125	.9375	1.625	0.692	26.8	16.8
26	100E26	E	11.050	10.370	B1	3.5	2.625	2.9375	6	1.8125	.125	.9375	1.625	0.692	28.1	18.1
27	100E27	E	11.440	10.767	B1	3.5	2.625	2.9375	6	1.8125	.125	.9375	1.625	0.692	29.2	19.2
28	100E28	E	11.840	11.164	B1	3.5	2.625	2.9375	6	1.8125	.125	.9375	1.625	0.692	30.7	20.7
30	100E30	E	12.640	11.958	B1	3.5	2.625	2.9375	6	1.8125	.125	.9375	1.625	0.692	33.2	23.2
32	100E32	E	13.440	12.753	B1	3.5	2.625	2.9375	6	1.8125	.125	.9375	1.625	0.692	35.4	25.4
35	100E35	E	14.640	13.945	B1	3.5	2.625	2.9375	6	1.8125	.125	.9375	1.625	0.692	40.5	30.5
36	100E36	E	15.040	14.342	B1	3.5	2.625	2.9375	6	1.8125	.125	.9375	1.625	0.692	42.5	32.3
40	100E40	E	16.630	15.932	B1	3.5	2.625	2.9375	6	1.8125	.125	.9375	1.625	0.692	49.1	39.1
42	100E42	E	17.430	16.727	B1	3.5	2.625	2.9375	6	1.8125	.125	.9375	1.625	0.692	53.4	43.4
45	100E45	E	18.630	17.920	B1	3.5	2.625	2.9375	6	1.8125	.125	.9375	1.625	0.692	58.9	48.9
48	100E48	E	19.820	19.112	B1	3.5	2.625	2.9375	6	1.8125	.125	.9375	1.625	0.692	64.0	54.0
54	100E54	E	22.210	21.498	C	3.5	2.625	2.9375	6	.875	1.0625	.9375	1.625	0.692	72.0	62.0
60	100E60	E	24.600	23.884	C	3.5	2.625	2.9375	6	.875	1.0625	.9375	1.625	0.692	84.0	74.0
70	100F70	F	28.580	27.862	C	3.9375	3.625	4	6.625	1	1.9375	1.8125	2.5	0.692	110.5	99.0
72	100F72	F	29.380	28.657	C	3.9375	3.625	4	6.625	1	1.9375	1.8125	2.5	0.692	117.5	106.0
80	100F80	F	32.570	31.839	C	3.9375	3.625	4	6.625	1	1.9375	1.8125	2.5	0.692	134.5	123.0
84	100F84	F	34.160	33.430	C	3.9375	3.625	4	6.625	1	1.9375	1.8125	2.5	0.692	151.5	140.0

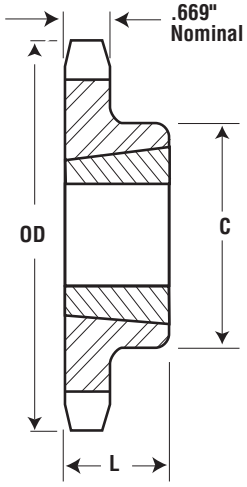
All Steel Stock Sprockets

No. 100 1¼" Pitch

Single - Taper Bushed with Hardened Teeth

No. Teeth	Catalog Number
11	100BTB11H
12	100BTB12H
13	100BTB13H
14	100BTB14H
15	100BTB15H
16	100BTB16H
17	100BTB17H
18	100BTB18H
19	100BTB19H
20	100BTB20H
21	100BTB21H
22	100BTB22H
24	100BTB24H
26	100BTB26H
28	100BTB28H
30	100BTB30H

SABER TOOTH



Type B



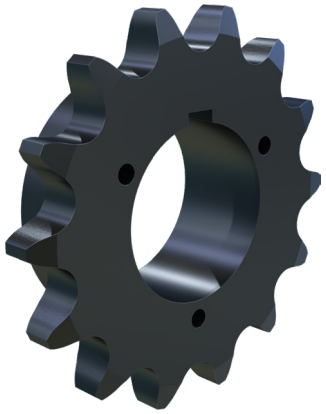
Single - Taper Bushed

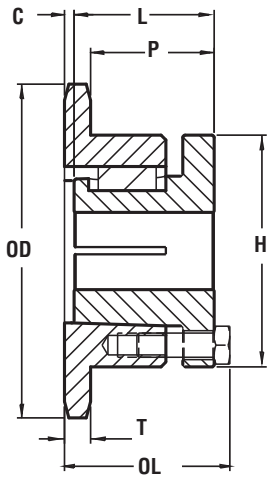
No. Teeth	Catalog Number	Bushing	Diameter		Max. Bore	Dimensions		Type	Wt. lb (Approx.)	
			OD	PD		L	C		Rim Only	Bushing Only
11	100BTB11	1615	5.007	4.437	1.625	1.5	3	B	2.7	1.2
12	100BTB12	1615	5.415	4.830	1.625	1.5	3.25	B	3.5	1.2
13	100BTB13	2012	5.821	5.223	2	1.25	3.5625	B	3.6	1.7
14	100BTB14	2012	6.227	5.617	2	1.25	3.5625	B	3.9	1.7
15	100BTB15	2517	6.631	6.012	2.5	1.75	4.25	B	5.0	3.5
16	100BTB16	2517	7.034	6.407	2.5	1.75	4.5	B	6.4	3.5
17	100BTB17	2517	7.437	6.803	2.5	1.75	4.5	B	7.1	3.5
18	100BTB18	2517	7.839	7.198	2.5	1.75	4.5	B	7.8	3.5
19	100BTB19	2517	8.241	7.594	2.5	1.75	4.5	B	8.7	3.5
20	100BTB20	2517	8.642	7.991	2.5	1.75	4.5	B	9.6	3.5
21	100BTB21	2517	9.043	8.387	2.5	1.75	4.5	B	10.6	3.5
22	100BTB22	2517	9.444	8.783	2.5	1.75	4.5	B	11.0	3.5
24	100BTB24	2517	10.245	9.577	2.5	1.75	4.5	B	13.0	3.5
26	100BTB26	2517	11.045	10.370	2.5	1.75	4.5	B	15.0	3.5
28	100BTB28	3020	11.844	11.164	3	2	5.25	B	16.5	6.5
30	100BTB30	3020	12.643	11.958	3	2	5.25	B	22.0	6.5
32	100BTB32	3020	13.442	12.753	3	2	5.25	B	23.0	6.5
35	100BTB35	3020	14.639	13.945	3	2	5.25	B	28.0	6.5
36	100BTB36	3020	15.038	14.342	3	2	5.25	B	31.0	6.5
40	100BTB40	3020	16.633	15.932	3	2	5.25	B	37.0	6.5
45	100BTB45	3020	18.626	17.919	3	2	5.25	B	46.0	6.5
48	100BTB48	3020	19.821	19.112	3	2	5.25	B	53.0	6.5
54	100BTB54	3020	22.212	21.498	3	2	5.25	B	62.0	6.5
60	100BTB60	3020	24.601	23.884	3	2	5.25	B	72.0	6.5

No. 100
1¼" Pitch

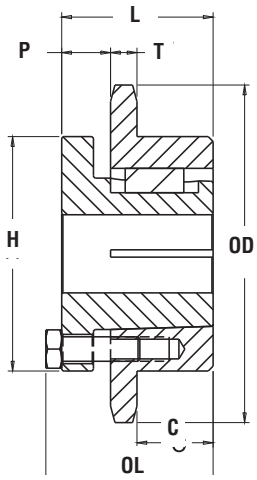
MST® Sprockets

Martin





Type 4



Type 5

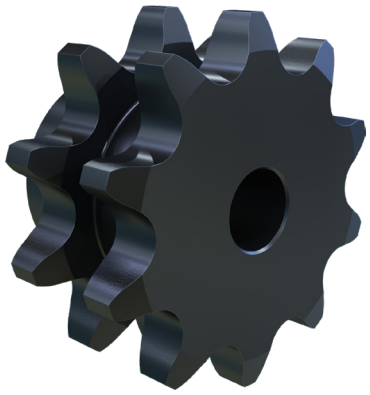
Single - MST® Sprockets

No. Teeth	Catalog Number	Bush-ing	Diameter		Type	Max. Bore	Dimensions						Wt. lb (Approx.)	
			OD	PD			OL	L	C	H	P	T (Nom.)	With Hub	Rim Only
11	100P11H	P1	5.010	4.437	4	1.75	2.1875	1.9375	–	3	1.25	0.692	4.1	2.8
12	100Q12H	Q1	5.420	4.830	4	2.6875	2.8438	2.5	.0625	4.125	1.875	0.692	7.0	3.5
13	100Q13H	Q1	5.820	5.223	4	2.6875	2.8438	2.5	.0625	4.125	1.875	0.692	7.8	4.3
14	100Q14H	Q1	6.230	5.617	4	2.6875	2.7813	2.5	–	4.125	1.8125	0.692	9.1	5.6
15	100Q15H	Q1	6.630	6.012	4	2.6875	2.7813	2.5	–	4.125	1.8125	0.692	10.1	6.6
16	100Q16H	Q1	7.030	6.407	4	2.6875	2.7813	2.5	–	4.125	1.8125	0.692	10.9	7.4
17	100Q17H	Q1	7.440	6.803	4	2.6875	2.7813	2.5	–	4.125	1.8125	0.692	11.7	8.2
18	100Q18H	Q1	7.840	7.198	4	2.6875	2.7813	2.5	–	4.125	1.8125	0.692	12.5	9.0
19	100Q19H	Q1	8.240	7.595	4	2.6875	2.7813	2.5	–	4.125	1.8125	0.692	13.3	9.8
20	100Q20H	Q1	8.640	7.991	4	2.6875	2.7813	2.5	–	4.125	1.8125	0.692	14.4	10.9
21	100Q21H	Q1	9.040	8.387	4	2.6875	2.7813	2.5	–	4.125	1.8125	0.692	15.3	11.8
21	100R21H	R1	9.040	8.387	4	3.75	3.1563	2.875	–	5.375	2.1875	0.692	20.8	13.3
22	100Q22H	Q1	9.440	8.783	4	2.6875	2.7813	2.5	–	4.125	1.8125	0.692	16.1	12.6
23	100Q23H	Q1	9.840	9.180	4	2.6875	2.7813	2.5	–	4.125	1.8125	0.692	17.3	13.8
24	100Q24H	Q1	10.250	9.577	4	2.6875	2.7813	2.5	–	4.125	1.8125	0.692	18.9	15.4
24	100R24H	R1	10.250	9.577	4	3.75	3.1563	2.875	–	5.375	2.1875	0.692	23.1	15.6
25	100Q25H	Q1	10.650	9.973	4	2.6875	2.7813	2.5	–	4.125	1.8125	0.692	19.5	16.0
25	100R25H	R1	10.650	9.973	4	3.75	3.1563	2.875	–	5.375	2.1875	0.692	24.5	17.0
26	100Q26H	Q1	11.050	10.370	4	2.6875	2.7813	2.5	–	4.125	1.8125	0.692	20.8	17.3
26	100R26H	R1	11.050	10.370	4	3.75	3.1563	2.875	–	5.375	2.1875	0.692	25.4	17.9
27	100Q27H	Q1	11.440	10.767	4	2.6875	2.7813	2.5	–	4.125	1.8125	0.692	21.7	18.2
27	100R27H	R1	11.440	10.767	4	3.75	3.1563	2.875	–	5.375	2.1875	0.692	27.1	19.6
28	100Q28H	Q1	11.840	11.164	4	2.6875	2.7813	2.5	–	4.125	1.8125	0.692	23.1	19.6
28	100R28H	R1	11.840	11.164	4	3.75	3.1563	2.875	–	5.375	2.1875	0.692	28.5	21.0
30	100Q30H	Q1	12.640	11.958	4	2.6875	2.7813	2.5	–	4.125	1.8125	0.692	25.9	22.4
30	100R30H	R1	12.640	11.958	4	3.75	3.1563	2.875	–	5.375	2.1875	0.692	32.0	24.5
32	100Q32	Q1	13.440	12.753	4	2.6875	2.7813	2.5	–	4.125	1.8125	0.692	28.8	25.3
32	100R32	R1	13.440	12.753	4	3.75	3.1563	2.875	–	5.375	2.1875	0.692	34.0	26.5
35	100Q35	Q1	14.640	13.945	4	2.6875	2.7813	2.5	–	4.125	1.8125	0.692	33.7	30.2
35	100R35	R1	14.640	13.945	4	3.75	3.1563	2.875	–	5.375	2.1875	0.692	37.3	29.8
36	100R36	R1	15.040	14.342	4	3.75	3.1563	2.875	–	5.375	2.1875	0.692	40.5	33.0
40	100R40	R1	16.630	15.932	4	3.75	3.1563	2.875	–	5.375	2.1875	0.692	48.4	40.9
42	100R42	R1	17.430	16.727	4	3.75	3.1563	2.875	–	5.375	2.1875	0.692	51.8	44.3
45	100R45	R1	18.630	17.920	4	3.75	3.1563	2.875	–	5.375	2.1875	0.692	58.0	50.5
48	100R48	R1	19.820	19.112	4	3.75	3.1563	2.875	–	5.375	2.1875	0.692	65.0	57.5
54	100R54	R1	22.210	21.498	5	3.75	3.1563	2.875	1.3125	5.375	.875	0.692	76.5	69.0
60	100R60	R1	24.600	23.884	5	3.75	3.1563	2.875	1.3125	5.375	.875	0.692	91.5	84.0
70	100R70	R1	28.580	27.862	5	3.75	3.1563	2.875	1.3125	5.375	.875	0.692	111.5	104.0
72	100R72	R1	29.380	28.657	5	3.75	3.1563	2.875	1.3125	5.375	.875	0.692	113.5	106.0
80	100R80	R1	32.570	31.839	5	3.75	3.1563	2.875	1.3125	5.375	.875	0.692	142.5	135.0
84	100R84	R1	34.160	33.430	5	3.75	3.1563	2.875	1.3125	5.375	.875	0.692	145.5	138.0

Sprockets with "H" suffix have hardened teeth.

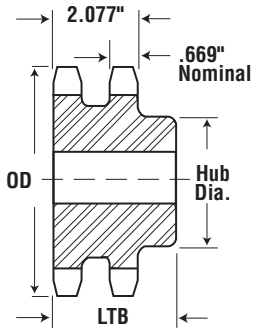
All Steel Stock Sprockets

No. 100-2 1¼" Pitch

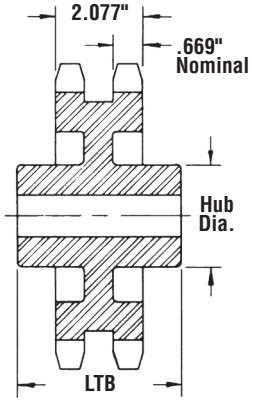


Alteration Charges

See current discount sheet for alteration charges.



Type B

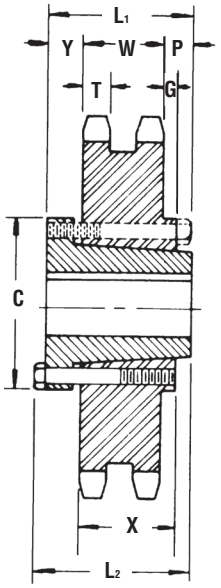


Type C

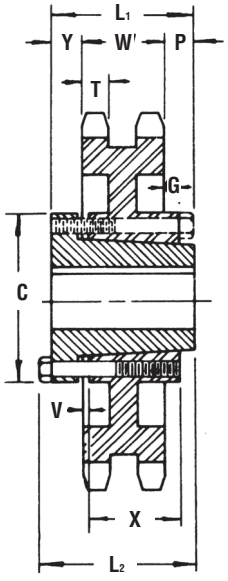
Double - Type B & C

No. Teeth	Catalog Number	OD	Type	Bore (Inches)		Hub (Inches)		Wt. lb (Approx.)
				Stock	Rec. Max.	Dia.	LTB	
9	D100B9	4.180	B	1	1.625	2.375	2.875	4.6
10	D100B10	4.600	B	1	1.875	2.75	2.875	6.2
11	D100B11	5.010	B	1	2.125	3.125	2.875	7.9
12	D100B12	5.420	B	1.125	2.25	3.375	2.875	9.3
13	D100B13	5.820	B	1.125	2.5	3.8125	2.875	11.4
14	D100B14	6.230	B	1.125	2.75	4.1875	2.875	13.6
15	D100B15	6.630	B	1.25	3.125	4.625	3.125	17.1
16	D100B16	7.030	B	1.25	3.3125	5	3.125	20.1
17	D100B17	7.440	B	1.25	3.5	5.25	3.125	23.1
18	D100B18	7.840	B	1.25	3.5	5.25	3.125	25.4
19	D100B19	8.240	B	1.25	3.75	5.5	3.375	29.6
20	D100B20	8.640	B	1.25	3.75	5.5	3.375	32.4
21	D100B21	9.040	B	1.25	3.75	5.5	3.375	35.3
22	D100B22	9.440	B	1.25	3.75	5.5	3.375	38.4
23	D100B23	9.840	B	1.25	3.75	5.5	3.375	41.3
24	D100B24	10.250	B	1.25	3.75	5.75	3.375	45.1
25	D100B25	10.650	B	1.25	3.75	5.75	3.375	48.5
26	D100B26	11.050	B	1.5	3.75	5.75	3.375	51.5
30	D100B30	12.640	B	1.5	3.75	5.75	3.375	65.0
35	D100C35	14.640	C	1.5	3.8125	6	4.25	75.0
45	D100C45	18.630	C	1.5	3.8125	6	4.5	103.0
60	D100C60	24.600	C	1.5	5.375	7.5	5	175.0
70	D100C70	28.580	C	1.5	5.375	7.5	5	197.0
80	D100C80	32.570	C	1.5	5.375	7.5	5	231.0

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.



QD - Type C_2



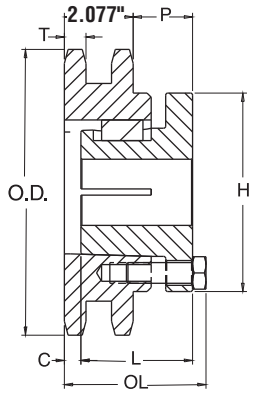
QD - Type C_6

Double - Type QD

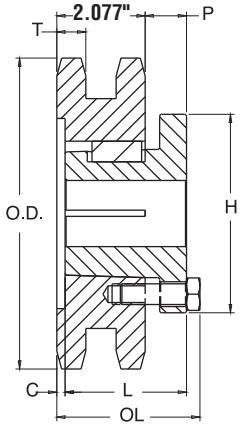
No. Teeth	Catalog Number	Bushing	Diameters		Type	Max. Bore	Dimensions										Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	P	G	V	X	T	W	With Hub	Rim Only
35	D100F35	F	14.640	13.945	C2	3.9375	3.625	4	6.625	1	.5469	.4219	–	2.5	0.669	2.077	84.5	73.0
45	D100F45	F	18.630	17.920	C2	3.9375	3.625	4	6.625	1	.5469	.4219	–	2.5	0.669	2.077	92.5	81.0
60	D100J60	J	24.600	23.884	C6	4.4375	4.5	5	7.25	1.2188	1.2031	1.0938	.0313	3.1875	0.669	2.077	152.0	133.0
70	D100J70	J	28.580	27.862	C6	4.4375	4.5	5	7.25	1.2188	1.2031	1.0938	.0313	3.1875	0.669	2.077	180.0	161.0
80	D100J80	J	32.570	31.839	C6	4.4375	4.5	5	7.25	1.2188	1.2031	1.0938	.0313	3.1875	0.669	2.077	215.0	196.0

No. 100-2
1¼" Pitch

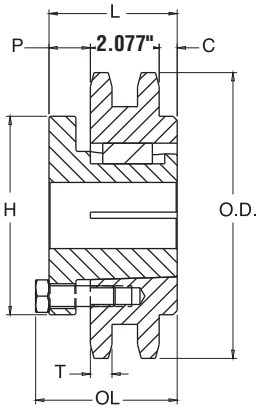
MST® Sprockets



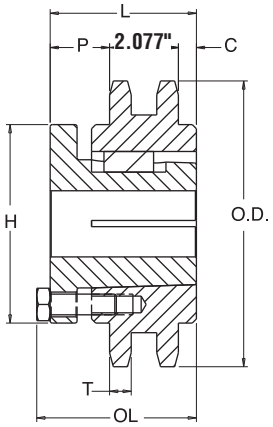
Type 12



Type 14



Type 15



Type 18

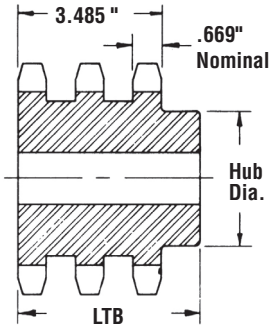
Double - MST® Sprockets

No. Teeth	Catalog Number	Bushing	Diameters		Type	Max. Bore	Dimensions						Wt. lb (Approx.)	
			OD	PD			OL	L	C	H	P	T (Nom.)	With Hub	Rim Only
11	D100P11H	P1	5.010	4.437	14	1.75	2.9375	1.9375	.75	3	.625	0.669	6.0	4.7
12	D100Q12H	Q2	5.420	4.830	12	2.625	4.2188	3.5	.4375	4.125	1.8594	0.669	10.4	5.9
13	D100Q13H	Q2	5.820	5.223	12	2.625	4.2188	3.5	.4375	4.125	1.8594	0.669	12.4	7.9
14	D100Q14H	Q1	6.230	5.617	14	2.6875	3.0938	2.5	.3125	4.125	.75	0.669	10.9	7.4
15	D100Q15H	Q1	6.630	6.012	14	2.6875	3.0938	2.5	.3125	4.125	.75	0.669	12.6	9.1
16	D100Q16H	Q1	7.030	6.407	14	2.6875	3.0938	2.5	.3125	4.125	.75	0.669	14.4	10.9
17	D100R17H	R1	7.440	6.803	14	3.75	3.2188	2.875	.625	5.375	.875	0.669	17.5	10.0
18	D100R18H	R1	7.840	7.198	14	3.75	3.2188	2.875	.625	5.375	.875	0.669	19.8	12.3
19	D100R19	R1	8.240	7.595	14	3.75	3.2188	2.875	.625	5.375	.875	0.669	22.4	14.9
20	D100R20	R1	8.640	7.991	14	3.75	3.2188	2.875	.625	5.375	.875	0.669	24.9	17.4
21	D100R21	R1	9.040	8.387	14	3.75	3.2188	2.875	.625	5.375	.875	0.669	27.8	20.3
22	D100R22	R1	9.440	8.783	14	3.75	3.2188	2.875	.625	5.375	.875	0.669	30.3	22.8
24	D100R24	R1	10.250	9.577	14	3.75	3.2188	2.875	.625	5.375	.875	0.669	37.0	29.5
35	D100R35	R1	14.640	13.945	14	3.75	3.2188	2.875	.625	5.375	.875	0.669	84.3	76.8
45	D100S45	S1	18.630	17.920	15	4.125	4.75	4.375	115/64	6.375	1.625	0.669	151.5	138.0
60	D100S60	S1	24.600	23.884	15	4.125	4.75	4.375	115/64	6.375	1.625	0.669	264.5	251.0
70	D100S70	S1	28.580	27.862	18	4.125	7.125	6.75	2.125	6.375	2.4375	0.669	371.5	358.0
80	D100S80	S1	32.570	31.839	18	4.125	7.125	6.75	2.125	6.375	2.4375	0.669	444.5	431.0

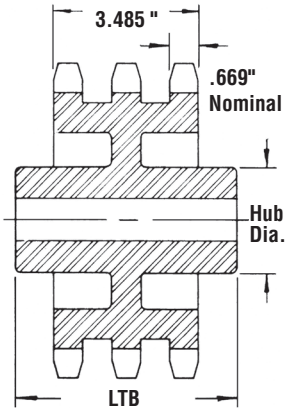
Sprockets with "H" suffix have hardened teeth.

All Steel Stock Sprockets

No. 100-3 1¼" Pitch

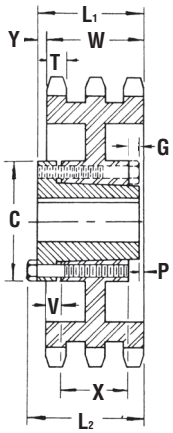


Type B

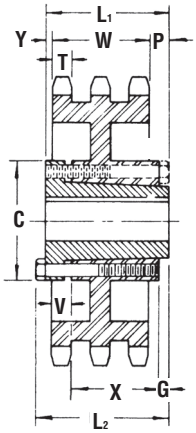


Type C





QD — Type B_1



QD — Type C_3

Alteration Charges

See current discount sheet for alteration charges.

Triple - Type B & C

No. Teeth	Catalog Number	OD	Type	Bore (inches)		Hub (inches)		Wt. lb (Approx.)
				Stock	Rec. Max.	Dia.	Length Thru	
11	E100B11	5.010	B	1	2.125	3.125	4.125	11.7
12	E100B12	5.420	B	1.125	2.125	3.375	4.125	13.7
13	E100B13	5.820	B	1.125	2.5	3.8125	4.125	16.9
14	E100B14	6.230	B	1.125	2.75	4.1875	4.125	20.2
15	E100B15	6.630	B	1.125	3.125	4.625	4.5	25.0
16	E100B16	7.030	B	1.125	3.3125	5	4.5	29.3
17	E100B17	7.440	B	1.125	3.5	5.125	4.5	33.8
18	E100B18	7.840	B	1.125	3.5	5.125	4.75	38.6
19	E100B19	8.240	B	1.125	3.75	5.5	4.75	43.3
20	E100B20	8.640	B	1.125	3.75	5.5	4.75	47.9
21	E100B21	9.040	B	1.125	3.75	5.5	4.75	52.3
22	E100B22	9.440	B	1.125	3.75	5.5	4.75	57.5
23	E100B23	9.840	B	1.125	3.75	5.5	4.75	62.5
24	E100B24	10.250	B	1.125	3.75	5.75	4.75	69.0
25	E100B25	10.650	B	1.125	3.75	5.75	4.75	73.0
26	E100B26	11.050	B	1.5	3.8125	5.75	4.75	79.0
30	E100B30	12.640	B	1.5	3.8125	5.75	4.75	103.0
35	E100C35	14.640	C	1.5	4	6	5	108.0
45	E100C45	18.630	C	1.5	4	6	5	143.0
60	E100C60	24.600	C	1.5	5.375	7.5	5	217.0
70	E100C70	28.580	C	1.5	5.375	7.5	5	262.0
80	E100C80	32.570	C	1.5	5.375	7.5	5	313.0

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

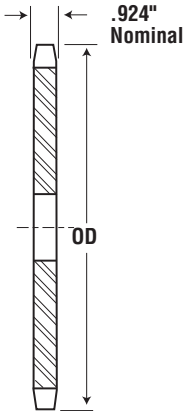
Triple - Type QD

No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions										Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	P	G	V	X	T	W	With Hub	Rim Only
35	E100F35	F	14.640	13.945	B1	3.9375	3.9844	4.3594	6.625	.5	.3594	.125	.5	2.5	0.669	3.485	112	100
45	E100F45	F	18.630	17.820	B1	3.9375	3.9844	4.3594	6.625	.5	.3594	.125	.5	2.5	0.669	3.485	139	120
60	E100J60	J	24.600	28.884	C3	4.4375	4.5	5	7.125	.5	.5156	.375	.6875	3.1875	0.669	3.485	197	178
70	E100J70	J	28.580	27.862	C3	4.4375	4.5	5	7.125	.5	.5156	.375	.6875	3.1875	0.669	3.485	247	228
80	E100J80	J	32.570	31.839	C3	4.4375	4.5	5	7.125	.5	.5156	.375	.6875	3.1875	0.669	3.485	287	268

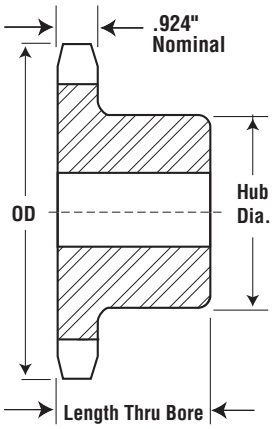
No. 120
1½" Pitch

All Steel Stock Sprockets

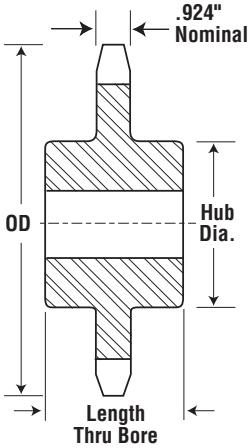




Type A



Type B



Type C

Single - Type B & C

Single - Type A

No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
				Stock	Rec. Max	Dia.	LTB					
8	–	4.520	–	–	–	–	–	–	A	120A8	1.25	2.4
9	120B9	5.020	B	1.375	1.8125	3.375 ★	2.25	5.3	A	120A9	1.25	3.0
10	120B10	5.520	B	1.375	2.25	3.75 ★	2.25	7.1	A	120A10	1.25	3.8
11	120B11	6.010	B	1.375	2.375	3.5625	2.125	7.6	A	120A11	1.25	4.8
12	120B12	6.500	B	1.375	2.75	4.125	2.125	9.9	A	120A12	1.25	5.8
13	120B13	6.990	B	1.375	3	4.5625	2.25	12.4	A	120A13	1.25	6.7
14	120B14	7.470	B	1.375	3.25	4.75	2.25	14.4	A	120A14	1.25	8.0
15	120B15	7.960	B	1.25	3.25	4.75	2.375	16.7	A	120A15	1.25	9.1
16	120B16	8.440	B	1.25	3.5	5.25	2.375	19.9	A	120A16	1.25	10.6
17	120B17	8.920	B	1.25	3.5	5.25	2.375	20.8	A	120A17	1.25	12.6
18	120B18	9.410	B	1.25	3.5	5.25	2.375	22.2	A	120A18	1.25	13.6
19	120B19	9.890	B	1.25	3.5	5.25	2.375	24.8	A	120A19	1.25	15.1
20	120B20	10.370	B	1.25	3.5	5.25	2.375	25.8	A	120A20	1.25	16.9
21	120B21	10.850	B	1.25	3.5	5.25	2.375	26.7	A	120A21	1.25	18.7
22	120B22	11.330	B	1.25	3.5	5.25	2.375	28.2	A	120A22	1.25	20.0
23	120B23	11.810	B	1.25	3.5	5.25	2.375	30.3	A	120A23	1.25	22.1
24	120B24	12.290	B	1.25	3.5	5.25	2.375	32.1	A	120A24	1.25	24.8
25	120B25	12.770	B	1.25	3.5	5.25	2.375	34.6	A	120A25	1.25	26.8
26	120B26	13.250	B	1.5	4	6	2.5	40.0	A	120A26	1.5	28.3
27	–	13.730	–	–	–	–	–	–	A	120A27	1.5	30.9
28	120B28	14.210	B	1.5	4	6	2.5	44.9	A	120A28	1.5	33.6
30	120B30	15.170	B	1.5	4	6	2.5	50.2	A	120A30	1.5	39.0
32	120B32	16.130	B	1.5	4	6	2.5	56.0	A	120A32	1.5	43.9
33	–	16.610	–	–	–	–	–	–	A	120A33	1.5	48.2
34	–	17.090	–	–	–	–	–	–	A	120A34	1.5	50.0
35	120B35	17.570	B	1.5	4	6	2.5	62.4	A	120A35	1.5	52.0
36	120B36	18.050	B	1.5	4	6	2.5	66.4	A	120A36	1.5	56.0
40	120C40	19.960	C	1.5	4	6	3.75	92.0	A	120A40	1.5	71.0
42	120C42	20.920	C	1.5	4	6	3.75	98.0	A	120A42	1.5	75.0
45	120C45	22.350	C	1.5	4	6	3.75	99.2	A	120A45	1.5	88.0
48	120C48	23.790	C	1.5	4	6	4	113.0	A	120A48	1.5	103.0
54	120C54	26.650	C	1.5	4	6	4	133.0	A	120A54	1.5	140.0
60	120C60	29.520	C	1.5	5.25	7	4	160.0	A	120A60	1.5	160.0
70	120C70	34.300	C	1.5	5.375	7.5	4.5	206.0	A	120A70	1.5	216.0
80	120C80	39.080	C	1.5	5.375	7.5	4.5	254.0	A	120A80	1.5	284.0
90	–	43.850	–	–	–	–	–	–	A	120A90	1.5	358.0

★ Has recessed groove in hub for chain clearance.

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

Alteration Charges

See current discount sheet for alteration charges.

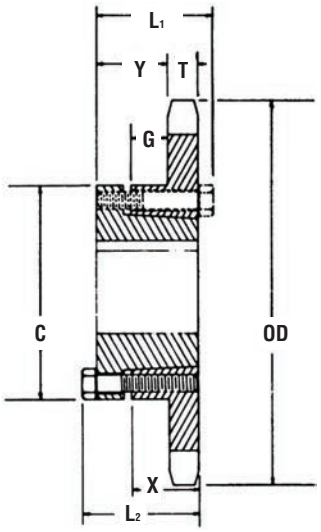
All Steel Stock Sprockets

No. 120 1½" Pitch

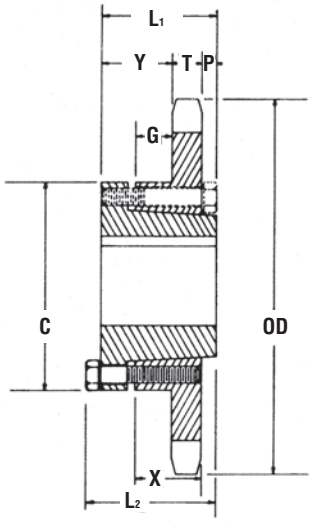
Single - Type QD With Hardened Teeth

No. Teeth	Catalog Number
12	120SF12H
13	120SF13H
14	120SF14H
15	120SF15H
16	120E16H
17	120E17H
18	120E18H
19	120E19H
20	120E20H
21	120E21H
22	120E22H
23	120E23H
24	120E24H
25	120E25H
26	120E26H
28	120E28H
30	120E30H

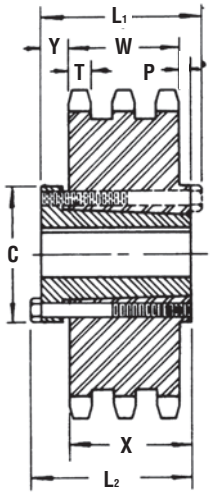
SABER TOOTH



QD — Type B



QD — Type B1



QD — Type C

Single - Type QD

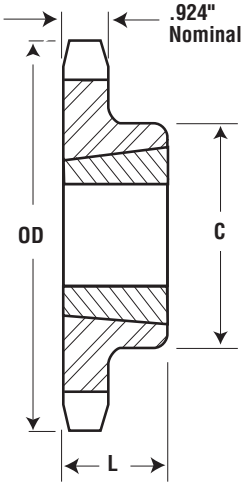
No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions								Wt. lb (Approx.)	
			OD	PD			L1	L2	C	Y	P	G	X	T	With Hub	Rim Only
12	120SF12	SF	6.500	5.796	B	2.9375	2.25	2.25	4.625	1.0781	–	.3281	1.25	0.924	7.7	4.7
13	120SF13	SF	6.990	6.268	B	2.9375	2.25	2.25	4.625	1.0781	–	.3281	1.25	0.924	9.1	6.1
14	120SF14	SF	7.470	6.741	B	2.9375	2.25	2.25	4.625	1.0781	–	.3281	1.25	0.924	10.4	7.4
15	120SF15	SF	7.960	7.215	B	2.9375	2.25	2.25	4.625	1.0781	–	.3281	1.25	0.924	11.8	8.0
16	120E16	E	8.440	7.689	B1	3.5	2.625	2.9375	6	1.5625	.125	.7031	1.625	0.924	21.2	11.2
17	120E17	E	8.920	8.163	B1	3.5	2.625	2.9375	6	1.5625	.125	.7031	1.625	0.924	23.4	13.4
18	120E18	E	9.410	8.638	B1	3.5	2.625	2.9375	6	1.5625	.125	.7031	1.625	0.924	24.8	14.8
19	120E19	E	9.890	9.113	B1	3.5	2.625	2.9375	6	1.5625	.125	.7031	1.625	0.924	26.5	16.5
20	120E20	E	10.370	9.589	B1	3.5	2.625	2.9375	6	1.5625	.125	.7031	1.625	0.924	29.2	19.2
21	120E21	E	10.850	10.064	B1	3.5	2.625	2.9375	6	1.5625	.125	.7031	1.625	0.924	29.9	19.9
22	120E22	E	11.330	10.540	B1	3.5	2.625	2.9375	6	1.5625	.125	.7031	1.625	0.924	31.6	21.6
23	120E23	E	11.810	11.016	B1	3.5	2.625	2.9375	6	1.5625	.125	.7031	1.625	0.924	33.8	23.8
24	120E24	E	12.290	11.492	B1	3.5	2.625	2.9375	6	1.5625	.125	.7031	1.625	0.924	35.8	25.8
25	120E25	E	12.770	11.968	B1	3.5	2.625	2.9375	6	1.5625	.125	.7031	1.625	0.924	38.1	28.1
26	120E26	E	13.250	12.444	B1	3.5	2.625	2.9375	6	1.5625	.125	.7031	1.625	0.924	39.9	29.9
28	120E28	E	14.210	13.397	B1	3.5	2.625	2.9375	6	1.5625	.125	.7031	1.625	0.924	49.7	34.7
30	120E30	E	15.170	14.350	B1	3.5	2.625	2.9375	6	1.5625	.125	.7031	1.625	0.924	49.4	39.4
32	120F32	F	16.130	15.303	C	3.9375	3.625	4	6.625	1	1.6875	1.5781	2.5	0.924	62.0	50.5
35	120F35	F	17.570	16.734	C	3.9375	3.625	4	6.625	1	1.6875	1.5781	2.5	0.924	71.0	59.5
36	120F36	F	18.050	17.211	C	3.9375	3.625	4	6.625	1	1.6875	1.5781	2.5	0.924	74.9	63.4
40	120F40	F	19.960	19.118	C	3.9375	3.625	4	6.625	1	1.6875	1.5781	2.5	0.924	88.5	77.0
42	120F42	F	20.920	20.072	C	3.9375	3.625	4	6.625	1	1.6875	1.5781	2.5	0.924	94.5	83.0
45	120F45	F	22.350	21.503	C	3.9375	3.625	4	6.625	1	1.6875	1.5781	2.5	0.924	95.5	84.0
48	120F48	F	23.790	22.935	C	3.9375	3.625	4	6.625	1	1.6875	1.5781	2.5	0.924	103.5	92.0
54	120F54	F	26.650	25.798	C	3.9375	3.625	4	6.625	1	1.6875	1.5781	2.5	0.924	125.0	114.0
60	120J60	J	29.520	28.661	C	4.4375	4.5	5	7.25	1.1875	2.3125	2.2656	3.1875	0.924	159.0	140.0
70	120J70	J	34.300	33.434	C	4.4375	4.5	5	7.25	1.1875	2.3125	2.2656	3.1875	0.924	196.0	177.0
80	120J80	J	39.080	38.207	C	4.4375	4.5	5	7.25	1.1875	2.3125	2.2656	3.1875	0.924	241.0	222.0

No. 120
1½" Pitch

All Steel Stock Sprockets

Single - Taper Bushed

No. Teeth	Catalog Number	Bushing	Diameter		Max. Bore	Dimensions		Type	Wt. lb (Approx.)	
			OD	PD		L	C		Rim Only	Bushing Only
12	120BTB12	2012	6.498	5.796	2	1.25	3.5625	B	5.5	1.7
13	120BTB13	2517	6.896	6.268	2.5	1.75	4.25	B	6.0	3.5
14	120BTB14	2517	7.472	6.741	2.5	1.75	4.25	B	7.0	3.5
15	120BTB15	2517	7.957	7.215	2.5	1.75	4.25	B	8.0	3.5
16	120BTB16	3020	8.441	7.689	3	2	5.25	B	10.0	6.5
17	120BTB17	3020	8.924	8.163	3	2	5.25	B	11.0	6.5
18	120BTB18	3020	9.407	8.638	3	2	5.25	B	12.0	6.5
19	120BTB19	3020	9.889	9.113	3	2	5.25	B	14.0	6.5
20	120BTB20	3020	10.371	9.588	3	2	5.25	B	15.5	6.5
21	120BTB21	3020	10.851	10.064	3	2	5.25	B	17.5	6.5
24	120BTB24	3020	12.294	11.492	3	2	5.25	B	23.5	6.5
26	120BTB26	3020	13.254	12.444	3	2	5.25	B	28.5	6.5
30	120BTB30	3020	15.171	14.351	3	2	5.25	B	33.5	6.5
35	120CTB35	3020	17.566	16.734	3	2	5.25	C	52.0	6.5
45	120CTB45	3030	22.351	21.503	3	3	5.875	C	82.0	9.2
60	120CTB60	3535	29.522	28.661	3.5	3.5	6.5	C	140.0	14.0
70	120CTB70	3535	34.301	33.434	3.5	3.5	6.5	C	175.0	14.0
80	120CTB80	3535	39.078	38.207	3.25	3.5	6.5	C	220.0	14.0



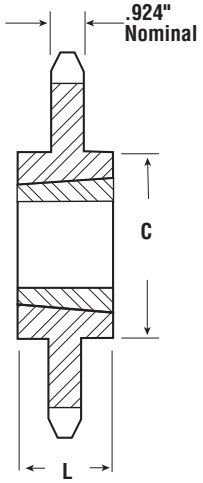
Type B

Single - Taper Bushed with Hardened Teeth

No. Teeth	Catalog Number
13	120BTB13H
14	120BTB14H
15	120BTB15H
16	120BTB16H
17	120BTB17H
18	120BTB18H
19	120BTB19H
20	120BTB20H
21	120BTB21H
24	120BTB24H
26	120BTB26H
30	120BTB30H

SABER TOOTH





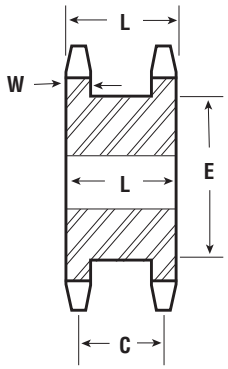
Type C

Single - Type C — Steel 1½" Pitch

No. Teeth	Catalog Number	OD	Bore (inches)		Hub (inches)		Wt. lb (Approx.)
			Stock	Rec. Max.	Diameter	Length	
11	120C11	6.010	1.375	2.375	3.5625	3.375	12.45
12	120C12	6.500	1.375	2.75	4.8125	3.375	14.80
13	120C13	6.990	1.375	3	4.625	3.375	17.15
14	120C14	7.470	1.375	3.25	4.75	3.375	19.50

Double Single - Type A — Steel

No. Teeth	Catalog Number	Diameter		Type	Min. Bore	Max. Bore	Dimensions				Wt. lb (Approx.)
		OD	PD				L	C	E	W (Nom.)	
15	DS120A15	7.960	7.215	A	1.4375	3.75	3.3438	2.4375	5.4844	0.924	30.0
16	DS120A16	8.440	7.689	A	1.4375	4	3.3438	2.4375	6	0.924	34.0
17	DS120A17	8.920	8.163	A	1.4375	4.4375	3.3438	2.4375	6.4844	0.924	37.0
18	DS120A18	9.410	8.638	A	1.4375	5.1875	3.3438	2.4375	6.4844	0.924	42.0
19	DS120A19	9.890	9.113	A	1.4375	5.5	3.3438	2.4375	7.4531	0.924	47.0
20	DS120A20	10.370	9.589	A	1.4375	5.9375	3.3438	2.4375	7.9375	0.924	51.0

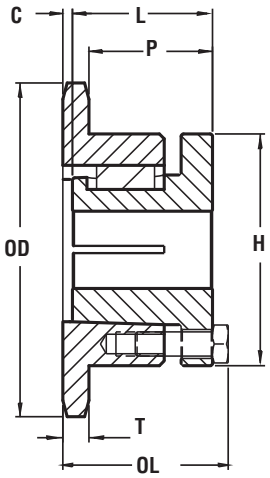


Type A

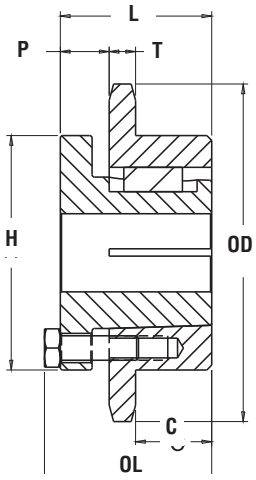
MST® Sprockets

No. 120 1½" Pitch

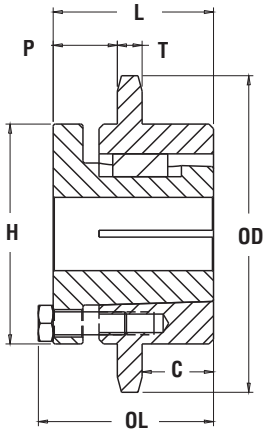




Type 4



Type 5



Type 6

Single - MST® Sprockets

No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions						Wt. lb (Approx.)	
			OD	PD			OL	L	C	H	P	T (Nom.)	With Hub	Rim Only
11	120Q11H	Q1	6.010	5.324	4	2.6875	2.3906	2.5	–	4.125	1.5625	0.924	8.3	4.8
12	120Q12H	Q1	6.500	5.796	4	2.6875	2.3906	2.5	–	4.125	1.5625	0.924	9.8	6.3
13	120Q13H	Q1	6.990	6.268	4	2.6875	2.3906	2.5	–	4.125	1.5625	0.924	11.4	7.9
14	120Q14H	Q1	7.470	6.741	4	2.6875	2.3906	2.5	–	4.125	1.5625	0.924	12.7	9.2
15	120Q15H	Q1	7.960	7.215	4	2.6875	2.3906	2.5	–	4.125	1.5625	0.924	13.9	10.4
16	120Q16H	Q1	8.440	7.689	4	2.6875	2.3906	2.5	–	4.125	1.9375	0.924	15.3	11.8
16	120R16H	R1	8.440	7.689	4	3.75	3.1563	2.875	–	5.375	1.9375	0.924	19.5	12.0
17	120Q17H	Q1	8.920	8.163	4	2.6875	2.3906	2.5	–	4.125	1.9375	0.924	16.9	13.4
17	120R17H	R1	8.920	8.163	4	3.75	3.1563	2.875	–	5.375	1.9375	0.924	21.2	13.7
18	120Q18H	Q1	9.410	8.638	4	2.6875	2.3906	2.5	–	4.125	1.9375	0.924	19.1	15.6
18	120R18H	R1	9.410	8.638	4	3.75	3.1563	2.875	–	5.375	1.9375	0.924	22.5	15.0
19	120R19H	R1	9.890	9.113	4	3.75	3.1563	2.875	–	5.375	1.9375	0.924	24.4	16.9
20	120R20H	R1	10.370	9.589	4	3.75	3.1563	2.875	–	5.375	1.9375	0.924	26.3	18.8
21	120R21H	R1	10.850	10.064	4	3.75	3.1563	2.875	–	5.375	1.9375	0.924	28.2	20.7
22	120R22H	R1	11.330	10.540	4	3.75	3.1563	2.875	–	5.375	1.9375	0.924	30.0	22.5
23	120R23H	R1	11.810	11.016	4	3.75	3.1563	2.875	–	5.375	1.9375	0.924	31.8	24.3
24	120R24H	R1	12.290	11.492	4	3.75	3.1563	2.875	–	5.375	1.9375	0.924	34.6	27.1
25	120R25H	R1	12.770	11.968	4	3.75	3.1563	2.875	–	5.375	1.9375	0.924	36.6	29.1
26	120R26H	R1	13.250	12.444	5	3.75	3.1563	2.875	1.0625	5.375	.875	0.924	40.8	33.3
28	120R28H	R1	14.210	13.397	5	3.75	3.1563	2.875	1.0625	5.375	.875	0.924	45.5	38.0
30	120R30H	R1	15.170	14.350	5	3.75	3.1563	2.875	1.0625	5.375	.875	0.924	50.8	43.3
32	120R32	R1	16.130	15.303	5	3.75	3.1563	2.875	1.0625	5.375	.875	0.924	56.9	49.4
35	120R35	R2	17.570	16.734	6	3.625	5.1563	4.875	2	5.375	1.9375	0.924	79.0	68.0
36	120R36	R2	18.050	17.211	6	3.625	5.1563	4.875	2	5.375	1.9375	0.924	83.0	72.0
40	120R40	R2	19.960	19.118	6	3.625	5.1563	4.875	2	5.375	1.9375	0.924	93.0	82.0
40	120S40	S1	19.960	19.118	5	4.25	4.75	4.375	2.375	6.375	1.0625	0.924	96.5	83.0
42	120S42	S1	20.920	20.072	5	4.25	4.75	4.375	2.375	6.375	1.0625	0.924	103.5	90.0
45	120R45	R2	22.350	21.503	6	3.625	5.1563	4.875	2	5.375	1.9375	0.924	113.0	102.0
45	120S45	S1	22.350	21.503	5	4.25	4.75	4.375	2.375	6.375	1.0625	0.924	113.5	100.0
48	120S48	S1	23.790	22.935	5	4.25	4.75	4.375	2.375	6.375	1.0625	0.924	124.5	111.0
54	120S54	S1	26.650	25.798	5	4.25	4.75	4.375	2.375	6.375	1.0625	0.924	151.5	138.0
60	120R60	R2	29.520	28.661	6	3.625	5.1563	4.875	2	5.375	1.9375	0.924	190.0	179.0
60	120S60	S1	29.520	28.661	5	4.25	4.75	4.375	2.375	6.375	1.0625	0.924	193.5	180.0
70	120R70	R2	34.300	33.434	6	3.625	5.1563	4.875	2	5.375	1.9375	0.924	159.0	148.0
70	120S70	S2	34.300	33.434	5	4.1875	7.125	6.75	2.875	6.375	2.9375	0.924	186.0	167.0
80	120R80	R2	39.080	38.207	6	3.625	5.1563	4.875	2	5.375	1.9375	0.924	302.0	291.0
80	120S80	S2	39.080	38.207	6	4.1875	7.125	6.75	2.875	6.375	2.9375	0.924	324.0	305.0

Sprockets with "H" suffix have hardened teeth.

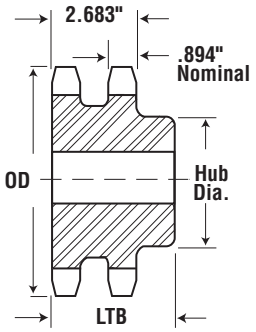
No. 120-2
1½" Pitch

All Steel Stock Sprockets

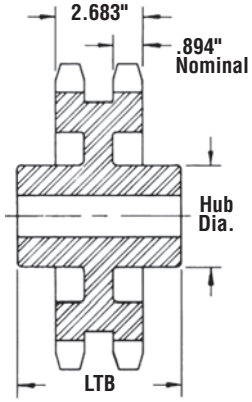


Alteration Charges

See current discount sheet for alteration charges.



Type B

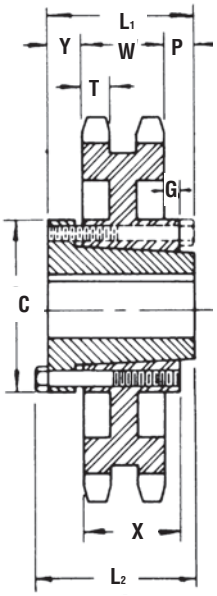


Type C

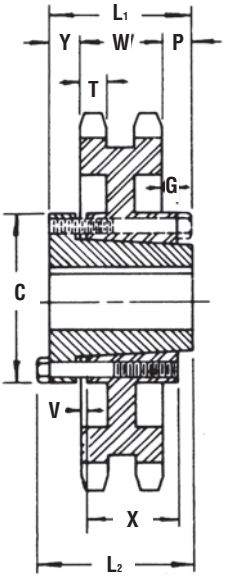
Double - Type B & C

No. Teeth	Catalog Number	OD	Type	Bore (Inches)		Hub (Inches)		Wt. lb (Approx.)
				Stock	Rec. Max.	Dia.	LTB	
11	D120B11	6.010	B	1.5	2.375	3.5625	3.75	13.6
12	D120B12	6.500	B	1.5	2.75	4.0625	3.75	17.3
13	D120B13	6.990	B	1.5	3	4.5	3.75	21.1
14	D120B14	7.470	B	1.5	3.3125	5	3.75	25.6
15	D120B15	7.960	B	1.5	3.5	5.25	3.75	29.9
16	D120B16	8.440	B	1.5	3.5	5.25	3.75	33.8
17	D120B17	8.920	B	1.5	3.5	5.25	3.75	36.9
18	D120B18	9.410	B	1.5	3.5	5.25	3.75	41.9
19	D120B19	9.890	B	1.5	3.5	5.25	3.75	46.5
20	D120B20	10.370	B	1.5	3.5	5.5	3.75	50.2
21	D120B21	10.850	B	1.5	3.5	5.5	3.75	55.6
22	D120B22	11.330	B	1.5	3.8125	5.75	4	64.0
23	D120B23	11.810	B	1.5	4	6.5	4	75.0
24	D120B24	12.290	B	1.5	4	6.5	4	79.0
25	D120B25	12.770	B	1.5	4	6.5	4	84.0
26	D120B26	13.250	B	1.5	4	6.5	4	90.0
30	D120B30	15.170	B	1.5	4	6.5	4	119.0
35	D120C35	17.570	C	1.5	5.375	7.5	6	148.0
45	D120C45	22.350	C	1.5	5.375	7.5	6	188.0
60	D120C60	29.520	C	1.5	6.375	9.5	6.25	307.0

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.



QD - Type C_5



QD - Type C_6

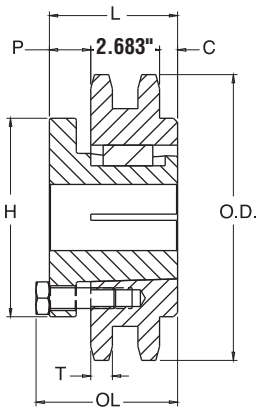
Double - Type QD

No. Teeth	Catalog Number	Bushing	Diameters		Type	Max. Bore	Dimensions										Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	P	G	V	X	T	W	With Hub	Rim Only
30	D120J30	J	15.170	14.350	C5	4.4375	4.5	5	7.25	.3438	.7813	.6563	.1563	3.1875	.894	2.683	97.5	78.0
35	D120J35	J	17.570	16.734	C5	4.4375	4.5	5	7.25	.3438	.7813	.6563	.1563	3.1875	.894	2.683	112.0	93.0
45	D120J45	J	22.350	21.502	C5	4.4375	4.5	5	7.25	.3438	.7813	.6563	.1563	3.1875	.894	2.683	157.0	138.0
60	D120M60	M	29.520	28.661	C6	5.5	6.75	6.75	9	.9063	1.7813	1.6563	.8438	5.1875	.894	2.683	271.0	234.0

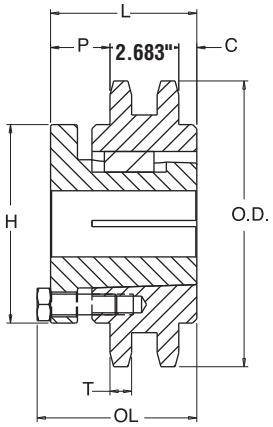
MST® Sprockets

No. 120-2
1½" Pitch





Type 15



Type 18

Double - MST® Sprockets

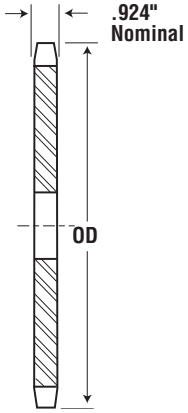
No. Teeth	Catalog Number	Bushing	Diameters		Type	Max. Bore	Dimensions						Wt. lb (Approx.)	
			OD	PD			OL	L	C	H	P	T (Nom.)	With Hub	Rim Only
30	D120S30	S1	15.170	14.350	15	4.25	4.75	4.1875	.625	6.1875	1.0625	0.894	118.5	105.0
35	D120S35	S1	17.570	16.734	15	4.25	4.75	4.1875	.625	6.1875	1.0625	0.894	161.5	148.0
45	D120S45	S2	22.350	21.503	18	4.1875	7.125	6.75	1.8438	6.1875	2.2188	0.894	287.0	268.0
60	D120U60	U0	29.520	28.661	15	5.5	5.7188	5.25	1.2813	8.1875	5938	0.894	213.0	183.0

No. 140
1¾" Pitch

All Steel Stock Sprockets







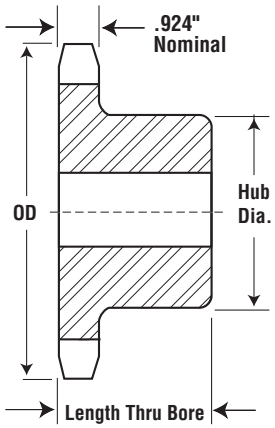
Type A

Single - Type B & C

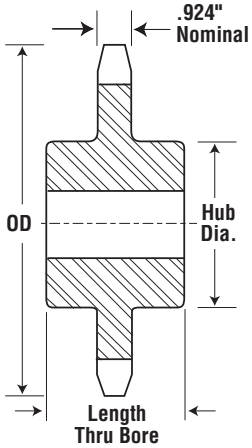
Single - Type A

No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
				Stock	Rec. Max	Dia.	LTB					
11	140B11	7.010	B	1.5	2.75	4.25	2.25	11.3	A	140A11	1.5	5.0
12	140B12	7.580	B	1.5	3	4.5	2.25	13.2	A	140A12	1.5	7.8
13	140B13	8.150	B	1.5	3.2813	55/16	2.375	18.9	A	140A13	1.5	8.2
14	140B14	8.720	B	1.5	3.75	5.5	2.375	20.4	A	140A14	1.5	10.0
15	140B15	9.280	B	1.5	4.25	6.25	2.375	25.1	A	140A15	1.5	11.0
16	140B16	9.850	B	1.5	4.25	6.25	2.5	27.9	A	140A16	1.5	14.0
17	140B17	10.410	B	1.5	4.25	6.25	2.5	29.8	A	140A17	1.5	16.0
18	140B18	10.980	B	1.5	4.25	6.25	2.5	32.0	A	140A18	1.5	18.0
19	140B19	11.540	B	1.5	4.25	6.25	2.5	34.1	A	140A19	1.5	21.0
20	140B20	12.100	B	1.5	4.25	6.25	2.5	36.0	A	140A20	1.5	23.0
21	140B21	12.660	B	1.5	4.25	6.25	2.5	38.7	A	140A21	1.5	25.0
22	140B22	13.220	B	1.5	4.25	6.25	2.5	40.6	A	140A22	1.5	28.0
23	140B23	13.780	B	1.5	4.25	6.25	2.5	42.1	A	140A23	1.5	30.0
24	140B24	14.340	B	1.5	4.25	6.25	2.5	46.2	A	140A24	1.5	33.0
25	140B25	14.900	B	1.5	4.25	6.25	2.5	47.8	A	140A25	1.5	34.0
26	140B26	15.460	B	1.5	4.25	6.25	3	57.2	A	140A26	1.5	39.0
27	140B27	16.020	B	1.5	4.25	6.25	3	58.5	A	140A27	1.5	41.0
28	140B28	16.580	B	1.5	4.25	6.25	3	62.2	A	140A28	1.5	45.0
30	140B30	17.700	B	1.5	4.25	6.25	3	69.8	A	140A30	1.5	52.0
31	–	18.260	–	–	–	–	–	–	A	140A31	1.5	56.0
32	140B32	18.820	B	1.5	4.25	6.25	3	76.3	A	140A32	1.5	60.0
35	140C35	20.490	C	1.5	5.25	7	4	108.0	A	140A35	1.5	73.0
36	–	21.050	–	–	–	–	–	–	A	140A36	1.5	77.0
40	140C40	23.290	C	1.5	5.25	7	4	121.0	A	140A40	1.5	93.0
45	140C45	26.080	C	1.5	5.25	7	4	142.0	A	140A45	1.5	131.0
48	140C48	27.750	C	1.5	5.25	7	4	150.0	A	140A48	1.5	134.0
54	140C54	31.100	C	1.5	5.25	7	4	177.0	A	140A54	1.5	173.0
60	140C60	34.440	C	1.5	5.25	7	5	220.0	A	140A60	1.5	219.0
70	140C70	40.020	C	1.5	5.375	7.5	5	282.0	A	140A70	1.5	292.0
80	140C80	45.590	C	1.5	5.375	7.5	5	331.0	A	140A80	1.5	402.0

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.



Type B



Type C

Alteration Charges

See current discount sheet for alteration charges.

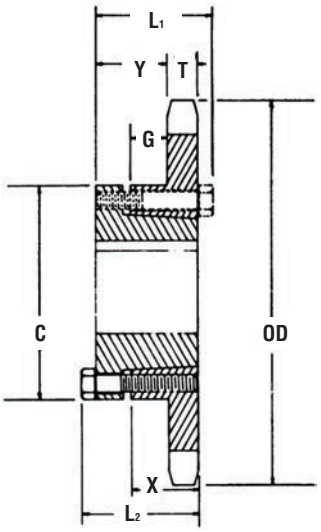
All Steel Stock Sprockets

No. 140 1¾" Pitch

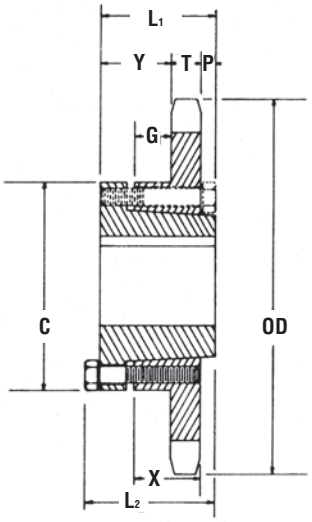
Single - Type QD With Hardened Teeth

No. Teeth	Catalog Number
11	140SF11H
12	140SF12H
13	140SF13H
14	140E14H
15	140E15H
16	140E16H
17	140E17H
18	140E18H
19	140E19H
20	140E20H
21	140E21H
22	140E22H
23	140F23H
24	140F24H
25	140F25H
26	140F26H
30	140F30H

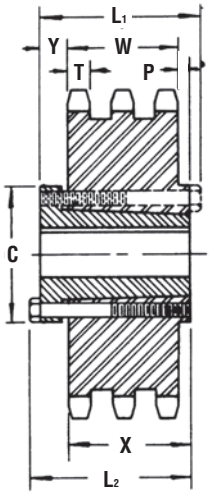
SABER TOOTH



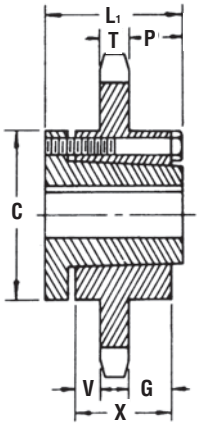
QD — Type B



QD — Type B1



QD — Type C



QD — Type C1

Single - Type QD

No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions									Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	P	G	V	X	T	With Hub	Rim Only
11	140SF11	SF	7.010	6.212	B	2.9375	2.25	2.25	4.625	.2344	–	.3281	–	1.25	0.924	8.6	5.6
12	140SF12	SF	7.580	6.762	B	2.9375	2.25	2.25	4.625	.2344	–	.3281	–	1.25	0.924	10.4	7.4
13	140SF13	SF	8.150	7.313	B	2.9375	2.25	2.25	4.625	.2344	–	.3281	–	1.25	0.924	11.9	8.9
14	140E14	E	8.720	7.864	B1	3.5	2.625	2.9375	6	1.2813	.125	.7031	–	1.625	0.924	21.6	11.6
15	140E15	E	9.280	8.417	B1	3.5	2.625	2.9375	6	1.2813	.125	.7031	–	1.625	0.924	24.2	14.2
16	140E16	E	9.850	8.970	B1	3.5	2.625	2.9375	6	1.2813	.125	.7031	–	1.625	0.924	25.9	15.9
17	140E17	E	10.410	9.524	B1	3.5	2.625	2.9375	6	1.2813	.125	.7031	–	1.625	0.924	28.0	18.0
18	140E18	E	10.980	10.078	B1	3.5	2.625	2.9375	6	1.2813	.125	.7031	–	1.625	0.924	29.6	19.6
19	140E19	E	11.540	10.632	B1	3.5	2.625	2.9375	6	1.2813	.125	.7031	–	1.625	0.924	32.0	22.0
20	140E20	E	12.100	11.187	B1	3.5	2.625	2.9375	6	1.2813	.125	.7031	–	1.625	0.924	34.6	24.6
21	140E21	E	12.660	11.742	B1	3.5	2.625	2.9375	6	1.2813	.125	.7031	–	1.625	0.924	37.6	27.6
22	140E22	E	13.220	12.297	B1	3.5	2.625	2.9375	6	1.2813	.125	.7031	–	1.625	0.924	39.5	29.5
23	140F23	F	13.780	12.852	B1	3.9375	3.625	4	6.625	2.2813	.125	1.5781	–	2.5	0.924	48.0	36.4
24	140F24	F	14.340	13.407	B1	3.9375	3.625	4	6.625	2.2813	.125	1.5781	–	2.5	0.924	51.6	40.1
25	140F25	F	14.900	13.963	B1	3.9375	3.625	4	6.625	2.2813	.125	1.5781	–	2.5	0.924	53.8	42.3
26	140F26	F	15.460	14.518	B1	3.9375	3.625	4	6.625	2.2813	.125	1.5781	–	2.5	0.924	58.0	46.5
30	140F30	F	17.700	16.742	B1	3.9375	3.625	4	6.625	2.2813	.125	1.5781	–	2.5	0.924	72.0	60.4
35	140F35	F	20.490	19.523	C	3.9375	3.625	4	6.625	1	1.3438	1.5781	–	2.5	0.924	89.5	78.0
36	140F36	F	21.050	20.079	C	3.9375	3.625	4	6.625	1	1.3438	1.5781	–	2.5	0.924	95.5	84.0
40	140J40	J	23.290	22.305	C	4.2188	4.5	5	7.25	1.0938	2.375	2.2656	–	3.1875	0.924	117.0	98.0
45	140J45	J	26.080	25.087	C	4.2188	4.5	5	7.25	1.0938	2.375	2.2656	–	3.1875	0.924	139.0	120.0
48	140J48	J	27.750	26.757	C	4.2188	4.5	5	7.25	1.0938	2.375	2.2656	–	3.1875	0.924	148.0	129.0
54	140J54	J	31.100	30.097	C	4.2188	4.5	5	7.25	1.0938	2.375	2.2656	–	3.1875	0.924	168.0	149.0
60	140J60	J	34.440	33.438	C	4.2188	4.5	5	7.25	1.0938	2.375	2.2656	–	3.1875	0.924	205.0	186.0
70	140M70	M	40.020	39.006	C1	5.5	6.75	6.75	9	2.9063	2.9063	2.513	1.2031	5.1875	0.924	301.0	264.0
80	140M80	M	45.590	44.575	C1	5.5	6.75	6.75	9	2.9063	2.9063	2.513	1.2031	5.1875	0.924	385.0	348.0

No. 140
1¾" Pitch

All Steel Stock Sprockets

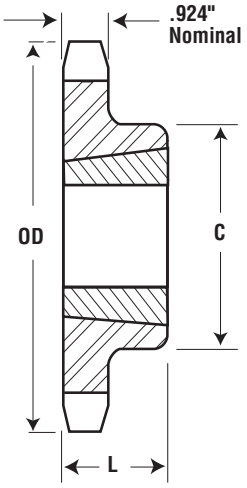
Martin

Single - Taper Bushed with Hardened Teeth

No. Teeth	Catalog Number
12	140BTB12H
13	140BTB13H
14	140BTB14H
15	140BTB15H
16	140BTB16H
17	140BTB17H
18	140BTB18H
19	140BTB19H
21	140BTB21H
26	140BTB26H

SABER TOOTH

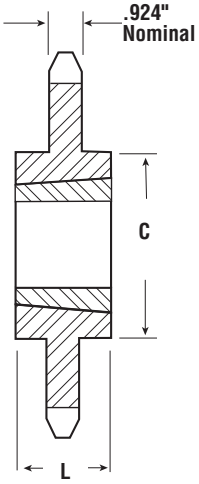




Type B

Single - Taper Bushed

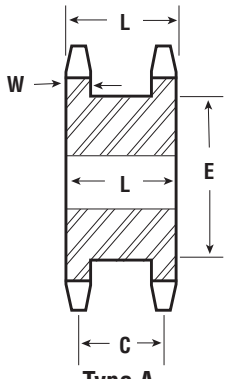
No. Teeth	Catalog Number	Bushing	Diameter		Max. Bore	Dimensions		Type	Wt. lb (Approx.)	
			OD	PD		L	C		Rim Only	Bushing Only
12	140BTB12	2517	7.581	6.762	2.5	1.75	4.25	B	7.0	3.5
13	140BTB13	3020	8.150	7.313	3	2	5.25	B	8.0	6.5
14	140BTB14	3020	8.718	7.864	3	2	5.25	B	10.0	6.5
15	140BTB15	3020	9.283	8.417	3	2	5.25	B	12.0	6.5
16	140BTB16	3020	9.848	8.970	3	2	5.25	B	14.0	6.5
17	140BTB17	3020	10.411	9.524	3	2	5.25	B	16.0	6.5
18	140BTB18	3020	10.975	10.078	3	2	5.25	B	18.0	6.5
19	140BTB19	3020	11.537	10.632	3	2	5.25	B	20.0	6.5
21	140BTB21	3020	12.660	11.742	3	2	5.25	B	24.0	6.5
26	140BTB26	3020	15.463	14.518	3	2	5.25	B	40.0	6.5
35	140CTB35	3535	20.494	19.523	3.5	3.5	6.5	C	78.0	14.0
45	140CTB45	4040	26.076	25.087	4	4	7.75	C	118.0	22.0
60	140CTB60	4040	34.442	33.438	4	4	7.75	C	188.0	22.0
70	140CTB70	4040	40.017	39.006	4	4	7.75	C	241.0	22.0



Type C

Double Single - Type A — Steel

No. Teeth	Catalog Number	Diameter		Type	Min. Bore	Max. Bore	Dimensions				Wt. lb (Approx.)
		OD	PD				L	C	E	W (Nom.)	
14	DS140A14	8.720	7.864	A	1.4375	3.875	3.6094	2.6875	5.875	0.924	35.0
15	DS140A15	9.280	8.417	A	1.4375	4.4375	3.6094	2.6875	6.4531	0.924	43.0
16	DS140A16	9.850	8.970	A	1.4375	5.25	3.6094	2.6875	7.0156	0.924	49.0
17	DS140A17	10.410	9.524	A	1.4375	5.5625	3.6094	2.6875	7.5781	0.924	58.0
18	DS140A18	10.980	10.078	A	1.4375	6.125	3.6094	2.6875	8.1406	0.924	66.0

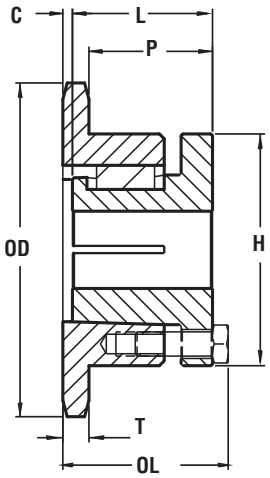


Type A

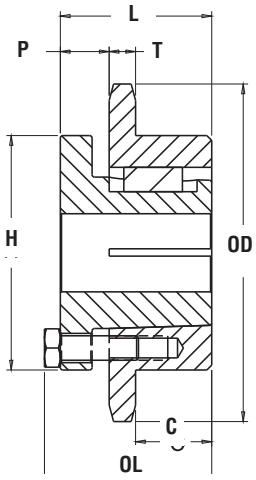
MST® Sprockets

No. 140-2
1¾" Pitch

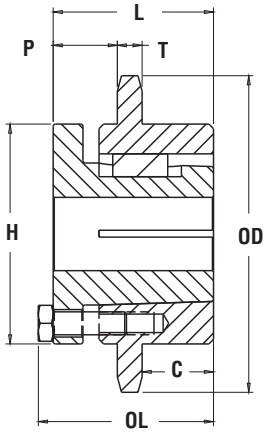




Type 4



Type 5



Type 6

Single - MST® Sprockets

No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions						Wt. lb (Approx.)	
			OD	PD			OL	L	C	H	P	T (Nom.)	With Hub	Rim Only
11	140Q11H	Q1	7.010	6.212	4	2.6875	2.7813	2.5	–	4.125	1.5625	0.924	9.9	6.4
12	140Q12H	Q1	7.580	6.762	4	2.6875	2.7813	2.5	–	4.125	1.5625	0.924	12.5	9.0
13	140R13H	R1	8.150	7.313	4	3.75	3.1563	2.875	–	5.375	1.9375	0.924	18.6	11.1
14	140R14H	R1	8.720	7.864	4	3.75	3.1563	2.875	–	5.375	1.9375	0.924	20.1	12.6
15	140R15H	R1	9.280	8.417	4	3.75	3.1563	2.875	–	5.375	1.0625	0.924	22.2	14.7
16	140R16H	R1	9.850	8.970	4	3.75	3.1563	2.875	–	5.375	1.0625	0.924	24.0	16.5
17	140R17H	R1	10.410	9.524	4	3.75	3.1563	2.875	–	5.375	1.9375	0.924	26.0	18.5
18	140R18H	R1	10.980	10.078	4	3.75	3.1563	2.875	–	5.375	1.9375	0.924	28.0	20.5
19	140R19H	R1	11.540	10.632	4	3.75	3.1563	2.875	–	5.375	1.9375	0.924	30.5	23.0
20	140R20H	R1	12.100	11.187	4	3.75	3.1563	2.875	–	5.375	1.9375	0.924	32.9	25.4
21	140R21H	R1	12.660	11.742	4	3.75	3.1563	2.875	–	5.375	1.9375	0.924	35.3	27.8
22	140R22H	R1	13.220	12.297	5	3.75	3.1563	2.875	1.0625	5.375	.875	0.924	40.0	32.5
23	140R23H	R1	13.780	12.852	5	3.75	3.1563	2.875	1.0625	5.375	.875	0.924	43.5	36.0
24	140R24H	R1	14.340	13.407	5	3.75	3.1563	2.875	1.0625	5.375	.875	0.924	45.1	37.6
25	140R25H	R1	14.900	13.963	5	3.75	3.1563	2.875	1.0625	5.375	.875	0.924	47.8	40.3
26	140R26H	R1	15.460	14.518	5	3.75	3.1563	2.875	1.0625	5.375	.875	0.924	51.5	44.0
30	140R30H	R2	17.700	16.742	5	3.625	5.1563	4.875	2	5.375	.875	0.924	79.0	68.0
35	140R35	R2	20.490	19.523	6	3.625	5.1563	4.875	2	5.375	.875	0.924	99.0	88.0
36	140R36	R2	21.050	20.079	6	3.625	5.1563	4.875	2	5.375	.875	0.924	101.0	90.0
36	140S36	S1	21.050	20.079	5	4.25	4.75	4.375	2.375	6.375	1.0625	0.924	102.5	89.0
40	140R40	R2	23.290	22.305	6	3.625	5.1563	4.875	2	5.375	.875	0.924	120.0	109.0
40	140S40	S1	23.290	22.305	5	4.25	4.75	4.375	2.375	6.375	1.0625	0.924	120.5	107.0
45	140S45	S1	26.080	25.087	5	4.25	4.75	4.375	2.375	6.375	1.0625	0.924	145.5	132.0
48	140S48	S2	27.750	26.757	6	4.1875	7.5	6.75	2.875	6.375	2.9375	0.924	188.0	169.0
54	140S54	S2	31.100	30.097	6	4.1875	7.5	6.75	2.875	6.375	2.9375	0.924	227.0	208.0
60	140S60	S2	34.440	33.438	6	4.1875	7.5	6.75	2.875	6.375	2.9375	0.924	249.0	230.0
70	140S70	S2	40.020	39.006	6	4.1875	7.5	6.75	2.875	6.375	2.9375	0.924	330.0	311.0
80	140S80	S2	45.590	44.575	6	4.1875	7.5	6.75	2.875	6.375	2.9375	0.924	261.0	242.0

Sprockets with "H" suffix have hardened teeth.

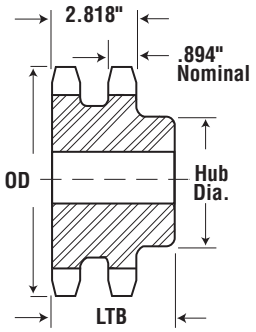
No. 140-2
1¾" Pitch

All Steel Stock Sprockets

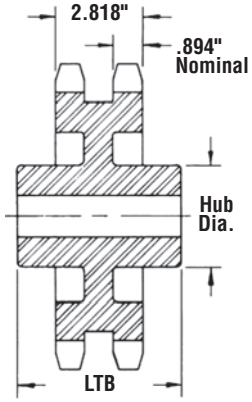


Alteration Charges

See current discount sheet for alteration charges.



Type B

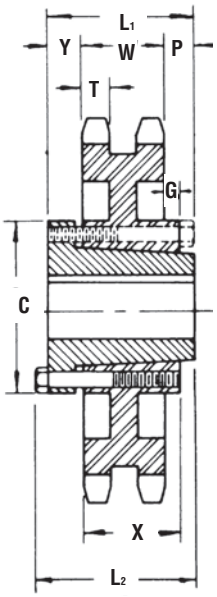


Type C

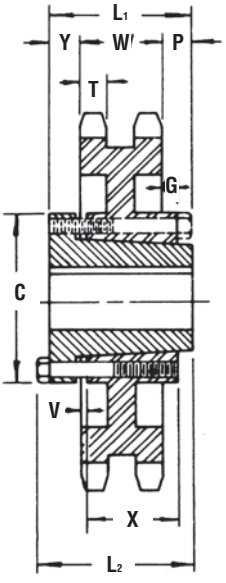
Double - Type B & C

No. Teeth	Catalog Number	OD	Type	Bore (Inches)		Hub (Inches)		Wt. lb (Approx.)
				Stock	Rec. Max.	Dia.	LTB	
13	D140B13	8.150	B	1.625	3.3125	5	3.75	29.0
14	D140B14	8.720	B	1.625	3.75	5.5	3.75	34.8
15	D140B15	9.280	B	1.625	4.5	6.5	3.75	42.5
16	D140B16	9.850	B	1.625	5.25	7	4	48.1
17	D140B17	10.410	B	1.625	5.25	7	4	57.5
18	D140B18	10.980	B	1.75	5.25	7	4	65.6
19	D140B19	11.540	B	1.75	5.25	7	4	72.0
20	D140B20	12.100	B	1.75	5.25	7	4	76.0
21	D140B21	12.660	B	1.75	5.25	7	4	82.0
22	D140B22	13.220	B	1.75	5.25	7	4	94.0
23	D140B23	13.780	B	1.75	5.25	7	4	100.0
24	D140B24	14.340	B	1.75	5.25	7	4	104.0
25	D140B25	14.900	B	1.75	5.25	7	4	120.0
26	D140B26	15.460	B	1.75	5.25	7	4	128.0
35	D140C35	20.490	C	1.5	5.375	7.5	6	180.0
45	D140C45	26.080	C	1.5	5.375	7.5	6	232.0
60	D140C60	34.440	C	1.5	6.375	9.5	6.25	372.0

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.



QD - Type C_5



QD - Type C_6

Double - Type QD

No. Teeth	Catalog Number	Bushing	Diameters		Type	Max. Bore	Dimensions										Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	P	G	V	X	T	W	With Hub	Rim Only
35	D140J35	J	20.490	19.523	C5	4.4375	4.5	5	7.25	.9688	.7188	.5938	.2188	3.1875	0.894	2.818	137	128
45	D140J45	J	26.080	25.087	C5	4.4375	4.5	5	7.25	.9688	.7188	.5938	.2188	3.1875	0.894	2.818	195	176
60	D140M60	M	34.440	33.438	C6	5.5	6.75	6.75	9	2.2188	1.7188	1.5938	.7813	5.1875	0.894	2.818	339	302

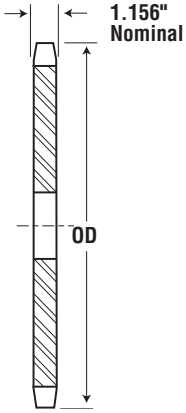
All Steel Stock Sprockets

No. 160 2" Pitch



Alteration Charges

See current discount sheet for alteration charges.

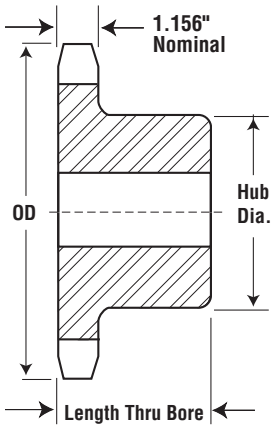


Type A

Single - Type B & C

Single - Type A

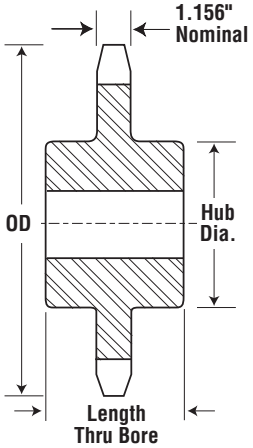
No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
				Stock	Rec. Max	Dia.	LTB					
8	160B8	6.030	B	1.5	1.875	3.25	2.25	8.0	A	160A8	1.5	5.0
9	160B9	6.700	B	1.5	2.125	3.625	2.25	10.0	A	160A9	1.5	7.0
10	160B10	7.360	B	1.5	2.75	4.125	2.25	12.0	A	160A10	1.5	8.0
11	160B11	8.010	B	1.5	3.25	4.75	2.5	17.0	A	160A11	1.5	10.0
12	160B12	8.660	B	1.5	3.75	5.5	2.5	21.0	A	160A12	1.5	12.0
13	160B13	9.310	B	1.5	4	6	2.75	28.0	A	160A13	1.5	16.0
14	160B14	9.960	B	1.5	4.5	6.5	2.75	32.0	A	160A14	1.5	17.0
15	160B15	10.610	B	1.5	5.25	7	2.75	37.0	A	160A15	1.5	21.0
16	160B16	11.260	B	1.5	5.25	7	2.75	41.0	A	160A16	1.5	24.0
17	160B17	11.900	B	1.5	5.25	7	2.75	45.0	A	160A17	1.5	27.0
18	160B18	12.540	B	1.5	5.25	7	2.75	48.0	A	160A18	1.5	30.0
19	160B19	13.190	B	1.5	5.25	7	2.75	52.0	A	160A19	1.5	34.0
20	160B20	13.830	B	1.5	5.25	7	2.75	56.0	A	160A20	1.5	38.0
21	160B21	14.470	B	1.5	5.25	7	2.75	59.0	A	160A21	1.5	42.0
22	160B22	15.110	B	1.5	5.25	7	2.75	65.0	A	160A22	1.5	46.0
23	160B23	15.750	B	1.5	5.25	7	2.75	68.0	A	160A23	1.5	50.0
24	160B24	16.390	B	1.5	5.25	7	3	77.0	A	160A24	1.5	56.0
25	160B25	17.030	B	1.5	5.25	7	3	81.0	A	160A25	1.5	61.0
26	160B26	17.670	B	1.5	5.25	7	3	86.0	A	160A26	1.5	65.0
27	160B27	18.310	B	1.5	5.25	7	3	91.0	A	160A27	1.5	71.0
28	160B28	18.950	B	1.5	5.25	7	3	98.0	A	160A28	1.5	77.0
30	160B30	20.230	B	1.5	5.25	7	3	108.0	A	160A30	1.5	90.0
35	160C35	23.420	C	1.5	5.5	8	4.5	154.0	A	160A35	1.5	121.0
40	160C40	26.610	C	1.5	5.5	8	4.5	196.0	A	160A40	1.5	138.0
45	160C45	29.800	C	1.5	5.5	8	5	234.0	A	160A45	1.5	204.0
54	160C54	35.540	C	1.5	5.5	8	5	276.0	A	160A54	1.5	294.0
60	160C60	39.360	C	1.5	5.5	8	5	329.0	A	160A60	1.5	366.0
70	160C70	45.730	C	1.5	5.5	8	5	446.0	A	160A70	1.5	507.0
80	160C80	52.100	C	1.5	5.5	8	6	612.0	A	160A80	1.5	656.0



Type B

Single - Type C — Steel 2" Pitch

No. Teeth	Catalog Number	OD	Bore (inches)		Hub (inches)		Wt. lb (Approx.)
			Stock	Rec. Max.	Diameter	Length	
11	160C11	8.010	1.5	3.25	4.5	4.125	21.0
12	160C12	8.660	1.5	3.75	5.5	4.125	26.0



Type C

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

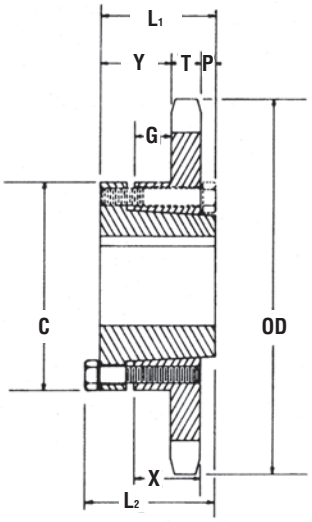
No. 160
2" Pitch

All Steel Stock Sprockets

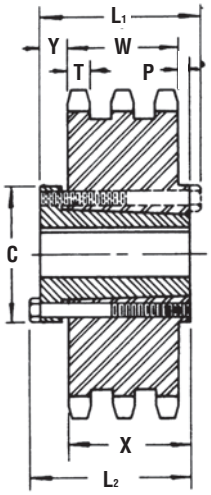
Single - Type QD With Hardened Teeth

No. Teeth	Catalog Number
12	160E12H
13	160E13H
14	160E14H
15	160F15H
16	160F16H
17	160F17H
18	160F18H
19	160F19H
20	160F20H
21	160F21H
22	160F22H
23	160F23H
24	160F24H
25	160F25H
26	160J26H
28	160J28H
30	160J30H

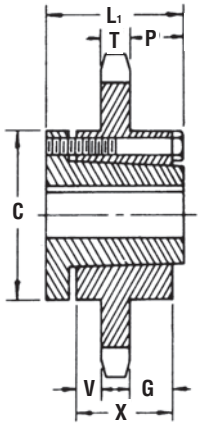
SABER TOOTH



QD — Type B_1



QD — Type C



QD — Type C_1

Single - Type QD

No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions									Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	P	G	V	X	T	With Hub	Rim Only
12	160E12	E	8.660	7.727	B1	3.5	2.625	2.9375	6	1.3125	.125	.4688	–	1.625	1.156	21.0	11.0
13	160E13	E	9.310	8.357	B1	3.5	2.625	2.9375	6	1.3125	.125	.4688	–	1.625	1.156	24.0	14.0
14	160E14	E	9.960	8.988	B1	3.5	2.625	2.9375	6	1.3125	.125	.4688	–	1.625	1.156	26.0	16.0
15	160F15	F	10.610	9.620	B1	3.9375	3.625	4	6.625	2.3125	.125	1.3438	–	2.5	1.156	35.5	24.0
16	160F16	F	11.260	10.252	B1	3.9375	3.625	4	6.625	2.3125	.125	1.3438	–	2.5	1.156	38.5	27.0
17	160F17	F	11.900	10.885	B1	3.9375	3.625	4	6.625	2.3125	.125	1.3438	–	2.5	1.156	42.5	31.0
18	160F18	F	12.540	11.518	B1	3.9375	3.625	4	6.625	2.3125	.125	1.3438	–	2.5	1.156	46.5	35.0
19	160F19	F	13.190	12.151	B1	3.9375	3.625	4	6.625	2.3125	.125	1.3438	–	2.5	1.156	49.5	38.0
20	160F20	F	13.830	12.785	B1	3.9375	3.625	4	6.625	2.3125	.125	1.3438	–	2.5	1.156	53.5	42.0
21	160F21	F	14.740	13.419	B1	3.9375	3.625	4	6.625	2.3125	.125	1.3438	–	2.5	1.156	56.5	45.0
22	160F22	F	15.110	14.053	B1	3.9375	3.625	4	6.625	2.3125	.125	1.3438	–	2.5	1.156	62.5	51.0
23	160F23	F	15.750	14.688	B1	3.9375	3.625	4	6.625	2.3125	.125	1.3438	–	2.5	1.156	66.5	55.0
24	160F24	F	16.390	15.323	B1	3.9375	3.625	4	6.625	2.3125	.125	1.3438	–	2.5	1.156	70.5	59.0
25	160F25	F	17.030	15.958	B1	3.9375	3.625	4	6.625	2.3125	.125	1.3438	–	2.5	1.156	75.5	64.0
26	160J26	J	17.670	16.593	C	4.4375	4.5	5	7.25	1.1875	2.125	2.0313	–	3.1875	1.156	92.5	74.0
28	160J28	J	18.950	17.863	C	4.4375	4.5	5	7.25	1.1875	2.125	2.0313	–	3.1875	1.156	103.0	84.0
30	160J30	J	20.230	19.134	C	4.4375	4.5	5	7.25	1.1875	2.125	2.0313	–	3.1875	1.156	115.0	96.0
35	160J35	J	23.420	22.312	C	4.4375	4.5	5	7.25	1.1875	2.125	2.0313	–	3.1875	1.156	135.0	116.0
40	160M40	M	26.610	25.491	C1	5.5	6.75	6.75	9	2.6875	2.6875	2.4063	1.5938	5.1875	1.156	21.0	174.0
45	160M45	M	29.800	28.671	C1	5.5	6.75	6.75	9	2.6875	2.6875	2.4063	1.5938	5.1875	1.156	245.0	208.0
54	160M54	M	35.540	34.397	C1	5.5	6.75	6.75	9	2.6875	2.6875	2.4063	1.5938	5.1875	1.156	299.0	262.0
60	160M60	M	39.360	38.215	C1	5.5	6.75	6.75	9	2.6875	2.6875	2.4063	1.5938	5.1875	1.156	347.0	310.0
70	160M70	M	45.730	44.578	C1	5.5	6.75	6.75	9	2.6875	2.6875	2.4063	1.5938	5.1875	1.156	468.0	431.0
80	160M80	M	52.100	50.943	C1	5.5	6.75	6.75	9	2.6875	2.6875	2.4063	1.5938	5.1875	1.156	567.0	530.0

All Steel Stock Sprockets

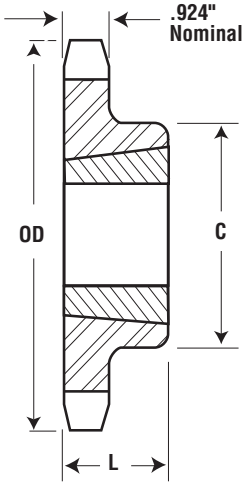
No. 160 2" Pitch

Single - Taper Bushed with Hardened Teeth

No. Teeth	Catalog Number
11	160BTB11H
12	160BTB12H
13	160BTB13H
14	160BTB14H
15	160BTB15H
16	160BTB16H
17	160BTB17H
18	160BTB18H
19	160BTB19H
21	160BTB21H
26	160BTB26H

SABER TOOTH

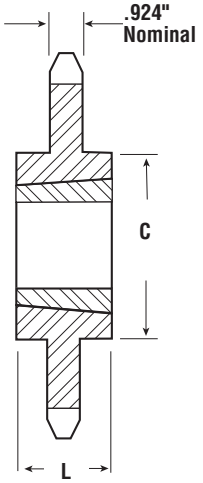




Type B

Single - Taper Bushed

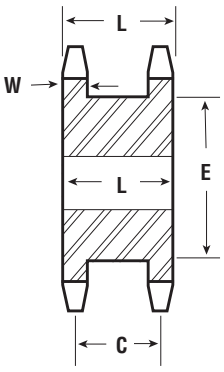
No. Teeth	Catalog Number	Bushing	Diameter		Max. Bore	Dimensions		Type	Wt. lb (Approx.)	
			OD	PD		L	C		Rim Only	Bushing Only
11	160BTB11	2517	8.011	7.099	2.5	1.75	4.25	B	9.0	3.5
12	160BTB12	3020	8.664	7.727	3	2	5.25	B	11.0	6.5
13	160BTB13	3020	9.314	8.357	3	2	5.25	B	13.0	6.5
14	160BTB14	3020	9.963	8.988	3	2	5.25	B	16.0	6.5
15	160BTB15	3535	10.609	9.620	3.5	3.5	6.5	B	25.0	14.0
16	160BTB16	3535	11.255	10.252	3.5	3.5	6.5	B	28.0	14.0
17	160BTB17	3535	11.899	10.885	3.5	3.5	6.5	B	32.0	14.0
18	160BTB18	3535	12.543	11.518	3.5	3.5	6.5	B	35.0	14.0
19	160BTB19	3535	13.185	12.151	3.5	3.5	6.5	B	39.0	14.0
21	160BTB21	3535	14.470	13.419	3.5	3.5	6.5	B	48.0	14.0
26	160BTB26	3535	17.671	16.593	3.5	3.5	6.5	B	68.0	14.0
35	160CTB35	4040	23.422	22.312	4	4	7.75	C	118.0	14.0
45	160CTB45	4040	29.802	28.671	4	4	7.75	C	186.0	22.0
60	160CTB60	4545	39.362	38.215	4.5	4.5	8.75	C	292.0	30.0



Type C

Double Single - Type A — Steel

No. Teeth	Catalog Number	Diameter		Type	Min. Bore	Max. Bore	Dimensions				Wt. lb (Approx.)
		OD	PD				L	C	E	W (Nom.)	
15	DS160A15	10.609	9.620	A	1.6875	5.5	4.25	3.0938	7.375	1.156	69.0
16	DS160A16	11.255	10.252	A	1.6875	6	4.25	3.0938	8.0156	1.156	75.0
17	DS160A17	11.899	10.885	A	1.6875	6.5	4.25	3.0938	8.9688	1.156	92.0
18	DS160A18	12.543	11.518	A	1.6875	6.8125	4.25	3.0938	9.3125	1.156	97.0

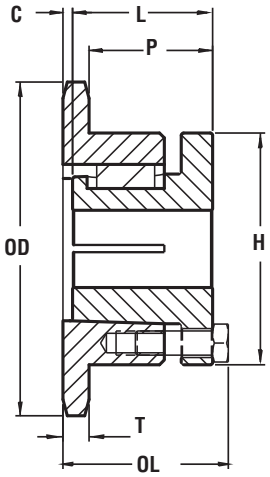


Type A

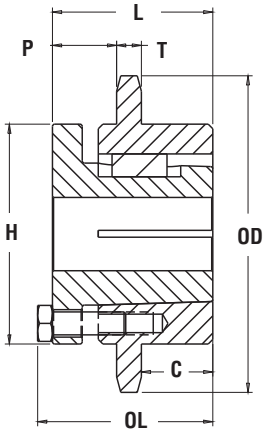
No. 160
2" Pitch

MST® Sprockets





Type 4



Type 6

Single - MST® Sprockets

No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions						Wt. lb (Approx.)	
			OD	PD			OL	L	C	H	P	T (Nom.)	With Hub	Rim Only
11	160R11H	R1	8.010	7.099	4	3.75	3.4063	2.875	.25	5.375	1.9688	1.156	18.3	10.8
12	160R12H	R1	8.660	7.727	4	3.75	3.4063	2.875	.25	5.375	1.9688	1.156	21.7	14.2
13	160R13H	R1	9.310	8.357	4	3.75	3.1563	2.875	–	5.375	1.7188	1.156	23.0	15.5
14	160R14H	R1	9.960	8.988	4	3.75	3.1563	2.875	–	5.375	1.7188	1.156	26.0	18.5
15	160R15H	R1	10.610	9.620	4	3.75	3.1563	2.875	–	5.375	1.7188	1.156	29.1	21.6
16	160R16H	R1	11.260	10.252	4	3.75	3.1563	2.875	–	5.375	1.7188	1.156	32.5	25.0
17	160R17H	R1	11.900	10.885	4	3.75	3.1563	2.875	–	5.375	1.7188	1.156	35.5	28.0
18	160R18H	R1	12.540	11.518	4	3.75	3.1563	2.875	–	5.375	1.7188	1.156	39.4	31.9
19	160R19H	R1	13.190	12.151	4	3.75	3.1563	2.875	–	5.375	1.7188	1.156	43.4	35.9
20	160R20H	R2	13.830	12.785	6	3.625	5.1563	4.875	2	5.375	1.7188	1.156	62.0	51.0
21	160R21H	R2	14.470	13.419	6	3.625	5.1563	4.875	2	5.375	1.7188	1.156	67.0	56.0
22	160R22H	R2	15.110	14.053	6	3.625	5.1563	4.875	2	5.375	1.7188	1.156	71.0	60.0
23	160R23H	R2	15.750	14.688	6	3.625	5.1563	4.875	2	5.375	1.7188	1.156	76.0	65.0
24	160R24H	R2	16.390	15.323	6	3.625	5.1563	4.875	2	5.375	1.7188	1.156	82.5	71.5
25	160R25H	R2	17.030	15.958	6	3.625	5.1563	4.875	2	5.375	1.7188	1.156	85.0	74.0
26	160R26H	R2	17.670	16.593	6	3.625	5.1563	4.875	2	5.375	1.7188	1.156	90.0	79.0
26	160S26H	S2	17.670	16.593	6	4.1875	7.125	6.75	2.875	6.375	2.7188	1.156	98.0	79.0
28	160R28H	R2	18.950	17.863	6	3.625	5.1563	4.875	2	5.375	1.7188	1.156	110.8	99.8
28	160S28H	S2	19.950	17.863	6	4.1875	7.125	6.75	2.875	6.375	2.7188	1.156	118.8	99.8
30	160R30H	R2	20.230	19.134	6	3.625	5.1563	4.875	2	5.375	1.7188	1.156	117.0	106.0
30	160S30H	S2	20.230	19.134	6	4.1875	7.125	6.75	2.875	6.375	2.7188	1.156	134.0	115.0
35	160S35	S2	23.420	22.312	6	4.1875	7.125	6.75	2.875	6.375	2.7188	1.156	169.0	150.0
40	160S40	S2	26.610	25.491	6	4.1875	7.125	6.75	2.875	6.375	2.7188	1.156	184.0	165.0
45	160S45	S2	29.800	28.671	6	4.1875	7.125	6.75	2.875	6.375	2.7188	1.156	223.0	204.0
60	160U60	U0	39.360	38.215	6	5.5	5.7813	5.25	1.9375	8.375	1.6563	1.156	338.0	308.0
70	160U70	U0	45.730	44.578	6	5.5	5.7813	5.25	1.9375	8.375	1.6563	1.156	384.0	354.0
80	160S80	S2	52.100	50.943	6	4.1875	7.125	6.75	2.875	6.375	2.7188	1.156	–	–
80	160U80	U1	52.100	50.943	6	5.5	7.5938	7.125	2.875	8.375	2.5938	1.156	434.0	394.0

Sprockets with "H" suffix have hardened teeth.

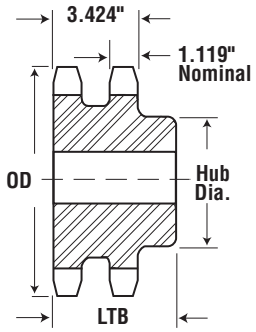
All Steel Stock Sprockets

No. 160-2 2" Pitch

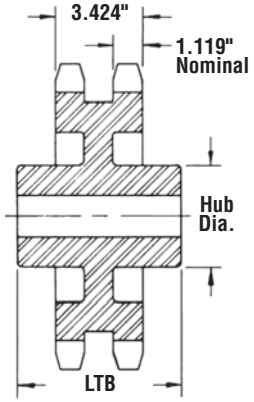


Alteration Charges

See current discount sheet for alteration charges.



Type B

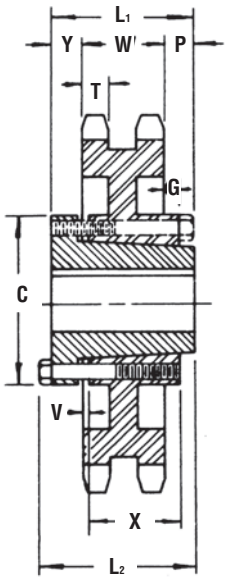


Type C

Double - Type B & C

No. Teeth	Catalog Number	OD	Type	Bore (Inches)		Hub (Inches)		Wt. lb (Approx.)
				Stock	Rec. Max.	Dia.	LTB	
13	D160B13	9.310	B	2	4	6	4.75	48.0
14	D160B14	9.960	B	2	4.75	6.75	4.75	58.0
15	D160B15	10.610	B	2	5.25	7	4.75	68.0
16	D160B16	11.260	B	2	5.25	7	4.75	75.0
17	D160B17	11.900	B	2	5.25	7	4.75	91.0
18	D160B18	12.540	B	2	5.25	7	4.75	96.0
19	D160B19	13.190	B	2	5.25	7	4.75	107.0
20	D160B20	13.830	B	2	5.25	7	4.75	119.0
21	D160B21	14.470	B	2	5.375	7.5	4.75	130.0
22	D160B22	15.110	B	2	5.375	7.5	4.75	141.0
23	D160B23	15.750	B	2	5.375	7.5	4.75	157.0
24	D160B24	16.390	B	2	5.375	7.5	4.75	171.0
25	D160B25	17.030	B	2	5.375	7.5	4.75	187.0
26	D160B26	17.670	B	2	5.375	7.5	4.75	201.0
35	D160C35	23.420	C	1.5	6.75	9.5	6.625	306.0
45	D160C45	29.800	C	1.5	7	10	7.125	431.0
60	D160C60	39.360	C	1.5	7	10	7.125	564.0

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.



QD - Type C_6

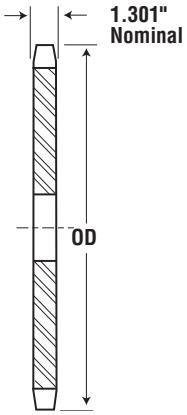
Double - Type QD

No. Teeth	Catalog Number	Bushing	Diameters		Type	Max. Bore	Dimensions										Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	P	G	V	X	T	W	With Hub	Rim Only
35	D160M35	M	23.420	22.312	C6	5.5	6.75	6.75	9	2.0469	1.2813	1.1563	.6094	5.1875	1.119	3.424	259.0	222.0
45	D160N45	N	29.800	28.671	C6	6	8.125	8.125	10	2.3738	2.3594	2.1563	.3281	6.25	1.119	3.424	377.0	340.0
60	D160N60	N	39.360	38.215	C6	6	8.125	8.125	10	2.3738	2.3594	2.1563	.3281	6.25	1.119	3.424	509.0	472.0

No. 180
2¼" Pitch

All Steel Stock Sprockets





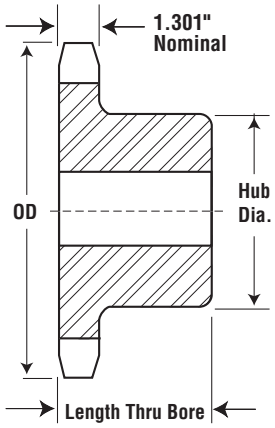
Type A

Single - Type B & C

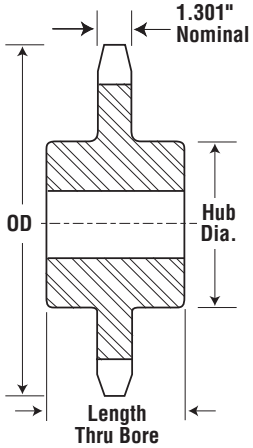
Single - Type A

No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
				Stock	Rec. Max	Dia.	LTB					
11	180B11	9.010	B	1.5	3.625	5.5	3	29	A	180A11	1.5	14.0
12	180B12	9.750	B	1.5	4	6	3	32	A	180A12	1.5	16.0
13	180B13	10.480	B	1.5	4.625	6.75	3.125	40	A	180A13	1.5	20.0
14	180B14	11.210	B	1.5	5.25	7	3.125	44	A	180A14	1.5	24.0
15	180B15	11.930	B	1.5	5.25	7	3.125	48	A	180A15	1.5	28.0
16	180B16	12.660	B	1.5	5.25	7	3.125	52	A	180A16	1.5	32.0
17	180B17	13.390	B	1.5	5.25	7	3.125	58	A	180A17	1.5	37.0
18	180B18	14.110	B	1.5	5.25	7	3.125	63	A	180A18	1.5	43.0
19	180B19	14.830	B	1.5	5.375	7.5	3.375	74	A	180A19	1.5	47.0
20	180B20	15.560	B	1.5	5.375	7.5	3.375	81	A	180A20	1.5	53.0
21	180B21	16.280	B	1.5	5.375	7.5	3.375	83	A	180A21	1.5	57.0
22	180B22	17.000	B	1.5	5.375	7.5	3.375	92	A	180A22	1.5	62.0
23	180B23	17.720	B	1.5	5.375	7.5	3.375	99	A	180A23	1.5	69.0
24	180B24	18.440	B	1.5	5.375	7.5	3.375	105	A	180A24	1.5	77.0
25	180B25	19.160	B	1.5	5.375	7.5	3.375	113	A	180A25	1.5	84.0
28	180B28	21.320	B	1.5	5.5	8	3.5	135	A	180A28	1.5	104.0
30	180C30	22.760	C	1.5	5.75	8.5	4.375	180	A	180A30	1.5	120.0
35	180C35	26.350	C	1.5	5.75	8.5	4.375	222	A	180A35	1.5	172.0
40	180C40	29.940	C	1.5	5.75	8.5	4.375	270	A	180A40	1.5	229.0
45	180C45	33.530	C	1.5	6	9	5	315	A	180A45	1.5	284.0
54	180C54	39.980	C	1.5	6	9	5	477	A	180A54	1.5	420.0
60	180C60	44.280	C	1.5	6.5	9.5	5.375	489	A	180A60	1.5	505.0

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.



Type B



Type C

Alteration Charges

See current discount sheet for alteration charges.

All Steel Stock Sprockets

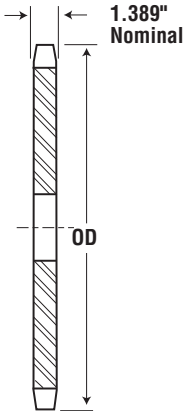
No. 200 2½" Pitch

Single - Type B & C

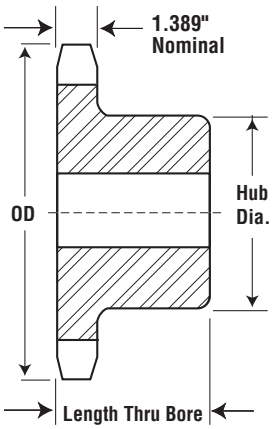
Single - Type A

No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb	Type	Catalog Number	Stock Bore	Wt. lb
				Stock	Rec. Max	Dia.	LTB					
10	200B10	9.200	B	1.5	3.75	5.5	3	26.0	A	200A10	1.5	16.0
11	200B11	10.020	B	1.5	4	6	3	33.0	A	200A11	1.5	20.0
12	200B12	10.830	B	1.5	4.5	6.5	3	37.0	A	200A12	1.5	24.0
13	200B13	11.640	B	1.5	5.25	7	3	46.0	A	200A13	1.5	30.0
14	200B14	12.460	B	1.5	5.375	7.5	3.5	59.0	A	200A14	1.5	32.0
15	200B15	13.260	B	1.5	5.375	7.5	3.5	64.0	A	200A15	1.5	40.0
16	200B16	14.070	B	1.5	5.375	7.5	3.5	72.0	A	200A16	1.5	46.0
17	200B17	14.870	B	1.5	5.375	7.5	3.5	76.0	A	200A17	1.5	51.0
18	200B18	15.680	B	1.5	5.375	7.5	3.5	84.0	A	200A18	1.5	57.0
19	200B19	16.480	B	1.5	5.375	7.5	3.5	91.0	A	200A19	1.5	65.0
20	200B20	17.290	B	1.5	5.375	7.5	3.5	98.0	A	200A20	1.5	72.0
21	200B21	18.090	B	1.5	5.375	7.5	3.5	106.0	A	200A21	1.5	82.0
22	200B22	18.890	B	1.5	5.75	8.5	4	131.0	A	200A22	1.5	88.0
23	200B23	19.690	B	1.5	5.75	8.5	4	136.0	A	200A23	1.5	95.0
24	200B24	20.490	B	1.5	5.75	8.5	4	142.0	A	200A24	1.5	105.0
25	200B25	21.290	B	1.5	5.75	8.5	4	153.0	A	200A25	1.5	113.0
26	200C26	22.090	C	1.5	5.75	8.5	4.5	178.0	A	200A26	1.5	124.0
28	200C28	23.690	C	1.5	5.75	8.5	4.5	195.0	A	200A28	1.5	144.0
30	200C30	25.290	C	1.5	5.75	8.5	4.5	212.0	A	200A30	1.5	167.0
32	200C32	26.880	C	1.5	5.75	8.5	4.5	220.0	A	200A32	1.5	195.0
35	200C35	29.280	C	1.5	5.75	8.5	4.5	254.0	A	200A35	1.5	227.0
40	200C40	33.270	C	1.5	6	9	5	320.0	A	200A40	1.5	301.0
45	200C45	37.250	C	1.5	6	9	5	364.0	A	200A45	1.5	390.0
54	200C54	44.420	C	1.5	6.5	9.5	5.5	512.0	A	200A54	1.5	555.0
60	200C60	49.200	C	1.5	6.5	9.5	5.5	654.0	A	200A60	1.5	692.0

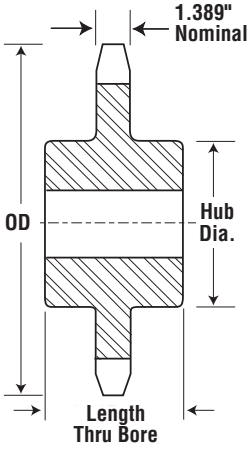
Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.



Type A



Type B



Type C

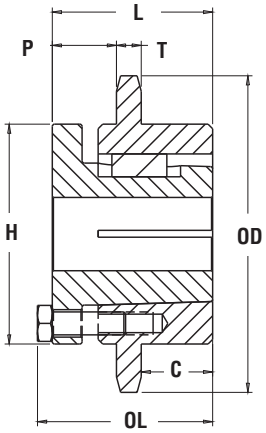
Single - Type QD

No. Teeth	Catalog Number	Bush.	Diameter		Type	Max. Bore	Dimensions									Wt. lb (Approx.)	
			OD	PD			L_1	L_2	C	Y	P	G	V	X	T	With Hub	Rim Only
12	200F12	F	10.830	9.660	C	9.3375	3.625	4	6.625	1	1.3125	1.125	–	2.5	1.389	25.5	24.0
13	200J13	J	11.640	10.447	C	4.4375	4.5	5	7.25	1.1875	2	1.8125	–	3.1875	1.389	50.5	32.0
14	200J14	J	12.460	11.235	C	4.4375	4.5	5	7.25	1.1875	2	1.8125	–	3.1875	1.389	57.5	39.0
15	200J15	J	13.260	12.025	C	4.4375	4.5	5	7.25	1.1875	2	1.8125	–	3.1875	1.389	62.5	44.0
16	200J16	J	14.070	12.815	C	4.4375	4.5	5	7.25	1.1875	2	1.8125	–	3.1875	1.389	68.5	50.0
17	200M17	M	14.870	13.605	C1	5.5	6.75	6.75	9	2.7188	2.7188	2.3125	1.5	5.1875	1.389	113.0	76.0
18	200M18	M	15.680	14.397	C1	5.5	6.75	6.75	9	2.7188	2.7188	2.3125	1.5	5.1875	1.389	119.0	82.0
19	200M19	M	16.480	15.910	C1	5.5	6.75	6.75	9	2.7188	2.7188	2.3125	1.5	5.1875	1.389	125.0	88.0
20	200M20	M	17.290	15.982	C1	5.5	6.75	6.75	9	2.7188	2.7188	2.3125	1.5	5.1875	1.389	134.0	97.0
21	200M21	M	18.090	16.775	C1	5.5	6.75	6.75	9	2.7188	2.7188	2.3125	1.5	5.1875	1.389	140.0	103.0
22	200M22	M	18.890	17.567	C1	5.5	6.75	6.75	9	2.7188	2.7188	2.3125	1.5	5.1875	1.389	149.0	112.0
23	200M23	M	19.690	18.360	C1	5.5	6.75	6.75	9	2.7188	2.7188	2.3125	1.5	5.1875	1.389	157.0	120.0
24	200M24	M	20.490	19.152	C1	5.5	6.75	6.75	9	2.7188	2.7188	2.3125	1.5	5.1875	1.389	168.0	131.0
25	200M25	M	21.290	19.947	C1	5.5	6.75	6.75	9	2.7188	2.7188	2.3125	1.5	5.1875	1.389	175.0	138.0
26	200M26	M	22.090	20.740	C1	5.5	6.75	6.75	9	2.7188	2.7188	2.3125	1.5	5.1875	1.389	185.0	148.0
28	200M28	M	23.690	22.330	C1	5.5	6.75	6.75	9	2.7188	2.7188	2.3125	1.5	5.1875	1.389	205.0	168.0
30	200M30	M	25.290	23.917	C1	5.5	6.75	6.75	9	2.7188	2.7188	2.3125	1.5	5.1875	1.389	227.0	190.0
32	200M32	M	26.880	25.505	C1	5.5	6.75	6.75	9	2.7188	2.7188	2.3125	1.5	5.1875	1.389	251.0	214.0
35	200M35	M	29.280	27.890	C1	5.5	6.75	6.75	9	2.7188	2.7188	2.3125	1.5	5.1875	1.389	265.0	228.0
40	200M40	M	33.270	31.865	C1	5.5	6.75	6.75	9	2.7188	2.7188	2.3125	1.5	5.1875	1.389	315.0	278.0
45	200N45	N	37.250	35.840	C1	5.875	8.125	8.125	10	3.4063	3.4063	3.1875	1.6875	6.25	1.389	405.0	348.0
54	200N54	N	44.420	42.995	C1	5.875	8.125	8.125	10	3.4063	3.4063	3.1875	1.6875	6.25	1.389	535.0	478.0
60	200N60	N	49.200	47.767	C1	5.875	8.125	8.125	10	3.4063	3.4063	3.1875	1.6875	6.25	1.389	665.0	608.0

No. 200
2½" Pitch

All Steel Stock Sprockets





Type 6

Single - MST® Sprockets

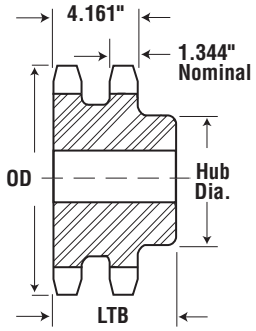
No. Teeth	Catalog Number	Bushing	Diameter		Type	Max. Bore	Dimensions						Wt. lb (Approx.)	
			OD	PD			OL	L	C	H	P	T (Nom.)	With Hub	Rim Only
12	200R12	R2	10.830	9.660	6	3.625	5.1563	4.875	2	5.375	1.5	1.389	46.3	35.3
13	200S13	S2	11.640	10.447	6	4.1875	7.125	6.75	2.875	6.375	2.5	1.389	71.2	52.2
14	200S14	S2	12.460	11.235	6	4.1875	7.125	6.75	2.875	6.375	2.5	1.389	76.5	57.5
15	200S15	S2	13.260	12.025	6	4.1875	7.125	6.75	2.875	6.375	2.5	1.389	80.0	61.0
16	200S16	S2	14.070	12.815	6	4.1875	7.125	6.75	2.875	6.375	2.5	1.389	90.0	71.0
17	200S17	S2	14.870	13.605	6	4.1875	7.125	6.75	2.875	6.375	2.5	1.389	98.0	79.0
18	200U18	U0	15.680	14.397	6	5.5	5.7188	5.25	1.625	8.375	2.5313	1.389	106.5	76.5
19	200U19	U0	16.480	15.190	6	5.5	5.7188	5.25	1.625	8.375	2.5313	1.389	113.7	83.7
20	200U20	U0	17.290	15.982	6	5.5	5.7188	5.25	1.625	8.375	2.5313	1.389	121.3	91.3
21	200U21	U0	18.090	16.775	6	5.5	5.7188	5.25	1.625	8.375	2.5313	1.389	129.4	99.4
22	200U22	U0	18.890	17.567	6	5.5	5.7188	5.25	1.625	8.375	2.5313	1.389	140.0	110.0
23	200U23	U0	19.690	18.360	6	5.5	5.7188	5.25	1.625	8.375	2.5313	1.389	147.0	117.0
24	200U24	U0	20.490	19.152	6	5.5	5.7188	5.25	1.625	8.375	2.5313	1.389	156.0	126.0
25	200U25	U0	21.290	19.947	6	5.5	5.7188	5.25	1.625	8.375	2.5313	1.389	170.0	140.0
26	200U26	U0	22.090	20.740	6	5.5	5.7188	5.25	1.625	8.375	2.5313	1.389	180.0	150.0
28	200U28	U0	23.690	22.330	6	5.5	5.7188	5.25	1.625	8.375	2.5313	1.389	199.0	169.0
30	200U30	U0	25.290	23.917	6	5.5	5.7188	5.25	1.625	8.375	2.5313	1.389	218.0	188.0
32	200U32	U0	26.880	25.505	6	5.5	5.7188	5.25	1.625	8.375	2.5313	1.389	242.0	212.0
35	200U35	U1	29.280	27.890	6	5.5	7.5938	7.125	2.875	8.375	2.875	1.389	292.0	252.0
40	200U40	U1	33.270	31.865	6	5.5	7.5938	7.125	2.875	8.375	2.875	1.389	346.0	306.0
45	200U45	U1	37.250	35.840	6	5.5	7.5938	7.125	2.875	8.375	2.875	1.389	330.0	290.0
54	200U54	U2	44.420	42.995	6	5	10.5938	10.125	4.25	8.375	3.963	1.389	435.0	385.0
60	200U60	U2	49.200	47.767	6	5	10.5938	10.125	4.25	8.375	3.963	1.389	495.0	445.0

Sprockets with "H" suffix have hardened teeth.

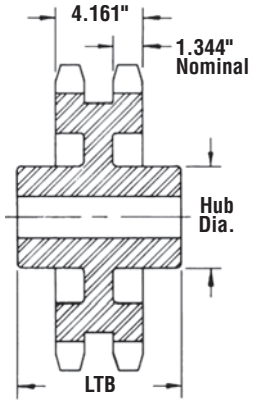
All Steel Stock Sprockets

No. 200-2
2½" Pitch





Type B



Type C

Double - Type B & C

No. Teeth	Catalog Number	OD	Type	Bore (Inches)		Hub (Inches)		Wt. lb (Approx.)
				Stock	Rec. Max.	Dia.	LTB	
11	D200B11	10.020	B	2	3.75	5.5	5.875	57
12	D200B12	10.830	B	2	4.5	6.5	6.25	80
13	D200B13	11.640	B	2	5.25	7	6.375	96
14	D200B14	12.460	B	2	5.5	8	6.375	119
15	D200B15	13.260	B	2	5.75	8.5	6.375	138
16	D200B16	14.070	B	2	5.75	8.5	6.625	161
17	D200B17	14.870	B	2	5.75	8.5	6.625	178
18	D200B18	15.680	B	2	5.75	8.5	6.625	196
19	D200B19	16.480	B	2	5.75	8.5	6.625	217
20	D200B20	17.290	B	2	5.75	8.5	6.625	236
21	D200B21	18.090	B	2	5.75	8.5	6.625	250
22	D200B22	18.890	B	2	5.75	8.5	6.625	284
23	D200B23	19.690	B	2	5.75	8.5	6.625	308
24	D200B24	20.490	B	2	5.75	8.5	6.625	330
25	D200B25	21.290	B	2	5.75	8.5	6.625	358
26	D200B26	22.090	B	2	5.75	8.5	6.625	386
45	D200C45	37.250	C	1.5	7	10	8.5	665
60	D200C60	49.200	C	1.5	7	10	9	972

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

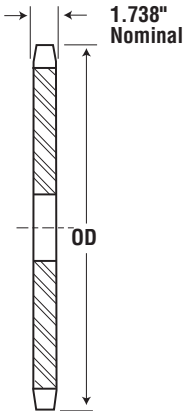
Alteration Charges

See current discount sheet for alteration charges.

No. 240
3" Pitch

All Steel Stock Sprockets



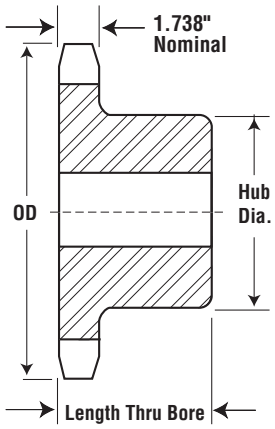


Type A

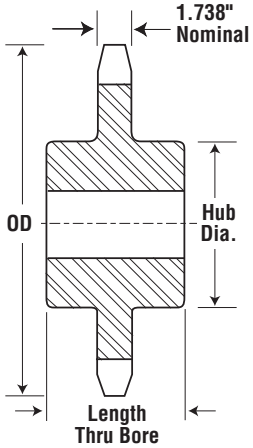
Single - Type B & C

Single - Type A

No. Teeth	Catalog Number	OD	Type	Bore		Hub		Wt. lb (Approx.)	Type	Catalog Number	Stock Bore	Wt. lb (Approx.)
				Stock	Rec. Max	Dia.	LTB					
10	240B10	11.030	B	1.5	4.5	6.5	3.375	49.0	A	240A10	1.5	30.0
11	240B11	12.020	B	1.5	4.75	7	3.875	66.0	A	240A11	1.5	37.0
12	240B12	13.000	B	1.5	5.375	7.5	3.875	72.0	A	240A12	1.5	45.0
13	240B13	13.970	B	1.5	5.375	7.5	3.875	81.0	A	240A13	1.5	54.0
14	240B14	14.940	B	1.5	5.375	7.5	3.875	88.0	A	240A14	1.5	62.0
15	240B15	15.910	B	1.5	5.375	7.5	3.875	98.0	A	240A15	1.5	68.0
16	240B16	16.880	B	1.5	5.5	8	4.125	120.0	A	240A16	1.5	82.0
17	240B17	17.850	B	1.5	5.5	8	4.125	137.0	A	240A17	1.5	93.0
18	240B18	18.810	B	1.5	5.5	8	4.125	142.0	A	240A18	1.5	108.0
19	240B19	19.780	B	1.5	5.5	8	4.125	154.0	A	240A19	1.5	120.0
20	240B20	20.740	B	1.5	5.5	8	4.125	169.0	A	240A20	1.5	128.0
21	240B21	21.710	B	1.5	5.5	8	4.125	186.0	A	240A21	1.5	148.0
25	240B25	25.550	B	1.5	5.5	8	4.125	254.0	A	240A25	1.5	208.0
30	240C30	30.340	C	1.5	6	9	6.25	398.0	A	240A30	1.5	310.0
35	240C35	35.130	C	1.5	6	9	6.25	527.0	A	240A35	1.5	416.0
40	240C40	39.920	C	1.5	7	10	6.75	672.0	A	240A40	1.5	548.0
45	240C45	44.700	C	1.5	7	10	6.75	850.0	A	240A45	1.5	702.0
54	240C54	53.310	C	1.5	7	10	6.75	1148.0	A	240A54	1.5	1022.0
60	240C60	59.040	C	1.5	7	10	6.75	1419.0	A	240A60	1.5	1268.0



Type B



Type C

Metric Sprockets ISO STANDARDS

Types A - B & C Stock Sprockets



Type A
Simplex



Type B
Simplex



Type C
Triplex



Type B
Duplex



Taper Bushed
Simplex



Taper Bushed
Duplex



Instant Split®
Sprocket

Made-To-Order



Taper Bushed
Double-Simplex
Hardened Teeth

Double-Simplex



QD Bushed
Simplex

QD Sprockets



Idler
Ball Bearing

Idler Sprockets



Type B
Simplex
Stainless

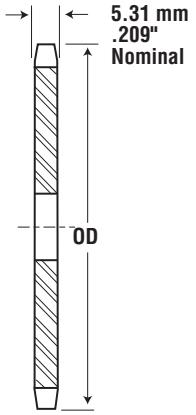
Stainless Steel

ISO 06B-1
METRIC 35

Metric Sprockets

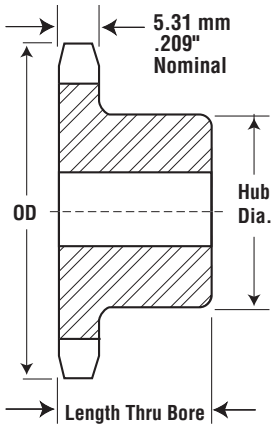
0.375 INCH (9.525 MM) PITCH SIMPLEX

CHAIN DATA:
BS 228/3
ISO 06B-1
PITCH: 9.53 mm (0.375")
ROLLER DIAMETER: 6.35 mm (0.250")
ROLLER WIDTH: 5.72 mm (0.225")
TENSILE: 910 kilos (2000 lbs.)





Type A





Type B

Simplex - Type B — Steel

Type A — Steel

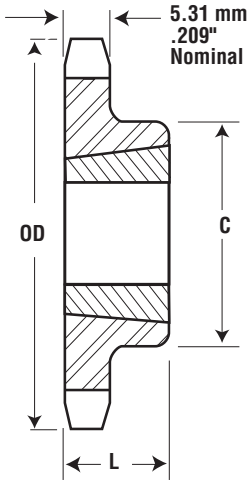
No. Teeth	Pitch Diameter (mm)	Catalog Number	Bore		Hub		Weight Approx. (kg)	Catalog Number	Bore Stock (mm)	Weight Approx. (kg)
			Stock (mm)	Max (mm)	Dia. (mm)	LTB (mm)				
8	24.89	06B8	8	9	13	22	0.03	–	–	–
9	27.85	06B9	8	11	16	22	0.04	–	–	–
10	30.82	06B10	8	12	20	22	0.06	–	–	–
11	33.81	06B11	8	14	23	25	0.09	–	–	–
12	36.80	06B12	8	16	26	25	0.10	–	–	–
13	39.80	06B13	10	18	29	25	0.11	–	–	–
14	42.80	06B14	10	19	31	25	0.12	–	–	–
15	45.81	06B15	10	20	34	25	0.14	06A15	8	0.07
16	48.82	06B16	10	22	37	25	0.18	06A16	10	0.08
17	51.84	06B17	10	25	40	28	0.20	06A17	10	0.18
18	54.85	06B18	10	25	43	28	0.23	06A18	10	0.11
19	57.87	06B19	10	28	46	28	0.25	06A19	10	0.12
20	60.89	06B20	10	30	49	28	0.31	06A20	10	0.13
21	63.91	06B21	12	30	50	28	0.36	06A21	10	0.14
22	66.93	06B22	12	32	51	28	0.37	06A22	10	0.15
23	69.95	06B23	12	32	52	28	0.39	06A23	10	0.17
24	72.97	06B24	12	32	54	28	0.40	06A24	10	0.19
25	76.00	06B25	12	35	57	28	0.41	06A25	10	0.20
26	79.02	06B26	12	38	60	28	0.42	06A26	10	0.21
27	82.05	06B27	12	38	60	28	0.44	06A27	10	0.22
28	85.07	06B28	12	38	60	28	0.45	06A28	10	0.23
29	88.10	06B29	12	38	60	28	0.47	06A29	10	0.25
30	91.12	06B30	12	38	60	30	0.48	06A30	10	0.27
32	97.18	06B32	14	40	65	30	0.56	06A32	12	0.20
35	106.26	06B35	14	40	65	30	0.68	06A35	12	0.27
36	109.29	06B36	16	45	70	30	0.71	06A36	12	0.28
38	115.35	06B38	16	45	70	30	0.77	06A38	14	0.43
40	121.40	06B40	16	45	70	30	0.81	06A40	14	0.45
42	127.46	06B42	16	45	70	30	0.85	06A42	14	0.48
45	136.55	06B45	16	45	75	30	0.91	06A45	14	0.51
48	145.64	06B48	16	45	75	30	0.97	06A48	14	0.54
54	163.82	06B54	16	45	75	30	1.09	06A54	14	0.61
57	172.91	06B57	19	45	75	30	1.27	06A57	18	0.86
60	182.00	06B60	19	45	75	30	1.34	06A60	18	0.91
64	194.12	06B64	19	45	75	30	1.43	06A64	18	0.97
70	212.30	06B70	19	45	75	30	1.56	06A70	18	1.06
72	218.37	06B72	19	45	75	30	1.60	06A72	18	1.09
76	230.49	06B76	19	45	75	30	1.91	06A76	18	1.45
80	242.61	06B80	19	45	75	30	2.01	06A80	18	1.53
84	254.74	06B84	19	45	75	30	2.11	06A84	18	1.60
90	272.93	06B90	19	52	75	30	2.26	06A90	18	1.72
95	288.08	06B95	19	52	75	30	2.61	06A95	18	2.18
96	291.11	06B96	19	52	75	30	2.64	06A96	18	2.20
114	345.68	06B114	19	52	75	30	3.63	06A114	18	3.13

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

0.375 INCH (9.525 MM) PITCH SIMPLEX

CHAIN DATA:
BS 228/3
ISO 06B-1
PITCH: 9.53 mm (0.375")
ROLLER DIAMETER: 6.35 mm (0.250")
ROLLER WIDTH: 5.72 mm (0.225")
TENSILE: 910 kilos (2000 lbs.)





Type B

Simplex - Taper Bushed — Steel

No. Teeth	Pitch Diameter (mm)	Catalog Number	Bushing	Max. Bore (mm)	Dimensions		Weight (Approx.)	
					L (mm)	C (mm)	Rim (kg)	Bushing (kg)
18	54.85	06BTB18H	1008	25.40	22.23	47.63 ★	0.18	0.14
19	57.87	06BTB19H	1008	25.40	22.23	46.04	0.23	0.14
20	60.89	06BTB20H	1008	25.40	22.23	49.20	0.27	0.14
21	63.91	06BTB21H	1008	25.40	22.23	52.39	0.32	0.14
22	66.93	06BTB22H	1210	31.75	25.40	60.33	0.36	0.27
23	69.95	06BTB23H	1210	31.75	25.40	61.91	0.41	0.27
24	72.97	06BTB24H	1210	31.75	25.40	61.91	0.41	0.27
25	76.00	06BTB25H	1210	31.75	25.40	61.91	0.54	0.27
26	79.02	06BTB26H	1610	41.28	25.40	73.03 ★	0.50	0.41
28	85.07	06BTB28H	1610	41.28	25.40	73.03	0.54	0.41
30	91.12	06BTB30H	1610	41.28	25.40	79.38	0.54	0.41
32	97.18	06BTB32	1610	41.28	25.40	82.55	0.59	0.41
35	106.26	06BTB35	1610	41.28	25.40	82.55	0.64	0.41
36	109.29	06BTB36	1610	41.28	25.40	82.55	0.64	0.41
38	115.35	06BTB38	1610	41.28	25.40	82.55	0.68	0.41
40	121.40	06BTB40	1610	41.28	25.40	82.55	0.86	0.41
45	136.55	06BTB45	1610	41.28	25.40	82.55	0.95	0.41
48	145.65	06BTB48	1610	41.28	25.40	82.55	1.04	0.41
54	163.82	06BTB54	1610	41.28	25.40	82.55	1.18	0.41
57	172.91	06BTB57	1610	41.28	25.40	82.55	1.25	0.41
60	182.00	06BTB60	1610	41.28	25.40	82.55	1.36	0.41
70	212.30	06BTB70	1610	41.28	25.40	82.55	1.68	0.41
76	230.49	06BTB76	1610	41.28	25.40	82.55	1.82	0.41
95	288.08	06BTB95	1610	41.28	25.40	82.55	2.28	0.41

★ Has recessed groove in hub for chain clearance.
Sprockets with "H" suffix have hardened teeth.

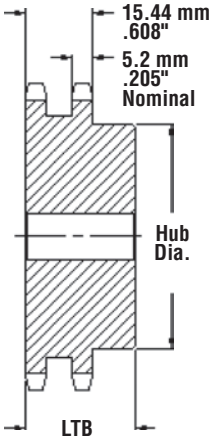
ISO 06B-2
METRIC 35-2

Metric Sprockets

0.375 INCH (9.525 MM) PITCH DUPLEX WIDTH CHAINS

CHAIN DATA:
BS 228/3
ISO 06B-2
PITCH: 9.53 mm (0.375")
ROLLER DIAMETER: 6.35 mm (0.250")
ROLLER WIDTH: 5.72 mm (0.225")
TENSILE: 1730 kilos (3800 lbs.)





Type B

Duplex - Type B — Steel

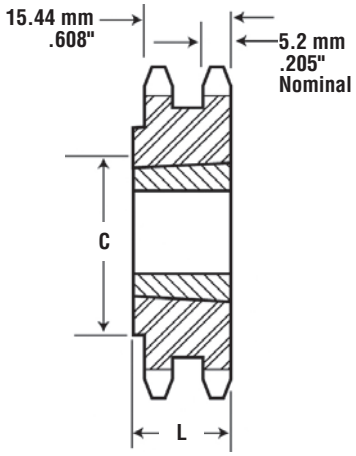
No. Teeth	Pitch Diameter (mm)	Catalog Number	Bore (Inches)		Hub (Inches)		Weight Approx. (kg)
			Stock (mm)	Max (mm)	Dia. (mm)	LTB (mm)	
12	36.80	D06B12	10	16	25	25	0.16
13	39.79	D06B13	10	18	28	25	0.20
14	42.80	D06B14	10	18	31	25	0.25
15	45.81	D06B15	10	20	34	25	0.29
16	48.82	D06B16	12	20	37	30	0.34
17	51.83	D06B17	12	24	40	30	0.39
18	54.85	D06B18	12	25	43	30	0.45
19	57.87	D06B19	12	28	46	30	0.52
20	60.89	D06B20	12	30	49	30	0.59
21	63.91	D06B21	12	30	52	30	0.68
22	66.93	D06B22	12	35	55	30	0.75
23	69.95	D06B23	12	38	58	30	0.80
24	72.97	D06B24	12	39	61	30	0.84
25	76.00	D06B25	12	40	64	30	0.89
26	79.02	D06B26	12	42	67	30	0.91
27	82.05	D06B27	12	45	70	30	1.00
28	85.07	D06B28	12	48	73	30	1.07
29	88.10	D06B29	12	50	76	30	1.14
30	91.12	D06B30	12	52	80	30	1.22
32	98.18	D06B32	16	52	80	30	1.30
35	106.26	D06B35	16	52	80	30	1.42
36	109.29	D06B36	16	60	90	30	1.58
38	115.35	D06B38	16	60	90	30	1.72
40	121.40	D06B40	16	52	80	35	1.81
42	127.46	D06B42	19	60	90	35	2.05
45	136.55	D06B45	19	60	90	35	2.35
48	145.64	D06B48	19	60	90	35	2.75
52	157.75	D06B52	19	60	90	35	3.13
57	172.91	D06B57	19	60	90	35	3.47
60	182.00	D06B60	19	60	90	35	3.78
68	206.24	D06B68	19	60	90	35	4.43
70	212.30	D06B70	19	60	90	35	4.56
72	218.37	D06B72	19	60	90	35	4.89
76	230.49	D06B76	19	60	90	38	5.67
84	254.74	D06B84	19	60	90	38	7.10
95	288.08	D06B95	25	62	95	38	8.64
96	291.11	D06B96	25	62	95	38	8.75
114	345.68	D06B114	25	62	95	38	11.12

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

0.375 INCH (9.525 MM) PITCH DUPLEX WIDTH CHAINS

CHAIN DATA:
BS 228/3
ISO 06B-2
PITCH: 9.53 mm (0.375")
ROLLER DIAMETER: 6.35 mm (0.250")
ROLLER WIDTH: 5.72 mm (0.225")
TENSILE: 1730 kilos (3800 lbs.)





Type B

Duplex - Taper Bushed — Steel

No. Teeth	Pitch Diameter (mm)	Catalog Number	Bushing	Max. Bore. (mm)	Dimensions		Weight (Approx.)	
					L (mm)	C (mm)	Rim (kg)	Bushing (kg)
19	57.87	D06BTB19	1008	25.40	22.23	46.43	0.6	0.14
20	60.89	D06BTB20	1008	25.40	22.23	49.20	0.8	0.14
21	63.91	D06BTB21	1008	25.40	22.23	52.39	1.4	0.14
22	66.93	D06BTB22	1008	25.40	22.23	55.56	1.7	0.14
24	72.97	D06BTB24	1210	31.75	25.40	61.91	1.8	0.27
25	76.00	D06BTB25	1210	31.75	25.40	61.91	1.9	0.27
26	79.02	D06BTB26	1210	31.75	25.40	66.68	2.0	0.27
30	91.12	D06BTB30	1610	41.28	25.40	79.38	1.8	0.41
32	97.18	D06BTB32	1610	41.28	25.40	82.55	2.0	0.41
35	106.26	D06BTB35	1610	41.28	25.40	82.55	2.3	0.41
38	115.34	D06BTB38	1610	41.28	25.40	82.55	2.5	0.41
40	121.40	D06BTB40	1610	41.28	25.40	82.55	2.9	0.41
45	136.55	D06BTB45	1610	41.28	25.40	82.55	3.2	0.41
48	145.65	D06BTB48	1610	41.28	25.40	92.08	3.5	0.41
54	163.82	D06BTB54	1610	41.28	25.40	92.08	3.9	0.41
57	172.91	D06BTB57	1610	41.28	25.40	92.08	4.1	0.41
60	182.00	D06BTB60	1610	41.28	25.40	92.08	4.9	0.41
70	212.30	D06BTB70	1610	41.28	25.40	92.08	6.3	0.41
76	230.49	D06BTB76	1610	41.28	25.40	92.08	6.8	0.41
95	288.08	D06BTB95	1610	41.28	25.40	92.08	6.9	0.41

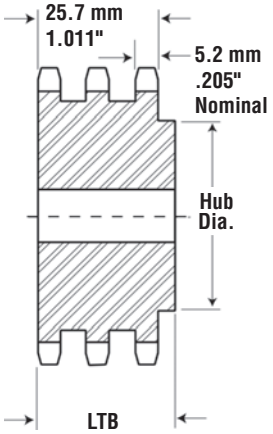
ISO 06B-3
METRIC 35-3

Metric Sprockets

0.375 INCH (9.525 MM) PITCH TRIPLEX

CHAIN DATA:
BS 228/3
ISO 06B-2
PITCH: 9.53 mm (0.375")
ROLLER DIAMETER: 6.35 mm (0.250")
ROLLER WIDTH: 5.72 mm (0.225")
TENSILE: 1730 kilos (3800 lbs.)





Type B

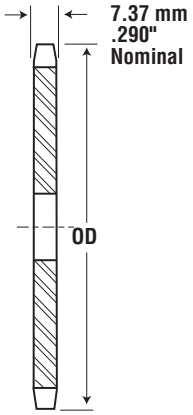
Triplex - Type B — Steel

No. Teeth	Pitch Diameter (mm)	Catalog Number	Bore (Inches)		Hub (Inches)		Weight Approx. (kg)
			Stock (mm)	Max (mm)	Dia. (mm)	LTB (mm)	
12	36.80	E06B12	12	16	25	35	0.23
13	39.80	E06B13	12	18	28	35	0.27
14	42.80	E06B14	12	18	31	35	0.32
15	45.81	E06B15	12	20	34	35	0.36
16	48.82	E06B16	12	20	37	35	0.45
17	51.84	E06B17	12	24	40	35	0.54
18	54.85	E06B18	12	25	43	35	0.64
19	57.87	E06B19	12	28	46	35	0.72
20	60.89	E06B20	12	30	49	35	0.77
21	63.91	E06B21	14	30	52	40	0.86
22	66.93	E06B22	14	35	54	40	0.95
23	69.95	E06B23	14	38	58	40	1.04
24	72.97	E06B24	14	39	61	40	1.18
25	76.00	E06B25	14	40	64	40	1.27
26	79.02	E06B26	14	42	67	40	1.31
27	82.05	E06B27	14	45	70	40	1.36
28	85.07	E06B28	14	48	73	40	1.50
29	88.10	E06B29	14	50	76	40	1.68
30	91.12	E06B30	14	52	80	40	1.72
32	97.18	E06B32	16	52	80	48	2.00
35	106.26	E06B35	16	52	80	48	2.25
36	109.29	E06B36	16	60	90	40	2.33
38	115.34	E06B38	16	60	90	40	2.49
40	121.40	E06B40	16	52	80	48	2.65
42	127.46	E06B42	19	60	90	48	2.81
45	136.55	E06B45	19	60	90	48	3.00
48	145.64	E06B48	19	60	90	48	3.20
52	157.75	E06B52	19	60	90	48	3.46
57	172.91	E06B57	19	60	90	48	4.77
60	182.00	E06B60	19	60	80	48	5.02
68	206.24	E06B68	19	60	90	48	5.69
72	218.37	E06B72	19	60	90	48	6.02
76	230.49	E06B76	19	64	100	48	8.48
84	254.74	E06B84	19	64	100	48	9.37
95	288.08	E06B95	25	64	100	54	13.61
96	291.11	E06B96	25	64	100	54	13.75
114	345.68	E06B114	25	64	100	54	17.48

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

0.500 INCH (12.70 MM) PITCH SIMPLEX

CHAIN DATA:
BS 228/3
ISO 08B-1
PITCH: 12.70 mm (0.5")
ROLLER DIAMETER: 6.35 mm (0.250")
ROLLER WIDTH: 5.72 mm (0.225")
TENSILE: 910 kilos (2000 lbs.)



Simplex - Type B — Steel

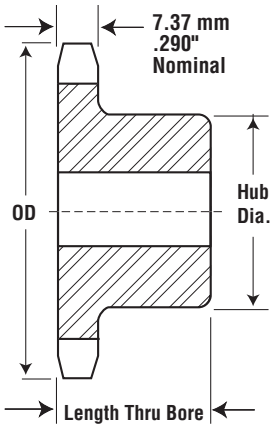
Type A — Steel

No. Teeth	Pitch Diameter (mm)	Catalog Number	Bore		Hub		Weight Approx. (kg)	Catalog Number	Bore Stock (mm)	Weight Approx. (kg)
			Stock (mm)	Max (mm)	Dia. (mm)	LTB (mm)				
9	37.13	08B9	10	15	21	25	0.14	–	–	–
10	41.10	08B10	10	20	26	25	0.15	–	–	–
11	45.08	08B11	10	22	30	25	0.17	–	–	–
12	49.07	08B12	10	22	34	28	0.24	08A12	10	0.08
13	53.07	08B13	10	25	38	28	0.25	08A13	10	0.10
14	57.07	08B14	10	28	42	28	0.31	08A14	10	0.12
15	61.08	08B15	10	30	46	28	0.33	08A15	10	0.14
16	65.10	08B16	12	32	50	28	0.37	08A16	10	0.15
17	69.12	08B17	12	35	54	28	0.51	08A17	10	0.16
18	73.14	08B18	12	38	57	28	0.54	08A18	10	0.20
19	77.16	08B19	12	40	64	28	0.65	08A19	10	0.21
20	81.18	08B20	12	42	67	28	0.76	08A20	10	0.25
21	85.21	08B21	12	45	70	28	0.82	08A21	12	0.26
22	89.24	08B22	12	48	73	28	0.88	08A22	12	0.30
23	93.27	08B23	12	51	78	28	1.05	08A23	12	0.33
24	97.30	08B24	14	53	82	28	1.05	08A24	12	0.37
25	101.33	08B25	14	53	82	28	1.13	08A25	12	0.40
26	105.36	08B26	16	53	82	30	1.15	08A26	16	0.43
27	109.40	08B27	16	53	82	30	1.19	08A27	16	0.44
28	113.43	08B28	16	53	82	30	1.30	08A28	16	0.50
29	117.46	08B29	16	53	82	30	1.33	08A29	16	0.55
30	121.50	08B30	16	53	89	30	1.36	08A30	15	0.57
31	125.53	08B31	16	60	89	30	1.41	08A31	15	0.64
32	129.57	08B32	16	60	89	30	1.46	08A32	15	0.67
33	133.61	08B33	16	60	89	30	1.51	08A33	15	0.71
34	137.64	08B34	16	60	89	30	1.56	08A34	15	0.74
35	141.68	08B35	16	60	89	30	1.61	08A35	15	0.77
36	145.72	08B36	16	60	89	35	1.69	08A36	15	0.83
37	149.75	08B37	16	60	89	35	1.74	08A37	15	0.87
38	153.79	08B38	16	60	89	35	1.78	08A38	15	0.91
39	157.83	08B39	19	60	89	35	1.83	08A39	18	0.92
40	161.87	08B40	19	60	89	35	1.88	08A40	18	1.01
42	169.94	08B42	19	60	89	35	1.97	08A42	18	1.13
45	182.06	08B45	19	60	89	35	2.11	08A45	18	1.43
48	194.18	08B48	19	64	100	35	2.76	08A48	18	1.46
54	218.42	08B54	19	64	100	35	3.11	08A54	18	2.01
57	230.54	08B57	19	64	100	35	3.28	08A57	18	2.27
60	242.66	08B60	19	64	100	35	3.45	08A60	18	2.03
64	258.83	08B64	19	64	100	35	3.68	08A64	18	2.17
70	283.07	08B70	19	64	100	35	4.02	08A70	18	3.28
72	291.15	08B72	19	64	100	35	4.13	08A72	18	3.51
76	307.32	08B76	19	64	100	35	5.73	08A76	18	3.70
80	323.49	08B80	19	64	100	35	6.03	08A80	18	4.63
84	339.65	08B84	19	64	100	35	6.33	08A84	18	4.57
95	384.11	08B95	25	64	100	35	8.90	08A95	24	5.45
96	388.15	08B96	25	64	100	35	8.99	08A96	24	5.51
114	460.91	08B114	25	64	100	35	11.17	08A114	24	6.54

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.



Type A





Type B

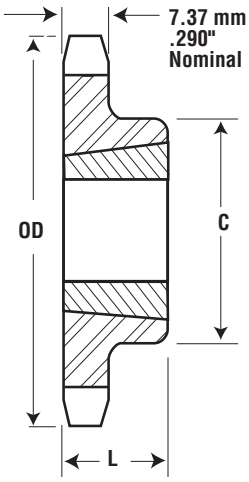
ISO 08B-1
METRIC 40

Metric Sprockets

0.500 INCH (12.70 MM) PITCH SIMPLEX

CHAIN DATA:
BS 228/7
ISO 08B-1
PITCH: 12.70 mm (0.500")
ROLLER DIAMETER: 8.51 mm (0.335")
ROLLER WIDTH: 7.75 mm (0.305")
TENSILE: 1820 kilos (4000 lbs.)





Type B

Simplex - Taper Bushed — Steel

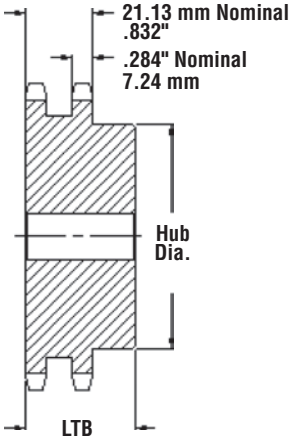
No. Teeth	Pitch Diameter (mm)	Catalog Number	Bushing	Max. Bore (mm)	Dimensions		Weight (Approx.)	
					L (mm)	C (mm)	Rim (kg)	Bushing (kg)
14	57.07	08BTB14H	1008	25.40	22.23	46 ★	0.18	0.14
15	61.08	08BTB15H	1008	25.40	22.23	46	0.18	0.14
16	65.10	08BTB16H	1008	25.40	22.23	46	0.23	0.14
17	69.12	08BTB17H	1210	31.75	25.40	60 ★	0.23	0.14
18	73.14	08BTB18H	1210	31.75	25.40	62 ★	0.27	0.27
19	77.16	08BTB19H	1210	31.75	25.40	62	0.32	0.27
20	81.18	08BTB20H	1610	41.28	25.40	70 ★	0.41	0.41
21	85.21	08BTB21H	1610	41.28	25.40	70	0.45	0.41
22	89.24	08BTB22H	1610	41.28	25.40	70	0.50	0.41
23	93.27	08BTB23H	1610	41.28	25.40	76	0.59	0.41
24	97.30	08BTB24H	1610	41.28	25.40	82	0.73	0.41
25	101.33	08BTB25H	1610	41.28	25.40	82	0.73	0.41
26	105.36	08BTB26H	1610	41.28	25.40	82	0.73	0.41
27	109.40	08BTB27H	1610	41.28	25.40	76	0.70	0.41
28	113.43	08BTB28H	1610	41.28	25.40	76	0.73	0.41
29	117.46	08BTB29H	1610	41.28	25.40	76	0.76	0.41
30	121.50	08BTB30H	1610	41.28	25.40	73	0.82	0.41
32	129.57	08BTB32	1610	41.28	25.40	76	0.87	0.41
35	141.68	08BTB35	1610	41.28	25.40	76	0.96	0.41
36	145.72	08BTB36	1610	41.28	25.40	76	0.98	0.41
38	153.79	08BTB38	1610	41.28	25.40	76	1.23	0.41
40	161.87	08BTB40	1610	41.28	25.40	76	1.29	0.41
42	169.94	08BTB42	1610	41.28	25.40	76	1.36	0.41
45	182.06	08BTB45	1610	41.28	25.40	76	1.46	0.41
48	194.18	08BTB48	1610	41.28	25.40	76	1.55	0.41
54	218.42	08BTB54	1610	41.28	25.40	76	1.75	0.41
57	230.54	08BTB57	1610	41.28	25.40	76	2.63	0.41
60	242.66	08BTB60	1610	41.28	25.40	76	2.77	0.41
70	283.07	08BTB70	2012	50.80	31.75	90	3.93	0.41
72	291.15	08BTB72	2012	50.80	31.75	90	4.05	0.41
76	307.32	08BTB76	2012	50.80	31.75	90	4.27	0.77
80	323.49	08BTB80	2012	50.80	31.75	90	4.49	0.77
84	339.65	08BTB84	2012	50.80	31.75	90	4.72	0.77
95	384.11	08BTB95	2012	50.80	31.75	90	6.81	0.77
96	388.15	08BTB96	2012	50.80	31.75	90	6.88	0.77
114	460.91	08BTB114	2517	63.50	44.45	108	10.44	0.77

★ Has recessed groove in hub for chain clearance.
Sprockets with "H" suffix have hardened teeth.

0.500 INCH (12.70 MM) PITCH DUPLEX

CHAIN DATA:
BS 228/7
ISO 08B-2
PITCH: 12.70 mm (0.500")
ROLLER DIAMETER: 8.51 mm (0.335")
ROLLER WIDTH: 7.75 mm (0.305")
TENSILE: 3180 kilos (7000 lbs.)





Type B

Duplex - Type B — Steel

No. Teeth	Pitch Diameter (mm)	Catalog Number	Bore (Inches)		Hub (Inches)		Weight Approx. (kg)
			Stock (mm)	Max (mm)	Dia. (mm)	LTB (mm)	
10	41.10	D08B10	10	18	26	32	0.22
11	45.08	D08B11	11	21	30	35	0.22
12	49.07	D08B12	12	23	34	35	0.26
13	53.07	D08B13	12	25	38	35	0.28
14	57.07	D08B14	12	28	42	35	0.34
15	61.08	D08B15	12	30	46	35	0.36
16	65.10	D08B16	14	33	50	35	0.35
17	69.12	D08B17	14	36	54	35	0.44
18	73.14	D08B18	14	38	58	35	0.49
19	77.16	D08B19	14	40	62	35	0.57
20	81.18	D08B20	14	40	66	35	0.65
21	85.21	D08B21	16	45	70	40	0.72
22	89.24	D08B22	16	45	70	40	0.73
23	93.27	D08B23	16	45	70	40	0.83
24	97.30	D08B24	16	50	75	40	0.94
25	101.33	D08B25	16	52	80	40	0.98
26	105.36	D08B26	20	56	85	40	1.04
27	109.40	D08B27	20	56	85	40	1.08
28	113.43	D08B28	20	60	90	40	1.10
29	117.46	D08B29	20	62	95	40	1.14
30	121.50	D08B30	20	64	100	40	1.16
32	129.57	D08B32	20	64	100	40	1.24
35	141.68	D08B35	20	64	100	40	1.35
36	145.72	D08B36	20	73	110	40	2.05
38	153.79	D08B38	20	73	110	45	2.17
40	161.87	D08B40	20	73	110	45	2.28
42	169.94	D08B42	20	73	110	45	2.32
45	182.06	D08B45	20	73	110	45	2.49
48	194.18	D08B48	20	73	110	45	2.65
54	218.42	D08B54	25	73	110	45	2.98
57	230.54	D08B57	25	73	110	45	3.88
60	242.66	D08B60	25	73	110	45	4.08
68	283.07	D08B68	25	73	110	45	4.63
72	291.16	D08B72	25	73	110	45	4.90
76	307.32	D08B76	30	80	120	45	6.60
84	339.65	D08B84	30	80	120	45	7.29
95	384.11	D08B95	30	80	120	45	9.89
96	388.15	D08B96	30	80	120	45	9.99
114	460.90	D08B114	30	80	120	45	12.88

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

ISO 08B-2
METRIC 40-2

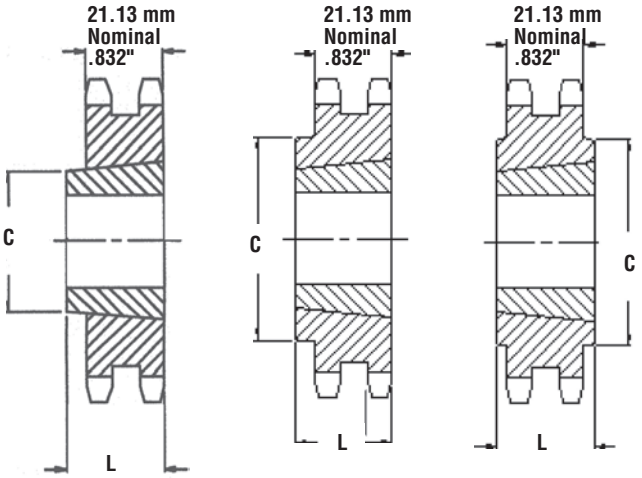
Metric Sprockets

Martin

0.500 INCH (12.70 MM) PITCH DUPLEX

CHAIN DATA:
BS 228/7
ISO 08B-2
PITCH: 12.70 mm (0.500")
ROLLER DIAMETER: 8.51 mm (0.335")
ROLLER WIDTH: 7.75 mm (0.305")
TENSILE: 3180 kilos (7000 lbs.)





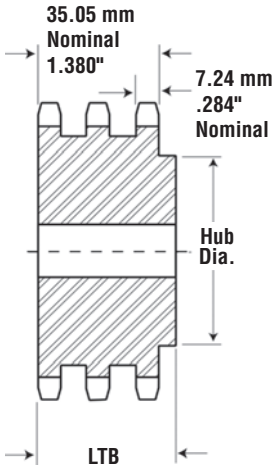
Duplex - Taper Bushed — Steel

No. Teeth	Pitch Diameter (mm)	Catalog Number	Bushing	Max. Bore. (mm)	Dimensions		Weight (Approx.)	
					L (mm)	C (mm)	Rim (kg)	Bushing (kg)
15	61.08	D08ATB15	1008	25.40	22.22	–	0.18	0.13
16	65.10	D08ATB16	1008	25.40	22.22	–	0.22	0.13
17	69.12	D08ATB17	1008	25.40	22.22	–	0.27	0.13
18	73.14	D08BTB18	1210	31.75	25.40	58	0.27	0.27
19	77.16	D08BTB19	1210	31.75	25.40	63	0.36	0.27
20	81.18	D08BTB20	1610	41.27	25.40	70	0.37	0.41
21	85.21	D08BTB21	1610	41.27	25.40	70	0.46	0.41
22	89.24	D08BTB22	1610	41.27	25.40	74	0.55	0.41
23	93.27	D08BTB23	1610	41.27	25.40	78	0.59	0.41
24	97.30	D08BTB24	2012	41.27	25.40	83	0.70	0.41
25	101.33	D08BTB25	2012	50.80	31.75	87	0.77	0.77
26	105.36	D08BTB26	2012	50.80	31.75	87	0.80	0.77
28	113.43	D08BTB28	2012	50.80	31.75	99	1.06	0.77
30	121.50	D08BTB30	2012	50.80	31.75	108	1.59	0.77
35	141.68	D08BTB35	2012	50.80	31.75	108	1.86	0.77
36	145.72	D08BTB36	2012	50.80	31.75	108	1.91	0.77
38	153.79	D08BTB38	2012	50.80	31.75	108	3.18	0.77
42	169.94	D08CTB42	2517	50.80	44.45	108	5.57	1.59
45	182.06	D08CTB45	2517	63.50	44.45	108	5.97	1.59
48	194.18	D08CTB48	2517	63.50	44.45	108	6.37	1.59
54	218.42	D08CTB54	2517	63.50	44.45	108	7.17	1.59
57	230.54	D08CTB57	2517	63.50	44.45	108	7.56	1.59
60	242.66	D08CTB60	2517	63.50	44.45	108	12.05	1.59
68	274.99	D08CTB68	2517	63.50	44.45	108	13.66	1.59
70	283.07	D08CTB70	2517	63.50	44.45	108	14.06	1.59
72	291.15	D08CTB72	2517	63.50	44.45	108	14.46	1.59
76	307.32	D08CTB76	2517	63.50	44.45	108	15.26	1.59
84	339.65	D08CTB84	2517	63.50	44.45	108	16.87	1.59
95	384.11	D08CTB95	2517	63.50	44.45	108	19.08	1.59
96	388.15	D08CTB96	2517	63.50	44.45	108	19.28	1.59
114	460.91	D08CTB114	2517	63.50	44.45	108	22.90	1.59

0.500 INCH (12.70 MM) PITCH TRIPLEX

CHAIN DATA:
BS 228/7
ISO 08B-3
PITCH: 12.70 mm (0.500")
ROLLER DIAMETER: 8.51 mm (0.335")
ROLLER WIDTH: 7.75 mm (0.305")
TENSILE: 4540 kilos (10,000 lbs.)





Type B

Triplex - Type B — Steel

No. Teeth	Pitch Diameter (mm)	Catalog Number	Bore (Inches)		Hub (Inches)		Weight Approx. (kg)
			Stock (mm)	Max (mm)	Dia. (mm)	LTB (mm)	
11	45.08	E08B11	14	22	30	50	0.32
12	49.07	E08B12	14	24	34	50	0.45
13	53.06	E08B13	14	25	38	50	0.59
14	57.07	E08B14	14	28	42	50	0.72
15	61.08	E08B15	14	31	46	50	0.81
16	65.10	E08B16	16	35	50	50	0.90
17	69.12	E08B17	16	36	54	50	1.04
18	73.14	E08B18	16	38	58	50	1.22
19	77.16	E08B19	16	40	62	50	1.41
20	81.18	E08B20	16	40	66	50	1.58
21	85.21	E08B21	20	45	70	55	1.81
22	89.24	E08B22	20	45	70	55	2.03
23	93.27	E08B23	20	45	70	55	2.27
24	97.30	E08B24	20	50	75	55	2.44
25	101.33	E08B25	20	52	80	55	2.54
26	105.36	E08B26	20	56	85	55	2.85
27	109.40	E08B27	20	56	85	55	2.85
28	113.43	E08B28	20	60	90	55	3.16
29	117.46	E08B29	20	62	95	55	3.34
30	121.50	E08B30	20	64	100	55	3.48
35	141.68	E08B35	20	73	110	55	4.79
36	145.72	E08B36	25	80	120	55	5.43
38	153.79	E08B38	25	80	120	60	6.49
42	169.94	E08B42	25	80	120	60	7.17
45	182.06	E08B45	25	80	120	60	7.69
48	194.18	E08B48	25	80	120	60	8.20
52	210.34	E08B52	25	80	120	60	8.88
54	218.43	E08B54	25	80	120	60	9.22
57	230.54	E08B57	25	80	120	60	12.62
60	242.66	E08B60	25	85	130	65	13.84
68	274.99	E08B68	25	85	130	65	15.69
72	291.15	E08B72	25	85	130	65	16.61
76	307.32	E08B76	30	85	130	65	22.23
84	339.65	E08B84	30	85	130	65	24.57
95	384.11	E08B95	30	85	130	65	33.11
114	460.91	E08B114	30	85	130	65	41.90

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

ISO 10B-1
METRIC 50

Metric Sprockets

Martin

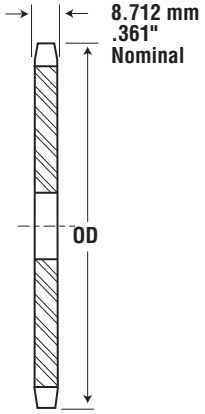
0.625 INCH (15.88 MM) PITCH SIMPLEX

Simplex - Type B — Steel

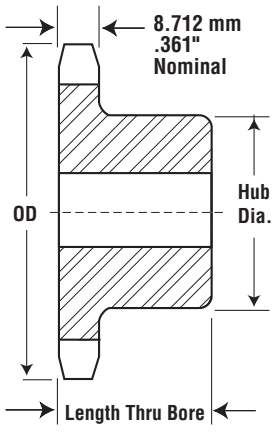
Type A - Steel

No. Teeth	Pitch Dia. (mm)	Catalog Number	Bore (mm) Stock	Bore (mm) Max	Hub (mm) Dia.	Hub (mm) LTB	Weight (kg)	Catalog Number	Bore Stock (mm)	Weight Approx. (kg)
8	41.48	10B8	12	16	22	25	0.09	–	–	–
9	46.42	10B9	12	19	27	25	0.14	–	–	–
10	51.37	10B10	12	22	32	25	0.23	–	–	–
11	56.35	10B11	12	25	37	25	0.27	–	–	–
12	61.34	10B12	12	32	43	25	0.32	10A12	12	0.15
13	66.33	10B13	12	33	48	25	0.36	10A13	12	0.19
14	71.34	10B14	12	36	53	25	0.45	10A14	12	0.23
15	76.36	10B15	12	38	57	25	0.59	10A15	12	0.25
16	81.37	10B16	12	44	63	25	0.68	10A16	12	0.31
17	86.39	10B17	12	47	67	25	0.82	10A17	12	0.35
18	91.42	10B18	12	48	73	25	0.91	10A18	12	0.39
19	96.45	10B19	16	51	76	25	1.04	10A19	16	0.43
20	101.48	10B20	16	51	76	25	1.13	10A20	16	0.48
21	106.51	10B21	16	51	76	25	1.18	10A21	16	0.51
22	111.55	10B22	16	51	76	25	1.27	10A22	16	0.59
23	116.59	10B23	16	51	76	25	1.45	10A23	16	0.65
24	121.62	10B24	16	51	76	32	1.50	10A24	15	0.68
25	126.66	10B25	16	51	76	32	1.59	10A25	15	0.73
26	131.70	10B26	16	51	76	32	1.63	10A26	15	0.78
27	136.74	10B27	19	51	76	32	1.68	10A27	18	0.89
28	141.79	10B28	19	51	76	32	1.72	10A28	18	0.93
29	146.83	10B29	19	51	76	32	1.91	10A29	18	1.07
30	151.87	10B30	19	57	82	32	2.04	10A30	18	1.15
31	156.92	10B31	19	57	82	32	2.13	10A31	18	1.27
32	161.96	10B32	19	57	82	32	2.27	10A32	18	1.23
33	167.01	10B33	19	57	82	32	2.33	10A33	18	1.42
34	172.05	10B34	19	57	82	32	2.36	10A34	18	1.45
35	177.10	10B35	19	57	82	32	2.48	10A35	18	1.51
36	182.15	10B36	19	57	82	32	2.56	10A36	18	1.73
37	187.19	10B37	19	57	82	32	2.68	10A37	18	1.81
38	192.24	10B38	19	57	82	32	2.72	10A38	18	1.88
39	197.29	10B39	19	57	82	32	2.86	10A39	18	2.00
40	202.33	10B40	19	57	82	32	2.95	10A40	18	2.02
41	207.38	10B41	19	57	82	32	3.01	10A41	18	2.20
42	212.43	10B42	19	57	82	32	3.16	10A42	18	2.26
43	217.48	10B43	19	57	82	32	3.20	10A43	18	2.38
44	222.53	10B44	19	57	82	32	3.44	10A44	18	2.46
45	227.58	10B45	19	64	95	32	3.73	10A45	18	2.69
46	232.63	10B46	19	64	95	32	3.85	10A46	18	2.91
47	237.68	10B47	19	64	95	32	3.89	10A47	18	2.95
48	242.73	10B48	25	64	95	32	4.18	10A48	24	2.98
49	247.78	10B49	25	64	95	32	4.21	10A49	24	3.20
50	252.82	10B50	25	64	95	32	4.40	10A50	24	3.22
51	257.87	10B51	25	64	95	32	4.48	10A51	24	3.32
52	262.92	10B52	25	64	95	32	4.64	10A52	24	3.62
53	267.97	10B53	25	64	95	32	4.75	10A53	24	3.67
54	273.03	10B54	25	64	95	32	4.86	10A54	24	3.76
55	278.08	10B55	25	64	95	32	4.96	10A55	24	3.88
56	283.13	10B56	25	64	95	32	5.22	10A56	24	4.04
57	288.18	10B57	25	64	95	32	5.27	10A57	24	4.25
58	293.23	10B58	25	64	95	32	5.36	10A58	24	4.67
59	298.28	10B59	25	64	95	32	5.59	10A59	24	4.76
60	303.33	10B60	25	64	95	32	5.90	10A60	24	4.90
70	353.84	10B70	25	64	95	44	8.24	10A70	24	6.35
72	363.94	10B72	25	64	95	44	8.84	10A72	24	6.91
76	384.15	10B76	25	64	95	44	11.03	10A76	24	9.11
80	404.36	10B80	25	70	108	44	11.22	10A80	24	9.53
84	424.57	10B84	25	70	108	44	11.57	10A84	24	10.02
95	480.14	10B95	25	70	108	44	14.57	10A95	24	12.25
96	485.19	10B96	25	70	108	44	14.93	10A96	24	12.43
112	566.03	10B112	25	70	108	44	19.05	10A112	24	17.10
114	576.13	10B114	25	70	108	44	20.61	10A114	24	17.84

CHAIN DATA:
BS 228/11
ISO 10B-1
PITCH: 15.88mm (0.625")
ROLLER DIAMETER:
10.16mm (0.400")
ROLLER WIDTH: 9.65mm (0.380")
TENSILE: 2270 kilos (4500 lbs.)



Type A



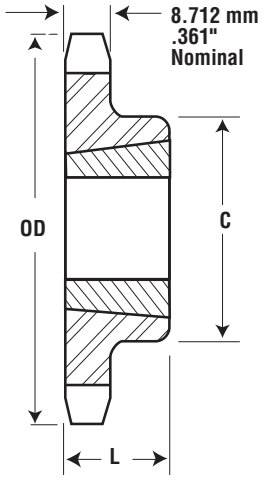
Type B

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

0.625 INCH (15.88 MM) PITCH SIMPLEX

CHAIN DATA:
BS 228/11
ISO 10B-1
PITCH: 15.88 mm (0.625")
ROLLER DIAMETER: 10.16 mm (0.400")
ROLLER WIDTH: 9.65 mm (0.380")
TENSILE: 2270 kilos (5000 lbs.)





Type B

Simplex - Taper Bushed — Steel

No. Teeth	Pitch Diameter (mm)	Catalog Number	Bushing	Max. Bore (mm)	Dimensions		Weight (Approx.)	
					L (mm)	C (mm)	Rim (kg)	Bushing (kg)
12	61.34	10BTB12H	1008	25.40	22.23	49.20 ★	0.23	0.14
13	66.33	10BTB13H	1008	25.40	22.23	46.02	0.23	0.14
14	71.34	10BTB14H	1008	25.40	22.23	49.20	0.27	0.14
15	76.35	10BTB15H	1210	31.75	25.40	62.69 ★	0.32	0.27
16	81.37	10BTB16H	1610	41.28	25.40	70.64 ★	0.41	0.41
17	86.39	10BTB17H	1610	41.28	25.40	70.64 ★	0.41	0.41
18	91.42	10BTB18H	1610	41.28	25.40	70.64	0.41	0.41
19	96.45	10BTB19H	1610	41.28	25.40	76.20	0.64	0.41
20	101.48	10BTB20H	1610	41.28	25.40	76.20	0.68	0.41
21	106.51	10BTB21H	1610	41.28	25.40	76.20	0.73	0.41
22	111.55	10BTB22H	1610	41.28	25.40	76.20	0.78	0.41
23	116.59	10BTB23H	2012	50.80	31.75	90.47	0.82	0.77
24	121.62	10BTB24H	2012	50.80	31.75	90.47	0.91	0.77
25	126.66	10BTB25H	2012	50.80	31.75	90.47	1.09	0.77
26	131.70	10BTB26H	2012	50.80	31.75	90.47	1.14	0.77
27	136.74	10BTB27H	2012	50.80	31.75	90.47	1.18	0.77
28	141.79	10BTB28H	2012	50.80	31.75	90.47	1.29	0.77
30	151.87	10BTB30H	2012	50.80	31.75	90.47	1.41	0.77
32	161.96	10BTB32	2012	50.80	31.75	90.47	1.63	0.77
35	177.10	10BTB35	2012	50.80	31.75	90.47	1.91	0.77
36	182.15	10BTB36	2012	50.80	31.75	90.47	1.95	0.77
38	192.24	10BTB38	2012	50.80	31.75	90.47	2.22	0.77
40	202.33	10BTB40	2012	50.80	31.75	90.47	2.36	0.77
42	212.43	10BTB42	2012	50.80	31.75	90.47	2.68	0.77
45	227.58	10BTB45	2012	50.80	31.75	90.47	2.95	0.77
48	242.73	10BTB48	2012	50.80	31.75	90.47	3.31	0.77
54	273.03	10BTB54	2012	50.80	31.75	90.47	4.08	0.77
57	288.18	10BTB57	2012	50.80	31.75	90.47	4.59	0.77
60	303.33	10BTB60	2012	50.80	31.75	90.47	4.90	0.77
70	353.84	10BTB70	2517	63.50	44.45	107.95	6.35	1.59
72	363.94	10BTB72	2517	63.50	44.45	107.95	7.03	1.59
76	384.15	10BTB76	2517	63.50	44.45	107.95	8.31	1.59
80	404.36	10BTB80	2517	63.50	44.45	107.95	8.85	1.59
84	424.57	10BTB84	2517	63.50	44.45	107.95	10.21	1.59
95	480.14	10BTB95	2517	63.50	44.45	107.95	12.76	1.59
96	485.19	10BTB96	2517	63.50	44.45	107.95	13.15	1.59
114	576.13	10BTB114	2517	63.50	44.45	107.95	19.61	1.59

★ Has recessed groove in hub for chain clearance.
Sprockets with "H" suffix have hardened teeth.

ISO 10B-2
METRIC 50-2

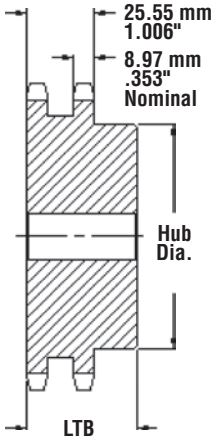
Metric Sprockets

Martin

0.625 INCH (15.88 MM) PITCH DUPLEX

CHAIN DATA:
BS 228/11
ISO 10B-2
PITCH: 15.88 mm (0.625")
ROLLER DIAMETER: 10.16 mm (0.400")
ROLLER WIDTH: 9.65 mm (0.380")
TENSILE: 4540 kilos (10,000 lbs.)





Type B

Duplex - Type B — Steel

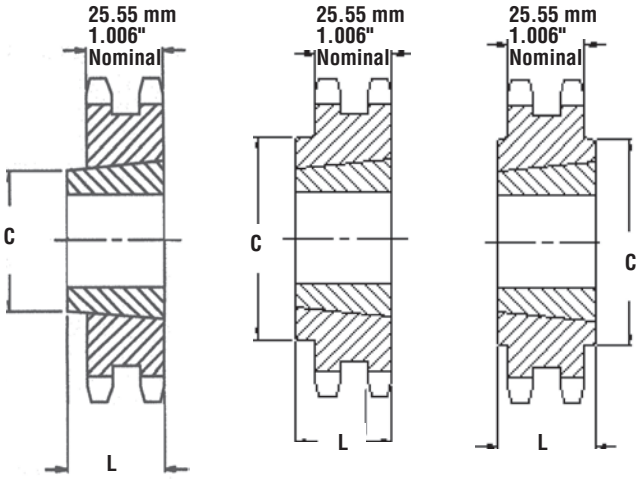
No. Teeth	Pitch Diameter (mm)	Catalog Number	Bore (Inches)		Hub (Inches)		Weight Approx. (kg)
			Stock (mm)	Max (mm)	Dia. (mm)	LTB (mm)	
11	56.35	D10B11	14	24	37	40	0.44
12	61.34	D10B12	14	28	43	40	0.57
13	66.33	D10B13	14	33	48	40	0.71
14	71.34	D10B14	14	35	53	40	0.84
15	76.35	D10B15	14	38	58	40	1.01
16	81.37	D10B16	16	40	63	45	1.19
17	86.39	D10B17	16	45	68	45	1.38
18	91.42	D10B18	16	48	73	45	1.62
19	96.45	D10B19	16	52	79	45	1.77
20	101.48	D10B20	16	56	84	45	1.93
21	106.51	D10B21	16	56	85	45	2.22
22	111.55	D10B22	16	60	90	45	2.53
23	116.59	D10B23	16	62	95	45	2.77
24	121.62	D10B24	16	64	100	45	2.95
25	126.66	D10B25	16	68	105	45	3.15
26	131.70	D10B26	20	73	110	45	3.42
27	136.74	D10B27	20	73	110	45	3.98
28	141.79	D10B28	20	76	115	45	4.20
29	146.83	D10B29	20	76	115	45	4.43
30	151.87	D10B30	20	80	120	45	4.66
32	161.96	D10B32	20	80	120	45	5.16
35	177.10	D10B35	20	80	120	45	5.96
36	182.15	D10B36	20	80	120	45	6.70
38	192.24	D10B38	20	80	120	50	7.67
40	202.33	D10B40	30	80	120	50	7.92
45	227.58	D10B45	30	80	120	50	9.21
48	242.73	D10B48	30	80	120	60	10.92
57	288.18	D10B57	32	85	130	60	15.07
60	303.33	D10B60	32	85	130	60	16.27
70	353.84	D10B70	32	85	130	60	21.99
76	384.15	D10B76	32	85	130	60	26.31
80	404.36	D10B80	32	85	130	60	27.98
95	480.14	D10B95	32	85	130	60	32.69
114	576.13	D10B114	32	85	130	60	49.30

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

0.625 INCH (15.88 MM) PITCH DUPLEX

CHAIN DATA:
BS 228/11
ISO 10B-2
PITCH: 15.878 mm (0.625")
ROLLER DIAMETER: 10.16 mm (0.400")
ROLLER WIDTH: 9.65 mm (0.380")
TENSILE: 4540 kilos (10,000 lbs.)





Duplex - Taper Bushed — Steel

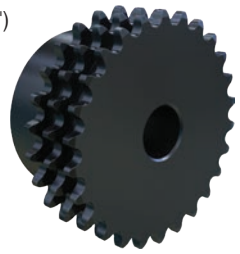
No. Teeth	Pitch Diameter (mm)	Catalog Number	Bushing	Max. Bore. (mm)	Dimensions		Weight (Approx.)	
					L (mm)	C (mm)	Rim (kg)	Bushing (kg)
14	71.34	D10ATB14	1008	25.40	22.23	–	0.45	0.14
15	76.35	D10ATB15	1210	31.75	25.40	–	0.48	0.27
16	81.37	D10ATB16	1210	31.75	25.40	–	0.50	0.27
17	86.39	D10ATB17	1610	41.28	25.40	–	0.57	0.41
18	91.42	D10ATB18	1610	41.28	25.40	–	0.64	0.41
19	96.45	D10ATB19	1610	41.28	25.40	–	0.71	0.41
20	101.49	D10BTB20	2012	50.80	25.40	84.00	0.82	0.77
21	106.52	D10BTB21	2012	50.80	25.40	89.00	0.86	0.77
22	111.55	D10BTB22	2012	50.80	31.75	99.00	1.45	0.77
23	116.59	D10BTB23	2012	50.80	31.75	109.00	1.72	0.77
25	126.66	D10BTB25	2012	50.80	31.75	134.00	3.40	0.77
30	151.87	D10BTB30	2517	63.50	44.45	107.95	3.92	1.59
36	182.15	D10CTB36	2517	63.50	44.45	107.95	4.54	1.59
38	192.24	D10CTB38	2517	63.50	44.45	107.95	5.68	1.59
42	212.43	D10CTB42	2517	63.50	44.45	107.95	7.95	1.59
48	242.73	D10CTB48	2517	63.50	44.45	107.95	11.35	1.59
57	288.18	D10CTB57	2517	63.50	44.45	107.95	19.69	1.59
60	303.33	D10CTB60	2517	63.50	44.45	107.95	22.47	1.59
68	343.74	D10CTB68	2517	63.50	44.45	107.95	25.47	1.59
76	384.15	D10CTB76	2517	63.50	44.45	107.95	37.30	1.59
84	424.57	D10CTB84	2517	63.50	44.45	107.95	44.72	1.59
95	480.14	D10CTB95	2517	63.50	44.45	107.95	52.14	1.59
114	576.13	D10CTB114	2517	63.50	44.45	107.95	62.57	1.59
68	274.99	D08CTB68	2517	63.50	44.45	108	13.66	1.59
70	283.07	D08CTB70	2517	63.50	44.45	108	14.06	1.59
72	291.15	D08CTB72	2517	63.50	44.45	108	14.46	1.59
76	307.32	D08CTB76	2517	63.50	44.45	108	15.26	1.59
84	339.65	D08CTB84	2517	63.50	44.45	108	16.87	1.59
95	384.11	D08CTB95	2517	63.50	44.45	108	19.08	1.59
96	388.15	D08CTB96	2517	63.50	44.45	108	19.28	1.59
114	460.91	D08CTB114	2517	63.50	44.45	108	22.90	1.59

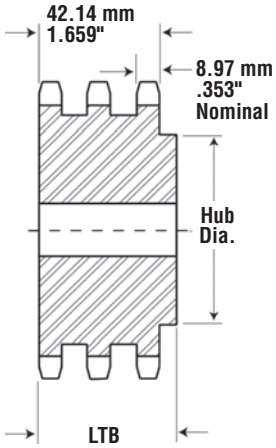
ISO 10B-3
METRIC 50-3

Metric Sprockets

0.625 INCH (15.88 MM) PITCH TRIPLEX

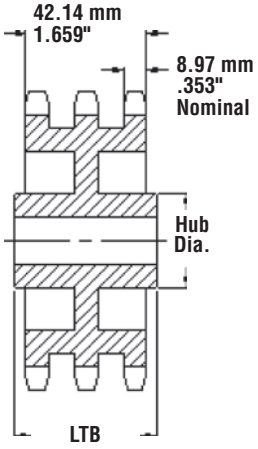
CHAIN DATA:
BS 228/11
ISO 10B-3
PITCH: 15.88 mm (0.625")
ROLLER DIAMETER: 10.16 mm (0.400")
ROLLER WIDTH: 9.65 mm (0.380")
TENSILE: 6810 kilos (10,000 lbs.)





Type B





Type C

Triplex - Type B/C — Steel

No. Teeth	Pitch Diameter (mm)	Catalog Number	Bore (Inches)		Hub (Inches)		Weight Approx. (kg)
			Stock (mm)	Max (mm)	Dia. (mm)	LTB (mm)	
11	56.35	E10B11	16	24	37	55	0.68
12	61.34	E10B12	16	29	43	55	0.82
13	66.33	E10B13	16	34	48	55	1.05
14	71.34	E10B14	16	35	53	55	1.23
15	76.35	E10B15	16	38	58	55	1.36
16	81.37	E10B16	16	42	63	60	1.55
17	86.39	E10B17	16	45	68	60	1.81
18	91.42	E10B18	16	48	73	60	2.09
19	96.45	E10B19	16	52	79	60	2.40
20	101.48	E10B20	16	56	84	60	2.72
21	106.51	E10B21	20	56	85	60	3.04
22	111.55	E10B22	20	60	90	60	3.36
23	116.59	E10B23	20	62	95	60	3.67
24	121.62	E10B24	20	64	100	60	4.00
25	126.66	E10B25	20	68	105	60	4.31
26	131.70	E10B26	20	73	110	60	5.18
27	136.74	E10B27	20	73	110	60	5.63
28	141.79	E10B28	20	76	115	60	6.04
29	146.83	E10B29	20	76	115	60	6.22
30	151.87	E10B30	20	80	120	60	6.36
32	161.96	E10B32	20	80	120	60	7.26
35	177.10	E10B35	20	80	120	60	8.60
36	182.15	E10B36	25	80	120	60	9.34
38	192.24	E10B38	25	80	120	60	11.03
45	227.58	E10B45	30	80	120	75	14.94
48	242.73	E10B48	30	80	120	75	16.62
57	288.18	E10B57	32	80	120	75	21.77
60	303.33	E10B60	32	80	120	75	22.22
76	384.15	E10C76	32	80	120	89	23.13
80	404.36	E10C80	32	80	120	89	25.14
95	480.14	E10C95	32	80	120	95	32.66
114	576.13	E10C114	32	80	120	95	44.76

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

0.750 INCH (19.05 MM) PITCH SIMPLEX

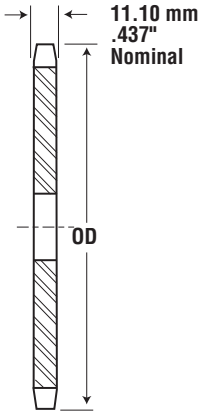
CHAIN DATA:
BS 228/13
ISO 12B-1
PITCH: 19.05 mm (0.750")
ROLLER DIAMETER: 12.07 mm (0.475")
ROLLER WIDTH: 11.68 mm (0.460")
TENSILE: 2,950 kilos (6500 lbs.)

Simplex - Type B — Steel

Type A — Steel

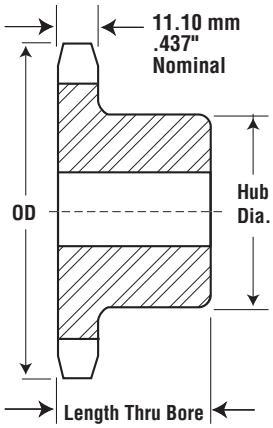
No. Teeth	Pitch Diameter (mm)	Catalog Number	Bore		Hub		Weight Approx. (kg)	Catalog Number	Bore Stock (mm)	Weight Approx. (kg)
			Stock (mm)	Max (mm)	Dia. (mm)	LTB (mm)				
11	67.62	12B11	12	32	47	35	0.53	12A11	14	0.36
12	73.60	12B12	12	35	53	35	0.67	12A12	14	0.42
13	79.60	12B13	12	38	59	35	0.75	12A13	14	0.48
14	85.61	12B14	12	42	64	35	0.91	12A14	14	0.54
15	91.63	12B15	12	45	70	35	1.14	12A15	14	0.60
16	97.65	12B16	16	50	75	35	1.27	12A16	14	0.68
17	103.67	12B17	16	52	80	35	1.46	12A17	14	0.77
18	109.71	12B18	16	52	80	35	1.69	12A18	14	0.85
19	115.74	12B19	16	60	90	35	1.78	12A19	14	0.95
20	121.78	12B20	16	64	90	35	2.10	12A20	14	1.08
21	127.82	12B21	20	64	100	40	2.27	12A21	16	1.15
22	133.86	12B22	20	64	100	40	2.38	12A22	16	1.24
23	139.90	12B23	20	67	100	40	2.49	12A23	16	1.33
24	145.95	12B24	20	67	100	40	2.62	12A24	19	1.47
25	151.99	12B25	20	67	100	40	2.78	12A25	19	1.63
26	158.04	12B26	20	67	100	40	2.89	12A26	19	1.72
27	164.09	12B27	20	67	100	40	3.05	12A27	19	1.91
28	170.14	12B28	20	67	100	40	3.12	12A28	19	1.99
29	176.19	12B29	20	67	100	40	3.30	12A29	19	2.44
30	182.25	12B30	20	67	100	40	3.44	12A30	19	2.28
31	188.30	12B31	20	67	100	40	3.50	12A31	19	2.49
32	194.35	12B32	20	67	100	40	3.75	12A32	19	2.62
33	200.41	12B33	20	67	100	40	3.82	12A33	19	2.77
34	206.46	12B34	20	67	100	40	3.99	12A34	19	2.91
35	212.52	12B35	20	67	100	40	4.10	12A35	19	3.19
36	218.57	12B36	20	67	100	40	4.35	12A36	19	3.21
37	224.63	12B37	20	67	100	40	4.64	12A37	19	3.52
38	230.69	12B38	25	70	107	40	4.92	12A38	24	3.67
39	236.74	12B39	25	70	107	40	5.15	12A39	24	3.87
40	242.80	12B40	25	70	107	40	5.22	12A40	24	4.00
41	248.86	12B41	25	70	107	40	5.51	12A41	24	4.24
42	254.92	12B42	25	70	107	40	5.78	12A42	24	4.53
43	260.98	12B43	25	70	107	40	5.90	12A43	24	4.58
44	267.03	12B44	25	70	107	40	6.30	12A44	24	4.99
45	273.09	12B45	25	70	107	40	6.34	12A45	25	5.14
46	279.15	12B46	25	70	107	40	6.62	12A46	25	5.33
47	285.21	12B47	25	70	107	40	6.80	12A47	25	5.70
48	291.27	12B48	25	70	107	40	7.18	12A48	25	5.75
50	303.39	12B50	25	70	107	40	8.01	12A50	25	6.45
54	327.63	12B54	32	70	110	45	9.80	12A54	30	7.33
57	345.81	12B57	32	70	110	45	10.10	12A57	32	8.11
60	363.99	12B60	32	70	110	45	11.44	12A60	32	9.19
65	394.30	12B65	32	70	110	45	13.12	12A65	32	10.65
70	424.61	12B70	32	70	110	45	14.51	12A70	32	12.45
72	436.73	12B72	32	80	120	50	15.50	12A72	32	13.22
76	460.98	12B76	32	80	120	50	17.26	12A76	32	14.78
80	485.23	12B80	32	80	120	50	19.00	12A80	32	20.75
84	509.48	12B84	32	80	120	50	21.07	12A84	32	21.78
95	576.17	12B95	32	92	140	55	23.83	12A95	32	23.46
96	582.23	12B96	32	92	140	55	26.61	12A96	32	23.71
114	691.36	12B114	32	92	140	55	33.98	12A114	32	28.16

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.





Type A





Type B

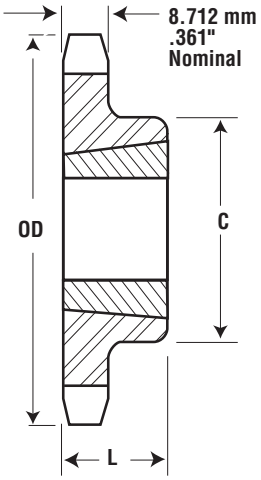
ISO 12B-1
METRIC 60

Metric Sprockets

0.750 INCH (19.05 MM) PITCH SIMPLEX

CHAIN DATA:
BS 228/13
ISO 12B-1
PITCH: 19.05 mm (0.750")
ROLLER DIAMETER: 12.07 mm (0.475")
ROLLER WIDTH: 11.68 mm (0.460")
TENSILE: 2,950 kilos (6500 lbs.)





Type B

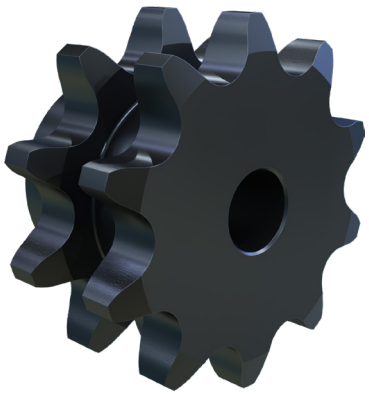
Simplex - Taper Bushed — Steel

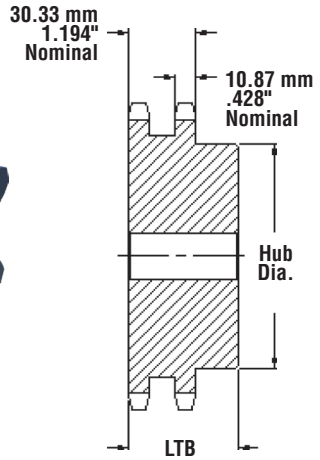
No. Teeth	Pitch Diameter (mm)	Catalog Number	Bushing	Max. Bore (mm)	Dimensions		Weight (Approx.)	
					L (mm)	C (mm)	Rim (kg)	Bushing (kg)
11	67.62	12BTB11H	1008	25.40	22.23	46.04	0.27	0.14
12	73.61	12BTB12H	1008	25.40	22.23	49.21	0.36	0.14
13	79.60	12BTB13H	1210	31.75	25.40	62.69	0.41	0.27
14	85.61	12BTB14H	1210	31.75	25.40	62.69	0.45	0.27
15	91.63	12BTB15H	1610	41.28	25.40	70.64	0.54	0.41
16	97.65	12BTB16H	1610	41.28	25.40	76.20	0.73	0.41
17	103.67	12BTB17H	1610	41.28	25.40	82.55	0.82	0.41
18	109.70	12BTB18H	1610	41.28	25.40	82.55	0.91	0.41
19	115.74	12BTB19H	1610	41.28	25.40	82.55	1.00	0.41
20	121.78	12BTB20H	2012	50.80	31.75	90.47	1.00	0.77
21	127.82	12BTB21H	2012	50.80	31.75	90.47	1.18	0.77
22	133.86	12BTB22H	2012	50.80	31.75	90.47	1.27	0.77
23	139.90	12BTB23H	2012	50.80	31.75	90.47	1.27	0.77
24	145.95	12BTB24H	2012	50.80	31.75	90.47	1.50	0.77
25	151.99	12BTB25H	2012	50.80	31.75	90.47	1.74	0.77
26	158.04	12BTB26H	2012	50.80	31.75	90.47	1.74	0.77
27	164.09	12BTB27H	2012	50.80	31.75	90.47	1.80	0.77
28	170.14	12BTB28H	2012	50.80	31.75	90.47	2.04	0.77
30	182.25	12BTB30H	2012	50.80	31.75	90.47	2.32	0.77
32	194.35	12BTB32	2012	50.80	31.75	90.47	2.48	0.77
35	212.52	12BTB35	2012	50.80	31.75	90.47	2.71	0.77
36	218.57	12BTB36	2012	50.80	31.75	90.47	2.78	0.77
38	230.69	12BTB38	2012	50.80	31.75	90.47	3.36	0.77
40	242.80	12BTB40	2012	50.80	31.75	90.47	3.53	0.77
42	254.92	12BTB42	2012	50.80	31.75	90.47	3.71	0.77
45	273.09	12BTB45	2012	50.80	31.75	90.47	3.98	0.77
48	291.27	12BTB48	2012	50.80	31.75	90.47	4.24	0.77
54	327.63	12BTB54	2517	63.50	44.45	107.95	8.30	1.59
57	345.81	12BTB57	2517	63.50	44.45	107.95	8.76	1.59
60	363.99	12BTB60	2517	63.50	44.45	107.95	9.22	1.59
68	412.49	12BTB68	2517	63.50	44.45	107.95	10.45	1.59
70	424.61	12BTB70	2517	63.50	44.45	107.95	10.76	1.59
72	436.73	12BTB72	2517	63.50	44.45	107.95	11.06	1.59
76	460.98	12BTB76	2517	63.50	44.45	107.95	11.68	1.59
84	509.48	12BTB84	2517	63.50	44.45	107.95	12.91	1.59
95	576.17	12BTB95	2517	63.50	44.45	107.95	14.60	1.59
96	582.23	12BTB96	2517	63.50	44.45	107.95	14.75	1.59
114	691.36	12BTB114	2517	63.50	44.45	107.95	17.52	1.59

Sprockets with “H” suffix have hardened teeth.

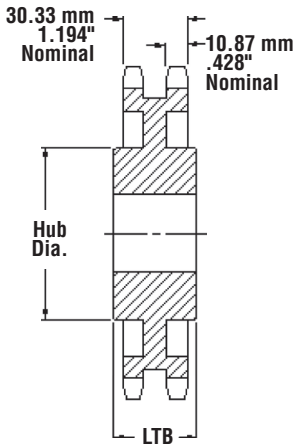
0.750 INCH (15.88 MM) PITCH DUPLEX

CHAIN DATA:
BS 228/13
ISO 12B-2
PITCH: 19.05 mm (0.750")
ROLLER DIAMETER: 12.07 mm (0.475")
ROLLER WIDTH: 11.68 mm (0.460")
TENSILE: 5,900 kilos (13,000 lbs.)





Type B



Type C

Duplex - Type B/C — Steel

No. Teeth	Pitch Diameter (mm)	Catalog Number	Bore (Inches)		Hub (Inches)		Weight Approx. (kg)
			Stock (mm)	Max (mm)	Dia. (mm)	LTB (mm)	
11	67.62	D12B11	16	32	47	50	1.00
12	73.60	D12B12	16	36	53	50	1.23
13	79.60	D12B13	16	38	59	50	1.41
14	85.61	D12B14	16	42	65	50	1.68
15	91.63	D12B15	16	45	71	50	1.95
16	97.65	D12B16	20	51	77	50	2.27
17	103.67	D12B17	20	54	83	50	2.63
18	109.70	D12B18	20	60	89	50	3.18
19	115.74	D12B19	20	62	95	50	3.50
20	121.78	D12B20	20	64	100	50	3.72
21	127.82	D12B21	20	64	100	50	4.31
22	133.86	D12B22	20	64	100	50	4.77
23	139.90	D12B23	20	73	110	50	4.99
24	145.95	D12B24	20	73	110	50	5.45
25	151.99	D12B25	20	80	120	50	5.67
26	158.04	D12B26	20	80	120	50	6.13
27	164.09	D12B27	20	80	120	50	6.49
28	170.14	D12B28	20	80	120	50	6.81
29	176.19	D12B29	20	80	120	50	7.13
30	182.25	D12B30	20	80	120	50	7.49
32	194.35	D12B32	20	85	130	50	9.31
35	212.52	D12B35	20	85	130	50	10.18
36	218.57	D12B36	25	85	130	50	12.31
38	230.69	D12B38	25	85	130	50	12.99
40	242.80	D12B40	25	85	130	50	13.67
45	273.09	D12B45	25	85	130	50	15.38
48	291.27	D12B48	25	85	130	50	16.41
57	345.81	D12B57	32	85	130	65	25.34
60	363.99	D12B60	32	85	130	65	26.67
68	412.49	D12C68	32	85	130	75	30.48
76	460.98	D12C76	40	85	130	75	25.63
80	485.23	D12C80	40	85	130	75	26.98
95	576.17	D12C95	40	93	140	85	39.24
96	582.23	D12C96	40	93	140	85	39.65
114	691.36	D12C114	40	93	140	85	41.86

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

ISO 12B-2
METRIC 60-2

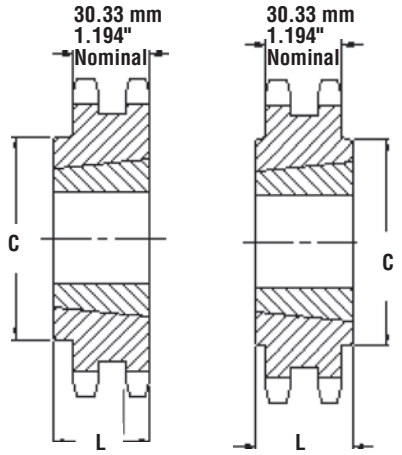
Metric Sprockets

Martin

0.750 INCH (19.05 MM) PITCH DUPLEX

CHAIN DATA:
BS 228/13
ISO 12B-2
PITCH: 19.05 mm (0.750")
ROLLER DIAMETER: 12.07 mm (0.475")
ROLLER WIDTH: 11.68 mm (0.460")
TENSILE: 5,900 kilos (13000 lbs.)





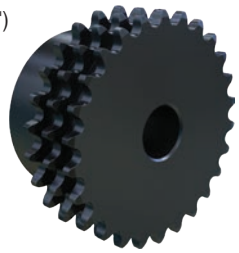
Type B Type C

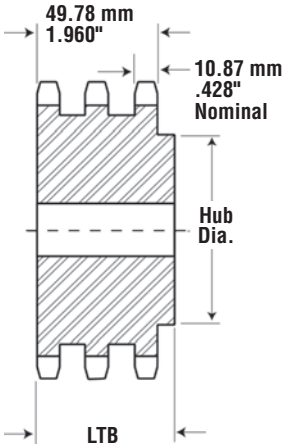
Duplex - Taper Bushed — Steel

No. Teeth	Pitch Diameter (mm)	Catalog Number	Bushing	Max. Bore. (mm)	Dimensions		Weight (Approx.)	
					L (mm)	C (mm)	Rim (kg)	Bushing (kg)
12	73.60	D12BTB12	1215	31.75	38.10	53.54	0.61	0.73
13	79.60	D12BTB13	1215	31.75	38.10	59.74	0.66	0.77
14	85.61	D12BTB14	1215	31.75	38.10	65.91	0.84	0.82
15	91.63	D12BTB15	1615	41.28	38.10	72.09	0.70	0.77
16	97.65	D12BTB16	1615	41.28	38.10	76.20	1.11	0.77
17	103.67	D12BTB17	1615	41.28	38.10	82.93	1.25	0.77
18	109.70	D12BTB18	2012	50.80	31.75	90.50	1.56	0.77
19	115.74	D12BTB19	2012	50.80	31.75	96.6	1.81	0.77
20	121.78	D12BTB20	2517	63.50	44.45	102.00	2.04	1.59
21	127.82	D12BTB21	2517	63.50	44.45	107.95	2.50	1.59
22	133.86	D12BTB22	2517	63.50	44.45	107.95	2.78	1.59
23	139.90	D12BTB23	2517	63.50	44.45	107.95	3.07	1.59
24	145.95	D12BTB24	2517	63.50	44.45	107.95	3.35	1.59
25	151.99	D12BTB25	2517	63.50	44.45	107.95	3.63	1.59
26	158.04	D12BTB26	2517	63.50	44.45	107.95	3.91	1.59
27	164.09	D12BTB27	2517	63.50	44.45	107.95	4.20	1.59
28	170.14	D12BTB28	2517	63.50	44.45	107.95	4.48	1.59
30	182.25	D12BTB30	2517	63.50	44.45	107.95	5.04	1.59
32	194.35	D12BTB32	2517	63.50	44.45	107.95	5.61	1.59
35	212.52	D12BTB35	2517	63.50	44.45	107.95	6.46	1.59
38	230.69	D12CTB38	2517	63.50	44.45	107.95	8.40	1.59
40	242.80	D12CTB40	2517	63.50	44.45	107.95	9.56	1.59
42	254.92	D12CTB42	2517	63.50	44.45	107.95	10.73	1.59
45	273.09	D12CTB45	2517	63.50	44.45	107.95	12.48	1.59
48	291.27	D12CTB48	2517	63.50	44.45	107.95	14.23	1.59
54	327.63	D12CTB54	2517	63.50	44.45	107.95	17.73	1.59
57	345.81	D12CTB57	2517	63.50	44.45	107.95	19.48	1.59
60	363.99	D12CTB60	2517	63.50	44.45	107.95	21.23	1.59
65	394.30	D12CTB65	2517	63.50	44.45	107.95	24.15	1.59
70	424.61	D12CTB70	2517	63.50	44.45	107.95	27.06	1.59
75	454.92	D12CTB75	3020	76.20	50.80	133.35	19.27	2.95
76	460.98	D12CTB76	3020	76.20	50.80	133.35	19.52	2.95
84	509.48	D12CTB84	3020	76.20	50.80	133.35	21.58	2.95
95	576.17	D12CTB95	3020	76.20	50.80	133.35	24.40	2.95
96	582.23	D12CTB96	3020	76.20	50.80	133.35	24.66	2.95
114	691.36	D12CTB114	3020	76.20	50.80	133.35	29.28	2.95

0.750 INCH (19.05 MM) PITCH TRIPLEX

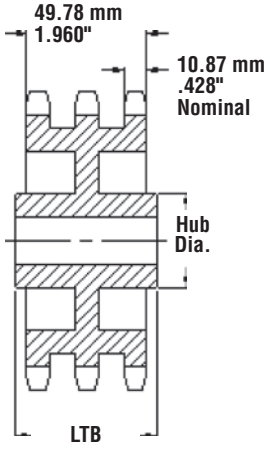
CHAIN DATA:
BS 228/13
ISO 12B-3
PITCH: 19.05 mm (0.750")
ROLLER DIAMETER: 12.07 mm (0.475")
ROLLER WIDTH: 11.68 mm (0.460")
TENSILE: 8,850 kilos (19,500 lbs.)





Type B





Type C

Triplex - Type B/C — Steel

No. Teeth	Pitch Diameter (mm)	Catalog Number	Bore (Inches)		Hub (Inches)		Weight Approx. (kg)
			Stock (mm)	Max (mm)	Dia. (mm)	LTB (mm)	
11	67.62	E12B11	20	32	47	70	1.13
12	73.60	E12B12	20	36	53	70	1.50
13	79.60	E12B13	20	38	59	70	1.77
14	85.61	E12B14	20	42	65	70	2.04
15	91.63	E12B15	20	45	71	70	2.45
16	97.65	E12B16	20	51	77	70	2.95
17	103.67	E12B17	20	54	83	70	3.49
18	109.70	E12B18	20	60	89	70	3.86
19	115.74	E12B19	20	62	95	70	4.54
20	121.78	E12B20	20	64	100	70	5.08
21	127.82	E12B21	20	64	100	70	5.67
22	133.86	E12B22	20	64	100	70	5.99
23	139.90	E12B23	20	73	110	70	6.62
24	145.95	E12B24	20	73	110	70	7.17
25	151.99	E12B25	20	80	120	70	7.71
26	158.04	E12B26	20	80	120	70	8.44
27	164.09	E12B27	20	80	120	70	8.99
28	170.14	E12B28	20	80	120	70	9.49
29	176.19	E12B29	20	80	120	70	9.99
30	182.25	E12B30	20	80	120	70	10.53
35	212.52	E12B35	25	85	130	70	18.95
36	218.57	E12B36	25	85	130	70	19.49
38	230.69	E12B38	25	85	130	70	20.57
45	273.10	E12B45	25	85	130	70	24.36
48	291.27	E12B48	25	85	130	70	25.98
57	345.81	E12C57	32	82	130	85	33.73
60	363.99	E12C60	32	82	130	85	35.51
68	412.49	E12C68	32	82	130	85	40.24
76	460.98	E12C76	40	95	140	85	37.19
80	485.23	E12C80	40	95	140	85	39.15
95	576.17	E12C95	40	95	140	100	47.63

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

ISO 16B-1
METRIC 80

Metric Sprockets

Martin

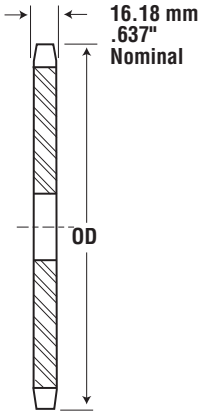
1.00 INCH (25.40 MM) PITCH SIMPLEX

CHAIN DATA:
BS 228/15
ISO 16B-1
PITCH: 25.40 mm (1.00")
ROLLER DIAMETER: 15.88 mm (0.625")
ROLLER WIDTH: 17.02 mm (0.670")
TENSILE: 4,310 kilos (9,500 lbs.)

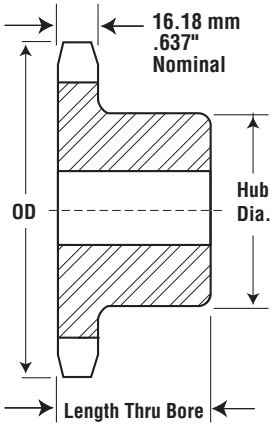
Simplex - Type B/C — Steel

Type A — Steel

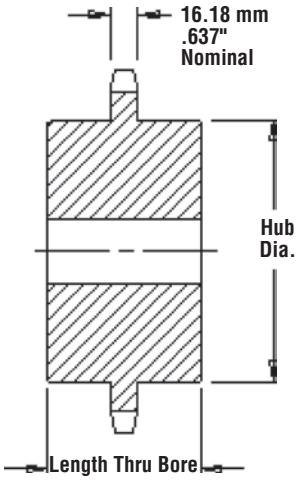
No. Teeth	Pitch Dia. (mm)	Catalog Number	Bore (mm) Stock	Bore (mm) Max	Hub (mm) Dia.	Hub (mm) LTB	Weight (kg)	Catalog Number	Bore Stock (mm)	Weight (kg)
11	90.16	16B11	16	41	63	40	1.45	16A11	14	0.82
12	98.14	16B12	16	47	72	40	1.82	16A12	14	0.91
13	106.14	16B13	16	52	79	40	1.82	16A13	14	1.04
14	114.15	16B14	16	60	88	40	2.09	16A14	14	1.22
15	122.17	16B15	16	62	96	40	2.59	16A15	14	1.36
16	130.20	16B16	20	67	100	45	3.00	16A16	14	1.54
17	138.23	16B17	25	67	102	45	3.18	16A17	14	1.81
18	146.27	16B18	25	70	108	45	3.77	16A18	24	2.00
19	154.32	16B19	25	70	108	45	3.86	16A19	24	2.13
20	162.37	16B20	25	70	108	45	4.09	16A20	24	2.49
21	170.42	16B21	25	70	108	50	4.54	16A21	24	2.63
22	178.48	16B22	25	70	108	50	4.99	16A22	24	2.82
23	186.56	16B23	25	70	108	50	5.08	16A23	24	3.04
24	194.60	16B24	25	70	108	50	5.54	16A24	24	3.45
25	202.66	16B25	25	70	108	50	5.76	16A25	24	3.63
26	210.72	16B26	32	80	120	50	7.03	16A26	30	3.90
27	218.79	16B27	32	80	120	50	7.53	16A27	30	4.31
28	226.86	16B28	32	80	120	50	7.58	16A28	30	4.58
29	234.93	16B29	32	80	120	50	7.94	16A29	30	4.81
30	243.00	16B30	32	80	120	50	8.26	16A30	32	5.22
31	251.07	16B31	32	80	120	50	8.62	16A31	32	5.56
32	259.14	16B32	32	80	120	50	8.98	16A32	32	5.90
33	267.21	16B33	32	80	120	50	9.33	16A33	32	6.24
34	275.28	16B34	32	80	120	50	9.69	16A34	32	6.58
35	283.36	16B35	32	80	120	50	10.05	16A35	32	6.92
36	291.43	16B36	32	80	120	50	10.41	16A36	32	7.26
37	299.51	16B37	32	80	120	50	10.76	16A37	32	7.60
38	307.58	16B38	32	80	120	50	11.12	16A38	32	7.94
39	315.66	16B39	32	80	120	50	11.48	16A39	32	8.48
40	323.74	16B40	32	80	120	50	11.83	16A40	32	9.01
41	331.81	16B41	32	80	120	50	12.19	16A41	32	9.55
42	339.89	16B42	32	80	120	50	12.55	16A42	32	10.09
43	347.97	16B43	32	80	120	50	12.91	16A43	32	10.62
44	356.05	16B44	32	80	120	50	13.27	16A44	32	11.16
45	364.12	16B45	32	80	120	50	13.62	16A45	32	11.70
46	372.20	16B46	32	80	120	50	13.98	16A46	32	12.23
47	380.28	16B47	32	80	120	50	14.34	16A47	32	12.77
48	388.36	16B48	32	80	120	50	14.70	16A48	32	12.31
49	396.44	16B49	32	80	120	50	15.05	16A49	32	13.85
50	404.52	16B50	32	80	120	50	15.41	16A50	32	14.38
54	436.84	16B54	32	85	130	50	20.99	16A54	32	16.53
57	461.08	16B57	32	85	130	50	22.16	16A57	32	18.14
60	485.33	16B60	32	85	130	50	23.33	16A60	32	19.75
65	525.73	16B65	32	85	130	50	25.27	16A65	32	22.43
70	566.15	16C70	40	108	159	90	33.59	16A70	40	25.47
72	582.31	16C72	40	108	159	90	35.48	16A72	40	27.94
76	614.64	16C76	40	108	159	90	39.24	16A76	40	32.89
80	646.97	16C80	40	108	159	90	43.00	16A80	40	37.84
84	679.30	16C84	40	108	159	90	46.77	16A84	40	42.78
90	727.80	16C90	40	108	159	90	52.41	16A90	40	50.21
95	768.22	16C95	40	108	159	90	57.12	16A95	40	56.39
96	766.31	16C96	40	108	159	90	58.06	16A96	40	57.63
114	921.81	16C114	40	108	159	90	75.00	16A114	40	76.36



Type A



Type B



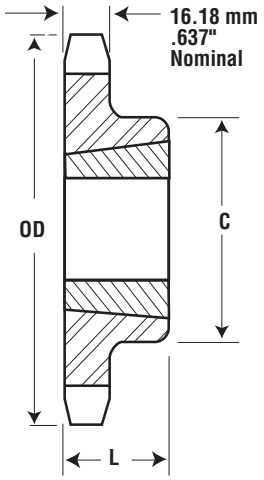
Type C

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

1.00 INCH (25.40 MM) PITCH SIMPLEX

CHAIN DATA:
BS 228/15
ISO 16B-1
PITCH: 25.40 mm (1.00")
ROLLER DIAMETER: 15.88 mm (0.625")
ROLLER WIDTH: 17.02 mm (0.670")
TENSILE: 4,310 KILOS (9,500 lbs.)





Type B

Simplex - Taper Bushed — Steel

No. Teeth	Pitch Diameter (mm)	Catalog Number	Bushing	Max. Bore (mm)	Dimensions		Weight (Approx.)	
					L (mm)	C (mm)	Rim (kg)	Bushing (kg)
10	82.20	16BTB10H	1215	31.75	38.10	62.69	0.73	0.36
11	90.16	16BTB11H	1215	31.75	38.10	62.69	0.91	0.36
12	98.14	16BTB12H	1615	41.28	38.10	76.20	1.04	0.54
13	106.14	16BTB13H	1615	41.28	38.10	76.20	1.27	0.54
14	114.15	16BTB14H	1615	41.28	38.10	82.55	1.36	0.54
15	122.17	16BTB15H	1615	41.28	38.10	82.55	1.45	0.54
16	130.20	16BTB16H	2012	50.80	31.75	90.47	1.55	0.77
17	138.23	16BTB17H	2012	50.80	31.75	90.47	1.69	0.77
18	146.27	16BTB18H	2012	50.80	31.75	90.47	1.46	0.77
19	154.32	16BTB19H	2012	50.80	31.75	90.47	2.14	0.77
20	162.37	16BTB20H	2517	63.50	44.45	107.95	2.72	1.59
21	170.42	16BTB21H	2517	63.50	44.45	107.95	2.95	1.59
22	178.48	16BTB22H	2517	63.50	44.45	107.95	3.18	1.59
23	186.54	16BTB23H	2517	63.50	44.45	107.95	3.40	1.59
24	194.60	16BTB24H	2517	63.50	44.45	107.95	3.63	1.59
25	202.66	16BTB25H	2517	63.50	44.45	107.95	3.90	1.59
26	210.72	16BTB26H	2517	63.50	44.45	107.95	4.22	1.59
27	218.79	16BTB27H	2517	63.50	44.45	107.95	4.31	1.59
28	226.86	16BTB28H	2517	63.50	44.45	107.95	4.54	1.59
30	243.00	16BTB30H	2517	63.50	44.45	107.95	5.44	1.59
32	259.14	16BTB32	2517	63.50	44.45	107.95	5.67	1.59
35	283.36	16BTB35	2517	63.50	44.45	107.95	7.12	1.59
36	291.43	16BTB36	2517	63.50	44.45	107.95	7.94	1.59
38	307.58	16BTB38	2517	63.50	44.45	107.95	8.85	1.59
40	323.74	16BTB40	2517	63.50	44.45	107.95	9.75	1.59
45	364.12	16BTB45	2517	63.50	44.45	107.95	12.25	1.59
48	388.36	16BTB48	2517	63.50	44.45	107.95	13.61	1.59
54	436.84	16BTB54	2517	63.50	44.45	107.95	17.69	1.59
57	461.07	16BTB57	2517	63.50	44.45	107.95	19.16	1.59
60	485.33	16BTB60	2517	63.50	44.45	107.95	20.64	1.59
64	517.65	16BTB64	3020	76.20	50.80	133.35	19.35	2.95
70	566.15	16BTB70	3020	76.20	50.80	133.35	23.95	2.95
76	614.64	16BTB76	3020	76.20	50.80	133.35	28.55	2.95
80	646.97	16BTB80	3020	76.20	50.80	133.35	31.62	2.95
84	679.30	16BTB84	3020	76.20	50.80	133.35	34.68	2.95
95	768.22	16BTB95	3020	76.20	50.80	133.35	41.58	2.95
114	921.81	16BTB114	3020	76.20	50.80	133.35	56.15	2.95

Sprockets with “H” suffix have hardened teeth.

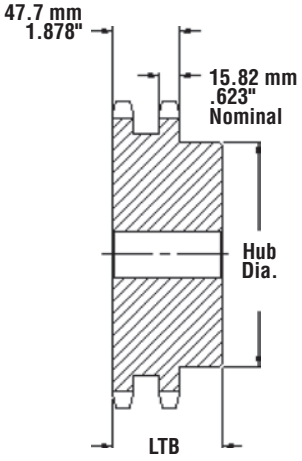
ISO 16B-2
METRIC 80-2

Metric Sprockets

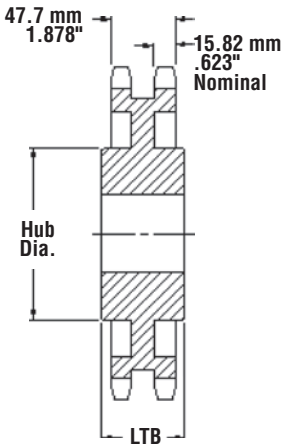
1.00 INCH (25.40 MM) PITCH DUPLEX

CHAIN DATA:
BS 228/15
ISO 16B-2
PITCH: 25.40 mm (1.00")
ROLLER DIAMETER: 15.88 mm (0.625")
ROLLER WIDTH: 17.02 mm (0.670")
TENSILE: 8,620 kilos (19,000 lbs.)





Type B



Type C

Duplex - Type B/C — Steel

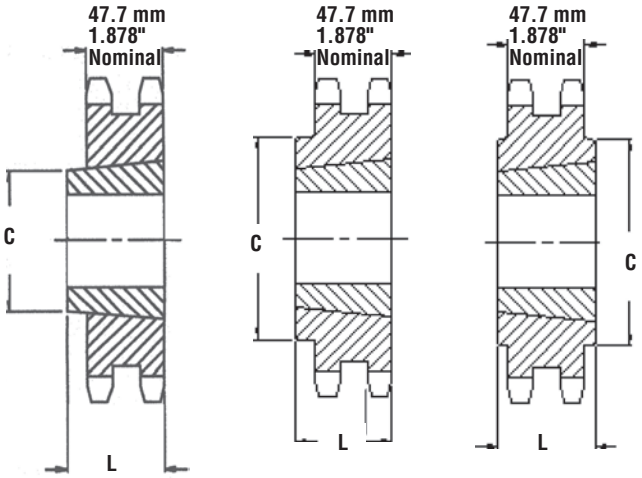
No. Teeth	Pitch Diameter (mm)	Catalog Number	Bore (Inches)		Hub (Inches)		Weight Approx. (kg)
			Stock (mm)	Max (mm)	Dia. (mm)	LTB (mm)	
11	90.16	D16B11	20	42	63	70	1.82
12	98.14	D16B12	20	45	72	70	2.36
13	106.14	D16B13	20	52	80	70	2.95
14	114.15	D16B14	20	53	88	70	3.50
15	122.17	D16B15	20	62	96	70	4.18
16	130.20	D16B16	20	66	104	70	5.22
17	138.23	D16B17	20	74	112	70	5.99
18	146.27	D16B18	20	80	120	70	6.81
19	154.32	D16B19	20	84	128	70	7.71
20	162.37	D16B20	20	85	130	70	8.26
21	170.42	D16B21	25	85	130	70	8.85
22	178.28	D16B22	25	85	130	70	9.53
23	186.54	D16B23	25	85	130	70	10.43
24	194.60	D16B24	25	85	130	70	11.44
25	202.66	D16B25	25	85	130	70	12.47
26	210.72	D16B26	25	85	130	70	13.62
27	218.79	D16B27	25	85	130	70	14.75
28	226.86	D16B28	25	85	130	70	15.89
29	234.93	D16B29	25	85	130	70	17.02
30	243.00	D16B30	25	95	145	75	18.16
32	259.14	D16B32	32	95	145	75	19.86
35	283.36	D16B35	32	95	145	75	22.27
36	291.43	D16B36	32	95	145	80	28.04
38	307.58	D16B38	32	95	145	80	29.60
42	339.89	D16B42	40	95	145	80	32.20
45	364.12	D16C45	40	95	145	95	34.35
57	461.07	D16C57	40	95	145	95	38.18
60	485.33	D16C60	40	95	145	95	42.77
68	549.98	D16C68	40	96	153	102	43.86
76	614.64	D16C76	40	96	152	102	68.11
80	646.97	D16C80	40	102	152	108	54.88
95	768.22	D16C95	40	102	152	108	72.57
114	921.81	D16C114	40	102	152	108	78.22

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

1.00 INCH (25.40 MM) PITCH DUPLEX

CHAIN DATA:
BS 228/15
ISO 16B-2
PITCH: 25.40 mm (1.00")
ROLLER DIAMETER: 15.88 mm (0.625")
ROLLER WIDTH: 17.02 mm (0.670")
TENSILE: 8,620 kilos (19,000 lbs.)





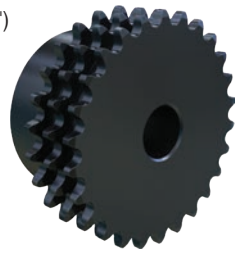
Duplex - Taper Bushed — Steel

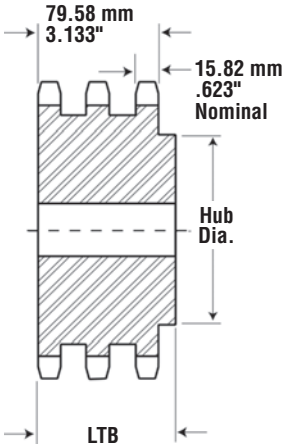
No. Teeth	Pitch Diameter (mm)	Catalog Number	Bushing	Max. Bore. (mm)	Dimensions		Weight (Approx.)	
					L (mm)	C (mm)	Rim (kg)	Bushing (kg)
13	106.14	D16ATB13	1615	41.28	38.10	–	1.54	0.77
14	114.15	D16ATB14	2012	50.80	31.75	–	1.68	0.77
15	122.17	D16ATB15	2012	50.80	31.75	–	2.04	0.77
16	130.20	D16ATB16	2012	50.80	31.75	–	2.27	0.77
17	138.23	D16ATB17	2517	63.50	44.45	–	2.50	1.59
18	146.27	D16ATB18	2517	63.50	44.45	–	2.64	1.59
19	154.32	D16BTB19	3020	76.20	50.80	127.00	3.18	2.95
20	162.37	D16BTB20	3020	76.20	50.80	133.35	3.45	2.95
21	170.42	D16BTB21	3020	76.20	50.80	141.28	4.09	2.95
22	178.48	D16BTB22	3020	76.20	50.80	149.23	4.73	2.95
23	186.54	D16BTB23	3020	76.20	50.80	158.34	5.48	2.95
24	194.60	D16BTB24	3020	76.20	50.80	166.68	6.34	2.95
25	202.66	D16BTB25	3020	76.20	50.80	174.63	7.72	2.95
26	210.72	D16BTB26	3020	76.20	50.80	182.56	8.36	2.95
27	218.79	D16BTB27	3020	76.20	50.80	133.35	10.22	2.95
28	226.86	D16BTB28	3020	76.20	50.80	133.35	10.59	2.95
30	243.00	D16CTB30	3020	76.20	50.80	133.35	11.35	2.95
35	283.36	D16CTB35	3020	76.20	50.80	133.35	17.88	2.95
38	307.58	D16CTB38	3020	76.20	50.80	133.35	21.79	2.95
42	339.89	D16CTB42	3020	76.20	50.80	133.35	22.94	2.95
45	364.12	D16CTB45	3020	76.20	50.80	133.35	23.80	2.95
57	461.08	D16CTB57	3020	76.20	50.80	133.35	27.24	2.95
76	614.64	D16CTB76	3020	76.20	50.80	133.35	37.68	2.95
95	768.22	D16CTB95	3020	76.20	50.80	133.35	43.13	2.95
114	921.81	D16CTB114	3020	76.20	50.80	133.35	48.58	2.95

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

1.00 INCH (25.40 MM) PITCH TRIPLEX

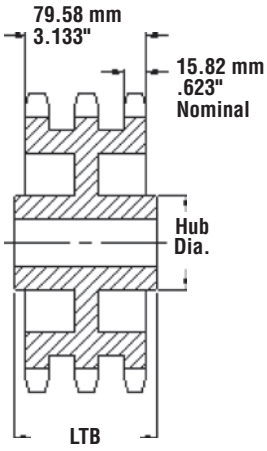
CHAIN DATA:
BS 228/15
ISO 16B-3
PITCH: 25.40 mm (1.00")
ROLLER DIAMETER: 15.88 mm (0.625")
ROLLER WIDTH: 17.02 mm (0.670")
TENSILE: 12,930 kilos (28,500 lbs.)





Type B





Type C

Triplex - Type B/C — Steel

No. Teeth	Pitch Diameter (mm)	Catalog Number	Bore (Inches)		Hub (Inches)		Weight Approx. (kg)
			Stock (mm)	Max (mm)	Dia. (mm)	LTB (mm)	
11	90.16	E16B11	25	42	63	100	2.72
12	98.14	E16B12	25	45	72	100	3.59
13	106.14	E16B13	25	52	80	100	4.13
14	114.15	E16B14	25	58	88	100	4.68
15	122.17	E16B15	25	62	96	100	5.54
16	130.20	E16B16	30	66	104	100	6.81
17	138.23	E16B17	30	74	112	100	8.07
18	146.27	E16B18	30	80	120	100	9.99
19	154.32	E16B19	30	84	128	100	10.89
20	162.37	E16B20	30	85	130	100	11.80
21	170.42	E16B21	30	85	130	100	13.61
22	178.48	E16B22	30	85	130	100	14.07
23	186.54	E16B23	30	85	130	100	14.97
24	194.60	E16B24	30	85	130	100	16.34
25	202.66	E16B25	30	85	130	100	17.70
26	210.72	E16B26	30	85	130	100	19.98
27	218.79	E16B27	30	85	130	100	21.57
28	226.86	E16B28	30	85	130	100	23.15
29	234.93	E16B29	30	85	130	100	24.74
30	243.00	E16B30	32	95	140	105	26.33
35	283.36	E16B35	32	95	140	105	36.06
36	291.43	E16B36	32	95	140	105	38.06
38	307.58	E16C38	32	97	152	114	41.45
42	339.89	E16C42	40	97	152	114	38.51
45	364.12	E16C45	40	97	152	114	41.91
57	461.08	E16C57	40	107	159	120	51.35
60	485.33	E16C60	40	107	159	120	58.06
68	549.98	E16C68	40	107	159	120	63.50
76	614.64	E16C76	40	107	159	120	77.11
95	768.22	E16C95	40	114	171	127	100.70
114	921.81	E16C114	40	114	171	127	120.84

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

1.25 INCH (31.75 MM) PITCH SIMPLEX

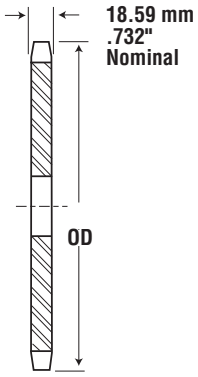
Simplex - Type B/C — Steel

Type A — Steel

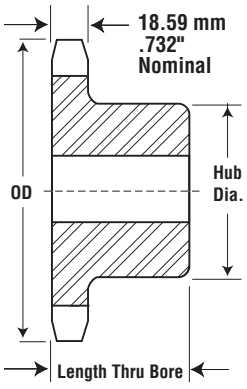
No. Teeth	Pitch Dia. (mm)	Catalog Number	Bore (mm)		Hub (mm)		Weight (kg)	Catalog Number	Bore Stock (mm)	Weight (kg)
			Stock	Max	Dia.	LTB				
8	82.97	20B8	25	57	48	48	1.04	20A8	25	0.63
9	92.83	20B9	25	57	58	48	1.45	20A9	25	0.95
10	102.75	20B10	25	60	69	48	1.86	20A10	25	1.27
11	112.70	20B11	25	70	79	48	2.40	20A11	25	1.59
12	122.67	20B12	25	76	90	48	2.95	20A12	25	1.91
13	132.67	20B13	25	76	98	41	3.00	20A13	25	2.18
14	142.68	20B14	25	76	106	41	3.40	20A14	25	2.49
15	152.71	20B15	25	76	114	44	4.31	20A15	25	2.68
16	162.75	20B16	25	76	114	44	4.63	20A16	24	3.08
17	172.79	20B17	32	76	114	44	4.99	20A17	24	3.54
18	182.84	20B18	32	76	114	44	5.44	20A18	30	3.81
19	192.90	20B19	32	76	114	51	5.90	20A19	30	4.31
20	202.96	20B20	32	76	114	51	6.35	20A20	30	4.58
21	213.03	20B21	32	76	114	51	7.03	20A21	32	5.17
22	223.10	20B22	32	76	114	51	7.71	20A22	32	5.72
23	233.17	20B23	32	84	114	51	8.16	20A23	32	5.99
24	243.25	20B24	32	84	114	51	8.62	20A24	32	6.62
25	253.32	20B25	32	84	114	51	9.07	20A25	32	6.94
26	263.41	20B26	32	84	127	51	9.53	20A26	32	7.62
27	273.49	20B27	32	84	127	51	10.43	20A27	32	8.35
28	283.57	20B28	32	84	127	51	11.34	20A28	32	8.85
29	293.66	20B29	32	84	127	51	11.76	20A29	32	9.43
30	303.75	20B30	32	84	127	51	12.02	20A30	32	9.98
31	313.83	20B31	32	84	127	51	12.77	20A31	32	10.73
32	323.92	20B32	32	84	127	51	13.52	20A32	32	11.49
33	334.01	20B33	32	84	127	51	14.59	20A33	32	12.24
34	344.10	20B34	32	84	127	51	15.66	20A34	32	13.00
35	354.20	20B35	32	84	127	64	16.74	20A35	32	13.75
36	364.29	20B36	32	84	127	64	17.51	20A36	32	14.50
37	374.38	20B37	32	84	127	64	18.17	20A37	32	15.25
38	384.48	20B38	32	84	127	64	18.82	20A38	32	16.01
39	394.57	20B39	32	84	127	64	19.78	20A39	32	16.76
40	404.67	20B40	32	84	127	64	21.27	20A40	32	17.52
41	414.77	20B41	32	84	127	64	22.07	20A41	32	18.27
42	424.88	20B42	32	84	127	64	22.86	20A42	32	19.03
43	434.96	20B43	32	84	127	64	23.40	20A43	32	19.78
44	445.06	20B44	32	84	127	64	23.95	20A44	32	20.53
45	455.15	20B45	32	84	127	64	24.49	20A45	32	21.29
46	465.25	20B46	32	84	127	64	26.31	20A46	32	22.04
47	475.35	20B47	32	84	127	64	28.12	20A47	32	22.79
48	485.45	20B48	40	102	152	64	29.94	20A48	32	23.55
49	495.55	20B49	40	102	152	64	31.76	20A49	32	24.30
50	505.65	20B50	40	102	152	64	33.57	20A50	32	25.06
51	515.75	20B51	40	102	152	64	35.39	20A51	40	24.43
52	525.85	20B52	40	102	152	64	37.21	20A52	40	25.85
53	535.95	20B53	40	102	152	64	39.02	20A53	40	27.27
54	546.05	20C54	40	102	152	82	32.90	20A54	40	25.70
55	556.15	20C55	40	102	152	82	34.77	20A55	40	30.12
56	566.25	20C56	40	102	152	82	36.63	20A56	40	31.34
57	576.35	20C57	40	102	152	82	38.50	20A57	40	32.96
58	586.45	20C58	40	102	152	82	40.37	20A58	40	35.80
59	596.56	20C59	40	102	152	82	42.24	20A59	40	37.22
60	606.66	20C60	40	102	152	82	44.10	20A60	40	38.64
70	707.68	20C70	40	133	178	95	65.36	20A70	40	52.85
72	727.89	20C72	40	133	178	95	67.23	20A72	40	55.70
76	768.30	20C76	40	133	178	95	70.98	20A76	40	61.38
80	808.71	20C80	40	133	178	95	74.70	20A80	40	67.06
84	849.13	20C84	40	133	178	95	78.43	20A84	40	72.75
90	909.76	20C90	40	133	178	95	84.03	20A90	40	81.27
95	960.28	20C95	40	133	178	114	117.18	20A95	40	102.42
96	970.38	20C96	40	133	178	114	117.56	20A96	40	103.84
114	1152.27	20C114	40	133	178	114	124.40	20A114	40	130.84

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

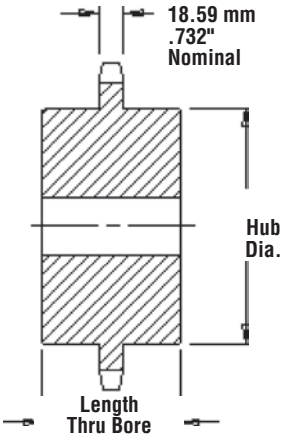
CHAIN DATA:
BS 228/17
ISO 20B-1
PITCH: 31.75 mm (1.250")
ROLLER DIAMETER:
19.05 mm (0.750")
ROLLER WIDTH: 19.56 mm (0.770")
TENSILE: 6,580 kilos (14,500 lbs.)



Type A



Type B



Type C

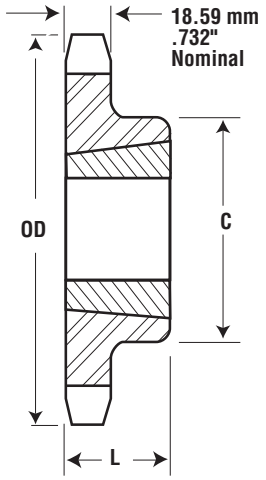
ISO 20B-1
METRIC 100

Metric Sprockets

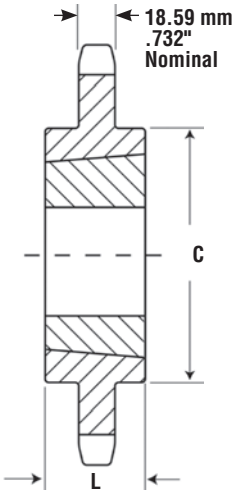
1.25 INCH (31.75 MM) PITCH SIMPLEX

CHAIN DATA:
BS 228/17
ISO 20B1
PITCH: 31.75 mm (1.250")
ROLLER DIAMETER: 19.05 mm (0.750")
ROLLER WIDTH: 19.56 mm (0.770")
TENSILE: 6,580 kilos (14,500 lbs.)





Type B



Type C

Simplex - Taper Bushed — Steel

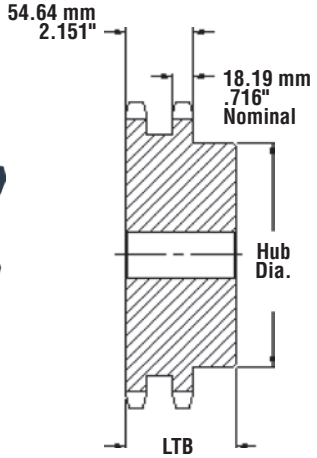
No. Teeth	Pitch Diameter (mm)	Catalog Number	Bushing	Max. Bore (mm)	Dimensions		Weight (Approx.)	
					L (mm)	C (mm)	Rim (kg)	Bushing (kg)
11	112.70	20BTB11H	1615	41.28	38.10	62.69	1.22	0.54
12	122.67	20BTB12H	1615	41.28	38.10	70.64	1.41	0.54
13	132.67	20BTB13H	2012	50.80	31.75	90.47	1.45	0.77
14	142.68	20BTB14H	2012	50.80	31.75	90.47	1.63	0.77
15	152.71	20BTB15H	2517	63.50	44.45	107.95	2.31	1.59
16	162.75	20BTB16H	2517	63.50	44.45	107.95	2.72	1.59
17	172.79	20BTB17H	2517	63.50	44.45	107.95	3.27	1.59
18	182.84	20BTB18H	2517	63.50	44.45	107.95	3.63	1.59
19	192.90	20BTB19H	2517	63.50	44.45	107.95	4.09	1.59
20	202.96	20BTB20H	2517	63.50	44.45	107.95	4.40	1.59
21	213.03	20BTB21H	2517	63.50	44.45	107.95	4.54	1.59
22	223.10	20BTB22H	2517	63.50	44.45	107.95	4.77	1.59
23	233.17	20BTB23H	2517	63.50	44.45	107.95	5.58	1.59
24	243.25	20BTB24H	2517	63.50	44.45	107.95	6.13	1.59
25	253.32	20BTB25H	2517	63.50	44.45	107.95	6.95	1.59
26	263.41	20BTB26H	2517	63.50	44.45	107.95	7.35	1.59
28	283.57	20BTB28H	3020	76.20	50.80	133.35	7.90	2.95
30	303.75	20BTB30H	3020	76.20	50.80	133.35	9.62	2.95
32	323.92	20BTB32	3020	76.20	50.80	133.35	11.03	2.95
35	354.20	20BTB35	3020	76.20	50.80	133.35	13.15	2.95
36	364.29	20BTB36	3020	76.20	50.80	133.35	13.86	2.95
38	384.48	20BTB38	3020	76.20	50.80	133.35	15.98	2.95
40	404.67	20BTB40	3020	76.20	50.80	133.35	19.43	2.95
45	455.15	20BTB45	3020	76.20	50.80	133.35	25.18	2.95
48	485.45	20BTB48	3020	76.20	50.80	133.35	28.62	2.95
54	546.05	20BTB54	3020	76.20	50.80	133.35	35.52	2.95
57	576.35	20BTB57	3020	76.20	50.80	133.35	37.82	2.95
60	606.66	20BTB60	3020	76.20	50.80	133.35	41.27	2.95
70	707.68	20CTB70	3535	88.90	88.90	171.45	51.56	6.35
72	727.89	20CTB72	3535	88.90	88.90	171.45	53.97	6.35
76	768.30	20CTB76	3535	88.90	88.90	171.45	60.33	6.35
80	808.71	20CTB80	3535	88.90	88.90	171.45	66.23	6.35
84	849.13	20CTB84	3535	88.90	88.90	171.45	73.48	6.35
90	909.76	20CTB90	3535	88.90	88.90	171.45	94.33	6.35
95	960.28	20CTB95	3535	88.90	88.90	171.45	96.16	6.35

Sprockets with “H” suffix have hardened teeth.

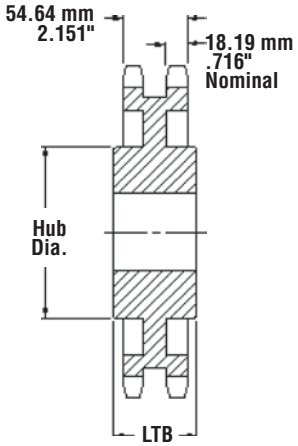
1.25 INCH (31.75 MM) PITCH DUPLEX

CHAIN DATA:
BS 228/17
ISO 20B-2
PITCH: 31.75 mm (1.250")
ROLLER DIAMETER: 19.05 mm (0.750")
ROLLER WIDTH: 19.56 mm (0.770")
TENSILE: 13,160 kilos (29,000 lbs.)





Type B



Type C

Duplex - Type B/C — Steel

No. Teeth	Pitch Diameter (mm)	Catalog Number	Bore (Inches)		Hub (Inches)		Weight Approx. (kg)
			Stock (mm)	Max (mm)	Dia. (mm)	LTB (mm)	
10	102.75	D20B10	20	45	69	75	2.90
11	112.70	D20B11	20	52	79	80	3.67
12	122.67	D20B12	20	60	90	80	4.31
13	132.67	D20B13	20	64	100	80	5.53
14	142.68	D20B14	20	73	110	80	6.62
15	152.71	D20B15	20	80	120	80	7.76
16	162.75	D20B16	25	80	120	80	9.12
17	172.79	D20B17	25	80	120	80	10.44
18	182.84	D20B18	25	80	120	80	11.71
19	192.90	D20B19	25	80	120	80	12.92
20	202.96	D20B20	25	80	120	80	15.43
21	213.03	D20B21	25	92	140	80	16.55
22	223.10	D20B22	25	92	140	80	17.70
23	233.17	D20B23	25	92	140	80	19.05
24	243.25	D20B24	32	96	145	80	20.43
25	253.32	D20B25	32	96	145	80	21.77
26	263.41	D20B26	32	96	145	80	23.15
27	273.49	D20B27	32	96	145	80	24.97
28	283.57	D20B28	32	96	145	80	26.78
30	303.75	D20B30	32	96	145	80	30.41
32	323.92	D20B32	32	96	145	80	32.22
35	354.20	D20C35	32	100	152	108	34.02
36	364.29	D20C36	32	100	152	108	34.70
38	384.48	D20C38	32	100	152	114	43.72
42	424.86	D20C42	40	100	152	114	43.55
45	455.15	D20C45	40	100	152	114	46.72
57	576.35	D20C57	40	100	191	127	64.10
60	606.66	D20C60	40	125	191	127	79.38
68	687.48	D20C68	40	125	191	127	87.74
76	768.30	D20C76	40	125	191	127	96.11
80	808.71	D20C80	40	125	191	127	100.30
95	960.28	D20C95	40	125	191	127	115.98
114	1152.26	D20C114	40	125	191	127	135.85

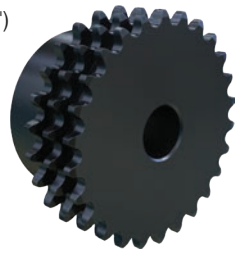
Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

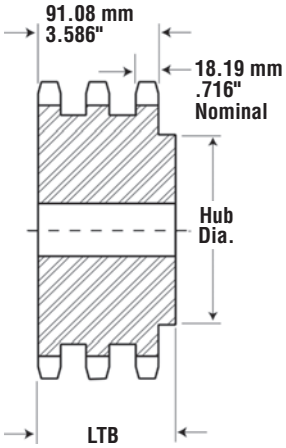
ISO 20B-3
METRIC 100-3

Metric Sprockets

1.25 INCH (31.75 MM) PITCH TRIPLEX

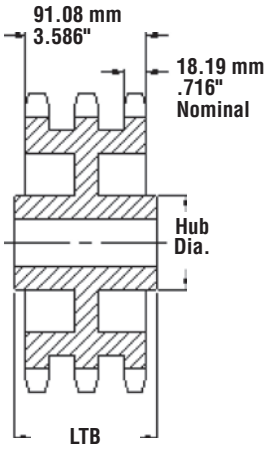
CHAIN DATA:
BS 228/17
ISO 20B-3
PITCH: 31.75 mm (1.250")
ROLLER DIAMETER: 19.05 mm (0.750")
ROLLER WIDTH: 19.56 mm (0.770")
TENSILE: 19,740 kilos (43,500 lbs.)





Type B





Type C

Triplex - Type B/C — Steel

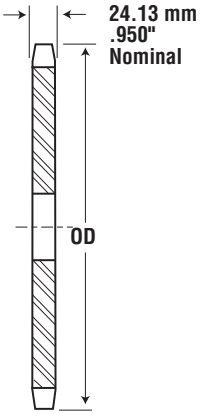
No. Teeth	Pitch Diameter (mm)	Catalog Number	Bore (Inches)		Hub (Inches)		Weight Approx. (kg)
			Stock (mm)	Max (mm)	Dia. (mm)	LTB (mm)	
10	102.75	E20B10	25	47	69	110	3.95
11	112.70	E20B11	25	52	79	115	5.26
12	122.67	E20B12	25	60	90	115	6.21
13	132.67	E20B13	25	64	100	115	9.26
14	142.68	E20B14	25	73	110	115	9.76
15	152.71	E20B15	25	80	120	115	10.81
16	162.75	E20B16	25	80	120	115	12.76
17	172.79	E20B17	25	80	120	115	14.76
18	182.84	E20B18	25	80	120	115	16.71
19	192.90	E20B19	25	80	120	115	19.13
20	202.96	E20B20	25	80	120	115	21.57
21	213.03	E20B21	25	92	140	115	23.36
22	223.10	E20B22	25	92	140	115	25.65
23	233.17	E20B23	25	92	140	115	27.90
24	243.25	E20B24	32	95	145	120	27.19
25	253.32	E20B25	32	95	145	120	27.90
26	263.41	E20B26	32	95	145	120	31.90
27	273.49	E20B27	32	95	145	120	35.90
28	283.57	E20B28	32	95	145	120	39.90
30	303.75	E20B30	32	95	145	120	47.90
32	323.92	E20B32	32	95	145	127	51.57
35	354.20	E20C35	32	97	152	127	57.29
36	364.29	E20C36	32	97	152	127	59.35
38	384.48	E20C38	40	97	152	127	62.56
42	424.86	E20C42	40	97	152	127	70.12
45	455.15	E20C45	40	97	152	127	75.84
57	576.35	E20C57	40	102	191	127	100.11
60	606.66	E20C60	40	102	191	127	104.86
68	687.48	E20C68	40	102	191	127	117.54
76	768.30	E20C76	40	102	191	127	130.21
80	808.71	E20C80	40	102	191	127	136.55
95	960.28	E20C95	40	102	191	127	160.31
114	1152.27	E20C114	40	102	191	127	190.41

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

1.50 INCH (38.10 MM) PITCH SIMPLEX

CHAIN DATA:
BS 228/18
ISO 24B-1
PITCH: 38.10 mm (1.50")
ROLLER DIAMETER: 25.40 mm (1.00")
ROLLER WIDTH: 25.40 mm (1.00")
TENSILE: 9,980 kilos (22,000 lbs.)





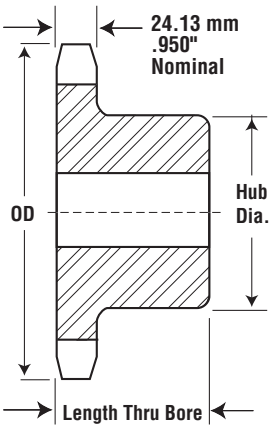
Type A

Simplex - Type B/C — Steel

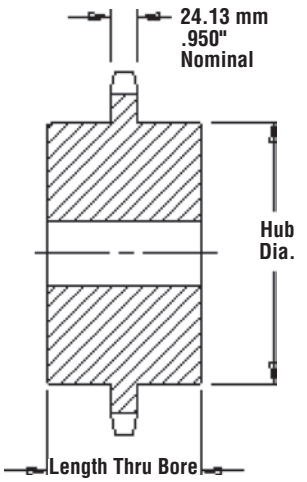
Type A — Steel

No. Teeth	Pitch Diameter (mm)	Catalog Number	Bore (mm)		Hub (mm)		Weight (kg)	Catalog Number	Bore Stock (mm)	Weight (kg)
			Stock	Max	Dia.	LTB				
9	111.40	24B9	20	45	69	45	2.02	24A9	20	1.69
10	123.29	24B10	20	52	80	45	2.61	24A10	20	1.88
11	135.23	24B11	25	60	90	50	3.77	24A11	20	2.06
12	147.21	24B12	25	67	102	50	4.77	24A12	20	2.68
13	159.20	24B13	25	76	114	50	5.91	24A13	20	3.06
14	171.22	24B14	32	86	127	60	6.68	24A14	32	3.72
15	183.25	24B15	32	92	140	60	7.49	24A15	32	4.31
16	195.29	24B16	32	92	140	60	9.08	24A16	32	4.86
17	207.35	24B17	32	92	140	60	9.76	24A17	32	5.44
18	219.41	24B18	32	92	140	60	10.49	24A18	32	6.13
19	231.48	24B19	32	92	140	60	11.21	24A19	32	7.03
20	243.55	24B20	32	92	140	60	12.26	24A20	32	7.94
21	255.63	24B21	32	92	140	60	13.38	24A21	32	8.62
22	267.72	24B22	32	92	140	60	13.67	24A22	32	9.76
23	179.80	24B23	32	92	140	60	14.74	24A23	32	10.43
24	291.90	24B24	32	92	140	60	15.48	24A24	32	11.35
25	303.99	24B25	32	92	140	60	16.38	24A25	32	12.47
26	316.09	24B26	40	102	150	65	19.43	24A26	40	13.39
27	328.19	24B27	40	102	150	65	20.39	24A27	40	14.53
28	340.29	24B28	40	102	150	65	21.34	24A28	40	15.89
29	352.39	24B29	40	102	150	65	22.79	24A29	40	17.02
30	364.49	24B30	40	102	150	65	24.25	24A30	40	18.39
31	376.60	24B31	40	102	150	65	26.19	24A31	40	20.02
32	388.71	24B32	40	102	150	65	28.12	24A32	40	21.66
33	400.82	24B33	40	102	150	65	30.05	24A33	40	23.29
34	412.93	24B34	40	102	150	65	31.99	24A34	40	24.93
35	425.04	24B35	40	102	150	65	33.93	24A35	40	26.56
36	437.15	24B36	40	102	152	65	35.86	24A36	40	28.19
38	461.37	24B38	40	102	152	65	39.73	24A38	40	31.46
42	509.83	24C42	40	102	152	95	45.31	24A42	40	40.99
45	546.19	24C45	40	102	152	95	50.71	24A45	40	48.14
48	482.54	24C48	40	102	152	102	57.43	24A48	40	55.29
57	691.62	24C57	40	133	178	102	76.05	24A57	40	76.73
60	727.99	24C60	40	133	178	102	80.05	24A60	40	85.19
76	922.00	24C76	40	133	191	114	129.00	24A76	40	116.00

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.



Type B



Type C

ISO 24B-1
METRIC 120

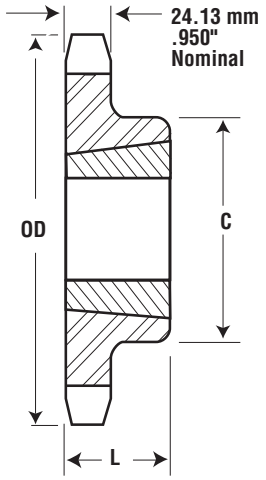
Metric Sprockets

Martin

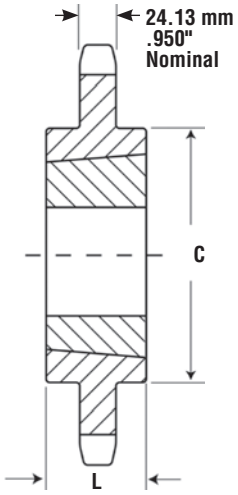
1.50 INCH (38.10 MM) PITCH SIMPLEX

CHAIN DATA:
BS 228/18
ISO 24B-1
PITCH: 38.10 mm (1.50")
ROLLER DIAMETER: 25.40 mm (1.00")
ROLLER WIDTH: 25.40 mm (1.00")
TENSILE: 9,980 kilos (22,000 lbs.)





Type B



Type C

Simplex - Taper Bushed — Steel

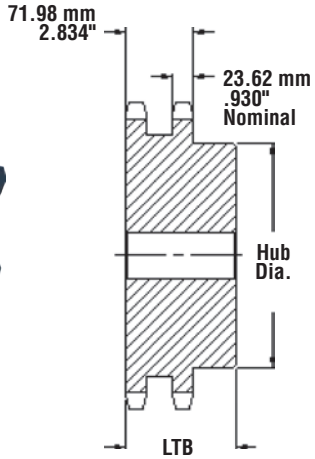
No. Teeth	Pitch Diameter (mm)	Catalog Number	Bushing	Max. Bore (mm)	Dimensions		Weight (Approx.)	
					L (mm)	C (mm)	Rim (kg)	Bushing (kg)
11	135.23	24BTB11H	2012	50.80	31.75	90.49	2.28	0.77
12	147.21	24BTB12H	2012	50.80	31.75	90.49	2.49	0.77
13	159.20	24BTB13H	2517	63.50	44.45	107.95	2.77	1.59
14	171.22	24BTB14H	2517	63.50	44.45	107.95	3.54	1.59
15	183.25	24BTB15H	2517	63.50	44.45	107.95	4.31	1.59
16	195.29	24BTB16H	3020	76.20	50.80	133.35	4.77	2.95
17	207.35	24BTB17H	3020	76.20	50.80	133.35	5.45	2.95
18	219.41	24BTB18H	3020	76.20	50.80	133.35	6.13	2.95
19	231.48	24BTB19H	3020	76.20	50.80	133.35	6.81	2.95
20	243.55	24BTB20H	3020	76.20	50.80	133.35	7.49	2.95
21	255.63	24BTB21H	3020	76.20	50.80	133.35	7.94	2.95
22	267.72	24BTB22H	3020	76.20	50.80	133.35	8.75	2.95
23	279.80	24BTB23H	3020	76.20	50.80	133.35	9.53	2.95
24	291.90	24BTB24H	3020	76.20	50.80	133.35	10.67	2.95
25	303.99	24BTB25H	3020	76.20	50.80	133.35	11.80	2.95
26	316.09	24BTB26H	3020	76.20	50.80	133.35	12.93	2.95
27	328.19	24BTB27H	3020	76.20	50.80	133.35	13.50	2.95
28	340.29	24BTB28H	3020	76.20	50.80	133.35	14.70	2.95
29	352.29	24BTB29H	3020	76.20	50.80	133.35	14.75	2.95
30	364.49	24BTB30H	3020	76.20	50.80	133.35	15.20	2.95
32	388.71	24BTB32	3020	76.20	50.80	133.35	15.76	2.95
38	461.37	24CTB38	3030	76.20	76.20	139.70	24.97	4.18
40	485.60	24CTB40	3030	76.20	76.20	139.70	28.46	4.18
42	509.83	24CTB42	3030	76.20	76.20	139.70	31.95	4.18
45	546.19	24CTB45	3030	76.20	76.20	139.70	37.19	4.18
48	582.54	24CTB48	3030	76.20	76.20	139.70	42.43	4.18
50	606.78	24CTB50	3030	76.20	76.20	139.70	45.92	4.18
54	655.26	24CTB54	3535	88.90	88.90	165.10	63.32	6.36
57	691.62	24CTB57	3535	88.90	88.90	165.10	71.46	6.36
60	727.99	24CTB60	3535	88.90	88.90	165.10	79.60	6.36
68	824.97	24CTB68	3535	88.90	88.90	165.10	101.31	6.36
72	873.46	24CTB72	3535	88.90	88.90	165.10	112.17	6.36
76	921.96	24CTB76	3535	88.90	88.90	165.10	123.02	6.36
95	1152.33	24CTB95	4040	101.60	101.60	196.85	196.67	9.98
96	1164.46	24CTB96	4040	101.60	101.60	196.85	201.03	9.98
114	1382.72	24CTB114	4040	101.60	101.60	196.85	279.50	9.98

Sprockets with “H” suffix have hardened teeth.

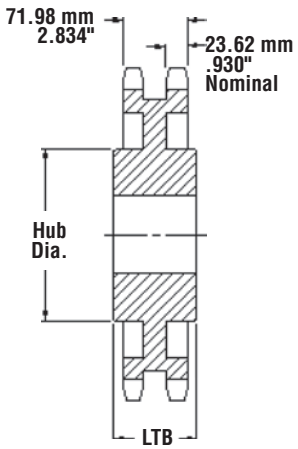
1.50 INCH (38.10 MM) PITCH DUPLEX

CHAIN DATA:
BS 228/18
ISO 24B-2
PITCH: 38.10 mm (1.50")
ROLLER DIAMETER: 25.40 mm (1.00")
ROLLER WIDTH: 25.40 mm (1.00")
TENSILE: 19,960 kilos (44,000 lbs.)





Type B



Type C

Duplex - Type B/C — Steel

No. Teeth	Pitch Diameter (mm)	Catalog Number	Bore (Inches)		Hub (Inches)		Weight Approx. (kg)
			Stock (mm)	Max (mm)	Dia. (mm)	LTB (mm)	
11	135.23	D24B11	32	60	90	100	6.50
12	147.21	D24B12	32	67	102	100	8.13
13	159.20	D24B13	32	76	114	100	9.92
14	171.22	D24B14	32	84	128	100	11.98
15	183.25	D24B15	32	93	140	100	14.13
16	195.29	D24B16	32	100	150	100	16.35
17	207.35	D24B17	40	100	150	100	17.85
18	219.41	D24B18	40	108	160	100	20.35
19	231.48	D24B19	40	108	160	100	22.56
20	243.55	D24B20	40	108	160	100	24.78
21	255.63	D24B21	40	108	160	100	26.99
22	267.72	D24B22	40	108	160	102	29.74
23	279.80	D24B23	40	108	160	102	32.87
24	291.90	D24B24	40	108	160	102	36.00
25	303.99	D24B25	40	108	160	102	39.13
26	316.09	D24B26	40	108	160	102	42.26
27	328.19	D24B27	40	108	160	102	45.40
28	340.29	D24B28	40	108	160	102	48.53
29	352.39	D24B29	40	108	160	102	51.66
30	364.49	D24B30	40	108	160	102	54.79
32	388.71	D24B32	40	108	160	102	61.05
38	461.37	D24C38	40	137	190	152	72.01
40	485.60	D24C40	40	137	190	152	75.80
42	509.83	D24C42	40	137	190	152	79.59
45	546.19	D24C45	40	137	190	152	85.28
48	582.54	D24C48	40	137	190	152	90.97
50	606.78	D24C50	40	137	190	152	94.76
54	655.26	D24C54	40	161	238	159	127.46
57	691.62	D24C57	40	161	238	159	140.74
60	727.99	D24C60	40	161	238	159	154.02
68	824.97	D24C68	40	161	238	159	189.45
72	873.46	D24C72	40	161	238	159	207.16
76	921.96	D24C76	40	161	238	159	224.87
95	1152.33	D24C95	40	161	238	159	309.00
96	1164.46	D24C96	40	161	238	159	313.43
114	1382.72	D24C114	40	161	238	159	393.13

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

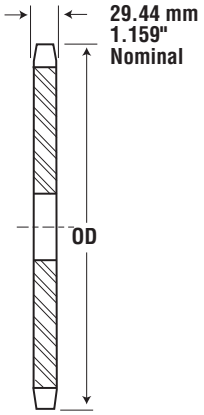
ISO 28B-1
METRIC 140

Metric Sprockets

1.75 INCH (44.45 MM) PITCH SIMPLEX

CHAIN DATA:
BS 228/20
ISO 28B-1
PITCH: 44.45 mm (1.75")
ROLLER DIAMETER: 27.94 mm (1.10")
ROLLER WIDTH: 30.99 mm (1.22")
TENSILE: 13,160 kilos (29,000 lbs.)





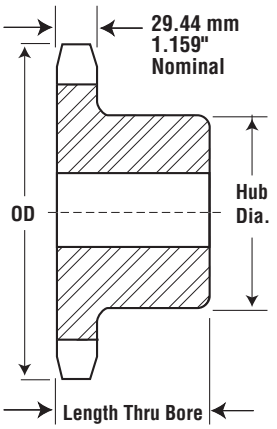
Type A

Simplex - Type B/C — Steel

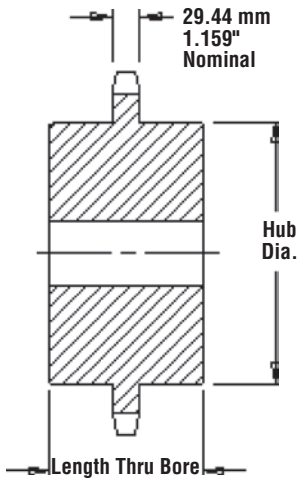
Type A — Steel

No. Teeth	Pitch Diameter (mm)	Catalog Number	Bore (mm)		Hub (mm)		Weight (kg)	Catalog Number	Bore Stock (mm)	Weight (kg)
			Stock	Max	Dia.	LTB				
11	157.77	28B11	40	73	112	70	5.27	28A11	32	3.18
12	171.74	28B12	40	84	125	70	6.40	28A12	32	3.95
13	185.74	28B13	40	93	140	70	8.22	28A13	32	4.31
14	199.76	28B14	40	93	140	60	9.13	28A14	32	4.77
15	213.79	28B15	40	108	160	60	11.40	28A15	40	5.45
16	227.84	28B16	40	108	160	64	12.76	28A16	40	6.81
17	241.91	28B17	40	108	160	64	13.65	28A17	40	7.71
18	255.98	28B18	40	108	160	64	13.65	28A18	40	8.63
19	270.06	28B19	40	108	160	64	15.01	28A19	40	9.53
20	284.14	28B20	40	108	160	64	16.84	28A20	40	10.44
21	298.24	28B21	40	108	160	64	18.19	28A21	40	11.79
22	312.34	28B22	40	108	160	64	19.11	28A22	40	13.17
23	326.44	28B23	40	108	160	64	20.46	28A23	40	14.06
24	340.54	28B24	40	108	160	64	21.84	28A24	40	15.44
25	354.65	28B25	40	108	160	64	22.73	28A25	40	16.78
26	368.77	28B26	40	108	160	64	26.83	28A26	40	18.61
27	382.88	28B27	40	108	160	64	27.74	28A27	40	20.43
28	397.00	28B28	40	108	160	64	30.29	28A28	40	20.88
29	411.12	28B29	40	108	160	64	31.74	28A29	40	23.06
30	425.24	28B30	40	108	160	64	32.73	28A30	40	25.17
32	453.49	28B32	40	134	180	76	34.84	28A32	40	31.02
38	538.27	28C38	40	134	178	102	51.25	28A38	40	48.58
40	566.54	28C40	40	134	178	102	52.84	28A40	40	52.80
42	594.81	28C42	40	134	178	102	54.43	28A42	40	57.02
45	637.22	28C45	40	134	178	102	60.55	28A45	40	63.35
48	679.63	28C48	40	134	178	102	62.72	28A48	40	69.68
54	764.47	28C54	40	134	178	127	74.60	28A54	40	82.34
57	806.89	28C57	40	134	178	127	81.77	28A57	40	88.67
60	849.32	28C60	40	134	178	127	88.94	28A60	40	97.97
68	962.47	28C68	40	137	191	127	108.05	28A68	40	122.79
72	1019.04	28C72	40	137	191	127	117.61	28A72	40	135.19
76	1075.62	28C76	40	137	191	127	127.17	28A76	40	147.60
95	1344.39	28C95	40	137	191	127	172.57	28A95	40	206.53
96	1358.53	28C96	40	137	191	127	174.96	28A96	40	209.63
114	1613.18	28C114	40	137	191	127	217.97	28A114	40	265.46

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.



Type B

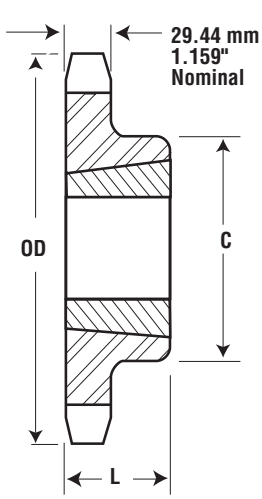


Type C

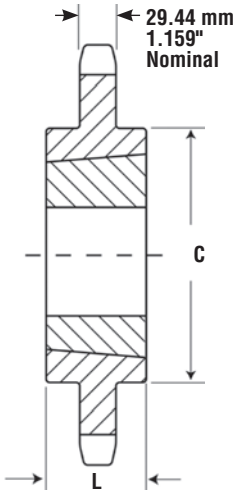
1.75 INCH (44.45 MM) PITCH SIMPLEX

CHAIN DATA:
BS 228/20
ISO 28B-1
PITCH: 44.45 mm (1.75")
ROLLER DIAMETER: 27.94 mm (1.10")
ROLLER WIDTH: 30.99 mm (1.22")
TENSILE: 13,160 kilos (29,000 lbs.)





Type B



Type C

Simplex - Taper Bushed — Steel

No. Teeth	Pitch Diameter (mm)	Catalog Number	Bushing	Max. Bore (mm)	Dimensions		Weight (Approx.)	
					L (mm)	C (mm)	Rim (kg)	Bushing (kg)
11	157.80	28BTB11H	2517	63.50	44.45	107.95	3.53	1.59
12	170.80	28BTB12H	2517	63.50	44.45	107.95	3.86	1.59
13	185.80	28BTB13H	3020	76.20	50.80	133.35	5.90	2.95
14	199.80	28BTB14H	3020	76.20	50.80	133.35	7.04	2.95
15	213.80	28BTB15H	3020	76.20	50.80	133.35	8.17	2.95
16	227.90	28BTB16H	3020	76.20	50.80	133.35	9.76	2.95
17	241.90	28BTB17H	3020	76.20	50.80	133.35	11.35	2.95
18	256.00	28BTB18H	3020	76.20	50.80	133.35	12.49	2.95
19	270.10	28BTB19H	3020	76.20	50.80	133.35	13.62	2.95
20	284.10	28BTB20H	3020	76.20	50.80	133.35	14.3	2.95
21	298.30	28BTB21H	3020	76.20	50.80	133.35	14.98	2.95
22	312.30	28BTB22H	3020	76.20	50.80	133.35	16.91	2.95
23	326.40	28BTB23H	3020	76.20	50.80	133.35	18.84	2.95
24	340.50	28BTB24H	3020	76.20	50.80	133.35	20.77	2.95
25	354.70	28BTB25H	3020	76.20	50.80	133.35	22.70	2.95
26	368.80	28BTB26H	3020	76.20	50.80	133.35	24.63	2.95
27	382.90	28BTB27	3020	76.20	50.80	133.35	26.56	2.95
28	397.00	28BTB28	3020	76.20	50.80	133.35	28.49	2.95
30	425.20	28BTB30	3020	76.20	50.80	133.35	32.35	2.95
32	453.49	28BTB32	3020	76.20	50.80	133.35	36.21	2.95
38	538.30	28CTB38	3535	88.90	88.90	165.10	45.40	6.36
40	566.55	28CTB40	3535	88.90	88.90	165.10	47.79	6.36
42	594.82	28CTB42	3535	88.90	88.90	165.10	50.18	6.36
45	637.21	28CTB45	4040	101.60	101.60	219.08	57.35	9.99
48	679.63	28CTB48	4040	101.60	101.60	219.08	61.17	9.99
54	764.46	28CTB54	4040	101.60	101.60	219.08	68.82	9.99
57	806.90	28CTB57	4040	101.60	101.60	219.08	72.64	9.99
60	849.33	28CTB60	4040	101.60	101.60	219.08	76.44	9.99
68	962.46	28CTB68	4040	101.60	101.60	219.08	86.63	9.99
72	1019.05	28CTB72	4040	101.60	101.60	219.08	91.73	9.99
76	1075.60	28CTB76	4040	101.60	101.60	219.08	96.83	9.99
95	1344.37	28CTB95	4040	101.60	101.60	219.08	121.03	9.99
96	1358.52	28CTB96	4040	101.60	101.60	219.08	122.31	9.99
114	1613.18	28CTB114	4040	101.60	101.60	219.08	145.24	9.99

Sprockets with “H” suffix have hardened teeth.

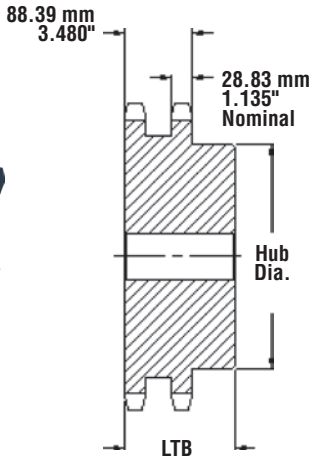
ISO 28B-2
METRIC 140-2

Metric Sprockets

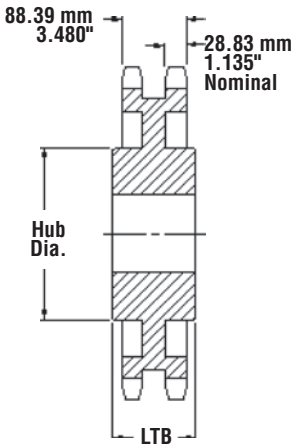
1.75 INCH (44.45 MM) PITCH DUPLEX

CHAIN DATA:
BS 228/20
ISO 28B-2
PITCH: 44.45 mm (1.75")
ROLLER DIAMETER: 27.94 mm (1.10")
ROLLER WIDTH: 30.99 mm (1.22")
TENSILE: 26,320 kilos (58,000 lbs.)





Type B



Type C

Duplex - Type B/C — Steel

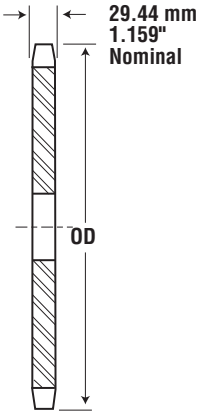
No. Teeth	Pitch Diameter (mm)	Catalog Number	Bore (Inches)		Hub (Inches)		Weight Approx. (kg)
			Stock (mm)	Max (mm)	Dia. (mm)	LTB (mm)	
11	157.77	D28B11	40	73	112	120	10.21
12	171.74	D28B12	40	84	125	120	13.02
13	185.74	D28B13	40	84	130	120	16.00
14	199.76	D28B14	40	87	135	120	19.28
15	213.79	D28B15	40	96	145	120	22.91
16	227.84	D28B16	40	108	160	120	26.92
17	241.91	D28B17	40	114	178	120	30.83
18	255.98	D28B18	40	114	178	120	34.74
19	270.06	D28B19	40	133	178	120	38.93
20	284.14	D28B20	40	133	178	120	44.27
21	298.24	D28B21	40	133	178	120	45.08
22	312.34	D28B22	40	133	178	120	48.15
23	326.44	D28B23	40	133	178	120	51.59
24	340.54	D28B24	40	133	178	120	55.03
25	354.65	D28B25	40	133	178	120	58.47
26	368.77	D28B26	40	133	178	120	64.06
28	397.00	D28B28	40	133	178	120	76.05
30	425.24	D28B30	40	133	178	120	89.16
32	453.49	D28B32	40	133	178	120	103.38
38	537.27	D28C38	40	133	191	159	97.53
40	566.54	D28C40	40	137	191	159	109.47
45	637.22	D28C45	40	137	191	159	137.32
48	679.63	D28C48	40	137	191	159	153.61
54	764.47	D28C54	40	162	241	181	204.44
57	806.89	D28C57	40	162	241	181	210.02
60	849.32	D28C60	40	162	241	181	230.82
68	962.47	D28C68	40	162	241	181	273.98
72	1019.04	D28C72	40	162	241	181	305.70
76	1075.62	D28C76	40	162	241	181	323.56

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

2.00 INCH (50.80 MM) PITCH SIMPLEX

CHAIN DATA:
BS 228/22
ISO 32B-1
PITCH: 50.80 mm(2.00")
ROLLER DIAMETER: 29.21 mm (1.15")
ROLLER WIDTH: 30.99 mm (1.22")
TENSILE: 17,240 kilos (38,000 lbs.)





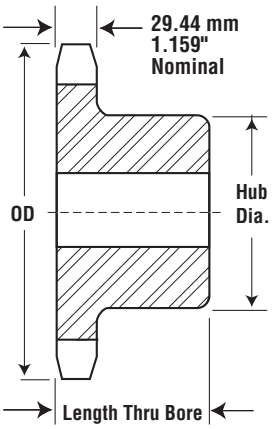
Type A

Simplex - Type B/C — Steel

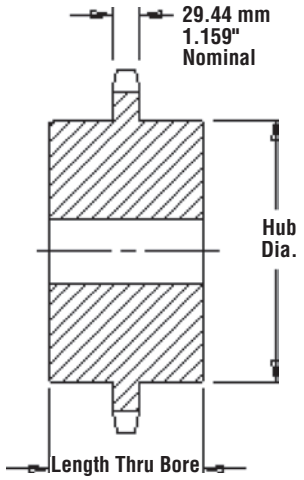
Type A — Steel

No. Teeth	Pitch Diameter (mm)	Catalog Number	Bore (mm)		Hub (mm)		Weight (kg)	Catalog Number	Bore Stock (mm)	Weight (kg)
			Stock	Max	Dia.	LTB				
11	180.31	32B11	40	83	120	80	9.04	32A11	32	5.00
12	196.28	32B12	40	89	133	80	11.11	32A12	32	6.02
13	212.27	32B13	40	102	152	70	12.61	32A13	32	7.12
14	228.29	32B14	40	102	152	70	14.97	32A14	32	8.32
15	244.33	32B15	40	102	178	70	17.32	32A15	40	9.50
16	260.39	32B16	40	103	178	70	18.78	32A16	40	11.64
17	276.46	32B17	40	103	178	70	20.23	32A17	40	12.35
18	292.55	32B18	40	103	178	70	21.88	32A18	40	13.96
19	308.64	32B19	40	103	178	70	23.53	32A19	40	15.57
20	324.74	32B20	40	133	178	70	25.37	32A20	40	17.36
21	340.84	32B21	40	133	178	70	27.20	32A21	40	19.15
22	356.96	32B22	40	133	178	70	29.23	32A22	40	21.13
23	373.07	32B23	40	133	178	70	31.25	32A23	40	23.10
24	389.19	32B24	40	133	178	76	35.33	32A24	40	25.26
25	405.32	32B25	40	133	178	76	36.80	32A25	40	27.41
26	421.45	32B26	40	133	181	76	39.41	32A26	40	30.25
27	437.58	32B27	40	133	181	76	42.02	32A27	40	33.10
28	453.72	32B28	40	133	181	76	44.62	32A28	40	35.94
29	469.85	32B29	40	133	181	76	47.23	32A29	40	38.78
30	485.99	32B30	40	133	181	76	49.84	32A30	40	41.63
32	518.28	32B32	40	139	203	76	58.02	32A32	40	47.31
38	615.17	32C38	40	139	203	114	86.78	32A38	40	64.37
40	647.47	32C40	40	139	203	114	91.35	32A40	40	72.98
42	679.78	32C42	40	139	203	114	95.91	32A42	40	81.60
45	728.25	32C45	40	139	203	127	116.97	32A45	40	94.52
48	776.72	32C48	40	139	203	127	130.43	32A48	40	107.44
54	873.68	32C54	40	139	203	127	157.34	32A54	40	133.29
57	922.16	32C57	40	139	203	127	170.79	32A57	40	146.21
60	970.65	32C60	40	139	203	127	184.25	32A60	40	164.35
68	1099.96	32C68	40	139	203	127	220.13	32A68	40	212.73
72	1164.62	32C72	40	139	203	152	282.31	32A72	40	236.91
76	1229.28	32C76	40	139	203	152	297.99	32A76	40	261.10

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.



Type B



Type C

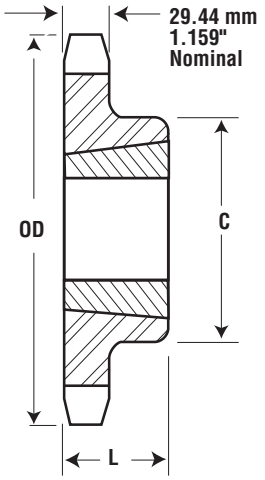
ISO 32B-1
METRIC 160

Metric Sprockets

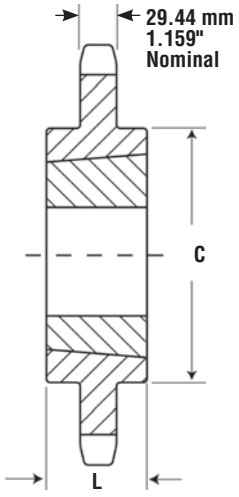
2.00 INCH (50.80 MM) PITCH SIMPLEX

CHAIN DATA:
BS 228/22
ISO 32B-1
PITCH: 50.80 mm (2.00")
ROLLER DIAMETER: 29.21 mm (1.15")
ROLLER WIDTH: 30.99 mm (1.22")
TENSILE: 17,240 kilos (38,000 lbs.)





Type B



Type C

Simplex - Taper Bushed — Steel

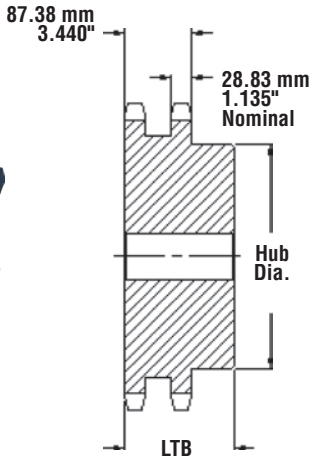
No. Teeth	Pitch Diameter (mm)	Catalog Number	Bushing	Max. Bore (mm)	Dimensions		Weight (Approx.)	
					L (mm)	C (mm)	Rim (kg)	Bushing (kg)
11	180.31	32BTB11H	2517	63.50	44.45	107.95	4.51	1.59
12	196.28	32BTB12H	3020	76.20	50.80	133.35	5.27	2.95
13	212.27	32BTB13H	3020	76.20	50.80	133.35	6.38	2.95
14	228.29	32BTB14H	3020	76.20	50.80	133.35	6.87	2.95
15	244.33	32BTB15H	3535	88.90	88.90	165.10	11.80	6.36
16	260.39	32BTB16H	3535	88.90	88.90	165.10	13.38	6.36
17	276.46	32BTB17H	3535	88.90	88.90	165.10	14.98	6.36
18	292.55	32BTB18H	3535	88.90	88.90	165.10	16.12	6.36
19	308.64	32BTB19H	3535	88.90	88.90	165.10	17.25	6.36
20	324.74	32BTB20H	3535	88.90	88.90	165.10	21.10	6.36
21	340.84	32BTB21H	3535	88.90	88.90	165.10	24.94	6.36
22	356.96	32BTB22H	3535	88.90	88.90	165.10	27.79	6.36
23	373.07	32BTB23H	3535	88.90	88.90	165.10	30.64	6.36
24	389.19	32BTB24H	3535	88.90	88.90	165.10	33.48	6.36
25	405.32	32BTB25H	3535	88.90	88.90	165.10	36.32	6.36
26	421.45	32BTB26H	3535	88.90	88.90	165.10	39.16	6.36
27	437.58	32BTB27	3535	88.90	88.90	165.10	42.00	6.36
28	453.72	32BTB28	3535	88.90	88.90	165.10	44.84	6.36
30	486.99	32BTB30	3535	88.90	88.90	165.10	50.52	6.36
32	518.28	32BTB32	3535	88.90	88.90	165.10	56.20	6.36
38	615.17	32CTB38	4040	101.60	101.60	219.08	68.10	10.00
40	647.47	32CTB40	4040	101.60	101.60	219.08	77.08	10.00
45	728.25	32CTB45	4040	101.60	101.60	219.08	99.53	10.00
48	776.72	32CTB48	4040	101.60	101.60	219.08	113.01	10.00
54	873.68	32CTB54	4040	101.60	114.30	219.08	139.95	10.00
57	922.16	32CTB57	4545	114.30	114.30	247.65	136.20	13.62
60	970.65	32CTB60	4545	114.30	114.30	247.65	158.84	13.62
64	1035.30	32CTB64	4545	114.30	114.30	247.65	189.03	13.62
70	1132.29	32CTB70	4545	114.30	114.30	247.65	234.32	13.62

Sprockets with “H” suffix have hardened teeth.

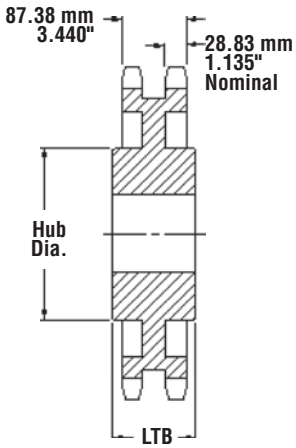
2.00 INCH (50.80 MM) PITCH DUPLEX

CHAIN DATA:
BS 228/22
ISO 32B-2
PITCH: 50.80 mm (2.00")
ROLLER DIAMETER: 29.21 mm (1.15")
ROLLER WIDTH: 30.99 mm (1.22")
TENSILE: 34,480 kilos (76,000 lbs.)





Type B



Type C

Duplex - Type B/C — Steel

No. Teeth	Pitch Diameter (mm)	Catalog Number	Bore (Inches)		Hub (Inches)		Weight Approx. (kg)
			Stock (mm)	Max (mm)	Dia. (mm)	LTB (mm)	
11	180.31	D32B11	40	80	125	120	10.42
12	196.28	D32B12	40	89	133	120	16.32
13	212.27	D32B13	40	96	145	120	21.77
14	228.29	D32B14	40	103	155	120	26.31
15	244.33	D32B15	40	106	160	120	30.84
16	260.39	D32B16	40	120	178	120	34.02
17	276.46	D32B17	40	120	178	120	41.28
18	292.55	D32B18	40	120	178	120	43.55
19	308.64	D32B19	40	120	178	120	48.53
20	324.74	D32B20	40	130	191	120	53.98
21	340.84	D32B21	40	130	191	120	58.97
22	356.96	D32B22	40	130	191	120	63.96
23	373.07	D32B23	40	130	191	120	71.21
24	389.19	D32B24	40	130	191	120	77.57
25	405.32	D32B25	40	130	191	120	84.82
26	421.45	D32B26	40	130	191	120	91.17
27	437.58	D32B27	40	130	191	120	97.52
28	453.72	D32B28	40	130	191	120	101.13
30	485.99	D32B30	40	130	191	120	116.57
38	615.17	D32B38	40	178	254	181	170.25
40	647.47	D32C40	40	178	254	181	177.46
45	728.25	D32C45	40	178	254	181	195.50
48	776.72	D32C48	40	178	254	181	204.51
54	873.68	D32C54	40	178	254	181	222.53
57	922.16	D32C57	40	178	254	181	231.54
60	970.65	D32C60	40	178	254	181	255.83
76	1229.28	D32C76	40	178	254	181	292.83

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

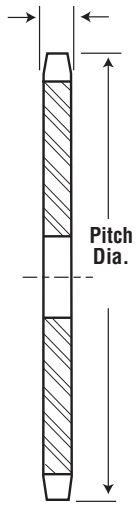
Sprocket Engineering Data

Roller Chain Dimensions
Sprocket Tooth Dimensions
Maximum Hub Recommendations
Application And Selection
Hardening
Chain Length Calculation
Speed Ratios
Sprocket Diameters
Horsepower Ratings

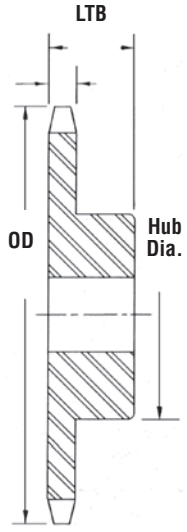
Sprockets

American sprocket manufacturers have adopted 4 specific types of sprocket construction styles as American Standards. In addition to the standard sprockets, special sprockets may be available in the same styles.

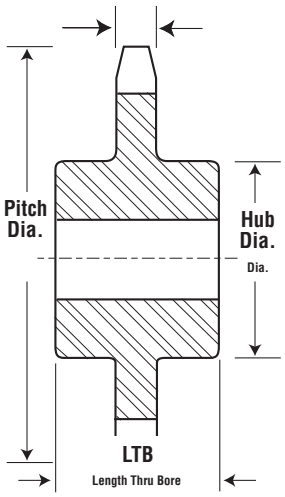
Style A - Flat sprocket with no hub extension either side.
Style B - Sprocket with hub extension one side.
Style C - Sprocket with hub extension both sides.
Style D - Sprocket with a detachable bolt on hub attached to a plate.



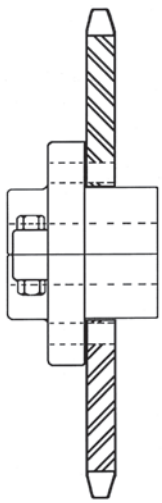
Single
Type A Hub



Single
Type B Hub



Single
Type C Hub

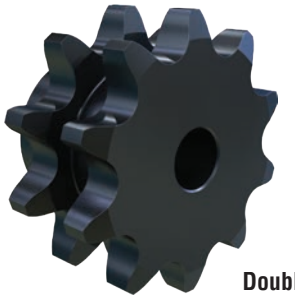


Single
Type D Hub

Sprocket Nomenclature

Multiple Strand Sprockets

Listed using a letter prefix starting with the letter D for Double Strand, E for Triple Strand, and F for Quadruple, etc. They also have the same hub configuration letter designation listed on previous page. In addition to the four specific types, sprockets may also be made in various other styles.

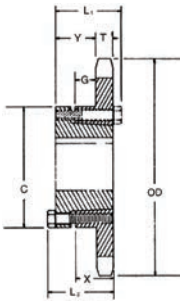


Double

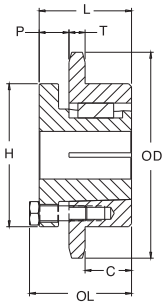


Triple

Five common styles are:



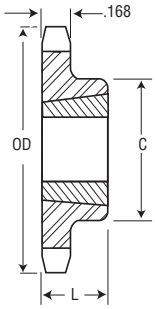






QD

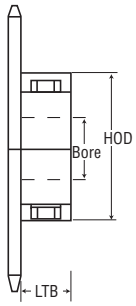
The QD (quick detachable) sprocket; here a tapered bushing is bolted into the bore machined in the sprocket. This bushing, when inserted into the sprocket, compresses onto the shaft providing a tight grip.





MST®

The MST® (Martin Split Taper®) is another style of bushed sprocket. The bushing is similar to the QD style except it has an external key that fits into the driven product.



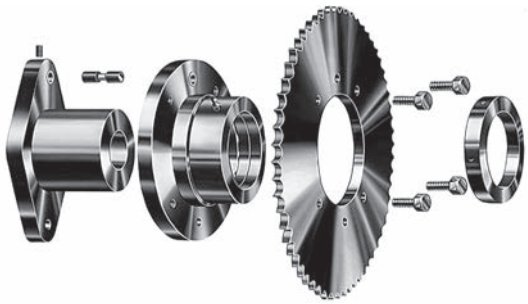


TB

The TB (taper bushed) sprocket is another style of an interchangeable bushed sprocket, which provides a positive grip on a driven shaft.

Split

A Split type sprocket is used in place of solid type to allow quick installation without disruption of shaft and alignment.



Shear Pin Sprocket

Sprocket Nomenclature

Sprocket nomenclatures provide the chain pitch written to the left of the hub style code letter followed by the number of teeth in the sprocket. If the sprocket is to be multiple strand, the prefix code letter is added to the beginning of the part number.

A suffix of H is added if the teeth are to be heat treated. If the sprocket is to be bored for QD, Taper Bushed or MST, the center hub letter is changed. For QD and MST styles the letter designation of the bushing is used in lieu of the hub style code. If a taper bushing is to be used, the two letters TB are added behind the hub code letter.

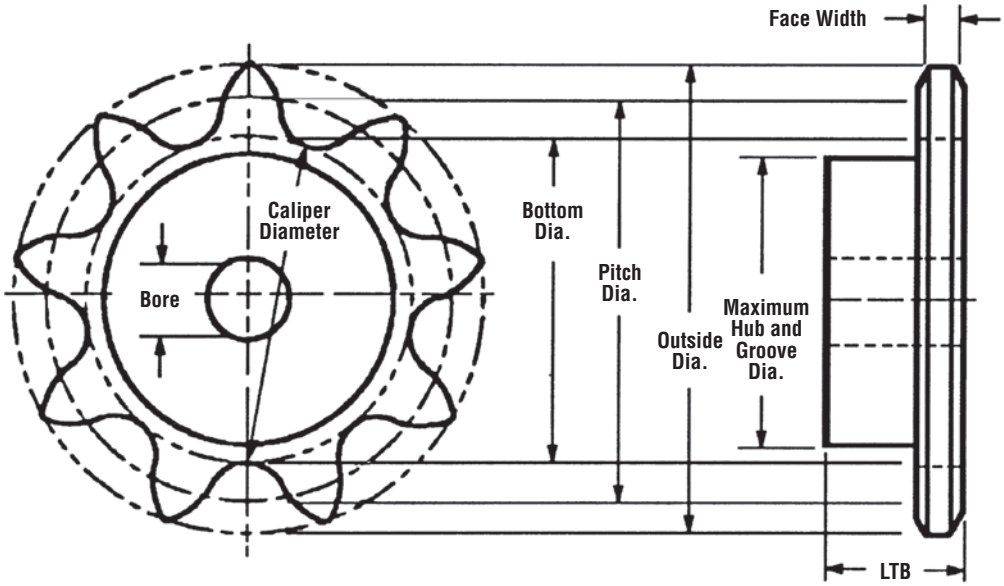
In some instances, the material a sprocket is to be manufactured from will be added into the part number as a suffix.

For example:

- **SS** Stainless Steel Material
- **NM** Non-Metallic
- **BR** Brass or Bronze Material
- **CD** Cadmium Plated
- **Zi** Zinc Plated
- **Ni** Nickel Plated
- **CH** Chrome Plated

If the part is to be used with a shear pin device, the center hub style letter is substituted with an SP.

Most manufacturers of sprockets conform to the ANSI (American Standards Institute) and Martin conforms to the Type II tooth form as given in the standard B29.1 - 1975. It is not necessary to show detailed tooth information on sprocket drawings, just specify ANSI standard tooth form.



Sprocket Dimensional Specifications

Bottom Diameter (BD)

The diameter of a circle tangent to the bottoms of the tooth spaces.

Caliper Diameter

Since the bottom diameter of a sprocket with odd number of teeth cannot be measured directly, caliper diameters are the measurement across the tooth spaces nearly opposite.

Pitch Diameter (PD)

The diameter across to the pitch circle which is the circle followed by the centers of the chain pins as the sprocket revolves in mesh with the chain.

$$PD = \frac{\text{Pitch}}{\text{SIN (180/Nt)}}$$

Outside Diameter (OD)

The measurement from the tip of the sprocket tooth across to the corresponding point directly across the sprocket. It is comparatively unimportant as the tooth length is not vital to proper meshing with the chain. The outside diameter may vary depending on type of cutter used.

$$OD = (\text{Pitch}) (.6 + \text{COT} [180 / \text{Nt}])$$

Hub Diameter (HOD)

That distance across the hub from one side to another. That distance across the hub from one side to another.

Maximum Sprocket Bore

Maximum Sprocket Bore is determined by the required hub wall thickness for proper strength. Allowance must be made for keyway and setscrews.

Face Width

Face width is limited in its maximum dimension to allow proper clearance to provide for chain engagement and disengagement. The minimum width is limited to provide the proper strength to carry the imposed loads.

Length Thru Bore (LTB)

Length Thru Bore (or LTB) must be sufficient to allow a long enough key to withstand the torque transmitted by the shaft. This also assures stability of the sprocket on the shaft.

Roller Chain Dimensions

ANSI Number	Roller Width	Roller Dia.	Inside Link Plate Height	Cottered Chain Width*	Riveted Chain Width*	Average Tensile Strength
Standard Series Chain						
25	1/8	.130	.237	.37	.34	875
25-2	1/8	.130	.237	.63	.59	1750
25-3	1/8	.130	.237	.88	.84	2626
35	3/16	.200	.356	.56	.50	2100
35-2	3/16	.200	.356	.96	.90	4200
35-3	3/16	.200	.356	1.36	1.31	6300
35-4	3/16	.200	.356	1.76	1.70	8400
35-5	3/16	.200	.356	2.16	2.11	10500
35-6	3/16	.200	.356	2.57	2.51	12600
40	5/16	.312	.475	.72	.67	3700
40-2	5/16	.312	.475	1.29	1.24	7400
40-3	5/16	.312	.475	1.85	1.80	11100
40-4	5/16	.312	.475	2.42	2.37	14800
40-6	5/16	.312	.475	3.56	3.51	22200
41	1/4	.306	.383	.65	.57	2000
50	3/8	.400	.594	.89	.83	6600
50-2	3/8	.400	.594	1.60	1.55	13200
50-3	3/8	.400	.594	2.31	2.26	19800
50-4	3/8	.400	.594	3.03	2.97	26400
50-5	3/8	.400	.594	3.75	3.69	33000
50-6	3/8	.400	.594	4.46	4.40	39600
60	1/2	.469	.712	1.11	1.04	8500
60-2	1/2	.469	.712	2.01	1.94	17000
60-3	1/2	.469	.712	2.91	2.84	25500
60-4	1/2	.469	.712	3.81	3.74	34000
60-5	1/2	.469	.712	4.71	4.64	42500
60-6	1/2	.469	.712	5.60	5.53	51000
80	5/8	.625	.950	1.44	1.32	14500
80-2	5/8	.625	.950	2.59	2.47	29000
80-3	5/8	.625	.950	3.74	3.62	43500
80-4	5/8	.625	.950	4.90	4.79	58000
80-5	5/8	.625	.950	6.06	5.94	72500
80-6	5/8	.625	.950	7.22	7.10	87000

*Dimensions are across pins.

ANSI Number	Roller Width	Roller Dia.	Inside Link Plate Height	Cottered Chain Width*	Riveted Chain Width*	Average Tensile Strength
Standard Series Chain						
100	3/4	.750	1.187	1.73	1.61	24000
100-2	3/4	.750	1.187	3.14	3.02	48000
100-3	3/4	.750	1.187	4.56	4.43	72000
100-4	3/4	.750	1.187	5.97	5.84	96000
100-5	3/4	.750	1.187	7.38	7.25	120000
100-6	3/4	.750	1.187	8.78	8.66	144000
120	1	.875	1.425	2.14	2.00	34000
120-2	1	.875	1.425	3.93	3.79	68000
120-3	1	.875	1.425	5.72	5.58	102000
120-4	1	.875	1.425	7.52	7.38	136000
120-5	1	.875	1.425	9.31	9.17	170000
120-6	1	.875	1.425	11.10	10.96	204000
140	1	1.000	1.662	2.31	2.14	46000
140-2	1	1.000	1.662	4.24	4.07	92000
140-3	1	1.000	1.662	6.16	6.00	138000
140-4	1	1.000	1.662	8.09	7.93	184000
140-6	1	1.000	1.662	11.94	11.78	276000
160	1 1/4	1.125	1.900	2.73	2.54	58000
160-2	1 1/4	1.125	1.900	5.04	4.85	116000
160-3	1 1/4	1.125	1.900	7.35	7.16	174000
160-4	1 1/4	1.125	1.900	9.66	9.47	232000
160-6	1 1/4	1.125	1.900	14.27	14.09	348000
180	1 13/32	1.406	2.137	3.15	2.88	76000
180-2	1 13/32	1.406	2.137	5.75	5.48	152000
180-3	1 13/32	1.406	2.137	8.34	8.07	228000
200	1 1/2	1.562	2.375	3.44	3.12	95000
200-2	1 1/2	1.562	2.375	6.26	5.94	190000
200-3	1 1/2	1.562	2.375	9.08	8.76	285000
200-4	1 1/2	1.562	2.375	11.90	11.58	380000
200-6	1 1/2	1.562	2.375	17.52	17.21	570000
240	1 7/8	1.875	2.812	4.06	3.72	130000
240-2	1 7/8	1.875	2.812	7.52	7.18	260000

*Dimensions are across pins.

Standard Keyways and Setscrews

Diameter of Shaft	Keyway Width × Depth	Setscrew	Diameter of Shaft	Keyway Width × Depth	Setscrew
1/2 - 9/16	1/8 × 1/16	10-24	2 5/16 - 2 3/4	5/8 × 5/16	5/8 *
5/8 - 7/8	3/16 × 3/32	1/4	2 13/16 - 3 1/4	3/4 × 3/8	5/8 *
15/16 - 1 1/4	1/4 × 1/8	5/16	3 5/16 - 3 3/4	7/8 × 7/16	3/4
1 5/16 - 1 3/8	5/16 × 5/32	5/16	3 13/16 - 4 1/2	1 × 1/2	3/4
1 7/16 - 1 3/4	3/8 × 3/16	3/8	4 9/16 - 5 1/2	1 1/4 × 5/8	3/4
1 13/16 - 2 1/4	1/2 × 1/4	1/2 *	5 9/16 - 6 1/2	1 1/2 × 3/4	3/4

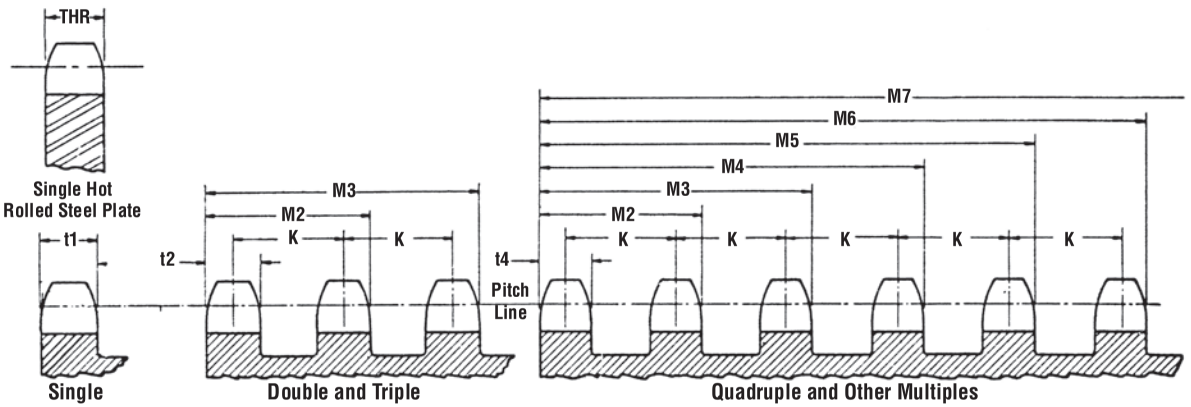
*Hub size may require smaller setscrews in some instances.

Standard Bore Tolerances

1" and Less	+ .001 -.000
1 1/16" to 2"	+ .002 -.000
2 1/16" to 3"	+ .003 -.000
3 1/16" & up	+ .004 -.000

Bores with closer tolerances will be supplied at a slight increase in price.

Sprocket Tooth Dimensions



Dimensions in Inches

Chain Data For All Sprockets				Single Strand	Double and Triple Strand			For 4 or more Strands										Tolerance on t & M Machined	Minus Tolerance on THR
ASA Chain No.	Pitch P	Roller Width W	Roller Dia.	t1 & THR	t2	M2	M3	t4	M2	M3	M4	M5	M6	M8	M10	M12	M16	K	
Standard Series Roller Chain Sprockets																			
25	.25	.125	.130	.110	.107	.359	.611	.096	.348	.600	.852	1.104	1.356	1.860	2.364	2.868	3.876	.252	.007	.021
35	.375	.188	.200	.168	.162	.561	.960	.149	.548	.947	1.346	1.745	2.144	2.942	3.740	4.538	6.134	.399	.008	.027
41	.5	.25	.306	.227	†	†	†	†	†	†	†	†	†	†	†	†	†	†	.009	.032
40	.5	.313	.312	.284	.275	.841	1.407	.256	.822	1.388	1.954	2.520	3.086	4.218	5.250	6.482	8.746	.566	.009	.035
50	.625	.375	.400	.343	.332	1.045	1.758	.311	1.024	1.737	2.450	3.163	3.876	5.302	6.728	8.154	11.006	.713	.010	.036
60	.75	.5	.469	.459	.444	1.341	2.238	.418	1.315	2.212	3.108	4.006	4.903	6.697	8.491	10.258	13.873	.897	.011	.036
80	1	.625	.625	.575	.557	1.700	2.863	.526	1.679	2.832	3.985	5.138	6.291	8.597	10.903	13.209	17.821	1.153	.012	.040
100	1.25	.75	.750	.692	.669	2.077	3.484	.633	2.041	3.449	4.857	6.265	7.673	10.489	13.305	16.121	21.753	1.408	.014	.046
120	1.5	1	.875	.924	.894	2.683	4.472	.848	2.637	4.426	6.215	8.004	9.793	13.371	16.949	20.527		1.789	.016	.057
140	1.75	1	1.000	.924	.894	2.818	4.742	.848	2.772	4.696	6.620	8.544	10.468	14.316	18.164	22.012		1.924	.016	.057
160	2	1.25	1.125	1.156	1.119	3.424	5.729	1.063	3.368	5.673	7.978	10.283	12.588	17.198	21.808			2.305	.019	.062
180	2.25	1.406	1.406	1.301	1.259	3.851	6.443	1.197	3.789	6.381	8.973	11.565	14.157	19.341				2.592	-.020	-.068
200	2.5	1.5	1.562	1.389	1.344	4.161	6.978	1.278	4.095	6.912	9.729	12.546	15.363	20.997				2.817	.021	.072
240	3	1.875	1.875	1.738	1.682	5.140	8.598	1.601	5.059	8.517	11.975	15.433	18.891					3.458	-.025	-.087
Heavy Series Chain Sprockets																			
60H	.750	.500	.469	.459	.444	1.472	2.500	.418	1.446	2.474	3.502	4.530	5.558	7.614				1.028	-.011	-.036
80H	1.000	.625	.625	.575	.557	1.840	3.123	.526	1.809	3.092	4.375	5.568	6.941	9.507				1.283	-.012	-.040
100H	1.250	.750	.750	.692	.669	2.208	3.747	.633	2.172	3.711	5.250	6.789	8.328	11.406				1.539	-.014	-.046
120H	1.500	1.000	.875	.924	.894	2.818	4.742	.848	2.772	4.696	6.620	8.544	10.468	14.316				1.924	-.016	-.057
140H	1.750	1.000	1.000	.924	.894	2.949	5.004	.848	2.903	4.958	7.013	9.068	11.123	15.233				2.055	-.016	-.057
160H	2.000	1.250	1.125	1.156	1.119	3.555	5.991	1.063	3.499	5.935	8.371	10.807	13.243	18.115				2.436	-.019	-.062
180H	2.250	1.406	1.406	1.301	1.259	3.982	6.705	1.197	3.920	6.643	9.366	12.089	14.812	20.258				2.723	-.020	-.068
200H	2.500	1.500	1.562	1.389	1.344	4.427	7.510	1.278	4.361	7.444	10.527	13.610	16.693	22.859				3.083	-.021	-.072

† = Not made in multiple strands.

Maximum Hub Dimensions

Recommended Max. Hub and Bore Sizes

American Standard No. 25

No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore
6	555	9/64	....	16	6940	31/32	9/16	26	8645	1 49/64	1 1/4
7	1300	15/64	....	17	7290	1 3/64	5/8	27	8655	1 55/64	1 1/4
8	2080	5/16	....	18	7590	1 1/8	3/4	28	8650	1 15/16	1 1/4
9	2860	7/16	1/4	19	7840	1 7/32	13/16	29	8625	2 1/64	1 1/4
10	3610	1/2	1/4	20	8050	1 19/64	7/8	30	8580	2 3/32	1 5/16
11	4310	9/16	5/16	21	8230	1 3/8	7/8	31	8540	2 11/64	1 3/8
12	4960	41/64	3/8	22	8370	1 29/64	15/16	32	8465	2 1/4	1 1/2
13	5540	47/64	7/16	23	8480	1 17/32	1	35	8200	2 31/64	1 11/16
14	6070	13/16	9/16	24	8560	1 39/64	1 1/16	40	7580	2 57/64	1 7/8
15	6530	57/64	9/16	25	8610	1 11/16	1 3/16	45	6820	3 9/32	2 1/4

Std. Keyway (Am. Std.) and Setscrew

Diameter of Shaft	Keyway Width x Depth	Dia. of Set-Screw	Min. Added To Bore For Adequate Hub Wall Steel Sprockets	
			Setscrew Over Key	Setscrew not over key
3/8	3/32 × 3/64	3/16	7/16	3/8
7/16	3/32 × 3/64	3/16	15/32	3/8
1/2 - 9/16	1/8 × 1/16	3/16	1/2	3/8
5/8 - 7/8	3/16 × 3/32	1/4	11/16	1/2
15/16 - 1 1/4	1/4 × 1/8	1/4	3/4	1/2
1 5/16 - 1 3/8	5/16 × 5/32	5/16	15/16	5/8
1 7/16 - 1 3/4	3/8 × 3/16	3/8	1 1/8	3/4

American Standard No. 35

No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore
6	290	15/64	....	16	3630	1 15/32	15/16	26	4525	2 43/64	1 3/4
7	680	3/8	....	17	3810	1 19/32	1 1/16	27	4530	2 51/64	1 3/4
8	1090	1/2	1/4	18	3970	1 23/32	1 3/16	28	4525	2 59/64	1 7/8
9	1495	5/8	3/8	19	4100	1 27/32	1 1/4	29	4510	3 1/32	2
10	1885	3/4	1/2	20	4210	1 61/64	1 1/4	30	4490	3 5/32	2 1/8
11	2260	55/64	9/16	21	4300	2 5/64	1 5/16	31	4470	3 9/32	2 1/4
12	2590	63/64	9/16	22	4380	2 13/64	1 7/16	32	4430	3 25/64	2 1/4
13	2900	1 7/64	11/16	23	4430	2 5/16	1 9/16	35	4290	3 3/4	2 1/2
14	3170	1 15/64	13/16	24	4480	2 7/16	1 11/16	40	3970	4 23/64	2 13/16
15	3420	1 23/64	7/8	25	4510	2 9/16	1 3/4	45	3570	4 61/64	3 1/4

Std. Keyway (Am. Std.) and Setscrew

Diameter of Shaft	Keyway Width x Depth	Dia. of Set-Screw	Min. Added To Bore For Adequate Hub Wall Steel Sprockets	
			Setscrew Over Key	Setscrew not over key
7/16	3/32 × 3/64	3/16	15/32	3/8
1/2 - 9/16	1/8 × 1/16	3/16	1/2	3/8
5/8 - 7/8	3/16 × 3/32	1/4	11/16	1/2
15/16 - 1 1/4	1/4 × 1/8	1/4	3/4	1/2
1 5/16 - 1 3/8	5/16 × 5/32	5/16	15/16	5/8
1 7/16 - 1 3/4	3/8 × 3/16	3/8	1 1/8	3/4
1 13/16 - 2 1/4	1/2 × 1/4	1/2	1 1/2	1

American Standard No. 41

No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore
6	130	27/64	1/8	16	1630	2 1/16	1 5/16	26	2040	3 43/64	2 3/8
7	305	19/32	5/16	17	1720	2 15/64	1 7/16	27	2040	3 53/64	2 9/16
8	495	49/64	1/2	18	1790	2 25/64	1 5/8	28	2040	4	2 3/4
9	675	15/16	9/16	19	1850	2 35/64	1 3/4	29	2040	4 5/32	2 3/4
10	850	1 3/32	11/16	20	1890	2 23/32	1 3/4	30	2020	4 5/16	2 13/16
11	1020	1 17/64	7/8	21	1940	2 7/8	1 7/8	31	2020	4 15/32	2 15/16
12	1170	1 27/64	7/8	22	1970	3 1/32	2	32	2000	4 41/64	3 1/8
13	1310	1 37/64	1 1/16	23	2000	3 3/16	2 3/16	35	1930	5 7/64	3 5/16
14	1430	1 3/4	1 1/4	24	2020	3 23/64	2 1/4	40	1780	5 29/32	3 7/8
15	1540	1 29/32	1 1/4	25	2030	3 33/64	2 1/4	45	1600	6 45/64	4 15/16

Std. Keyway (Am. Std.) and Setscrew

Diameter of Shaft	Keyway Width x Depth	Dia. of Set-Screw	Min. Added To Bore For Adequate Hub Wall Steel Sprockets	
			Setscrew Over Key	Setscrew not over key
5/8 - 7/8	3/16 × 3/32	1/4	11/16	1/2
15/16 - 1 1/4	1/4 × 1/8	1/4	3/4	1/2
1 5/16 - 1 3/8	5/16 × 5/32	5/16	15/16	5/8
1 7/16 - 1 3/4	3/8 × 3/16	3/8	1 1/8	3/4
1 13/16 - 2 1/4	1/2 × 1/4	1/2	1 1/2	1
2 5/16 - 2 3/4	5/8 × 5/16	5/8	1 7/8	1 1/4
2 13/16 - 3 1/4	3/4 × 3/8	3/4	2 1/4	1 1/2

American Standard No. 40

No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore
6	220	21/64	....	16	2720	1 63/64	1 1/4	26	3400	3 37/64	2 5/16
7	510	1/2	1/4	17	2860	2 9/64	1 5/16	27	3405	3 47/64	2 7/16
8	820	43/64	3/8	18	2980	2 19/64	1 1/2	28	3405	3 29/32	2 5/8
9	1125	27/32	9/16	19	3080	2 29/64	1 11/16	29	3395	4 1/16	2 3/4
10	1420	1	5/8	20	3160	2 5/8	1 3/4	30	3370	4 7/32	2 3/4
11	1690	1 11/64	3/4	21	3230	2 25/32	1 3/4	31	3360	4 3/8	2 7/8
12	1940	1 21/64	7/8	22	3290	2 15/16	1 15/16	32	3330	4 35/64	3
13	2180	1 1/2	1	23	3330	3 3/32	2 1/16	35	3220	5 1/64	3 1/4
14	2380	1 21/32	1 1/8	24	3360	3 17/64	2 1/4	40	2970	5 13/16	3 13/16
15	2560	1 13/16	1 1/4	25	3380	3 27/64	2 1/4	45	2670	6 39/64	4 13/16

Std. Keyway (Am. Std.) and Setscrew

Diameter of Shaft	Keyway Width x Depth	Dia. of Set-Screw	Min. Added To Bore For Adequate Hub Wall Steel Sprockets	
			Setscrew Over Key	Setscrew not over key
5/8 - 7/8	3/16 × 3/32	1/4	11/16	1/2
15/16 - 1 1/4	1/4 × 1/8	1/4	3/4	1/2
1 5/16 - 1 3/8	5/16 × 5/32	5/16	15/16	5/8
1 7/16 - 1 3/4	3/8 × 3/16	3/8	1 1/8	3/4
1 13/16 - 2 1/4	1/2 × 1/4	1/2	1 1/2	1
2 5/16 - 2 3/4	5/8 × 5/16	5/8	1 7/8	1 1/4
2 13/16 - 3 1/4	3/4 × 3/8	3/4	2 1/4	1 1/2

American Standard No. 50

No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore
6	155	27/64	1/8	16	1960	2 31/64	1 11/16	26	2445	4 31/64	2 15/16
7	370	41/64	3/8	17	2060	2 11/16	1 3/4	27	2450	4 11/16	3 3/16
8	590	27/32	9/16	18	2150	2 57/64	1 7/8	28	2445	4 57/64	3 1/4
9	810	1 1/16	11/16	19	2220	3 5/64	2 1/16	29	2440	5 5/64	3 5/16
10	1020	1 17/64	7/8	20	2280	3 9/32	2 1/4	30	2430	5 9/32	3 1/2
11	1220	1 15/32	15/16	21	2330	3 31/64	2 1/4	31	2415	5 31/64	3 11/16
12	1400	1 43/64	1 1/8	22	2370	3 11/16	2 7/16	32	2395	5 11/16	3 3/4
13	1570	1 7/8	1 1/4	23	2400	3 57/64	2 5/8	35	2320	6 9/32	4 9/32
14	1720	2 5/64	1 5/16	24	2420	4 5/64	2 3/4	40	2140	7 9/32	5 1/2
15	1850	2 9/32	1 1/2	25	2440	4 9/32	2 3/4	45	1930	8 9/32	6 1/4

Std. Keyway (Am. Std.) and Setscrew

Diameter of Shaft	Keyway Width x Depth	Dia. of Set-Screw	Min. Added To Bore For Adequate Hub Wall Steel Sprockets	
			Setscrew Over Key	Setscrew not over key
5/8 - 7/8	3/16 × 3/32	1/4	11/16	1/2
15/16 - 1 1/4	1/4 × 1/8	1/4	3/4	1/2
1 5/16 - 1 3/8	5/16 × 5/32	5/16	15/16	5/8
1 7/16 - 1 3/4	3/8 × 3/16	3/8	1 1/8	3/4
1 13/16 - 2 1/4	1/2 × 1/4	1/2	1 1/2	1
2 5/16 - 2 3/4	5/8 × 5/16	5/8	1 7/8	1 1/4
2 13/16 - 3 1/4	3/4 × 3/8	3/4	2 1/4	1 1/2

American Standard No. 60

No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore
6	120	33/64	1/4	16	1480	2 63/64	1 15/16	26	1840	5 25/64	3 5/8
7	275	49/64	1/2	17	1550	3 7/32	2 3/16	27	1845	5 5/8	3 3/4
8	445	1 1/32	5/8	18	1610	3 15/32	2 1/4	28	1840	5 7/8	3 7/8
9	610	1 9/32	7/8	19	1670	3 45/64	2 7/16	29	1835	6 7/64	4 1/16
10	770	1 33/64	1	20	1720	3 61/64	2 11/16	30	1830	6 11/32	4 9/16
11	920	1 49/64	1 1/4	21	1750	4 3/16	2 3/4	31	1815	6 19/32	4 13/16
12	1050	2 1/64	1 1/4	22	1780	4 7/16	2 15/16	32	1800	6 53/64	5 1/16
13	1180	2 1/4	1 1/2	23	1800	4 43/64	3 1/8	35	1740	7 35/64	5 1/2
14	1290	2 1/2	1 3/4	24	1820	4 29/32	3 1/4	40	1610	8 3/4	6 1/2
15	1390	2 3/4	1 3/4	25	1830	5 5/32	3 3/8	45	1450	9 15/16	7 7/16

Std. Keyway (Am. Std.) and Setscrew

Diameter of Shaft	Keyway Width x Depth	Dia. of Set-Screw	Min. Added To Bore For Adequate Hub Wall Steel Sprockets	
			Setscrew Over Key	Setscrew not over key
15/16 - 1 1/4	1/4 × 1/8	1/4	3/4	1/2
1 5/16 - 1 3/8	5/16 × 5/32	5/16	15/16	5/8
1 7/16 - 1 3/4	3/8 × 3/16	3/8	1 1/8	3/4
1 13/16 - 2 1/4	1/2 × 1/4	1/2	1 1/2	1
2 5/16 - 2 3/4	5/8 × 5/16	5/8	1 7/8	1 1/4
2 13/16 - 31/4	3/4 × 3/8	3/4	2 1/4	1 1/2
3 5/16 - 3 3/4	7/8 × 7/16	3/4	2 3/8	1 3/4

Maximum Hub Dimensions

Recommended Max. Hub and Bore Sizes

American Standard No. 80

No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore
6	75	45/64	7/16	16	935	3 63/64	2 11/16	26	1165	7 13/64	5 7/16
7	175	1 3/64	5/8	17	985	4 5/16	2 13/16	27	1170	6 33/64	5 1/2
8	280	1 3/8	7/8	18	1020	4 41/64	3 1/8	28	1170	7 27/32	5 13/16
9	385	1 23/32	1 3/16	19	1060	4 61/64	3 1/4	29	1165	8 5/32	6 1/8
10	485	2 3/64	1 1/4	20	1090	5 9/32	3 1/2	30	1160	8 31/64	6 7/16
11	580	2 3/8	1 5/8	21	1110	5 19/32	3 3/4	31	1155	8 51/64	6 1/2
12	670	2 45/64	1 3/4	22	1130	5 59/64	3 7/8	32	1143	9 7/64	6 9/16
13	750	3 1/64	2	23	1150	6 15/64	4 3/16	35	1110	10 5/64	7 1/2
14	820	3 11/32	2 1/4	24	1160	6 9/16	4 13/16	40	1020	11 43/64	8 5/8
15	880	3 43/64	2 3/8	25	1160	6 7/8	5 1/8	45	920	13 17/64	9 3/4

Std. Keyway (Am. Std.) and Setscrew

Diameter of Shaft	Keyway Width x Depth	Dia. of Set-Screw	Min. Added To Bore For Adequate Hub Wall Steel Sprockets	
			Setscrew Over Key	Setscrew not over key
15/16 - 1 1/4	1/4 × 1/8	1/4	3/4	1/2
15/16 - 1 3/8	5/16 × 5/32	5/16	15/16	5/8
17/16 - 1 3/4	3/8 × 3/16	3/8	1 1/8	3/4
113/16 - 2 1/4	1/2 × 1/4	1/2	1 1/2	1
25/16 - 2 3/4	5/8 × 5/16	5/8	1 7/8	1 1/4
2 13/16 - 3 1/4	3/4 × 3/8	3/4	2 1/4	1 1/2
3 5/16 - 3 3/4	7/8 × 7/16	3/4	2 3/8	1 3/4

American Standard No. 100

No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore
6	55	7/8	9/16	16	670	5	3 1/4	26	830	9 1/64	61/2
7	125	1 5/16	7/8	17	700	5 13/32	3 5/8	27	835	9 13/32	67/8
8	200	1 47/64	1 3/16	18	730	5 51/64	3 3/4	28	830	9 13/16	75/16
9	275	2 9/64	1 3/8	19	755	6 13/64	4 3/16	29	830	10 13/64	7 1/2
10	350	2 9/16	1 3/4	20	775	6 39/64	4 13/64	30	825	10 39/64	7 9/16
11	415	2 31/32	1 15/16	21	790	7	5 1/4	31	820	11	8
12	475	3 3/8	2 1/4	22	805	7 13/32	5 1/2	32	815	11 13/32	8 3/8
13	535	3 25/32	2 1/2	23	815	7 13/16	5 13/16	35	790	12 39/64	9 1/16
14	585	4 3/16	2 3/4	24	825	8 13/64	6 3/16	40	730	14 19/32	....
15	630	4 19/32	3 1/16	25	830	8 39/64	6 1/2	45	655	16 19/32	....

Std. Keyway (Am. Std.) and Setscrew

Diameter of Shaft	Keyway Width x Depth	Dia. of Set-Screw	Min. Added To Bore For Adequate Hub Wall Steel Sprockets	
			Setscrew Over Key	Setscrew not over key
15/16 - 1 3/8	5/16 × 5/32	5/16	15/16	5/8
1 7/16 - 1 3/4	3/8 × 3/16	3/8	1 1/8	3/4
1 13/16 - 2 1/4	1/2 × 1/4	1/2	1 1/2	1
2 5/16 - 2 3/4	5/8 × 5/16	5/8	1 7/8	1 1/4
2 13/16 - 3 1/4	3/4 × 3/8	3/4	2 1/4	1 1/2
3 5/16 - 3 3/4	7/8 × 7/16	3/4	2 3/8	1 3/4
3 13/16 - 4 1/2	1 × 1/2	3/4	2 1/2	2

American Standard No. 120

No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore
6	40	1 1/16	11/16	16	520	6	4	26	650	10 1 3/16	7 13/64
7	100	1 37/64	1 1/16	17	550	6 31/64	4 7/16	27	650	11 1 9/64	8 1/4
8	155	2 5/64	1 5/16	18	570	6 31/32	5 3/16	28	650	11 2 5/32	8 3/8
9	215	2 37/64	1 3/4	19	590	7 29/64	5 1/2	29	650	12 1/4	8 15/16
10	270	3 5/64	2 1/16	20	605	7 15/16	5 15/16	30	645	12 4 7/64	9 3/16
11	325	3 37/64	2 5/16	21	620	8 27/64	6 3/8	31	645	13 7/32	9 11/16
12	375	4 1/16	2 3/4	22	630	8 57/64	6 1/2	32	640	13 11/16	10 3/16
13	415	4 35/64	3	23	640	9 3/8	6 7/8	35	615	15 1/8	....
14	455	5 1/32	3 1/4	24	645	9 55/64	7 5/16	40	570	17 33/64	....
15	490	5 33/64	3 3/4	25	650	10 11/32	7 1/2	45	515	19 5 9/64	....

Std. Keyway (Am. Std.) and Setscrew

Diameter of Shaft	Keyway Width x Depth	Dia. of Set-Screw	Min. Added To Bore For Adequate Hub Wall Steel Sprockets	
			Setscrew Over Key	Setscrew not over key
1 7/16 - 1 3/4	3/8 × 3/16	3/8	1 1/8	3/4
1 13/16 - 2 1/4	1/2 × 1/4	1/2	1 1/2	1
2 5/16 - 2 3/4	5/8 × 5/16	5/8	1 7/8	1 1/4
2 13/16 - 3 1/4	3/4 × 3/8	3/4	2 1/4	1 1/2
3 5/16 - 3 3/4	7/8 × 7/16	3/4	2 3/8	1 3/4
3 13/16 - 4 1/2	1 × 1/2	3/4	2 1/2	2
4 9/16 - 5 1/2	1 1/4 × 5/8	3/4	2 3/8	1 3/4

American Standard No. 140

No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore
6	30	1 1/4	7/8	16	380	7 1/64	5 1/4	26	475	12 5/8	9 1/8
7	70	1 27/32	1 1/4	17	400	7 37/64	5 9/16	27	475	13 3/16	9 11/16
8	115	2 7/16	1 11/16	18	415	8 9/64	6 1/8	28	475	13 3/4	10 1/4
9	150	3 1/64	2	19	430	8 45/64	6 1/2	29	475	14 19/64	10 3/4
10	200	3 19/32	2 5/16	20	440	9 17/64	6 3/4	30	470	14 55/64	....
11	235	4 11/64	2 3/4	21	450	9 53/64	7 5/16	31	470	15 27/64	....
12	270	4 3/4	3 1/4	22	460	1 025/64	7 1/2	32	465	15 63/64	....
13	305	5 5/16	3 9/16	23	465	1 015/16	7 15/16	35	450	17 21/32	....
14	335	5 7/8	3 7/8	24	470	11 1/2	8 1/2	40	415	20 29/64	....
15	360	6 29/64	4 7/16	25	475	12 1/16	8 15/16	45	375	23 15/64	....

Std. Keyway (Am. Std.) and Setscrew

Diameter of Shaft	Keyway Width x Depth	Dia. of Set-Screw	Min. Added To Bore For Adequate Hub Wall Steel Sprockets	
			Setscrew Over Key	Setscrew not over key
1 7/16 - 1 3/4	3/8 × 3/16	3/8	1 1/8	3/4
1 13/16 - 2 1/4	1/2 × 1/4	1/2	1 1/2	1
2 5/16 - 2 3/4	5/8 × 5/16	5/8	1 7/8	1 1/4
2 15/16 - 3 1/4	3/4 × 3/8	3/4	2 1/4	1 1/2
3 5/16 - 3 3/4	7/8 × 7/16	3/4	2 3/8	1 3/4
3 15/16 - 4 1/2	1 × 1/2	3/4	2 1/2	2
4 9/16 - 5 1/2	1 1/4 × 5/8	3/4	2 3/8	1 3/4

American Standard No. 160

No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore
6	25	1 27/64	7/8	16	325	8 1/64	6	26	405	14 7/16	10 15/16
7	60	2 7/64	1 3/8	17	340	8 21/32	6 1/2	27	405	15 5/64	....
8	100	2 51/64	1 3/4	18	355	9 5/16	6 13/16	28	405	15 23/32	....
9	135	3 29/64	2 1/4	19	365	9 61/64	7 7/16	29	400	16 23/64	....
10	170	4 1/8	2 3/4	20	375	10 19/32	7 9/16	30	400	17	....
11	200	4 25/32	3 1/4	21	385	11 15/64	8 3/16	31	400	17 5/8	....
12	230	5 27/64	3 5/8	22	390	11 7/8	8 7/8	32	395	18 17/64	....
13	260	6 5/64	4 1/16	23	395	12 33/64	9	35	380	20 3/16	....
14	280	6 22/32	4 15/16	24	400	13 5/32	9 5/8	40	355	23 3/8	....
15	305	7 3/8	5 1/2	25	400	13 51/64	10 1/4	45	320	26 9/16	....

Std. Keyway (Am. Std.) and Setscrew

Diameter of Shaft	Keyway Width x Depth	Dia. of Set-Screw	Min. Added To Bore For Adequate Hub Wall Steel Sprockets	
			Setscrew Over Key	Setscrew not over key
1 3/16 - 2 1/4	1/2 × 1/4	1/2	1 1/2	1
2 5/16 - 2 3/4	5/8 × 5/16	5/8	1 7/8	1 1/4
2 13/16 - 3 1/4	3/4 × 3/8	3/4	2 1/4	1 1/2
3 5/16 - 3 3/4	7/8 × 7/16	3/4	2 3/8	1 3/4
3 13/16 - 4 1/2	1 × 1/2	3/4	2 1/2	2
4 9/16 - 5 1/2	1 1/4 × 5/8	3/4	2 3/8	1 3/4
5 9/16 - 6 1/2	1 1/2 × 3/4	3/4	3	2

American Standard No. 200

No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore	No. of Teeth	Max RPM	Max Hub	Max Bore
6	20	1 51/64	1 1/4	16	235	10 1/32	7 1/2	26	290	18 3/64	....
7	45	2 21/32	1 7/8	17	245	10 27/32	7 13/16	27	290	18 55/64	....
8	70	3 1/2	2 1/4	18	255	11 41/64	8 5/8	28	290	19 21/32	....
9	95	4 21/64	2 13/16	19	265	12 7/16	8 15/16	29	290	20 29/64	....
10	120	5 5/32	3 3/8	20	270	13 1/4	9 3/4	30	290	21 1/4	....
11	145	5 63/64	3 15/16	21	280	14 3/64	10 1/2	31	400	22 3/64	....
12	165	6 51/64	5	22	280	14 27/32	....	32	285	22 27/32	....
13	185	7 39/64	5 9/16	23	285	15 21/32	....	35	275	25 15/64	....
14	205	8 27/64	6 3/8	24	290	16 29/64	....	40	255	29 15/64	....
15	220	9 7/32	6 1/2	25	290	17 1/4	....	45	230	33 7/32	....

Std. Keyway (Am. Std.) and Setscrew

Diameter of Shaft	Keyway Width x Depth	Dia. of Set-Screw	Min. Added To Bore For Adequate Hub Wall Steel Sprockets	
			Setscrew Over Key	Setscrew not over key
2 5/16 - 2 3/4	5/8 × 5/16	5/8	1 7/8	1 1/4
2 13/16 - 3 1/4	3/4 × 3/8	3/4	2 1/4	1 1/2
3 5/16 - 3 3/4	7/8 × 7/16	3/4	2 3/8	1 3/4
3 13/16 - 4 1/2	1 × 1/2	3/4	2 1/2	2
4 9/16 - 5 1/2	1 1/4 × 5/8	3/4	3	2
5 9/16 - 6 1/2	1 1/2 × 3/4	3/4	3 1/4	2 1/2
6 9/16 - 7 1/2	1 3/4 × 3/4	3/4	3 1/4	2 1/2

Application Data and Selection Procedure

How to Check Horsepower Rating of Installed Drive

1. Determine the types of driving and driven loads and obtain the proper service factor, as explained in Steps 1 and 2 under
2. Selection Procedures.
3. Find the multiple strand factor, for the number of chain strands in the drive, from the Multiple Strand Factor Table, in Horsepower Tables (Page E-186 thru E-192).
4. From the horsepower rating table for the chain pitch, read the figure under the RPM of the small sprocket and to the right of the column giving number of teeth in the small sprocket.
5. The horsepower this drive can properly transmit is as follows:

$$\text{Horsepower Drive Can Transmit} = \frac{\left(\text{Rating Table Horsepower}\right) \times \left(\text{Multiple Strand}\right)}{\text{Service Factor}}$$

Center Distance

The following general principals should be applied in determining shaft center distances. The center distance must always be greater than one-half the sum of the sprocket outside diameters to avoid interference of teeth. When the speed ratio is greater than 3 to 1, the center distance should be not less than the sum of the sprocket diameters. Chain wrap should be at least 120° of the small sprocket — one-third of the teeth meshing.

Longer center distances give greater chain wrap. For average applications a center distance of 30 to 50 pitches of chain is recommended for best results. For pulsating loads, a center distance of 20 to 30 pitches may be desirable. For center distances of 80 pitches or greater, idlers or chain guides should be used to support the chain. Slightly adjustable center distances will provide chain tension as the chain elongates with wear.

Alignment

Accurate alignment of shafts and sprocket tooth faces provide uniform distribution of the load across the entire chain width and contributes substantially to optimum drive life. Shafting, bearings, and foundations should be suitable to maintain the initial alignment. Periodic maintenance should include an inspection of alignment to insure optimum chain life.

Design Horsepower

When making drive selections consideration is given to the loads imposed on the chain. Service factors based on the type of equipment to be driven (Table I, Page E162) and the type of input power (Table II, Page E162) are used to compensate for these loads.

Horsepower Rating Tables

The horsepower ratings in this catalog apply to lubricated single pitch, single strand precision roller chains, both standard and double pitch roller chain.

The ratings reflect a service factor of 1, a chain length of approximately 100 pitches, use of recommended lubrication methods, and a drive arrangement where two aligned sprockets are mounted on parallel horizontal shafts.

The horsepower ratings relate to the speed of the smaller sprocket and drive selections are made on this basis, whether the drive is speed reducing or speed increasing.

For ratings of multiple strand roller chains refer to Multiple Strand Factor in Horsepower Tables.

Lubrication

It has been shown that a separate wedge of fluid lubricant is formed in operating chain joints much like that formed in journal bearings. Therefore, fluid lubricant must be applied to assure an oil supply to the joints and minimize metal to metal contact. Lubrication, if supplied in sufficient volume, also provides effective cooling and impact damping at the higher speeds. For this reason, it is important that the lubrication recommendations be followed. The horsepower rating tables shown throughout this catalog, apply only to drives lubricated in the manner specified in the tables.

Chain drives should be protected against dirt and moisture and the oil supply kept free of contamination. Periodic oil change is desirable. A good grade of non-detergent petroleum base oil is recommended. Heavy oils and grease are generally too stiff to enter and fill the chain joints.

Application Data and Selection Procedure

Types of Lubrication

There are four basic types of lubrication for chain drives. The recommended type shown in the horsepower rating tables is influenced by chain speed and the amount of power transmitted. These are minimum lubrication requirements and the use of a better type (for example, Type C instead of Type B) is acceptable and may be beneficial. Chain life can vary appreciably depending upon the way the drive is lubricated. The better the lubrication, the longer the chain and sprocket life. For this reason, it is important that the lubrication recommendations be followed when using the rating tables given in this catalog.

Lubrication

TYPE A — Manual Lubrication. Oil applied periodically with brush or spout can.

TYPE B — Oil Bath or Oil Slinger. Oil level maintained in casing at predetermined height.

TYPE C — Oil Stream. Oil supplied by circulating pump inside chain loop on lower span.

NOTE: Drip Lubrication. Oil applied between link plate edges from a drip lubricator and should be used in clean environments only.

Selection of Roller Chain Drives

The following information is necessary for the proper selection and design of roller chain drives:

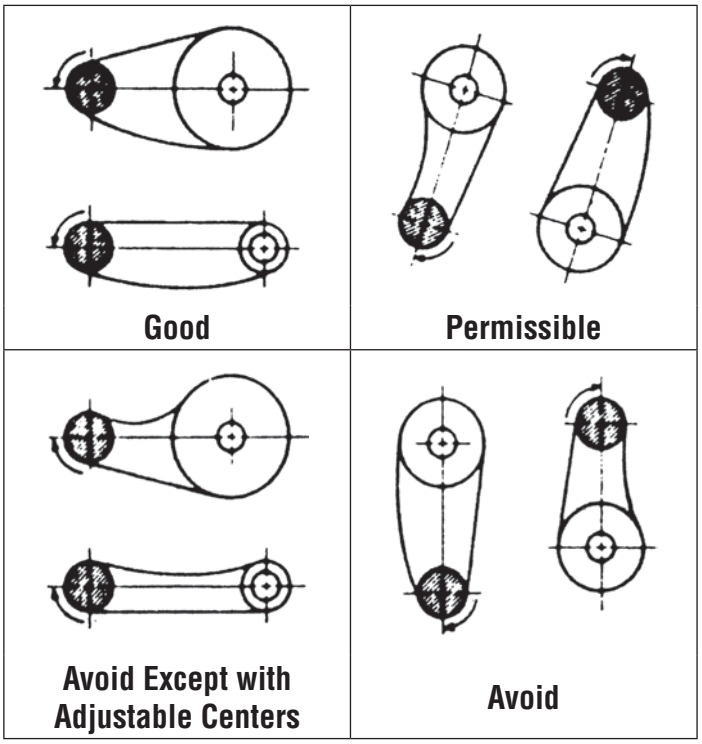
1. Type of input horsepower (electrical motor, internal combustion engine.)
2. Type of equipment to be driven.
3. Horsepower to be transmitted.
4. Full load speed of the fastest running shaft. (RPM)
5. Desired speed of the slow speed shaft. (RPM)
6. Diameters of the driving and driven shafts.
7. Center to center distance of shafts.
8. Position of drive and space limitations.
9. Method of lubrication.
10. Conditions of drive, steady or fluctuating load, hours of operation, lubrication.

Most roller chain drive applications allow considerable latitude in the selection of sprocket sizes and chain pitch, although usually one combination will best fulfill the requirements of power, speed, space limitations and economy.

Chain and Sprocket Selection Procedure Steps:

1. Determine class of driven load.
2. Select service factor.
3. Calculate design horsepower.
4. Select chain pitch.
5. Select number of teeth in small sprocket.
6. Determine number of teeth in larger sprocket.
7. Determine center distance.
8. Calculate chain length.

Drive Positions



Sprocket Selection

Application Data and Selection Procedure

Step I

Service Classification — Table I

Uniform Load

- Agitators, Liquid
- Blowers, Centrifugal
- Conveyors, Even Load
- Elevators, Even Load
- Fans, Centrifugal
- Generators
- Line Shafts, Even Load
- Machines, Even Load, Non-reversing
- Pumps, Centrifugal

Moderate Shock Load

- Moderate Shock Load
- Beaters
- Compressors, Centrifugal
- Conveyors, Uneven Load
- Elevators, Uneven Load
- Grinders, Pulp
- Kilns and Dryers
- Laundry - Washers and Tumblers
- Line Shafts, Uneven Load
- Machines, Pulsating Load, Non-reversing
- Pumps, Reciprocating, Triplex
- Screens, Rotary, Even Load
- Woodworking Machinery

Heavy Shock Load

- Brick Machines
- Compressors Reciprocating
- Crushers
- Machines, Reversing or Impact Loads
- Mills, Hammer, Rolling or Drawing
- Presses
- Pumps, Reciprocating, Simplex or Duplex

Step II

Service Factor — Table II

Service Classification	Type of Input Power		
	Internal Combustion Engine with Hydraulic Drive	Electric Motor or Turbine	Internal Combustion Engine with Mechanical Drive
Uniform Load	1.0	1.0	1.2
Moderate Shock Load	1.2	1.3	1.4
Heavy Shock Load	1.4	1.5	1.7

Unfavorable Operating Conditions which may be present should be compensated for by adding .2 to the Service Factor for each unfavorable condition. Some of these conditions are listed below:

1. Multiple Shafts — add .2 for each additional shaft.
2. Excessive speed ratios — exceeding 7 to 1.
3. Heavy starting loads with frequent starts and stops.
4. Conditions of high temperatures, unusually abrasive conditions, or circumstances decreasing lubrication effectiveness or not allowing the use of recommended lubrication procedures.

Step III

Determination of Design Horsepower

Determine the design horsepower of the required drive using the following procedure.

1. Determine Service Classification — Table I. Unlisted equipment may be classified by its similarity to a listed type.
2. Using Service Classification and Frequency of Service, select the Service Factor — Table II. Increase the Service Factor by adding compensation for unfavorable operating conditions.
3. Multiply the normal operating horsepower of the drive by the Compensated Service Factor to obtain Service Horsepower.

Step IV

Drive Selection

Using Design Horsepower computed above, use Trial Selection Chart (Horsepower Tables) on page E184-E185, or enter tables of Horsepower Ratings shown on pages E186 thru E192. Select the smallest pitch chain which has the required horsepower rating for a pinion sprocket turning at the specified RPM. Check to be certain the selected sprocket has a listed maximum bore large enough to accommodate the specified shaft. The tables on pages E-158 thru E-159 gives maximum bores for the usual range of driving sprockets.

If the Design Horsepower at the required RPM is greater than the horsepower rating of the largest pitch chain which can operate at that speed, a multiple chain drive should be considered for the application.

Selection of drives to operate at speeds somewhat below the maximum rating will increase the life of the drive and quietness of operation.

Step V

Driving Sprocket

In selecting the driving sprocket **17 teeth are recommended as a minimum** although 15 teeth are quite often used, and as low as 7 teeth can be cut. When the maximum bore of the 17 tooth sprocket will not accommodate the driving shaft, it is necessary to go to a sprocket with a greater number of teeth. Hardened teeth are recommended for sprockets with 25 teeth or less.

Application Data and Selection Procedure

Step VI

Driven Sprocket (Ratio)

The number of teeth selected for the driven sprocket depends upon the driving sprocket chosen and the desired speed of the driven shaft. When space limitations are a factor, the diameter of the driven sprocket sometimes determines the final selection of drive.

The recommended maximum speed ratio is 7 to 1, although higher ratios are occasionally used. It is usually better design, however, for large reductions to use a double reduction drive.

Select the driven sprocket size from the Speed Ratio Table on page E-170 using the required speed ratio and size of driver sprocket.

Step VII

Shaft Centers

May be calculated from the formula on page E-168 where the sprocket diameters and chain length are known.

On many applications the motor base is adjustable, allowing for slight changes in shaft centers. On long centers some form of chain adjuster or take-up is recommended.

Step VIII

Chain Length

On page E-168 is shown a simple method of computing the length of chain necessary for a drive with given sprocket dimensions and center to center distance of shafts. (See chart on page E-169 for length in ft.)

Chain Drive Design Example

To select a roller chain drive from a 10 HP electric motor (1.625'' shaft) 1200 RPM (1150 under load) to a wood working machine shaft at 300 RPM on 30" centers. Drive conditions — moderate pulsating load, good lubrication, 10 hour day operation.

1. Service class — moderate shock load (Table I).
2. Service factor — 1.3 (Table II).
3. Design HP — 1.3 × 10 = 13 DHP.
4. Selection — The Horsepower Ratings on page E-184 show that either of the following combinations may be used.

   No. D40-19 Tooth — Smoothest in operation

   No. 50-18 Tooth — Lower drive cost

For our purpose we select No. 50 chain and checking the bore find that the 1.625" shaft can be accommodated with a stock bored to size sprocket.

The driven sprocket is found as follows:

$$\text{No. Teeth Driven Sprocket} = 18 \times \frac{1150}{300} \text{ (Ratio)} = 68.99 \text{ or } 69 \text{ Teeth}$$

Since 69 teeth is not a stock size we select 70 teeth. The chain length is calculated as shown on page E-169 and is 142 pitches.

Overhung Load

When a sprocket is mounted on a reducer shaft, a calculation should be made to determine the overhung load in pounds using formula on page *i*-2 in general engineering section.

Engineering Data & Design

Horsepower equals 33,000 foot pounds per minute, or 550 foot pounds per second. In terms of chain load and speed.

$$HP = \frac{\text{Working Load} \times \text{Ft. Per Min.}}{33{,}000}$$

$$\text{or } HP = \frac{\text{Working Load} \times T \times P \times RPM}{396{,}000}$$

Where T = number of sprocket teeth
P = chain pitch

Chain Working Load when the horsepower input is known and the chain working load is desired, this can be calculated as follows:

$$\text{Working Load} = \frac{HP \times 33{,}000}{\text{Ft. Per Min.}}$$

$$\text{or} = \frac{HP \times 396{,}000}{T \times P \times RPM}$$

Chain Speed can be determined from the following formula:

$$\text{Chain Speed (Ft. Per Min.)} = \frac{T \times RPM}{K}$$

Where T = number of sprocket teeth
Constant K (Pitches of Chain Per Foot)

PITCH	3/8"	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	1 3/4"	2"	2 1/2"	3"
K	32	24	19.2	16	12	9.6	8	6.85	6	4.8	4

Approx. Wt./Ft. of Standard Roller Chain

Number	Single	Double	Triple	Quadruple
25	0.08	0.18	0.27	0.35
35	0.23	0.46	0.69	0.92
41	0.28	—	—	—
40	0.41	0.82	1.23	1.64
50	0.69	1.38	2.07	2.76
60	1.04	2.08	3.12	4.16
80	1.77	3.54	5.31	7.08
100	2.59	5.18	7.77	10.36
120	4.05	8.10	12.15	16.20
140	5.10	10.20	15.30	20.40
160	6.85	13.70	20.55	27.40
180	9.30	18.20	27.20	36.30
200	10.20	21.00	31.50	42.00
240	16.90	33.40	50.00	66.50

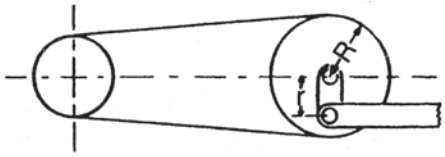
Factor of Safety is determined as follows:

$$FS = \frac{\text{Chain Ultimate Strength}}{\text{Chain Working Load}}$$

Shaft Torque ordinarily is greater for the driven shaft than for the driving shaft due to the difference in sprocket sizes and RPM Torque is usually expressed in inch pounds.

$$\text{Torque (Driving Shaft)} = \frac{HP \times 63{,}000}{RPM}$$

$$\text{Torque (Driven Shaft)} = \text{Working Load} \times R$$



Where a crank arm is used the load transmitted by the arm can be determined as follows:

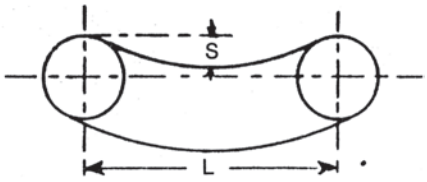
$$\text{Crank Arm Load} = \frac{\text{Driven Shaft Torque}}{r}$$

$$\text{or} = \frac{\text{Chain Working Load} \times R}{r}$$

Catenary Tension imposed by reason of the weight of chain can be approximated as follows:

$$\text{Catenary Tension} = \frac{W \times L}{8 \times S} + (W \times S)$$

Where W = weight of chain (lbs. per ft.)
S = chain sag (feet) = 2% to 3% of shaft centers approx.
L = Shaft center in feet.



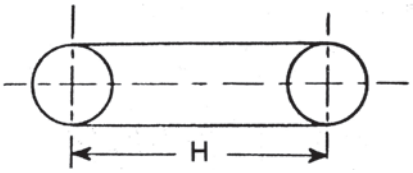
Engineering Data & Design

Conveyor Chains

Chains used in the design of conveyors should be selected on the basis of the **chain pull** imposed by the application and the permissible or **maximum working load** of the chain.

In some instances a larger pitch chain than is necessary may be selected due to the desired attachment spacing, and the effect in this case would be to increase the life of the conveyor.

Horizontal Conveyors



Total pull of chains = f H (W + P)

NOTE: When lower strand of conveyor drags on runway above formula becomes f H (W + 2P).

Vertical Conveyors



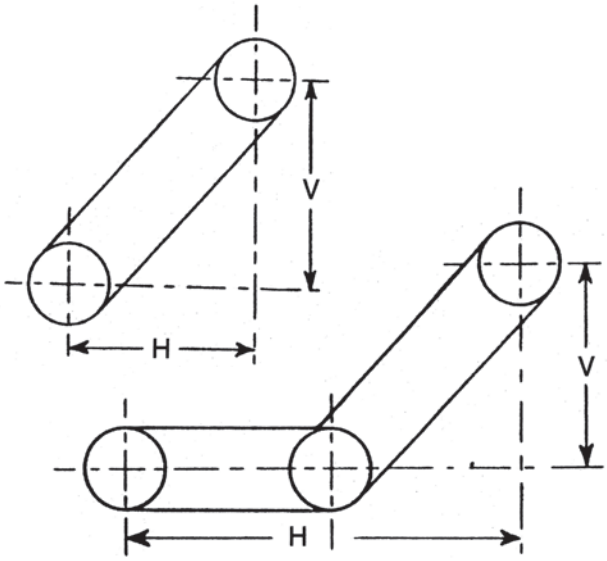
Total pull of chains = V (W + P)

H (ft) = Horizontal projection of conveyor length.
V (ft) = Vertical projection of conveyor length.
W (lb) = Weight of material handled per foot of conveyor length.
P (lb) = Weight per foot of all moving conveyor parts (single or two strand).
f = Coefficient of friction of chain on runway.

Chain Pull

The force or pull required to move a conveyor includes the pull necessary to move the weight of chain and material and the frictional resistance of the chain parts on the runways. The following formulas may be used in calculating the total chain pull. The same formula applies in the case of single or parallel strand chain conveyors, but in the case of parallel strand conveyors, the pull per chain is one-half of the figure calculated from the formula.

Inclined Conveyors



Total pull of chains = f H (W + P) + V (W + P)

NOTE: When lower strand of conveyor drags on runway the factor P (f H – V) should be added to above formula unless V is greater than f H.

Value of Coefficient F

Sliding steel on iron or steel 25%

Rolling friction 15%

(If material or other than the usual chain parts are in contact with the runway, the coefficient should be increased to compensate for the added resistance.)

Sprocket Engineering

Chain Drive Selection

Step 1:

Prime Driver: _____ (Type & Description) _____ (Rated - HP) _____ (RPM)

Driven Comp: _____ (Type & Description) _____ (RPM) _____ (Hours/Day)

Center Distance: _____" (Maximum) _____" (Minimum) _____" (Nominal)

Step 2: _____ (Service Classification (Step I Page E-162))

Step 3: _____ (Service Factor) (Include additions to basic factor) (Step II Page E-162)

Step 4: Determine Design HP _____ (HP) × _____ (Service Factor) = _____ (HP Design)

Step 5: Speed Ratio _____ (RPM Faster Shaft) × _____ (RPM Slower Shaft) = _____ (Ratio (E-172))

Step 6: From selector chart, select proper chain pitch & driver sprocket. (Check Martin Catalog page E-184.)

A. _____ (Chain Pitch) B. _____ (Driver Sprocket) C. _____ (Maximum Bore (Pages E-16 thru E-112))

Step 7: From ratio chart, select proper driven sprocket.

C. _____ (Driven Sprocket) _____ (Maximum Bore)

Step 8: Check manufacturer's catalog for maximum bore recommended & final stock selection. (Pages E-16 thru E-112)

Step 9: Review Horsepower table for type of lubrication required.

	Type:	A	B	C	(Pages E-161 and E-186 thru E-192)
OR	Type:	1	2	3	(Pages E-191 and E-192)

Step 10: _____ (Center Dist. (inches)) ÷ _____ (Chain Pitch) _____ (Center Dist. (pitches))

Step 11: Formula for chain length $= 2C + \frac{N+n}{2} + \frac{A}{C}$

Where: C = Center Dist. in pitches
N = Number of teeth in Driven Sprocket
n = Number of teeth in Driver Sprocket
A = Value from table tabulated for N - n values

Sprocket Hardening

Brinell, Rockwell and Scleroscope Hardness Numbers with Corresponding Tensile Strength

Brinell 10 MM Ball 3,000 Kg.	Rockwell "C" 120 Cone 150 Kg.	Scleroscope Shore Model C	Tensile Strength 1000 Lb. Per Sq. In.
745	68	100	368
712	66	95	352
682	64	91	337
653	62	87	324
627	60	84	311
601	58	81	298
578	57	78	287
555	55	75	276
534	53	72	266
514	52	70	256
495	50	67	247
477	49	65	238
461	47	63	229
444	46	61	220
429	45	59	212
415	44	57	204
401	42	55	196
388	41	54	189
375	40	52	182
362	38	51	176
351	37	49	170
341	36	48	165
331	35	46	160
321	34	45	155
311	33	44	150
302	32	43	146
293	31	42	142
285	30	40	138
277	29	39	134
269	28	38	131
262	26	37	128
255	25	37	125
248	24	36	122
241	23	35	119
235	22	34	116
229	21	33	113
223	20	32	110
	Rockwell "B" 1/16" Ball 100 Kg.		
217	97	31	107
212	96	31	104
207	95	30	101
202	94	30	99
197	93	29	97
192	92	28	95
187	91	28	93
183	90	27	91
179	89	27	89
174	88	26	87

Note: Hardening cannot be accurately checked with a file — stationary or portable hardness testers should be used for conclusive results.

Material

All Martin stock sprockets are made of quality steel poured to our specifications.

Bar size sprockets normally include sizes up to 7" or 71/2" in diameter type "B", "BS", "QD", "TB" single, double & triple width. And can easily be electrical induction or flame hardened — to Rockwell "C" 40 to 50.

Plate sprockets normally include sizes 71/2" in diameter and larger type "B", "BS", "C", "QD", "TB" single, double, & triple width fabricated and type "A" all diameters. This material would have 35 to 40 points of carbon and can be induction or flame hardened to Rockwell "C" 30 to 45. Degree of hardness obtainable and method depends on size of sprocket.

Special quality steel can be used for large quantities or made-to-order sprockets if specified.

Hardening Recommendations

Hardened teeth substantially increases sprocket life and is recommended under conditions listed below:

1. Pinion or driver where the reduction is 4:1 or greater.
2. Slow speed drives (100 FPM or less).
3. Where safety factor is less than standard.
4. Unusual abrasive conditions.

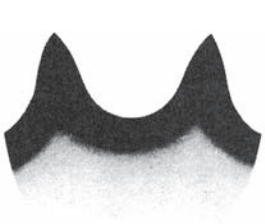
Degree of hardness — this is governed by conditions prevailing each application — for stock sprockets these general suggestions may be used as guide lines:

1. Rockwell "C" 35 to 50 pinion or driver.
2. Rockwell "C" 25 to 40 larger diameter or driver sprockets.

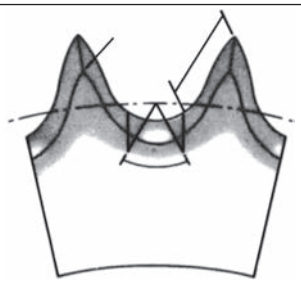
Induction or flame hardening will be used as best suited to the individual application. The diameter and pitch of the sprocket govern the method used.

Caution should be used to avoid "file hardness" (Rockwell C 62 and above) as it is not recommended for sprockets due to brittleness.

Depth of hardening should be limited so as to provide case only on the wear surfaces with a tough resilient core to absorb shock — (see illustration tooth section).



Hardened Tooth Section



Depth of Hardness Required

Chain Drive Engineering

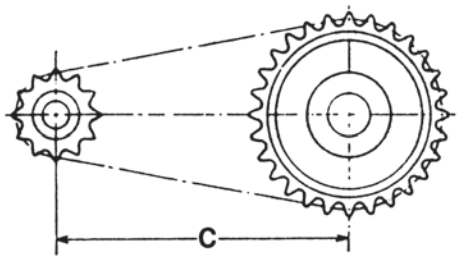
Chain Length Calculation

The following equation may be used to determine the chain length required for any two-sprocket drive.

$$L = 2C + \frac{N+n}{2} + \frac{.1013\,(N-n)^2}{4C}$$ or substituting A for $$\frac{.1013\,(N-n)^2}{4C}$$, $$L = 2C + \frac{N+n}{2} + \frac{A}{C}$$

Where:

- C = Shaft Center Distance in pitches
- L = Length of chain in pitches
- N = Number of teeth in larger sprocket
- n = Number of teeth in smaller sprocket
- π = 3.1416
- A = Value from table below tabulated for values of N-n
- P = Pitch of chain



CENTER DISTANCE

NOTE: The method described with above table of constants is sufficiently accurate for practically all commercial chain drives. When, however, a high degree of precision is necessary, especially if the drive is vertical, the following formula is useful in determining the exact centers for chain length already determined.

Calculation of shaft centers

The following formula is useful in determining the approximate centers in inches for chain lengths in pitches already determined.

$$C = \frac{P}{8}\left\{2L - N - n + \sqrt{(2L - N - n)^2 - 0.810\,(N - n)^2}\right\}$$

Values of A For Chain Length Calculation

N - n	A	N - n	A	N - n	A	N - n	A	N - n	A	N - n	A
1	0.03	32	25.94	63	100.54	94	223.82	125	395.79	156	616.44
2	0.10	33	27.58	64	103.75	95	228.61	126	402.14	157	624.37
3	0.23	34	29.28	65	107.02	96	233.44	127	408.55	158	632.35
4	0.41	35	31.03	66	110.34	97	238.33	128	415.01	159	640.38
5	0.63	36	32.83	67	113.71	98	243.27	129	421.52	160	648.46
6	0.91	37	34.68	68	117.13	99	248.26	130	428.08	161	656.59
7	1.24	38	36.58	69	120.60	100	253.30	131	434.69	162	664.77
8	1.62	39	38.53	70	124.12	101	258.39	132	441.36	163	673.00
9	2.05	40	40.53	71	127.69	102	263.54	133	448.07	164	681.28
10	2.53	41	42.58	72	131.31	103	268.73	134	454.83	165	689.62
11	3.06	42	44.68	73	134.99	104	273.97	135	461.64	166	698.00
12	3.65	43	46.84	74	138.71	105	279.27	136	468.51	167	706.44
13	4.28	44	49.04	75	142.48	106	284.67	137	475.42	168	714.92
14	4.96	45	51.29	76	146.31	107	290.01	138	482.39	169	723.46
15	5.70	46	53.60	77	150.18	108	295.45	139	489.41	170	732.05
16	6.48	47	55.95	78	154.11	109	300.95	140	496.47	171	740.68
17	7.32	48	58.36	79	158.09	110	306.50	141	503.59	172	749.37
18	8.21	49	60.82	80	162.11	111	312.09	142	510.76	173	758.11
19	9.14	50	63.33	81	166.19	112	317.74	143	517.98	174	766.90
20	10.13	51	65.88	82	170.32	113	323.44	144	525.25	175	775.74
21	11.17	52	68.49	83	174.50	114	329.19	145	532.57	176	784.63
22	12.26	53	71.15	84	178.73	115	334.99	146	539.94	177	793.57
23	13.40	54	73.86	85	183.01	116	340.84	147	547.36	178	802.57
24	14.59	55	76.62	86	187.34	117	346.75	148	554.83	179	811.61
25	15.83	56	79.44	87	191.73	118	352.70	149	562.36	180	820.70
26	17.12	57	82.30	88	196.16	119	358.70	150	569.93	181	829.85
27	18.47	58	85.21	89	200.64	120	364.76	151	577.56	182	839.04
28	19.86	59	88.17	90	205.18	121	370.86	152	585.23	183	848.29
29	21.30	60	91.19	91	209.76	122	377.02	153	592.96	184	857.58
30	22.80	61	94.25	92	214.40	123	383.22	154	600.73	185	866.93
31	24.34	62	97.37	93	219.08	124	389.48	155	608.56		

Roller Chain Lengths

No. of Pitches	Chain Pitch – Inches										
	3/8	1/2	5/8	3/4	1	1 1/4	1 1/2	1 3/4	2	2 1/2	3
	Chain Length – Feet										
1	0.0313	0.0417	0.0521	0.0625	0.0833	0.1042	0.1250	0.1458	0.1667	0.2083	0.2500
2	0.0625	0.0833	0.1042	0.1250	0.1667	0.2083	0.2500	0.2917	0.3333	0.4167	0.5000
3	0.0938	0.1250	0.1563	0.1875	0.2500	0.3125	0.3750	0.4375	0.5000	0.6250	0.7500
4	0.1250	0.1667	0.2083	0.2500	0.3333	0.4167	0.5000	0.5833	0.6667	0.8333	1.0000
5	0.1563	0.2083	0.2604	0.3125	0.4167	0.5208	0.6250	0.7292	0.8333	1.0417	1.2500
6	0.1875	0.2500	0.3125	0.3750	0.5000	0.6250	0.7500	0.8750	1.0000	1.2500	1.5000
7	0.2188	0.2917	0.3646	0.4375	0.5833	0.7292	0.8750	1.0208	1.1667	1.4583	1.7500
8	0.2500	0.3333	0.4167	0.5000	0.6667	0.8333	1.0000	1.1667	1.3333	1.6667	2.0000
9	0.2813	0.3750	0.4688	0.5625	0.7500	0.9375	1.1250	1.3125	1.5000	1.8750	2.2500
10	0.3125	0.4167	0.5208	0.6250	0.8333	1.0417	1.2500	1.4583	1.6667	2.0833	2.5000
11	0.3438	0.4584	0.5729	0.6875	0.9167	1.1459	1.3750	1.6041	1.8333	2.9217	2.7500
12	0.3750	0.5000	0.6250	0.7500	1.0000	1.2500	1.5000	1.7500	2.000	2.5000	3.0000
13	0.4063	0.5417	0.6771	0.8125	1.0833	1.3542	1.6250	1.8958	2.1667	2.7083	3.2500
14	0.4375	0.5833	0.7292	0.8750	1.1667	1.4583	1.7500	2.0417	2.3333	2.9167	3.5000
15	0.4688	0.6250	0.7813	0.9375	1.2500	1.5625	1.8750	2.1875	2.5000	3.1250	3.7500
16	0.5000	0.6667	0.8333	1.0000	1.3333	1.6667	2.0000	2.3333	2.6667	3.3333	4.0000
17	0.5313	0.7084	0.8854	1.0625	1.4167	1.7709	2.1250	2.4791	2.8333	3.5417	4.2500
18	0.5625	0.7500	0.9375	1.1250	1.5000	1.8750	2.2500	2.6250	3.0000	3.7500	4.5000
19	0.5938	0.7917	0.9896	1.1875	1.5833	1.9792	2.3750	2.7708	3.1667	3.9583	4.7500
20	0.6250	0.8333	1.0417	1.2500	1.6667	2.0833	2.5000	2.9167	3.3333	4.1667	5.0000
21	0.6563	0.8750	1.0938	1.3125	1.7500	2.1875	2.6250	3.0625	3.5000	4.3750	5.2500
22	0.6875	0.9167	1.1458	1.3750	1.8333	2.2917	2.7500	3.2083	3.6667	4.5833	5.5000
23	0.7188	0.9584	1.1979	1.4375	1.9166	2.3959	2.8750	3.3541	3.8333	4.7917	5.7500
24	0.7500	1.0000	1.2500	1.5000	2.0000	2.5000	3.0000	3.5000	4.0000	5.0000	6.0000
25	0.7813	1.0417	1.3021	1.5625	2.0833	2.6042	3.1250	3.6458	4.1667	5.2083	6.2500
26	0.8125	1.0833	1.3541	1.6250	2.1667	2.7083	3.2500	3.7917	4.3333	5.3167	6.5000
27	0.8438	1.1250	1.4062	1.6875	2.2500	2.8125	3.3750	3.9375	4.5000	5.6250	6.7500
28	0.8750	1.1667	1.4583	1.7500	2.3333	2.9167	3.5000	4.0833	4.6667	5.8333	7.0000
29	0.9063	1.2084	1.5104	1.8125	2.4167	3.0209	3.6250	4.2291	4.8333	6.0417	7.2500
30	0.9375	1.2500	1.5625	1.8750	2.5000	3.1250	3.7500	4.3750	5.0000	6.2500	7.5000
31	0.9688	1.2917	1.6146	1.9375	2.5833	3.2292	3.8750	4.5208	5.1667	6.4583	7.7500
32	1.0000	1.3333	1.6667	2.0000	2.6667	3.3333	4.0000	4.6667	5.3333	6.6667	8.0000
33	1.0313	1.3750	1.7188	2.0625	2.7500	3.4375	4.1250	4.8125	5.5000	6.8750	8.2500
34	1.0625	1.4167	1.7708	2.1250	2.8333	3.5417	4.2500	4.9583	5.6667	7.0833	8.5000
35	1.0938	1.4584	1.8229	2.1875	2.9167	3.6459	4.3750	5.1041	5.8333	7.2917	8.7500
36	1.1250	1.5000	1.8750	2.2500	3.0000	3.7500	4.5000	5.2500	6.0000	7.5000	9.0000
37	1.1563	1.5417	1.9271	2.3125	3.0833	3.8542	4.6250	5.3958	6.1667	7.7083	9.2500
38	1.1875	1.5833	1.9791	2.3750	3.1667	3.9583	4.7500	5.5417	6.3333	7.9167	9.5000
39	1.2188	1.6250	2.0312	2.4375	3.2500	4.0625	4.8750	5.0875	6.5000	8.1250	9.7500
40	1.2500	1.6667	2.0833	2.5000	3.3333	4.1667	5.0000	5.8333	6.6667	8.3333	10.0000
41	1.2813	1.7084	2.1354	2.5625	3.4167	4.2709	5.1250	5.9791	6.8333	8.5417	10.2500
42	1.3125	1.7500	2.1875	2.6250	3.5000	4.3750	5.2500	6.1250	7.0000	8.7500	10.5000
43	1.3438	1.7917	2.2396	2.6875	3.5833	4.4792	5.3750	6.2708	7.1667	8.9583	10.7500
44	1.3750	1.8333	2.2916	2.7500	3.6667	4.5833	5.5000	6.4167	7.3333	9.1667	11.0000
45	1.4063	1.8750	2.3437	2.8125	3.7500	4.6875	5.6250	6.5625	7.5000	9.3750	11.2500
46	1.4375	1.9167	2.3958	2.8750	3.8333	4.7917	5.7500	6.7083	7.6667	9.5833	11.5000
47	1.4688	1.9584	2.4479	2.9375	3.9167	4.8959	5.8750	6.8541	7.8333	9.7917	11.7500
48	1.5000	2.0000	2.5000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	10.0000	12.0000
49	1.5313	2.0417	2.5521	3.0625	4.0833	5.1042	6.1250	7.1458	8.1667	10.0283	12.2500
50	1.5625	2.0833	2.6042	3.1250	4.1667	5.2083	6.2500	7.2917	8.3333	10.4167	12.5000
51	1.5938	2.1250	2.6563	3.1875	4.2500	5.3125	6.3750	7.4375	8.5000	10.6250	12.7500
52	1.6250	2.1667	2.7083	3.2500	4.3333	5.4167	6.5000	7.5833	8.6667	10.8333	13.0000
53	1.6563	2.2084	2.7604	3.3125	4.4167	5.5209	6.6250	7.7291	8.8333	11.0417	13.2500
54	1.6875	2.2500	2.8125	3.3750	4.5000	5.6250	6.7500	7.8750	9.0000	11.2500	13.5000
55	1.7188	2.2917	2.8647	3.4375	4.5833	5.7292	6.8750	8.0208	9.1667	11.4583	13.7500
56	1.7500	2.3333	2.9167	3.5000	4.6667	5.8333	7.0000	8.1667	9.3333	11.6667	14.0000
57	1.7813	2.3750	2.9688	3.5625	4.7500	5.9375	7.1250	8.3125	9.5000	11.8750	14.2500
58	1.8125	2.4167	3.0208	3.6250	4.8333	6.0417	7.2500	8.4583	9.6667	12.0833	14.5000
59	1.8438	2.4584	3.0729	3.6875	4.1967	6.1459	7.3750	8.6041	9.8333	12.2917	14.7500
60	1.8750	2.5000	3.1250	3.7500	5.0000	6.2500	7.5000	8.7500	10.0000	12.5000	15.0000
61	1.9063	2.5417	3.1771	3.8125	5.0833	6.3542	7.6250	8.8958	10.1667	12.7083	15.2500
62	1.9375	2.5833	3.2292	3.8750	5.1667	6.4583	7.7500	9.0417	10.3333	12.9167	15.5000
63	1.9688	2.6250	3.2813	3.9375	5.2500	6.5625	7.8750	9.1875	10.5000	13.1250	15.7500
64	2.0000	2.6667	3.3333	4.0000	5.3333	6.6667	8.0000	9.3333	10.6667	13.3333	16.0000
65	2.0313	2.7084	3.3854	4.0625	5.4167	6.7709	8.1250	9.4791	10.8333	13.5417	16.2500
66	2.0625	2.7500	3.4375	4.1250	5.5000	6.8750	8.2500	9.6250	11.0000	13.7500	16.5000
67	2.0938	2.7917	3.4897	4.1875	5.5833	6.9792	8.3750	9.7708	11.1667	13.9583	16.7500
68	2.1250	2.8333	3.5417	4.2500	5.6667	7.0883	8.5000	9.9167	11.3333	14.1667	17.0000
69	2.1563	2.8750	3.5938	4.3125	5.7500	7.1875	8.6250	10.0625	11.5000	14.3750	17.2500
70	2.1875	2.9167	3.6458	4.3750	5.8333	7.2917	8.7500	10.2083	11.6667	14.5833	17.5000
71	2.2188	2.9584	3.6979	4.4375	5.9167	7.3959	8.8750	10.3541	11.8333	14.7917	17.7500
72	2.2500	3.0000	3.7500	4.5000	6.0000	7.5000	9.0000	10.5000	12.0000	15.0000	18.0000
73	2.2813	3.0417	3.8021	4.5625	6.0833	7.6042	9.1250	10.6458	12.1667	15.2083	18.2500
74	2.3125	3.0833	3.8541	4.6250	6.1667	7.7083	9.2500	10.7917	12.3333	15.4167	18.5000
75	2.3438	3.1250	3.9062	4.6875	6.2500	7.8125	9.3750	10.9375	12.5000	15.6250	18.7500
80	2.5000	3.3333	4.1667	5.0000	6.6667	8.3333	10.0000	11.6667	13.3333	16.6667	20.0000
85	2.6563	3.5417	4.4271	5.3125	7.0833	8.8542	10.6250	12.3958	14.1667	17.7083	21.2500
90	2.8125	3.7500	4.6875	5.6250	7.5000	9.3750	11.2500	13.1250	15.0000	18.7500	22.5000
95	2.9688	3.9584	4.9479	5.9375	7.9167	9.8959	11.8750	13.8541	15.8333	19.7917	23.7500
100	3.1250	4.1667	5.2083	6.2500	8.3333	10.4167	12.5000	14.5833	16.6667	20.8333	25.0000

Speed Ratios For Sprocket Combinations Driver Sprocket Teeth

Driven Sprocket Teeth	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
9	1.00																	
10	1.11	1.00																
11	1.22	1.10	1.00															
12	1.33	1.20	1.09	1.00														
13	1.44	1.30	1.18	1.08	1.00													
14	1.56	1.40	1.27	1.17	1.08	1.00												
15	1.67	1.50	1.36	1.25	1.15	1.07	1.00											
16	1.78	1.60	1.45	1.33	1.23	1.14	1.07	1.00										
17	1.89	1.70	1.55	1.42	1.31	1.21	1.13	1.06	1.00									
18	2.00	1.80	1.64	1.50	1.38	1.29	1.20	1.13	1.06	1.00								
19	2.11	1.90	1.73	1.58	1.46	1.36	1.27	1.19	1.12	1.06	1.00							
20	2.22	2.00	1.82	1.67	1.54	1.43	1.33	1.25	1.18	1.11	1.05	1.00						
21	2.33	2.10	1.91	1.75	1.61	1.50	1.40	1.31	1.23	1.17	1.10	1.05	1.00					
22	2.44	2.20	2.00	1.83	1.69	1.57	1.47	1.38	1.29	1.22	1.16	1.10	1.05	1.00				
23	2.56	2.30	2.09	1.92	1.77	1.64	1.53	1.44	1.35	1.28	1.21	1.15	1.09	1.04	1.00			
24	2.67	2.40	2.18	2.00	1.85	1.71	1.60	1.50	1.41	1.33	1.26	1.20	1.14	1.09	1.04	1.00		
25	2.78	2.50	2.27	2.08	1.92	1.79	1.67	1.56	1.47	1.39	1.32	1.25	1.19	1.14	1.09	1.04	1.00	
26	2.89	2.60	2.36	2.17	2.00	1.86	1.73	1.63	1.53	1.45	1.37	1.30	1.24	1.18	1.13	1.08	1.04	1.00
27	3.00	2.70	2.45	2.25	2.08	1.93	1.80	1.69	1.59	1.50	1.42	1.35	1.29	1.23	1.17	1.12	1.08	1.04
28	3.11	2.80	2.54	2.33	2.15	2.00	1.87	1.75	1.65	1.56	1.47	1.40	1.33	1.27	1.22	1.17	1.12	1.08
29	3.22	2.90	2.64	2.42	2.23	2.07	1.93	1.81	1.71	1.61	1.53	1.45	1.38	1.32	1.26	1.21	1.16	1.12
30	3.33	3.00	2.73	2.50	2.31	2.14	2.00	1.88	1.76	1.67	1.58	1.50	1.43	1.36	1.31	1.25	1.20	1.15
31	3.44	3.10	2.82	2.58	2.38	2.21	2.07	1.94	1.82	1.72	1.63	1.55	1.48	1.41	1.35	1.29	1.24	1.19
32	3.56	3.20	2.91	2.67	2.46	2.28	2.13	2.00	1.88	1.78	1.68	1.60	1.52	1.45	1.39	1.33	1.28	1.23
33	3.67	3.30	3.00	2.75	2.54	2.36	2.20	2.06	1.94	1.83	1.74	1.65	1.57	1.50	1.43	1.38	1.32	1.27
34	3.78	3.40	3.09	2.83	2.62	2.43	2.27	2.13	2.00	1.89	1.79	1.70	1.62	1.55	1.48	1.42	1.36	1.31
35	3.89	3.50	3.18	2.92	2.69	2.50	2.33	2.19	2.06	1.95	1.84	1.75	1.67	1.59	1.52	1.46	1.40	1.34
36	4.00	3.60	3.27	3.00	2.77	2.57	2.40	2.25	2.12	2.00	1.89	1.80	1.71	1.63	1.57	1.50	1.44	1.38
37	4.11	3.70	3.36	3.08	2.85	2.64	2.47	2.31	2.18	2.06	1.95	1.85	1.76	1.68	1.61	1.54	1.48	1.42
38	4.22	3.80	3.45	3.17	2.92	2.71	2.53	2.38	2.24	2.11	2.00	1.90	1.81	1.73	1.65	1.58	1.52	1.46
39	4.33	3.90	3.55	3.25	3.00	2.79	2.60	2.44	2.29	2.17	2.05	1.95	1.86	1.77	1.70	1.63	1.56	1.50
40	4.44	4.00	3.64	3.33	3.08	2.86	2.67	2.50	2.35	2.22	2.10	2.00	1.90	1.82	1.74	1.67	1.60	1.54
41	4.56	4.10	3.73	3.42	3.15	2.93	2.73	2.56	2.41	2.28	2.16	2.05	1.95	1.86	1.78	1.71	1.64	1.58
42	4.67	4.20	3.82	3.50	3.23	3.00	2.80	2.63	2.47	2.34	2.21	2.10	2.00	1.91	1.83	1.75	1.68	1.61
43	4.78	4.30	3.91	3.58	3.31	3.07	2.87	2.69	2.53	2.39	2.26	2.15	2.05	1.95	1.87	1.79	1.72	1.65
44	4.89	4.40	4.00	3.67	3.39	3.14	2.93	2.75	2.59	2.44	2.32	2.20	2.10	2.00	1.91	1.83	1.76	1.69
45	5.00	4.50	4.09	3.75	3.46	3.21	3.00	2.81	2.65	2.50	2.37	2.25	2.14	2.04	1.96	1.88	1.80	1.73
46	5.11	4.60	4.18	3.83	3.54	3.29	3.07	2.88	2.71	2.56	2.42	2.30	2.19	2.09	2.00	1.92	1.84	1.77
47	5.22	4.70	4.27	3.92	3.62	3.36	3.13	2.94	2.76	2.61	2.47	2.35	2.24	2.14	2.04	1.96	1.88	1.81
48	5.33	4.80	4.36	4.00	3.69	3.43	3.20	3.00	2.82	2.67	2.52	2.40	2.28	2.18	2.09	2.00	1.92	1.84
49	5.44	4.90	4.45	4.08	3.77	3.50	3.27	3.06	2.88	2.72	2.58	2.45	2.33	2.23	2.13	2.04	1.96	1.88
50	5.56	5.00	4.55	4.17	3.85	3.57	3.33	3.13	2.94	2.78	2.63	2.50	2.38	2.27	2.17	2.08	2.00	1.92
51	5.67	5.10	4.64	4.25	3.92	3.64	3.40	3.19	3.00	2.83	2.68	2.55	2.43	2.32	2.22	2.13	2.04	1.96
52	5.78	5.20	4.73	4.33	4.00	3.71	3.47	3.25	3.06	2.89	2.74	2.60	2.48	2.36	2.26	2.17	2.08	2.00
53	5.89	5.30	4.82	4.42	4.08	3.79	3.53	3.31	3.12	2.94	2.79	2.65	2.52	2.41	2.30	2.21	2.12	2.04
54	6.00	5.40	4.91	4.50	4.15	3.86	3.60	3.38	3.18	3.00	2.84	2.70	2.57	2.45	2.35	2.25	2.16	2.07
55	6.11	5.50	5.00	4.58	4.23	3.93	3.67	3.44	3.24	3.06	2.90	2.75	2.62	2.50	2.39	2.29	2.20	2.12
56	6.22	5.60	5.09	4.67	4.31	4.00	3.73	3.50	3.29	3.11	2.95	2.80	2.67	2.55	2.43	2.33	2.24	2.15
57	6.33	5.70	5.18	4.75	4.38	4.07	3.80	3.56	3.35	3.17	3.00	2.85	2.71	2.59	2.48	2.38	2.28	2.19
58	6.44	5.80	5.27	4.83	4.46	4.14	3.87	3.63	3.41	3.22	3.05	2.90	2.76	2.64	2.52	2.42	2.32	2.23
59	6.56	5.90	5.36	4.92	4.54	4.21	3.93	3.69	3.47	3.28	3.11	2.95	2.81	2.68	2.57	2.46	2.36	2.27
60	6.67	6.00	5.45	5.00	4.61	4.28	4.00	3.75	3.53	3.34	3.16	3.00	2.86	2.72	2.61	2.50	2.40	2.30
68	7.55	6.80	6.18	5.66	5.23	4.86	4.54	4.25	4.00	3.78	3.58	3.40	3.24	3.09	2.96	2.84	2.72	2.61
70	7.78	7.00	6.36	5.83	5.38	5.00	4.67	4.38	4.12	3.89	3.68	3.50	3.33	3.18	3.05	2.92	2.80	2.69
72	8.00	7.20	6.54	6.00	5.54	5.14	4.80	4.50	4.24	4.00	3.79	3.60	3.43	3.27	3.13	3.00	2.88	2.77
76			6.91	6.33	5.84	5.43	5.07	4.75	4.47	4.23	4.00	3.80	3.62	3.45	3.31	3.17	3.04	2.92
80			7.27	6.66	6.15	5.71	5.34	5.00	4.70	4.45	4.21	4.00	3.81	3.63	3.48	3.34	3.20	3.07
84				7.00	6.46	6.00	5.60	5.25	4.94	4.67	4.42	4.20	4.00	3.81	3.65	3.50	3.36	3.23
95					7.31	6.78	6.33	5.94	5.59	5.28	5.00	4.75	4.52	4.32	4.13	3.96	3.80	3.65
96					7.38	6.85	6.40	6.00	5.64	5.34	5.05	4.80	4.57	4.36	4.18	4.00	3.84	3.69
102						7.28	6.80	6.38	6.00	5.67	5.37	5.10	4.86	4.63	4.44	4.25	4.08	3.92
112								7.00	6.59	6.23	5.89	5.60	5.33	5.08	4.87	4.67	4.48	4.30

Martin stock sprockets in pitches No. 40 through No. 100 are available with 8 to 60 teeth inclusive and in all common larger sizes for all pitches.

Sprocket Diameter

No. 25 ¼" Pitch

Roller Chain Sprocket Diameters

No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter
6	0.500	0.583	0.370	71	5.652	5.796	5.521	136	10.823	10.970	10.693
7	0.576	0.669	0.432	72	5.732	5.876	5.602	137	10.903	11.050	10.772
8	0.653	0.754	0.523	73	5.811	5.956	5.680	138	10.983	11.130	10.853
9	0.731	0.837	0.591	74	5.891	6.035	5.761	139	11.062	11.209	10.932
10	0.809	0.919	0.679	75	5.970	6.115	5.839	140	11.142	11.289	11.012
11	0.887	1.002	0.748	76	6.050	6.195	5.920	141	11.221	11.369	11.091
12	0.966	1.083	0.836	77	6.129	6.274	5.998	142	11.301	11.448	11.171
13	1.045	1.167	0.907	78	6.209	6.354	6.079	143	11.380	11.528	11.250
14	1.124	1.246	0.994	79	6.288	6.433	6.157	144	11.460	11.607	11.330
15	1.203	1.326	1.066	80	6.368	6.513	6.238	145	11.540	11.687	11.409
16	1.282	1.407	1.152	81	6.448	6.593	6.317	146	11.619	11.767	11.489
17	1.361	1.487	1.225	82	6.527	6.672	6.397	147	11.699	11.846	11.568
18	1.440	1.568	1.310	83	6.607	6.752	6.476	148	11.779	11.926	11.649
19	1.519	1.648	1.383	84	6.686	6.832	6.556	149	11.858	12.005	11.727
20	1.598	1.729	1.468	85	6.766	6.911	6.635	150	11.938	12.084	11.807
21	1.678	1.809	1.543	86	6.845	6.991	6.715	151	12.017	12.164	11.886
22	1.757	1.889	1.627	87	6.925	7.070	6.794	152	12.097	12.244	11.966
23	1.836	1.969	1.702	88	7.004	7.150	6.874	153	12.176	12.323	12.045
24	1.915	2.049	1.785	89	7.084	7.230	6.953	154	12.256	12.403	12.125
25	1.995	2.129	1.861	90	7.164	7.309	7.034	155	12.335	12.482	12.204
26	2.074	2.209	1.944	91	7.243	7.389	7.112	156	12.415	12.562	12.284
27	2.154	2.289	2.020	92	7.323	7.468	7.193	157	12.494	12.641	12.363
28	2.233	2.369	2.103	93	7.402	7.548	7.271	158	12.574	12.721	12.444
29	2.312	2.449	2.179	94	7.482	7.628	7.352	159	12.654	12.801	12.523
30	2.392	2.529	2.262	95	7.561	7.707	7.430	160	12.733	12.881	12.603
31	2.471	2.609	2.338	96	7.641	7.787	7.511	161	12.813	12.960	12.682
32	2.551	2.688	2.421	97	7.720	7.866	7.589	162	12.893	13.039	12.762
33	2.630	2.768	2.497	98	7.800	7.946	7.670	163	12.972	13.119	12.841
34	2.710	2.848	2.580	99	7.880	8.026	7.749	164	13.051	13.199	12.921
35	2.789	2.928	2.656	100	7.959	8.105	7.829	165	13.131	13.278	13.000
36	2.869	3.008	2.739	101	8.039	8.185	7.908	166	13.211	13.357	13.080
37	2.948	3.087	2.815	102	8.118	8.264	7.988	167	13.290	13.437	13.159
38	3.028	3.167	2.898	103	8.198	8.344	8.067	168	13.370	13.517	13.239
39	3.107	3.247	2.975	104	8.277	8.424	8.147	169	13.450	13.597	13.318
40	3.187	3.327	3.057	105	8.357	8.503	8.226	170	13.529	13.676	13.398
41	3.266	3.406	3.134	106	8.437	8.583	8.307	171	13.608	13.756	13.477
42	3.346	3.486	3.216	107	8.516	8.662	8.385	172	13.688	13.835	13.558
43	3.425	3.566	3.293	108	8.596	8.742	8.466	173	13.768	13.915	13.637
44	3.505	3.646	3.375	109	8.675	8.822	8.544	174	13.847	13.995	13.717
45	3.584	3.725	3.452	110	8.755	8.901	8.625	175	13.927	14.074	13.796
46	3.664	3.805	3.534	111	8.834	8.981	8.703	176	14.006	14.154	13.876
47	3.743	3.885	3.611	112	8.914	9.060	8.784	177	14.086	14.233	13.955
48	3.823	3.964	3.693	113	8.994	9.140	8.863	178	14.166	14.313	14.035
49	3.902	4.044	3.770	114	9.073	9.220	8.943	179	14.245	14.392	14.114
50	3.982	4.124	3.852	115	9.153	9.299	9.022	180	14.325	14.472	14.195
51	4.061	4.203	3.929	116	9.232	9.379	9.102	181	14.404	14.551	14.273
52	4.141	4.283	4.011	117	9.312	9.458	9.181	182	14.484	14.631	14.353
53	4.220	4.363	4.088	118	9.391	9.538	9.261	183	14.564	14.711	14.433
54	4.300	4.442	4.170	119	9.471	9.618	9.340	184	14.643	14.790	14.513
55	4.379	4.522	4.247	120	9.550	9.697	9.420	185	14.722	14.870	14.591
56	4.459	4.602	4.329	121	9.630	9.777	9.499	186	14.803	14.949	14.672
57	4.538	4.681	4.407	122	9.709	9.856	9.579	187	14.882	15.029	14.751
58	4.618	4.761	4.488	123	9.789	9.936	9.658	188	14.961	15.109	14.831
59	4.697	4.841	4.566	124	9.869	10.016	9.739	189	15.041	15.188	14.910
60	4.777	4.920	4.647	125	9.949	10.095	9.818	190	15.120	15.268	14.990
61	4.857	5.000	4.725	126	10.028	10.175	9.898	191	15.200	15.347	15.069
62	4.936	5.080	4.806	127	10.108	10.255	9.977	192	15.279	15.427	15.149
63	5.016	5.159	4.884	128	10.187	10.334	10.057	193	15.359	15.507	15.228
64	5.095	5.239	4.965	129	10.267	10.414	10.136	194	15.439	15.586	15.308
65	5.175	5.319	5.044	130	10.346	10.493	10.216	195	15.518	15.666	15.387
66	5.254	5.398	5.124	131	10.426	10.573	10.295	196	15.598	15.745	15.467
67	5.334	5.478	5.203	132	10.505	10.652	10.375	197	15.678	15.824	15.547
68	5.413	5.558	5.283	133	10.585	10.732	10.454	198	15.757	15.904	15.626
69	5.493	5.637	5.362	134	10.664	10.811	10.534	199	15.837	15.984	15.706
70	5.572	5.717	5.442	135	10.744	10.891	10.613	200	15.916	16.064	15.786

Odd tooth "bottom diameters" equal pitch diameters minus .130".

No. 35
3/8" Pitch

Sprocket Diameter

Martin

Roller Chain Sprocket Diameters

No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter
5	0.638	0.741	0.407	71	8.478	8.694	8.276	136	16.235	16.456	16.035
6	0.750	0.875	0.550	72	8.597	8.814	8.397	137	16.355	16.575	16.154
7	0.864	1.004	0.643	73	8.717	8.933	8.514	138	16.474	16.695	16.274
8	9.80	1.130	0.780	74	8.836	9.053	8.636	139	16.593	16.814	16.392
9	1.097	1.256	0.880	75	8.955	9.172	8.753	140	16.713	16.934	16.513
10	1.214	1.379	1.014	76	9.074	9.292	8.874	141	16.832	17.053	16.631
11	1.331	1.502	1.117	77	9.194	9.411	8.992	142	16.952	17.172	16.752
12	1.449	1.625	1.249	78	9.313	9.531	9.113	143	17.071	17.292	16.870
13	1.567	1.746	1.356	79	9.432	9.650	9.231	144	17.190	17.411	16.990
14	1.685	1.868	1.485	80	9.552	9.770	9.352	145	17.309	17.531	17.108
15	1.804	1.989	1.594	81	9.671	9.889	9.469	146	17.429	17.650	17.229
16	1.922	2.110	1.722	82	9.791	10.008	9.591	147	17.548	17.769	17.347
17	2.041	2.231	1.832	83	9.910	10.128	9.708	148	17.667	17.889	17.467
18	2.160	2.352	1.960	84	10.029	10.247	9.829	149	17.787	18.008	17.586
19	2.279	2.472	2.071	85	10.148	10.367	9.947	150	17.906	18.128	17.706
20	2.397	2.593	2.197	86	10.268	10.486	10.068	151	18.026	18.247	17.825
21	2.516	2.713	2.309	87	10.387	10.605	10.285	152	18.145	18.366	17.945
22	2.635	2.833	2.435	88	10.506	10.725	10.306	153	18.264	18.486	18.063
23	2.754	2.954	2.548	89	10.626	10.844	10.424	154	18.384	18.605	18.184
24	2.873	3.074	2.673	90	10.745	10.964	10.545	155	18.503	18.724	18.302
25	2.992	3.194	2.786	91	10.865	11.083	10.663	156	18.623	18.844	18.423
26	3.111	3.314	2.911	92	10.934	11.202	10.784	157	18.742	18.963	18.541
27	3.230	3.434	3.025	93	11.103	11.322	10.902	158	18.861	19.082	18.661
28	3.349	3.553	3.149	94	11.223	11.441	11.023	159	18.981	19.202	18.780
29	3.468	3.673	3.263	95	11.342	11.561	11.140	160	19.100	19.321	18.900
30	3.588	3.793	3.388	96	11.461	11.680	11.261	161	19.219	19.440	19.018
31	3.707	3.913	3.502	97	11.581	11.799	11.379	162	19.338	19.560	19.138
32	3.826	4.032	3.626	98	11.700	11.919	11.500	163	19.458	19.679	19.257
33	3.945	4.152	3.741	99	11.819	12.038	11.618	164	19.577	19.799	19.377
34	4.064	4.272	3.864	100	11.939	12.158	11.739	165	19.697	19.918	19.496
35	4.184	4.392	3.979	101	12.058	12.277	11.856	166	19.816	20.037	19.616
36	4.303	4.511	4.103	102	12.177	12.396	11.977	167	19.935	20.090	19.734
37	4.422	4.631	4.218	103	12.297	12.516	12.095	168	20.055	20.276	19.855
38	4.541	4.751	4.341	104	12.416	12.635	12.216	169	20.174	20.396	19.973
39	4.661	4.870	4.457	105	12.536	12.755	12.334	170	20.294	20.515	20.094
40	4.780	4.990	4.580	106	12.655	12.874	12.455	171	20.413	20.634	20.212
41	4.899	5.109	4.695	107	12.774	12.993	12.573	172	20.532	20.754	20.332
42	5.018	5.229	4.818	108	12.893	13.113	12.693	173	20.652	20.873	20.451
43	5.138	5.349	4.934	109	13.013	13.232	12.811	174	20.771	20.993	20.571
44	5.257	5.468	5.057	110	13.132	13.352	12.932	175	20.890	21.112	20.689
45	5.376	5.588	5.173	111	13.251	13.471	13.050	176	21.010	21.231	20.810
46	5.495	5.707	5.295	112	13.371	13.590	13.171	177	21.129	21.351	20.928
47	5.615	5.827	5.411	113	13.490	13.710	13.289	178	21.248	21.470	21.048
48	5.734	5.946	5.534	114	13.610	13.829	13.410	179	21.368	21.589	21.167
49	5.853	6.066	5.650	115	13.729	13.949	13.528	180	21.487	21.709	21.287
50	5.972	6.186	5.772	116	13.848	14.068	13.648	181	21.606	21.828	21.406
51	6.092	6.305	5.889	117	13.968	14.187	13.766	182	21.726	21.948	21.526
52	6.211	6.425	6.011	118	14.087	14.307	13.887	183	21.845	22.067	21.644
53	6.330	6.544	6.127	119	14.206	14.426	14.005	184	21.965	22.186	21.765
54	6.449	6.663	6.249	120	14.326	14.546	14.126	185	22.084	22.306	21.883
55	6.569	6.783	6.366	121	14.445	14.665	14.244	186	22.203	22.425	22.003
56	6.688	6.903	6.488	122	14.564	14.784	14.364	187	22.323	22.544	22.122
57	6.807	7.022	6.605	123	14.684	14.904	14.482	188	22.442	22.664	22.242
58	6.927	7.142	6.727	124	14.803	15.023	14.603	189	22.561	22.783	22.360
59	7.046	7.261	6.843	125	14.922	15.143	14.721	190	22.681	22.902	22.481
60	7.165	7.380	6.965	126	15.042	15.262	14.842	191	22.800	23.022	22.599
61	7.285	7.500	7.082	127	15.161	15.381	14.960	192	22.919	23.141	22.719
62	7.404	7.619	7.204	128	15.281	15.501	15.081	193	23.039	23.261	22.838
63	7.523	7.739	7.321	129	15.400	15.620	15.199	194	23.158	23.380	22.958
64	7.643	7.859	7.443	130	15.519	15.740	15.319	195	23.277	23.499	23.177
65	7.762	7.978	7.560	131	15.639	15.859	15.437	196	23.397	23.619	23.197
66	7.881	8.097	7.681	132	15.758	15.978	15.558	197	23.516	23.738	23.315
67	8.001	8.217	7.798	133	15.877	16.098	15.676	198	23.636	23.858	23.436
68	8.120	8.336	7.920	134	15.996	16.217	15.796	199	23.755	23.977	23.554
69	8.239	8.456	8.037	135	16.116	16.337	15.915	200	23.874	24.096	23.674
70	8.358	8.575	8.158								

Roller Chain Sprocket Diameters

No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter
5	0.851	0.988	0.497	71	11.304	11.592	10.988	136	21.647	21.941	21.334
6	1.000	1.166	0.688	72	11.463	11.752	11.151	137	21.806	22.100	21.492
7	1.152	1.338	0.812	73	11.622	11.911	11.306	138	21.965	22.259	21.653
8	1.307	1.507	0.995	74	11.781	12.070	11.468	139	22.124	22.419	21.810
9	1.462	1.674	1.127	75	11.940	12.229	11.625	140	22.284	22.578	21.971
10	1.618	1.839	1.305	76	12.099	12.389	11.786	141	22.442	22.737	22.129
11	1.775	2.003	1.444	77	12.258	12.548	11.943	142	22.602	22.896	22.289
12	1.932	2.166	1.614	78	12.417	12.707	12.105	143	22.761	23.055	22.447
13	2.089	2.328	1.761	79	12.576	12.866	12.261	144	22.920	23.214	22.607
14	2.247	2.490	1.934	80	12.736	13.026	12.423	145	23.079	23.374	22.765
15	2.405	2.652	2.079	81	12.895	13.185	12.580	146	23.238	23.533	22.926
16	2.563	2.814	2.250	82	13.054	13.344	12.742	147	23.398	23.692	23.088
17	2.721	2.974	2.397	83	13.213	13.503	12.898	148	23.557	23.851	23.244
18	2.879	3.136	2.567	84	13.372	13.663	13.059	149	23.716	24.010	23.402
19	3.038	3.292	2.715	85	13.531	13.822	13.216	150	23.875	24.170	23.562
20	3.196	3.457	2.883	86	13.690	13.981	13.373	151	24.034	24.329	23.720
21	3.355	3.618	3.033	87	13.849	14.140	13.534	152	24.193	24.488	23.880
22	3.513	3.778	3.201	88	14.009	14.299	13.696	153	24.352	24.647	24.038
23	3.672	3.938	3.351	89	14.168	14.459	13.853	154	24.512	24.806	24.199
24	3.831	4.098	3.518	90	14.327	14.618	14.014	155	24.672	24.965	24.357
25	3.989	4.258	3.669	91	14.486	14.777	14.171	156	24.830	25.124	24.517
26	4.148	4.418	3.835	92	14.645	14.936	14.332	157	24.989	25.284	24.675
27	4.307	4.578	3.987	93	14.804	15.096	14.489	158	24.148	25.443	24.835
28	4.465	4.738	4.153	94	14.963	15.255	14.651	159	25.307	25.602	24.993
29	4.625	4.898	4.305	95	15.122	15.414	14.808	160	25.466	25.761	25.154
30	4.783	5.057	4.471	96	15.282	15.573	14.969	161	25.625	25.920	25.312
31	4.942	5.217	4.623	97	15.441	15.732	15.126	162	25.785	26.080	25.472
32	5.101	5.376	4.788	98	15.600	15.892	15.287	163	25.944	26.239	25.630
33	5.260	5.536	4.941	99	15.759	16.051	15.445	164	26.103	26.398	25.790
34	5.419	5.696	5.107	100	15.918	16.210	15.605	165	26.262	26.557	25.948
35	5.578	5.856	5.260	101	16.077	16.369	15.763	166	26.421	26.716	26.109
36	5.737	6.015	5.425	102	16.236	16.528	15.924	167	26.581	26.876	26.266
37	5.896	6.174	5.578	103	16.395	16.688	16.081	168	25.739	27.035	26.427
38	6.055	6.334	5.742	104	16.555	16.847	16.242	169	26.899	27.194	26.585
39	6.214	6.494	5.896	105	16.714	17.006	16.399	170	27.058	27.353	26.745
40	6.373	6.653	6.061	106	16.873	17.165	16.561	171	27.217	27.512	26.903
41	6.532	6.812	6.214	107	17.032	17.324	16.717	172	27.376	27.671	27.063
42	6.691	6.972	6.379	108	17.191	17.484	16.878	173	27.535	27.831	27.221
43	6.850	7.132	6.532	109	17.351	17.643	17.036	174	27.694	27.990	27.382
44	7.009	7.291	6.696	110	17.509	17.802	17.197	175	27.854	28.149	27.540
45	7.168	7.450	6.851	111	17.668	17.962	17.304	176	28.013	28.308	27.700
46	7.327	7.609	7.014	112	17.827	18.121	17.515	177	28.172	28.467	27.858
47	7.486	7.769	7.169	113	17.987	18.280	17.672	178	28.331	28.626	28.018
48	7.645	7.928	7.332	114	18.146	18.439	17.834	179	28.490	28.786	28.176
49	7.804	8.088	7.487	115	18.305	18.598	17.991	180	28.649	28.945	28.337
50	7.963	8.248	7.650	116	18.464	18.757	18.151	181	28.808	29.104	28.495
51	8.122	8.406	7.805	117	18.623	18.916	18.309	182	28.968	28.263	28.655
52	8.281	8.566	7.968	118	18.782	19.076	18.470	183	29.127	29.422	28.813
53	8.440	8.725	8.124	119	18.941	19.235	18.627	184	29.286	29.581	28.973
54	8.599	8.884	8.286	120	19.101	19.394	18.788	185	29.445	29.741	29.131
55	8.758	9.044	8.442	121	19.260	19.553	18.946	186	29.604	29.900	29.291
56	8.917	9.204	8.605	122	19.419	19.712	19.106	187	29.763	30.059	29.450
57	9.077	9.362	8.760	123	19.578	19.872	19.264	188	29.922	30.218	29.610
58	9.235	9.522	8.924	124	19.737	20.031	19.425	189	30.082	30.387	29.768
59	9.395	9.628	9.078	125	19.896	20.190	19.582	190	30.241	30.536	29.928
60	9.554	9.840	9.241	126	20.056	20.349	19.743	191	30.400	30.696	30.086
61	9.713	10.000	9.397	127	20.215	20.508	19.900	192	30.559	30.855	30.246
62	9.872	10.159	9.559	128	20.374	20.667	20.061	193	30.718	31.014	30.404
63	10.031	10.319	9.715	129	20.533	20.827	20.219	194	30.877	31.173	30.565
64	10.190	10.478	9.872	130	20.692	20.986	20.379	195	31.037	31.332	30.723
65	10.349	10.673	10.033	131	20.851	21.145	20.537	196	31.196	31.491	30.878
66	10.508	10.796	10.195	132	21.010	21.304	20.698	197	31.355	31.651	31.042
67	10.667	10.955	10.352	133	21.169	21.463	20.855	198	31.514	31.810	31.202
68	10.826	11.115	10.514	134	21.329	21.623	21.016	199	31.673	31.969	31.359
69	10.985	11.274	10.670	135	21.488	21.782	21.174	200	31.832	32.128	31.520
70	11.145	11.433	10.832								

No. 50
5/8" Pitch

Sprocket Diameter

Martin

Roller Chain Sprocket Diameters

No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter
5	1.063	1.235	0.611	71	14.129	14.491	13.726	136	27.059	27.426	26.659
6	1.250	1.458	0.850	72	14.329	14.690	13.929	137	27.258	27.626	26.856
7	1.441	1.673	1.104	73	14.528	14.889	14.124	138	27.457	27.824	27.057
8	1.633	1.884	1.233	74	14.726	15.088	14.326	139	27.656	28.024	27.254
9	1.828	2.093	1.400	75	14.925	15.287	14.522	140	27.854	28.223	27.454
10	2.023	2.299	1.623	76	15.124	15.486	14.724	141	28.053	28.421	27.652
11	2.219	2.504	1.796	77	15.323	15.685	14.920	142	28.253	28.621	27.853
12	2.415	2.708	2.015	78	15.522	15.884	15.122	143	28.451	28.819	28.050
13	2.612	2.911	2.193	79	15.721	16.083	15.318	144	28.650	29.018	28.250
14	2.809	3.113	2.409	80	15.919	16.283	15.519	145	28.849	28.218	28.447
15	3.006	3.315	2.590	81	16.119	16.481	15.715	146	29.048	29.416	28.608
16	3.204	3.517	2.804	82	16.318	16.681	15.918	147	29.247	29.615	28.845
17	3.401	3.718	2.987	83	16.516	16.879	16.113	148	29.446	29.814	29.046
18	3.599	3.919	3.159	84	16.715	17.079	16.315	149	29.645	30.013	29.243
19	3.798	4.121	3.384	85	16.914	17.278	16.511	150	29.844	30.213	29.444
20	3.995	4.321	3.595	86	17.113	17.476	16.713	151	30.043	30.411	29.641
21	4.194	4.522	3.782	87	17.312	17.676	16.909	152	30.241	30.610	29.841
22	4.392	4.722	3.992	88	17.511	17.874	17.111	153	30.441	30.809	30.039
23	4.590	4.923	4.179	89	17.709	18.074	17.307	154	30.639	31.008	30.239
24	4.788	5.123	4.388	90	17.909	18.273	17.509	155	30.838	31.207	30.437
25	4.987	5.323	4.577	91	18.108	18.472	17.705	156	31.038	31.406	30.638
26	5.185	5.523	4.785	92	18.306	18.671	17.906	157	31.236	31.605	30.835
27	5.384	5.723	4.975	93	18.505	18.870	18.103	158	31.435	31.804	31.035
28	5.582	5.922	5.182	94	18.704	19.069	18.304	159	31.634	32.003	31.233
29	5.781	6.122	5.371	95	18.903	19.268	18.501	160	31.833	32.202	31.433
30	5.979	6.321	5.579	96	19.102	19.467	18.702	161	32.032	32.401	31.630
31	6.178	6.521	5.770	97	19.301	19.666	18.898	162	32.231	32.600	31.831
32	6.376	6.721	5.976	98	19.500	19.865	19.100	163	32.430	32.799	32.082
33	6.575	6.921	6.168	99	19.699	20.064	19.296	164	32.629	32.998	32.229
34	6.774	7.120	6.374	100	19.898	20.263	19.498	165	32.828	33.197	32.426
35	6.973	7.319	6.565	101	20.096	20.462	19.694	166	33.027	33.396	32.627
36	7.171	7.519	6.771	102	20.296	20.661	19.896	167	33.226	33.595	32.824
37	7.370	7.718	6.963	103	20.494	20.860	20.092	168	33.424	33.794	33.024
38	7.569	7.918	7.169	104	20.693	21.059	20.293	169	33.624	33.993	33.222
39	7.768	8.117	7.361	105	20.893	21.258	20.490	170	33.823	34.192	33.423
40	7.966	8.316	7.566	106	21.091	21.457	20.691	171	34.021	34.391	33.620
41	8.165	8.516	7.759	107	21.290	21.656	20.888	172	34.220	34.589	33.820
42	8.364	8.715	7.964	108	21.489	21.855	21.089	173	34.419	34.789	34.018
43	8.563	8.914	8.157	109	21.688	22.054	21.286	174	36.618	34.988	34.218
44	8.761	9.114	8.361	110	21.887	22.253	21.487	175	34.817	35.186	34.416
45	8.960	9.313	8.554	111	22.086	22.452	21.684	176	35.016	35.386	34.616
46	9.159	9.512	8.759	112	22.284	22.651	21.884	177	35.215	35.584	34.814
47	9.358	9.711	8.952	113	22.484	22.850	22.081	178	35.414	35.783	35.014
48	9.556	9.911	9.156	114	22.683	23.049	22.283	179	35.613	35.983	35.211
49	9.755	10.110	9.350	115	22.881	23.248	22.479	180	35.812	36.181	35.412
50	9.954	10.309	9.554	116	23.080	23.447	22.680	181	36.011	36.380	35.609
51	10.153	10.508	9.748	117	23.279	23.646	22.827	182	36.209	36.579	35.809
52	10.351	10.708	9.951	118	23.478	23.845	23.078	183	36.409	36.778	36.007
53	10.550	10.907	10.146	119	23.677	24.004	23.275	184	36.608	36.977	36.208
54	10.749	11.106	10.349	120	23.876	24.243	23.476	185	36.806	37.176	36.405
55	10.948	11.305	10.543	121	24.075	24.442	23.673	186	37.005	37.375	36.605
56	11.147	11.504	10.747	122	24.274	24.641	23.874	187	37.204	37.574	36.803
57	11.346	11.703	10.941	123	24.473	24.840	24.071	188	37.403	37.773	37.003
58	11.544	11.903	11.144	124	24.672	25.039	24.272	189	37.602	39.972	37.201
59	11.743	12.102	11.339	125	24.871	25.238	24.469	190	37.801	38.171	37.401
60	11.942	12.301	11.542	126	25.069	25.437	24.669	191	38.000	38.370	37.599
61	12.141	12.500	11.737	127	25.269	25.636	24.867	192	38.199	38.569	37.799
62	12.340	12.699	11.940	128	25.468	25.834	25.068	193	38.398	38.768	37.998
63	12.539	12.898	12.135	129	25.666	26.034	25.264	194	38.597	38.967	38.197
64	12.738	13.098	12.338	130	25.865	26.233	25.465	195	38.796	39.166	38.394
65	12.936	13.296	12.533	131	26.064	26.432	25.662	196	38.994	39.364	38.594
66	13.135	13.496	12.735	132	26.263	26.631	25.863	197	39.194	39.564	38.792
67	13.334	13.694	12.930	133	26.462	26.829	26.060	198	39.393	39.763	38.993
68	13.533	13.894	13.133	134	26.661	27.029	26.261	199	39.591	39.961	39.190
69	13.732	14.093	13.328	135	26.860	27.228	26.458	200	39.791	40.161	39.391
70	13.931	14.292	13.531								

Martin

Sprocket Diameter

No. 60 ¾" Pitch

Roller Chain Sprocket Diameters

No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter
5	1.276	1.482	0.745	71	16.955	17.389	16.482	136	32.471	32.912	32.002
6	1.500	1.749	1.031	72	17.195	17.628	16.726	137	32.709	33.151	32.238
7	1.729	2.007	1.216	73	17.433	17.867	16.960	138	32.948	33.389	32.479
8	1.960	2.261	1.491	74	17.672	18.106	17.203	139	33.187	33.629	32.716
9	2.193	2.511	1.691	75	17.910	18.344	17.437	140	33.425	33.867	32.956
10	2.427	2.759	1.958	76	18.149	18.584	17.680	141	33.664	34.106	33.193
11	2.663	3.005	2.166	77	18.388	18.822	17.915	142	33.903	34.345	33.434
12	2.898	3.249	2.429	78	18.626	19.061	18.157	143	34.142	34.583	33.670
13	3.134	3.493	2.642	79	18.865	19.300	18.392	144	34.380	34.822	33.911
14	3.371	3.736	2.902	80	19.103	19.539	18.634	145	34.619	35.061	34.148
15	3.608	3.978	3.119	81	19.343	19.778	18.870	146	34.858	35.300	34.389
16	3.845	4.220	3.380	82	19.581	20.017	19.112	147	35.096	35.538	34.625
17	4.082	4.462	3.595	83	19.820	20.255	19.347	148	35.335	35.777	34.866
18	4.319	4.703	3.850	84	20.058	20.495	19.589	149	35.574	36.016	35.103
19	4.557	4.945	4.072	85	20.297	20.733	19.824	150	35.813	36.255	35.344
20	4.794	5.186	4.325	86	20.536	20.972	20.067	151	36.051	36.494	35.580
21	5.033	5.426	4.549	87	20.774	21.211	20.302	152	36.390	36.732	35.821
22	5.270	5.666	4.801	88	21.013	21.449	20.544	153	36.529	36.971	36.058
23	5.508	5.907	5.026	89	21.251	21.689	20.779	154	36.767	37.210	36.298
24	5.746	6.147	5.277	90	21.491	21.927	21.022	155	37.006	37.448	36.535
25	5.984	6.387	5.503	91	21.729	22.166	21.257	156	37.245	37.688	36.776
26	6.222	6.627	5.753	92	21.968	22.405	21.499	157	37.484	37.926	37.013
27	6.461	6.867	5.980	93	22.206	22.644	21.734	158	37.722	38.165	37.253
28	6.698	7.106	6.229	94	22.445	22.883	21.976	159	37.961	38.404	37.490
29	6.937	7.346	6.458	95	22.684	23.121	22.212	160	38.200	38.642	37.731
30	7.175	7.586	6.706	96	22.922	23.360	22.453	161	38.438	38.881	37.968
31	7.413	7.826	6.935	97	23.162	23.599	22.689	162	38.677	39.120	38.208
32	7.652	8.065	7.183	98	23.400	23.838	22.931	163	38.916	39.359	38.445
33	7.890	8.305	7.412	99	23.639	24.077	23.167	164	39.155	39.597	38.686
34	8.129	8.544	7.660	100	23.877	24.316	23.408	165	39.393	39.836	38.922
35	8.367	8.783	7.889	101	24.116	24.554	23.644	166	39.632	40.075	39.163
36	8.606	9.023	8.137	102	24.355	24.793	23.886	167	39.871	40.314	39.400
37	8.844	9.262	8.367	103	24.593	25.032	24.121	168	40.109	40.553	39.640
38	9.083	9.501	8.614	104	24.832	25.271	24.363	169	40.349	40.791	39.877
39	9.321	9.740	8.844	105	25.071	25.510	24.599	170	40.587	41.030	40.118
40	9.560	9.980	9.091	106	25.310	25.748	24.841	171	40.826	41.269	40.355
41	9.798	10.219	9.321	107	25.548	25.987	25.076	172	41.064	41.507	40.595
42	10.037	10.458	9.568	108	25.787	26.226	25.318	173	41.303	41.747	40.832
43	10.275	10.697	9.799	109	26.026	26.465	25.554	174	41.542	41.985	41.073
44	10.514	10.937	10.045	110	26.264	26.704	25.795	175	41.780	42.224	41.310
45	10.752	11.176	10.276	111	26.503	26.942	26.031	176	42.020	42.463	41.551
46	10.991	11.414	10.522	112	26.741	27.181	26.272	177	42.258	42.701	41.787
47	11.229	11.654	10.754	113	26.981	27.420	26.507	178	42.497	42.940	42.028
48	11.468	11.893	10.999	114	27.219	27.659	26.750	179	42.735	43.179	42.265
49	11.706	12.132	11.231	115	27.458	27.898	26.986	180	42.974	43.418	42.505
50	11.945	12.371	11.476	116	27.696	28.136	27.227	181	43.213	43.656	42.742
51	12.183	12.610	11.708	117	27.935	28.375	27.464	182	43.451	43.895	42.982
52	12.422	12.849	11.953	118	28.174	28.614	27.705	183	43.691	44.134	43.220
53	12.660	13.088	12.186	119	28.412	28.853	27.941	184	43.929	44.372	43.460
54	12.899	13.327	12.430	120	28.652	29.091	28.183	185	44.168	44.612	43.697
55	13.137	13.566	12.663	121	28.890	29.330	28.418	186	44.406	44.850	43.937
56	13.376	13.805	12.907	122	29.129	29.569	28.660	187	44.645	45.089	44.174
57	13.615	14.044	13.140	123	29.367	29.808	28.896	188	44.884	45.328	44.415
58	13.853	14.283	13.384	124	29.606	30.047	29.137	189	45.122	45.566	44.652
59	14.092	14.522	13.618	125	29.845	30.285	29.373	190	45.362	45.805	44.893
60	14.330	14.761	13.861	126	30.083	30.524	29.614	191	45.600	46.044	45.129
61	14.570	15.000	14.095	127	30.323	30.763	29.851	192	45.839	46.283	45.370
62	14.808	15.239	14.339	128	30.561	31.001	30.092	193	46.077	46.521	45.607
63	15.047	15.478	14.573	129	30.800	31.241	30.328	194	46.316	46.760	45.847
64	15.285	15.717	14.816	130	31.038	31.479	30.569	195	46.555	46.999	46.084
65	15.524	15.956	15.050	131	31.277	31.718	30.806	196	46.793	47.237	46.324
66	15.762	16.195	15.293	132	31.516	31.957	31.047	197	47.033	47.477	46.562
67	16.001	16.433	15.528	133	31.754	32.195	31.283	198	47.271	47.715	46.802
68	16.240	16.673	15.771	134	31.993	32.435	31.524	199	47.510	47.954	47.039
69	16.478	16.911	16.005	135	32.232	32.673	31.761	200	47.749	48.193	47.280
70	16.717	17.150	16.248								

No. 80
1" Pitch

Sprocket Diameter

Roller Chain Sprocket Diameters

No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter
5	1.701	1.976	0.993	71	22.607	23.185	21.977	136	43.294	43.882	42.669
6	2.000	2.332	1.375	72	22.926	23.504	22.301	137	43.612	44.201	42.984
7	2.305	2.676	1.622	73	23.244	23.822	22.613	138	43.931	44.519	43.306
8	2.613	3.014	1.988	74	23.562	24.141	22.937	139	44.249	44.838	43.621
9	2.924	3.348	2.254	75	23.880	24.459	23.250	140	44.567	45.156	43.942
10	3.236	3.678	2.611	76	24.198	24.778	23.573	141	44.885	45.474	44.258
11	3.550	4.006	2.888	77	24.517	25.096	23.887	142	45.204	45.793	44.579
12	3.864	4.332	3.239	78	24.835	25.415	24.210	143	45.522	46.111	44.894
13	4.179	4.657	3.523	79	25.153	25.733	24.523	144	45.840	46.429	45.215
14	4.494	4.981	3.869	80	25.471	26.052	24.846	145	46.158	46.748	45.531
15	4.810	5.304	4.158	81	25.790	26.370	25.160	146	46.477	47.066	45.852
16	5.126	5.627	4.501	82	26.108	26.689	25.483	147	46.795	47.384	46.167
17	5.442	5.949	4.794	83	26.426	27.007	25.796	148	47.113	47.703	46.488
18	5.759	6.271	5.134	84	26.744	27.326	26.119	149	47.432	48.021	46.804
19	6.076	6.593	5.430	85	27.062	27.644	26.433	150	47.750	48.340	47.125
20	6.392	6.914	5.767	86	27.381	27.962	26.756	151	48.068	48.658	47.441
21	6.710	7.235	6.066	87	27.699	28.281	27.069	152	48.386	48.976	47.761
22	7.027	7.555	6.402	88	28.017	28.599	27.392	153	48.705	49.295	48.077
23	7.344	7.876	6.702	89	28.335	28.918	27.706	154	49.023	49.613	48.398
24	7.661	8.196	7.036	90	28.654	29.236	28.029	155	49.341	49.931	48.714
25	7.979	8.516	7.338	91	28.972	29.555	28.343	156	49.660	50.250	49.035
26	8.296	8.836	7.671	92	29.290	29.873	28.665	157	49.978	50.568	49.351
27	8.614	9.156	7.974	93	29.608	30.192	28.979	158	50.296	50.886	49.671
28	8.931	9.475	8.306	94	29.927	30.510	29.302	159	50.615	51.205	49.987
29	9.249	9.795	8.611	95	30.245	30.828	29.616	160	50.933	51.523	50.308
30	9.567	10.114	8.942	96	30.563	31.147	29.938	161	51.251	51.841	50.624
31	9.884	10.434	9.247	97	30.822	31.465	30.252	162	51.569	52.160	50.944
32	10.202	10.753	9.577	98	31.200	31.784	30.575	163	51.888	52.478	51.260
33	10.520	11.073	9.883	99	31.518	32.102	30.889	164	52.206	52.796	51.581
34	10.838	11.392	10.213	100	31.836	32.421	31.211	165	52.524	53.115	51.897
35	11.156	11.711	10.520	101	32.154	32.739	31.526	166	52.843	53.433	52.218
36	11.471	12.030	10.849	102	32.473	33.057	31.848	167	53.161	53.752	52.533
37	11.792	12.349	11.156	103	32.791	33.376	32.162	168	53.479	54.070	52.854
38	12.110	12.668	11.485	104	33.109	33.694	32.484	169	53.798	54.388	53.170
39	12.428	12.987	11.792	105	33.428	34.013	32.799	170	54.116	54.707	53.491
40	12.746	13.306	12.121	106	33.746	34.331	33.121	171	54.434	55.025	53.807
41	13.064	13.625	12.429	107	34.064	34.649	33.435	172	54.752	55.343	54.127
42	13.382	13.944	12.757	108	34.382	34.968	33.757	173	55.071	55.662	54.443
43	13.700	14.263	13.065	109	34.701	35.286	34.072	174	55.389	55.980	54.764
44	14.018	14.582	13.393	110	35.019	35.605	34.394	175	55.707	56.298	55.080
45	14.336	14.901	13.702	111	35.337	35.923	34.709	176	56.026	56.617	55.401
46	14.654	15.219	14.029	112	35.655	36.241	35.030	177	56.344	56.935	55.717
47	14.972	15.538	14.338	113	35.974	36.560	35.345	178	56.662	57.253	56.037
48	15.290	15.857	14.665	114	36.292	36.878	35.667	179	56.980	57.572	56.353
49	15.608	16.176	14.975	115	36.610	37.197	35.982	180	57.299	57.890	56.674
50	15.926	16.495	15.301	116	36.928	37.515	36.303	181	57.617	58.208	56.990
51	16.244	16.813	15.611	117	37.274	37.833	36.618	182	57.935	58.527	57.310
52	16.562	17.132	15.937	118	37.565	38.152	36.940	183	58.254	58.845	57.626
53	16.880	17.451	16.248	119	37.883	38.470	37.255	184	58.572	59.163	57.947
54	17.198	17.769	16.573	120	38.202	38.788	37.577	185	58.890	59.482	58.263
55	17.516	18.088	16.884	121	38.520	39.107	37.892	186	59.208	59.800	58.583
56	17.835	18.407	17.210	122	38.838	39.425	38.213	187	59.527	60.118	58.900
57	18.153	18.725	17.521	123	39.156	39.744	38.528	188	59.845	60.437	59.220
58	18.471	19.044	17.846	124	39.457	40.062	38.850	189	60.163	60.755	59.536
59	18.789	19.363	18.157	125	39.793	40.380	39.165	190	60.482	61.073	59.857
60	19.107	19.681	18.482	126	40.111	40.699	39.486	191	60.800	61.392	60.173
61	19.426	20.000	18.794	127	40.430	41.017	39.801	192	61.118	61.710	60.493
62	19.744	20.318	19.119	128	40.748	41.335	40.123	193	61.436	62.028	60.809
63	20.062	20.637	19.431	129	41.066	41.654	40.438	194	61.755	62.347	61.130
64	20.380	20.956	19.755	130	41.384	41.972	40.759	195	62.073	62.665	61.447
65	20.698	21.274	20.067	131	41.703	42.291	41.075	196	62.391	62.983	61.756
66	21.016	21.593	20.391	132	42.021	42.609	41.396	197	62.710	63.302	62.083
67	21.335	21.911	20.704	133	42.339	42.927	41.711	198	63.028	63.620	62.403
68	21.653	22.230	21.028	134	42.657	43.246	42.032	199	63.346	63.938	62.719
69	21.971	22.548	21.340	135	42.976	43.564	42.348	200	63.665	64.257	63.040
70	22.289	22.867	21.664								

Martin

Sprocket Diameter

No. 100 1¼" Pitch

Roller Chain Sprocket Diameters

No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter
5	2.126	2.470	1.273	71	28.259	28.981	27.502	136	54.118	54.853	53.368
6	2.500	2.915	1.750	72	28.658	29.380	27.908	137	54.515	55.251	53.762
7	2.881	3.345	2.059	73	29.055	29.778	28.298	138	54.914	55.649	54.164
8	3.266	3.768	2.516	74	29.453	30.176	28.703	139	55.311	56.048	54.558
9	3.655	4.185	2.849	75	29.850	30.574	29.094	140	55.709	56.445	54.959
10	4.045	4.598	3.295	76	30.248	30.973	29.498	141	56.106	56.843	55.353
11	4.438	5.008	3.639	77	30.646	31.370	29.890	142	56.505	57.241	55.755
12	4.830	5.415	4.080	78	31.044	31.769	30.294	143	56.903	57.639	56.149
13	5.224	5.821	4.435	79	31.441	32.166	30.685	144	57.300	58.036	56.550
14	5.618	6.226	4.868	80	31.839	32.565	31.089	145	57.698	58.435	56.945
15	6.013	6.630	5.229	81	32.238	32.963	31.481	146	58.096	58.833	57.346
16	6.408	7.034	5.658	82	32.635	33.361	31.885	147	58.494	59.230	57.741
17	6.803	7.436	6.024	83	33.033	33.759	32.277	148	58.891	59.629	58.141
18	7.199	7.839	6.449	84	33.430	34.158	32.680	149	59.290	60.026	58.536
19	7.595	8.241	6.819	85	33.828	34.555	33.072	150	59.688	60.425	58.938
20	7.990	8.643	7.240	86	34.226	34.953	33.476	151	60.085	60.823	59.332
21	8.388	9.044	7.613	87	34.624	35.351	33.868	152	60.483	61.220	59.733
22	8.784	9.444	8.034	88	35.022	35.749	34.272	153	60.881	61.619	60.128
23	9.180	9.845	8.409	89	35.419	36.148	34.664	154	61.279	62.016	60.529
24	9.576	10.245	8.827	90	35.818	36.545	35.068	155	61.676	62.414	60.924
25	9.974	10.645	9.204	91	36.215	36.944	35.460	156	62.075	62.813	61.325
26	10.370	11.045	9.620	92	36.613	37.341	35.863	157	62.473	63.210	61.719
27	10.768	11.445	9.999	93	37.010	37.740	36.255	158	62.870	63.608	62.120
28	11.164	11.844	10.414	94	37.409	38.138	36.659	159	63.269	64.006	62.515
29	11.561	12.244	10.794	95	37.806	38.535	37.051	160	63.666	64.404	62.916
30	11.959	12.643	11.209	96	38.204	38.934	37.454	161	64.064	64.801	63.311
31	12.355	13.043	11.590	97	38.603	39.331	37.847	162	64.461	65.200	63.711
32	12.753	13.441	12.003	98	39.000	39.730	38.250	163	64.860	65.598	64.107
33	13.150	13.841	12.385	99	39.398	40.128	38.643	164	65.258	65.995	64.508
34	13.548	14.240	12.798	100	39.795	40.526	39.045	165	65.655	66.394	64.902
35	13.945	14.639	13.181	101	40.193	40.924	39.438	166	66.054	66.791	65.304
36	14.343	15.038	13.593	102	40.591	41.321	39.841	167	66.451	67.190	65.698
37	14.740	15.436	13.976	103	40.989	41.720	40.234	168	66.849	67.588	66.099
38	15.138	15.835	14.388	104	41.386	42.118	40.636	169	67.248	67.985	66.494
39	15.535	16.234	14.772	105	41.785	42.516	41.030	170	67.645	68.384	66.895
40	15.933	16.633	15.183	106	42.183	42.914	41.433	171	68.043	68.781	67.290
41	16.330	17.031	15.567	107	42.580	43.311	41.826	172	68.440	69.179	67.690
42	16.728	17.430	15.978	108	42.978	43.710	42.228	173	68.839	69.578	68.086
43	17.125	17.829	16.363	109	43.376	44.108	42.621	174	69.236	69.975	68.486
44	17.523	18.228	16.773	110	43.774	44.506	43.024	175	69.634	70.373	68.881
45	17.920	18.626	17.159	111	44.171	44.904	43.420	176	70.033	70.771	69.283
46	18.318	19.024	17.568	112	44.569	45.301	43.819	177	70.430	71.169	69.677
47	18.715	19.423	17.954	113	44.968	45.700	44.213	178	70.828	71.566	70.078
48	19.113	19.821	18.363	114	45.365	46.098	44.615	179	71.225	71.965	70.473
49	19.510	20.220	18.750	115	45.763	46.496	45.009	180	71.624	72.363	70.874
50	19.908	20.619	19.158	116	46.160	46.894	45.410	181	72.021	72.760	71.269
51	20.305	21.016	19.546	117	46.559	47.291	45.804	182	72.419	73.159	71.669
52	20.703	21.415	19.953	118	46.956	47.690	46.206	183	72.818	73.556	72.064
53	21.100	21.814	20.341	119	47.354	48.088	46.600	184	73.215	73.954	72.465
54	21.498	22.211	20.748	120	47.753	48.485	47.003	185	73.613	74.353	72.860
55	21.895	22.610	21.137	121	48.150	48.884	47.396	186	74.010	74.750	73.260
56	22.294	23.009	21.544	122	48.548	49.281	47.798	187	74.409	75.148	73.656
57	22.691	23.406	21.932	123	48.945	49.680	48.192	188	74.806	75.546	74.056
58	23.089	23.805	22.339	124	49.344	50.078	48.594	189	75.204	75.944	74.452
59	23.486	24.204	22.728	125	49.741	50.475	48.987	190	75.603	76.341	74.853
60	23.884	24.601	23.134	126	50.139	50.874	49.389	191	76.000	76.740	75.247
61	24.283	25.000	23.524	127	50.538	51.271	49.783	192	76.398	771.38	75.648
62	24.680	25.398	23.930	128	50.935	51.669	50.185	193	76.795	77.535	76.043
63	25.078	25.796	24.320	129	51.333	52.068	50.579	194	77.194	77.934	76.444
64	25.475	26.195	24.725	130	51.730	52.465	50.980	195	77.591	78.331	76.839
65	25.873	26.593	25.115	131	52.129	52.864	51.375	196	77.989	78.729	77.239
66	26.270	26.991	25.520	132	52.526	53.261	51.776	197	78.388	79.128	77.635
67	26.669	27.389	25.911	133	52.924	53.659	52.170	198	78.785	79.525	78.035
68	27.066	27.788	26.316	134	53.321	54.058	52.571	199	79.183	79.923	78.430
69	27.464	28.185	26.707	135	53.720	54.455	52.966	200	79.581	80.321	78.831
70	27.861	28.584	27.111								

No. 120
1½" Pitch

Sprocket Diameter

Roller Chain Sprocket Diameters

No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter
5	2.552	2.964	1.552	71	33.911	34.778	33.028	136	64.941	65.823	64.066
6	3.000	3.498	2.125	72	34.389	35.256	33.514	137	65.418	66.302	64.539
7	3.458	4.014	2.496	73	34.866	35.733	33.983	138	65.897	66.779	65.022
8	3.920	4.521	3.045	74	35.343	36.212	34.468	139	66.374	67.257	65.494
9	4.386	5.022	3.444	75	35.820	36.689	34.938	140	66.851	67.734	65.976
10	4.854	5.517	3.979	76	36.297	37.167	35.422	141	67.328	68.211	66.449
11	5.325	6.009	4.392	77	36.776	37.644	35.892	142	67.806	68.690	66.931
12	5.796	6.498	4.921	78	37.253	38.123	36.378	143	68.283	69.167	67.404
13	6.269	6.986	5.347	79	37.730	38.600	36.847	144	68.760	69.644	67.885
14	6.741	7.472	5.866	80	38.207	39.078	37.332	145	69.237	70.122	68.359
15	7.215	7.956	6.300	81	38.685	39.555	37.802	146	69.716	70.599	68.841
16	7.689	8.441	6.814	82	39.162	40.034	38.287	147	70.193	71.076	69.314
17	8.163	8.924	7.254	83	39.639	40.511	38.757	148	70.670	71.555	69.795
18	8.639	9.407	7.764	84	40.116	40.989	39.241	149	71.148	72.032	70.269
19	9.114	9.890	8.207	85	40.593	41.466	39.712	150	71.625	72.510	70.750
20	9.588	10.371	8.713	86	41.072	41.943	40.197	151	72.102	72.987	71.224
21	10.065	10.853	9.161	87	41.549	42.422	40.667	152	72.579	73.464	71.704
22	10.541	11.333	9.666	88	42.026	42.899	41.151	153	73.058	73.943	72.178
23	11.016	11.814	10.115	89	42.503	43.377	41.622	154	73.535	74.420	72.660
24	11.492	12.294	10.617	90	42.981	43.854	42.106	155	74.012	74.897	73.133
25	11.969	12.774	11.070	91	43.458	44.333	42.576	156	74.490	75.375	73.615
26	12.444	13.254	11.569	92	43.935	44.810	43.060	157	74.967	75.852	74.088
27	12.921	13.734	12.024	93	44.412	45.288	43.531	158	75.444	76.329	74.569
28	13.397	14.213	12.522	94	44.891	45.765	44.016	159	75.923	76.808	75.043
29	13.874	14.693	12.978	95	45.368	46.242	44.48	160	76.400	77.285	75.525
30	14.351	15.171	13.476	96	45.845	46.721	44.970	161	76.877	77.762	75.998
31	14.826	15.651	13.933	97	46.323	47.198	45.441	162	77.354	78.240	76.479
32	15.303	16.130	14.428	98	46.800	47.676	45.925	163	77.832	78.717	76.953
33	15.780	16.610	14.887	99	47.277	48.153	46.396	164	78.309	79.194	77.434
34	16.257	17.088	15.382	100	47.754	48.632	46.879	165	78.786	79.673	77.908
35	16.734	17.567	15.842	101	48.231	49.109	47.351	166	79.265	80.150	78.390
36	17.211	18.045	16.336	102	48.710	49.586	47.835	167	79.742	80.628	78.863
37	17.688	18.524	16.797	103	49.187	50.064	48.306	168	80.219	81.105	79.344
38	18.165	19.002	17.290	104	49.664	50.541	48.789	169	80.697	81.582	79.818
39	18.642	19.481	17.751	105	50.142	51.020	49.261	170	81.174	82.061	80.299
40	19.119	19.959	18.244	106	50.619	51.497	49.744	171	81.651	82.538	80.773
41	19.596	20.438	18.706	107	51.096	51.974	50.216	172	82.128	83.015	81.253
42	20.073	20.916	19.198	108	51.573	52.452	50.698	173	82.607	83.493	81.728
43	20.550	21.395	19.661	109	52.052	52.929	51.171	174	83.084	83.970	82.209
44	21.027	21.873	20.152	110	52.529	53.408	51.654	175	83.561	84.447	82.683
45	21.504	22.352	20.615	111	53.006	53.885	52.125	176	84.039	84.926	83.164
46	21.981	22.829	21.106	112	53.483	54.362	52.608	177	84.501	85.403	83.637
47	22.458	23.307	21.570	113	53.961	54.840	53.080	178	84.993	85.880	84.118
48	22.935	23.786	22.060	114	54.438	55.317	53.563	179	85.470	86.358	84.592
49	23.412	24.264	22.525	115	54.915	55.796	54.035	180	85.949	86.835	85.074
50	23.889	24.743	23.014	116	55.392	56.273	54.517	181	86.426	87.312	85.547
51	24.366	25.220	23.480	117	55.871	56.750	54.990	182	86.903	87.791	86.028
52	24.843	25.698	23.968	118	56.348	57.228	55.473	183	87.381	88.268	86.502
53	25.320	26.177	24.434	119	56.825	57.705	55.945	184	87.858	88.745	86.983
54	25.797	26.654	24.922	120	57.303	58.182	56.428	185	88.335	89.223	87.457
55	26.274	27.132	25.389	121	57.780	58.661	56.900	186	88.812	89.700	87.937
56	26.753	27.611	25.878	122	58.257	59.138	57.382	187	89.291	90.177	88.412
57	27.230	28.088	26.344	123	58.734	59.616	57.855	188	89.768	90.656	88.893
58	27.707	28.566	26.832	124	59.213	60.093	58.338	189	90.245	91.133	89.367
59	28.184	29.045	27.299	125	59.690	60.570	58.810	190	90.723	91.610	89.848
60	28.661	29.522	27.786	126	60.167	61.049	59.292	191	91.200	92.088	90.322
61	29.139	30.000	28.254	127	60.645	61.526	59.765	192	91.677	92.565	90.802
62	29.616	30.477	28.741	128	61.122	62.003	60.247	193	92.154	93.042	91.277
63	30.093	30.956	29.208	129	61.599	62.481	60.720	194	92.633	93.521	91.758
64	30.570	31.434	29.695	130	62.076	62.958	61.201	195	93.110	93.998	92.232
65	31.047	31.911	30.163	131	62.555	63.437	61.674	196	93.587	94.475	92.712
66	31.524	32.390	30.649	132	63.032	63.914	62.157	197	94.065	94.953	93.187
67	32.003	32.867	31.118	133	63.509	64.391	62.629	198	94.542	95.430	93.667
68	32.480	33.345	31.605	134	63.986	64.869	63.111	199	95.019	95.907	94.141
69	32.957	33.822	32.073	135	64.464	65.346	63.584	200	95.498	96.386	94.623
70	33.434	34.301	32.559								

Martin

Sprocket Diameter

No. 140 1¾" Pitch

Roller Chain Sprocket Diameters

No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter
5	2.977	3.458	1.832	71	39.562	40.574	38.553	136	75.765	76.794	74.765
6	3.500	4.081	2.500	72	40.121	41.132	39.121	137	76.321	77.352	75.316
7	4.034	4.683	2.932	73	40.677	41.689	39.667	138	76.879	77.908	75.879
8	4.573	5.275	3.573	74	41.234	42.247	40.234	139	77.436	78.467	76.431
9	5.117	5.859	4.039	75	41.790	42.803	40.781	140	78.008	79.023	77.008
10	5.663	6.437	4.663	76	42.347	43.362	41.347	141	78.549	79.580	77.545
11	6.213	7.011	5.148	77	42.905	43.918	41.895	142	79.107	80.138	78.107
12	6.762	7.581	5.762	78	43.461	44.476	42.461	143	79.664	80.694	78.484
13	7.313	8.150	6.259	79	44.018	45.033	43.009	144	80.220	81.251	79.220
14	7.865	8.717	6.865	80	44.574	45.591	43.574	145	80.777	81.809	79.773
15	8.418	9.282	7.371	81	45.133	46.148	44.123	146	81.335	82.366	80.335
16	8.971	9.847	7.971	82	45.689	46.706	44.689	147	81.891	82.922	80.887
17	9.524	10.411	8.483	83	46.246	47.262	45.237	148	82.448	83.480	81.448
18	10.078	10.974	9.078	84	46.802	47.821	45.802	149	83.006	84.037	82.000
19	10.633	11.538	9.596	85	47.359	48.377	46.351	150	83.563	84.595	82.563
20	11.186	12.100	10.186	86	47.917	48.934	46.917	151	84.119	85.152	83.115
21	11.743	12.661	10.709	87	48.473	49.492	47.465	152	84.676	85.708	83.676
22	12.297	13.221	11.297	88	49.030	50.048	48.030	153	85.234	86.266	84.229
23	12.852	13.783	11.822	89	49.586	50.607	48.579	154	85.790	86.823	84.790
24	13.407	14.343	12.407	90	50.145	51.163	49.145	155	86.347	87.379	85.343
25	13.963	14.903	12.935	91	50.701	51.721	49.693	156	86.905	87.938	85.905
26	14.518	15.463	13.518	92	51.258	52.278	50.258	157	87.462	88.494	86.457
27	15.075	16.023	14.049	93	51.814	52.836	50.807	158	88.018	89.051	87.018
28	15.629	16.581	14.629	94	52.372	53.393	51.372	159	88.576	89.609	87.571
29	16.186	17.141	15.162	95	52.929	53.949	51.921	160	89.133	90.165	88.133
30	16.742	17.700	15.742	96	53.485	54.507	52.485	161	89.689	90.722	88.685
31	17.297	18.260	16.276	97	54.044	55.064	53.035	162	90.246	91.280	89.246
32	17.854	18.818	16.854	98	54.600	55.622	53.600	163	90.804	91.837	89.799
33	18.410	19.378	17.389	99	55.157	56.179	54.150	164	91.361	92.393	90.361
34	18.967	19.936	17.967	100	55.713	56.737	54.713	165	91.917	92.951	90.913
35	19.523	20.494	18.503	101	56.270	57.293	55.264	166	92.475	93.508	91.475
36	20.080	21.053	19.080	102	56.828	57.850	55.828	167	93.032	94.066	92.027
37	20.636	21.611	19.617	103	57.384	58.408	56.378	168	93.588	94.623	92.588
38	21.193	22.169	20.193	104	57.941	58.965	56.941	169	94.147	95.179	93.141
39	21.749	22.727	20.730	105	58.499	59.523	57.492	170	94.703	95.737	93.703
40	22.306	23.286	21.306	106	59.056	60.079	58.056	171	95.260	96.294	94.255
41	22.862	23.844	21.844	107	59.612	60.636	58.606	172	95.816	96.850	94.816
42	23.419	24.402	22.419	108	60.169	61.194	59.169	173	96.374	97.409	95.370
43	23.975	24.960	22.958	109	60.727	61.751	59.720	174	96.931	97.965	95.931
44	24.532	25.519	23.532	110	61.283	62.309	60.283	175	97.487	98.522	96.484
45	25.088	26.077	24.072	111	61.840	62.865	60.834	176	98.046	99.080	97.046
46	25.645	26.633	24.645	112	62.396	63.422	61.396	177	98.602	99.636	97.598
47	26.201	27.192	25.186	113	62.955	63.980	61.948	178	99.159	100.193	98.159
48	26.758	27.750	25.758	114	63.511	64.537	62.511	179	99.715	100.751	98.712
49	27.314	28.308	26.300	115	64.068	65.095	63.062	180	100.273	101.308	99.273
50	27.871	28.866	26.871	116	64.624	65.651	63.624	181	100.830	101.864	99.826
51	28.427	29.423	27.414	117	65.182	66.208	64.176	182	101.386	102.422	100.386
52	28.984	29.981	27.984	118	65.739	66.766	64.739	183	101.945	102.979	100.940
53	29.540	30.539	28.528	119	66.295	67.323	65.290	184	102.501	103.535	101.501
54	30.097	31.096	29.097	120	66.854	67.879	65.854	185	103.058	104.094	102.054
55	30.653	31.654	29.641	121	67.410	68.437	66.404	186	103.614	104.650	102.614
56	31.211	32.212	30.211	122	67.967	68.994	66.967	187	104.172	105.207	103.168
57	31.768	32.769	30.755	123	68.523	69.552	67.518	188	104.729	105.765	103.729
58	32.324	33.327	31.324	124	69.081	70.109	68.081	189	105.285	106.321	104.282
59	32.881	33.885	31.869	125	69.638	70.665	68.632	190	105.844	106.878	104.844
60	33.437	34.442	32.437	126	70.194	71.223	69.194	191	106.400	107.436	105.396
61	33.996	35.000	32.983	127	70.753	71.780	69.746	192	106.957	107.993	105.957
62	34.552	35.557	33.552	128	71.309	72.336	70.309	193	107.513	108.549	106.510
63	35.109	36.115	34.097	129	71.866	72.895	70.860	194	108.071	109.107	107.071
64	35.665	36.673	34.665	130	72.422	73.451	71.422	195	108.628	109.664	107.624
65	36.222	37.230	35.211	131	72.980	74.009	71.974	196	109.184	110.220	108.184
66	36.778	37.788	35.778	132	73.537	74.566	72.537	197	109.743	110.779	108.738
67	37.336	38.344	36.325	133	74.093	75.122	73.088	198	110.299	111.335	109.299
68	37.893	38.903	36.893	134	74.650	75.681	73.650	199	110.856	111.892	109.853
69	38.449	39.459	37.439	135	75.208	76.237	74.202	200	111.414	112.450	110.414
70	39.006	40.017	38.006								

No. 160
2" Pitch

Sprocket Diameter

Martin

Roller Chain Sprocket Diameters

No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter
5	3.402	3.952	2.111	71	45.214	46.370	44.079	136	86.588	87.764	85.463
6	4.000	4.664	2.875	72	45.852	47.008	44.727	137	87.224	88.402	86.094
7	4..610	5.352	3.369	73	46.488	47.644	45.352	138	87.862	89.038	86.737
8	5.226	6.028	4.101	74	47.124	48.282	45.999	139	88.498	89.676	87.367
9	5.848	6.696	4.635	75	47.760	48.918	46.625	140	89.134	90.312	88.009
10	6.472	7.356	5.347	76	48.396	49.556	47.271	141	89.770	90.948	88.640
11	7.100	8.012	5.902	77	49.034	50.192	47.898	142	90.408	91.586	89.283
12	7.728	8.664	6.603	78	49.670	50.830	48.545	143	91.044	92.222	89.913
13	8.358	9.314	7.171	79	50.306	51.466	49.171	144	91.680	92.858	90.555
14	8.988	9.962	7.863	80	50.942	52.104	49.817	145	92.316	93.496	91.187
15	9.620	10.608	8.442	81	51.580	52.740	50.444	146	92.945	94.132	91.829
16	10.252	11.254	9.127	82	52.216	53.378	51.091	147	93.590	94.768	92.460
17	10.844	11.898	9.713	83	52.852	54.014	51.718	148	94.226	95.406	93.101
18	11.518	12.542	10.393	84	53.488	54.652	52.363	149	94.864	96.042	93.733
19	12.152	13.186	10.985	85	54.124	55.288	52.991	150	95.500	96.680	94.375
20	12.784	13.828	11.659	86	54.762	55.924	53.637	151	96.136	97.316	95.006
21	13.420	14.470	12.256	87	55.398	56.562	54.264	152	96.772	97.952	95.647
22	14.054	15.110	12.929	88	56.034	57.198	54.909	153	97.410	98.590	96.280
23	14.688	15.752	13.529	89	56.670	57.836	55.537	154	98.046	99.226	96.921
24	15.322	16.392	14.197	90	57.308	58.472	56.183	155	98.682	99.862	97.553
25	15.958	17.032	14.801	91	57.944	59.110	56.810	156	99.320	100.500	98.195
26	16.592	17.672	15.467	92	58.580	59.746	57.455	157	99.956	101.136	98.826
27	17.228	18.312	16.073	93	59.216	60.384	58.083	158	100.592	101.772	99.467
28	17.862	18.950	16.737	94	59.854	61.020	58.729	159	101.230	102.410	100.099
29	18.498	19.590	17.346	95	60.490	61.656	59.357	160	101.866	103.046	100.741
30	19.134	20.228	18.009	96	61.126	62.294	60.001	161	102.502	103.682	101.372
31	19.768	20.868	18.619	97	61.764	62.930	60.630	162	103.138	104.320	102.013
32	20.404	21.506	19.279	98	62.400	63.568	61.275	163	103.776	104.956	102.646
33	21.040	22.146	19.891	99	63.036	64.204	61.903	164	104.412	105.592	103.287
34	21.676	22.784	20.551	100	63.672	64.842	62.547	165	105.048	106.230	103.919
35	22.312	23.422	21.164	101	64.308	65.478	63.176	166	105.686	106.866	104.561
36	22.948	24.060	21.823	102	64.946	66.114	63.821	167	106.322	107.504	105.192
37	23.584	24.698	22.437	103	65.582	66.752	64.449	168	106.958	108.140	105.833
38	24.220	25.336	23.095	104	66.218	67.388	65.093	169	107.596	108.776	106.465
39	24.856	25.974	23.710	105	66.856	68.026	65.723	170	108.232	109.414	107.107
40	25.492	26.612	24.367	106	67.492	68.662	66.367	171	108.868	110.050	107.738
41	26.128	27.250	24.983	107	68.128	69.298	66.996	172	109.504	110.686	108.379
42	26.764	27.888	25.639	108	68.764	69.936	67.639	173	110.142	111.324	109.012
43	27.400	28.526	26.256	109	69.402	70.572	68.269	174	110.778	111.960	109.653
44	28.036	29.164	26.911	110	70.038	70.210	68.913	175	111.414	112.596	110.285
45	28.672	29.802	27.529	111	70.674	71.846	69.542	176	112.052	113.234	110.927
46	29.308	30.438	28.183	112	71.310	72.482	70.185	177	112.688	113.870	111.558
47	29.944	31.076	28.802	113	71.948	73.120	70.815	178	113.324	114.506	112.199
48	30.580	31.714	29.455	114	72.584	73.756	71.459	179	113.960	115.144	112.831
49	31.216	32.352	30.075	115	73.220	74.394	72.089	180	114.598	115.780	113.473
50	31.852	32.990	30.727	116	73.856	75.030	72.731	181	115.234	116.416	114.105
51	32.488	33.626	31.348	117	74.494	75.666	73.362	182	115.870	117.054	114.745
52	33.124	34.264	31.999	118	75.130	76.304	74.005	183	116.508	117.690	115.388
53	33.760	34.902	32.621	119	75.766	76.940	74.645	184	117.114	118.326	116.019
54	34.396	35.538	33.271	120	76.404	77.576	75.279	185	117.780	118.964	116.651
55	35.032	36.176	33.894	121	77.040	78.214	75.908	186	118.416	119.600	117.291
56	35.670	36.814	34.545	122	77.676	78.850	76.551	187	119.054	120.236	117.924
57	36.306	37.450	35.167	123	78.312	79.488	77.181	188	119.690	120.874	118.565
58	36.942	38.088	35.817	124	78.950	80.124	77.825	189	120.326	121.150	119.197
59	37.578	38.726	36.440	125	79.586	80.760	78.455	190	120.964	122.146	119.839
60	38.214	39.362	37.089	126	80.222	81.398	79.097	191	121.600	122.784	120.471
61	38.852	40.000	37.713	127	80.860	82.034	79.728	192	122.236	123.420	121.111
62	39.488	40.636	38.363	128	81.496	82.670	80.371	193	122.872	124.056	121.744
63	40.124	41.274	38.986	129	82.132	83.308	81.001	194	123.510	124.694	122.385
64	40.760	41.912	39.635	130	82.768	83.944	81.643	195	124.146	125.330	123.017
65	41.396	42.548	40.259	131	83.406	84.582	82.274	196	124.781	125.966	123.656
66	42.032	43.186	40.907	132	84.042	85.218	82.917	197	125.420	126.604	124.290
67	42.670	43.822	41.532	133	84.678	85.854	83.547	198	126.056	127.240	124.931
68	43.306	44.460	42.181	134	85.314	86.492	84.189	199	126.692	127.876	125.564
69	43.942	45.096	42.806	135	85.952	87.128	84.820	200	127.330	128.514	126.205
70	44.578	45.734	43.453								

Martin

Sprocket Diameter

No. 180 2¼" Pitch

Roller Chain Sprocket Diameters

No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter
5	3.828	4.446	2.234	71	50.866	52.166	49.448	136	97.412	98.735	96.006
6	4.500	5.247	3.094	72	51.583	52.884	50.177	137	98.128	99.452	96.715
7	5.186	6.021	3.650	73	52.299	53.600	50.880	138	98.844	100.106	97.438
8	5.879	6.782	4.473	74	53.015	54.317	51.609	139	99.560	100.886	98.148
9	6.579	7.533	5.073	75	53.730	55.033	52.313	140	100.276	101.601	98.870
10	7.281	8.276	5.875	76	54.446	55.751	53.040	141	100.992	102.317	99.580
11	7.986	9.014	6.499	77	55.162	56.466	53.745	142	101.708	103.034	100.302
12	8.693	9.747	7.287	78	55.879	57.184	54.473	143	102.425	103.750	101.012
13	9.402	10.478	7.927	79	56.594	57.899	55.177	144	103.140	104.465	101.734
14	10.112	11.207	8.706	80	57.310	58.617	55.904	145	103.857	105.183	102.445
15	10.822	11.934	9.357	81	58.027	59.333	56.610	146	104.573	105.899	103.167
16	11.533	12.661	10.127	82	58.743	60.055	57.337	147	105.289	106.614	103.877
17	12.245	13.385	10.787	83	59.459	60.766	58.042	148	106.005	108.332	104.599
18	12.957	14.110	11.551	84	60.175	61.484	58.769	149	106.721	108.047	105.309
19	13.670	14.834	12.217	85	60.891	62.199	59.474	150	107.438	108.765	106.032
20	14.383	15.557	12.977	86	61.607	62.915	60.201	151	108.154	109.481	106.742
21	15.096	16.279	13.648	87	62.323	63.632	60.907	152	108.870	110.196	107.464
22	15.810	16.999	14.404	88	63.039	63.348	61.633	153	109.586	110.914	108.174
23	16.524	17.721	15.079	89	63.755	65.066	62.339	154	110.302	111.629	108.896
24	17.238	18.441	15.832	90	64.471	65.781	63.065	155	111.018	112.345	109.607
25	17.952	19.161	16.511	91	65.187	66.499	63.771	156	111.734	113.063	110.328
26	18.666	19.881	17.260	92	65.903	67.214	64.497	157	112.451	113.778	111.039
27	19.381	20.601	17.942	93	66.619	67.932	65.203	158	113.167	114.494	111.761
28	20.096	21.319	18.690	94	67.335	68.648	65.929	159	113.883	115.211	112.471
29	20.810	22.039	19.374	95	68.051	69.363	66.636	160	114.599	115.927	113.193
30	21.525	22.757	20.119	96	68.767	70.081	67.361	161	115.315	116.642	113.904
31	22.240	23.477	20.806	97	69.483	70.796	68.068	162	116.031	117.360	114.625
32	22.955	24.194	21.549	98	70.199	71.514	68.793	163	116.747	118.076	115.336
33	23.670	24.914	22.237	99	70.916	72.230	69.500	164	117.464	118.791	116.058
34	24.385	25.632	22.979	100	71.631	72.947	70.225	165	118.180	119.509	116.768
35	25.101	26.350	23.669	101	72.348	73.663	70.933	166	118.896	120.224	117.490
36	25.816	27.068	24.410	102	73.064	74.378	71.658	167	119.612	120.942	118.201
37	26.531	27.785	25.101	103	73.780	75.096	72.365	168	120.328	121.658	118.922
38	27.246	28.503	25.840	104	74.496	75.812	73.090	169	121.044	122.373	119.633
39	27.962	29.221	26.533	105	75.212	76.529	73.798	170	121.760	123.091	120.354
40	28.677	29.939	27.271	106	75.928	77.245	74.522	171	122.477	123.806	121.065
41	29.393	30.656	27.965	107	76.644	77.960	75.230	172	123.193	124.522	121.787
42	30.108	31.374	28.702	108	77.360	78.678	75.954	173	123.909	125.240	122.498
43	30.824	32.092	29.397	109	79.073	79.394	76.662	174	124.625	125.955	123.219
44	31.539	32.810	30.133	110	78.792	80.111	77.386	175	125.341	126.671	123.930
45	32.255	33.527	30.830	111	79.508	80.827	78.095	176	126.057	127.388	124.651
46	32.971	34.243	31.565	112	80.225	81.542	78.819	177	126.774	128.104	125.363
47	33.686	34.961	32.262	113	80.931	82.260	79.527	178	127.490	128.819	126.084
48	34.402	35.678	32.996	114	81.657	82.976	80.251	179	128.206	129.537	126.795
49	35.118	36.396	33.694	115	82.373	83.693	80.959	180	128.922	130.253	127.516
50	35.834	37.114	34.428	116	83.089	84.409	81.683	181	129.638	130.968	128.227
51	36.549	37.829	35.126	117	83.805	85.124	82.392	182	130.354	131.686	128.948
52	37.265	38.547	35.859	118	84.521	85.842	83.115	183	131.071	132.401	129.660
53	37.981	39.265	36.558	119	85.237	86.558	83.824	184	131.787	133.117	130.381
54	38.696	39.980	37.290	120	85.953	87.273	84.547	185	132.503	133.835	131.092
55	39.412	40.698	37.990	121	86.670	87.991	85.256	186	133.219	134.550	131.813
56	40.128	41.416	38.722	122	87.386	88.706	85.980	187	133.935	135.266	132.524
57	40.844	42.131	39.422	123	88.102	89.424	86.689	188	134.651	135.983	133.245
58	41.560	42.849	40.154	124	88.818	90.140	87.412	189	135.367	136.699	133.957
59	42.276	43.567	40.855	125	89.534	90.855	88.121	190	136.084	137.414	134.678
60	42.991	44.282	41.585	126	90.250	91.573	88.844	191	136.800	138.132	135.389
61	43.707	45.000	42.287	127	90.966	92.288	89.553	192	137.516	138.848	136.110
62	44.423	45.716	43.017	128	91.682	93.004	90.276	193	138.232	139.563	136.822
63	45.139	46.433	43.719	129	92.399	93.722	90.986	194	138.948	140.281	137.542
64	45.855	47.151	44.449	130	93.115	94.437	91.709	195	139.664	140.996	138.254
65	46.571	47.867	45.151	131	93.831	95.155	92.418	196	140.381	141.712	138.975
66	47.287	48.584	45.881	132	94.547	95.870	93.141	197	141.097	142.430	139.686
67	48.003	49.300	46.584	133	95.263	96.586	93.850	198	141.813	143.145	140.407
68	48.719	50.018	47.313	134	95.979	97.304	94.573	199	142.529	143.861	141.119
69	49.435	50.733	48.016	135	96.695	98.019	95.283	200	143.245	144.578	141.839
70	50.151	51.451	48.745								

No. 200
2½" Pitch

Sprocket Diameter

Martin

Roller Chain Sprocket Diameters

No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter
5	4.253	4.940	2.482	71	56.518	57.962	54.942	136	108.235	109.705	106.672
6	5.000	5.830	3.438	72	57.315	58.760	55.752	137	109.030	110.502	107.461
7	5.760	6.690	4.055	73	58.110	59.555	56.533	138	109.827	111.297	108.264
8	6.533	7.535	4.970	74	58.905	60.352	57.342	139	110.622	112.095	109.052
9	7.310	8.370	5.636	75	59.700	61.147	58.125	140	111.418	112.890	109.855
10	8.090	9.195	6.527	76	60.495	61.945	58.932	141	112.212	113.685	110.644
11	8.875	10.015	7.220	77	61.292	62.740	59.716	142	113.010	114.482	111.447
12	9.660	10.830	8.097	78	62.087	63.537	60.524	143	113.805	115.277	112.235
13	10.447	11.642	8.807	79	62.882	64.332	61.307	144	114.600	116.072	113.037
14	11.235	12.452	9.672	80	63.678	65.130	62.115	145	115.395	116.870	113.827
15	12.025	13.260	10.396	81	64.475	65.925	62.899	146	116.192	117.665	114.629
16	12.815	14.068	11.252	82	65.270	66.722	63.707	147	116.988	118.460	115.418
17	13.605	14.872	11.985	83	66.065	67.517	64.490	148	117.783	119.257	116.220
18	14.397	15.678	12.834	84	66.860	68.315	65.297	149	118.580	120.052	117.010
19	15.190	16.478	13.574	85	67.655	69.110	66.082	150	119.375	120.850	117.812
20	15.980	17.285	14.417	86	68.452	69.905	66.889	151	120.170	121.645	118.601
21	16.775	18.088	15.164	87	69.247	70.702	67.673	152	120.965	122.440	119.402
22	17.567	18.888	16.004	88	70.043	71.497	68.480	153	121.762	123.237	120.193
23	18.360	19.690	16.754	89	70.838	72.295	69.265	154	122.558	124.032	120.995
24	19.153	20.490	17.590	90	71.635	73.090	70.072	155	123.354	124.827	121.784
25	19.947	21.290	18.345	91	72.430	73.887	70.856	156	125.150	125.624	122.587
26	20.740	22.090	19.177	92	73.225	74.682	71.662	157	124.945	126.420	123.376
27	21.535	22.890	19.935	93	74.020	75.480	72.448	158	125.740	127.215	124.177
28	22.327	23.688	20.764	94	74.817	76.275	73.254	159	126.537	128.012	124.967
29	23.123	24.488	21.526	95	75.612	77.070	74.039	160	127.332	128.807	125.769
30	23.917	25.285	22.354	96	76.408	77.867	74.845	161	128.127	129.602	126.559
31	24.710	26.085	23.117	97	77.205	78.662	75.631	162	128.923	130.400	127.360
32	25.505	26.882	23.942	98	78.000	79.460	76.437	163	129.720	131.195	128.150
33	26.300	27.682	24.708	99	78.795	80.255	77.222	164	130.515	131.990	128.952
34	27.095	28.480	25.532	100	79.590	81.052	78.027	165	131.310	132.787	129.742
35	27.890	29.280	26.300	101	80.385	81.847	78.814	166	132.107	133.582	130.544
36	28.685	30.075	27.122	102	81.182	82.642	79.619	167	132.903	134.380	131.333
37	29.480	30.872	27.890	103	81.977	83.440	80.405	168	133.697	135.175	132.134
38	30.275	31.670	28.712	104	82.773	84.235	81.210	169	134.495	135.970	132.925
39	31.070	32.468	29.481	105	83.570	85.032	81.997	170	135.290	136.767	133.727
40	31.865	33.265	30.302	106	84.365	85.827	82.802	171	136.085	137.562	134.516
41	32.660	34.062	31.072	107	85.160	86.622	83.588	172	136.880	138.357	135.317
42	33.455	34.860	31.892	108	85.955	87.420	84.392	173	137.677	139.155	136.108
43	34.250	35.658	32.663	109	86.753	88.215	85.180	174	138.472	139.950	136.909
44	35.045	36.455	33.482	110	87.547	89.012	85.984	175	139.268	140.745	137.700
45	35.840	37.252	34.254	111	88.342	89.808	86.771	176	140.065	141.542	138.502
46	36.635	38.047	35.072	112	89.137	90.603	87.574	177	140.860	142.337	139.291
47	37.430	38.845	35.846	113	89.935	91.400	88.363	178	141.655	143.132	140.092
48	38.225	39.642	36.662	114	90.730	92.195	89.167	179	142.450	143.930	140.883
49	39.020	40.440	37.437	115	91.525	92.992	89.954	180	143.247	144.725	141.684
50	39.815	41.238	38.252	116	92.320	93.787	90.757	181	144.042	145.520	142.474
51	40.610	42.032	39.028	117	93.117	94.582	91.546	182	144.838	146.318	143.275
52	41.405	42.830	39.842	118	93.912	95.380	92.349	183	145.635	147.113	144.066
53	42.200	43.627	40.619	119	94.707	96.175	93.137	184	146.430	147.908	144.867
54	42.995	44.422	41.432	120	95.505	96.970	93.942	185	147.225	148.705	145.657
55	43.790	45.220	42.211	121	96.300	97.767	94.729	186	148.020	149.500	146.457
56	44.587	46.018	43.024	122	97.095	98.562	95.532	187	148.817	150.295	147.249
57	45.383	46.812	43.802	123	97.890	99.360	96.320	188	149.612	151.093	148.049
58	46.177	47.610	44.614	124	98.687	100.155	97.124	189	150.408	151.888	148.840
59	46.973	48.408	45.393	125	99.482	100.950	97.912	190	151.205	152.683	149.642
60	47.768	49.202	46.205	126	100.278	101.747	98.715	191	152.000	153.480	150.432
61	48.565	50.000	46.964	127	101.075	102.542	99.503	192	152.795	154.275	151.232
62	49.360	50.795	47.797	128	101.870	103.337	100.307	193	153.590	155.070	152.023
63	50.155	51.593	48.576	129	102.665	104.135	101.095	194	154.387	155.868	152.824
64	50.950	52.390	49.387	130	103.460	104.930	101.897	195	155.183	156.663	153.615
65	51.745	53.185	50.167	131	104.257	105.727	102.686	196	155.977	157.458	154.414
66	52.540	53.982	50.977	132	105.052	106.522	103.489	197	156.775	158.255	155.206
67	53.337	54.777	51.759	133	105.847	107.317	104.278	198	157.570	159.050	156.007
68	54.132	55.575	52.569	134	106.643	108.115	105.080	199	158.365	159.845	156.798
69	54.927	56.370	53.350	135	107.440	108.910	105.869	200	159.162	160.643	157.599
70	55.723	57.167	54.160								

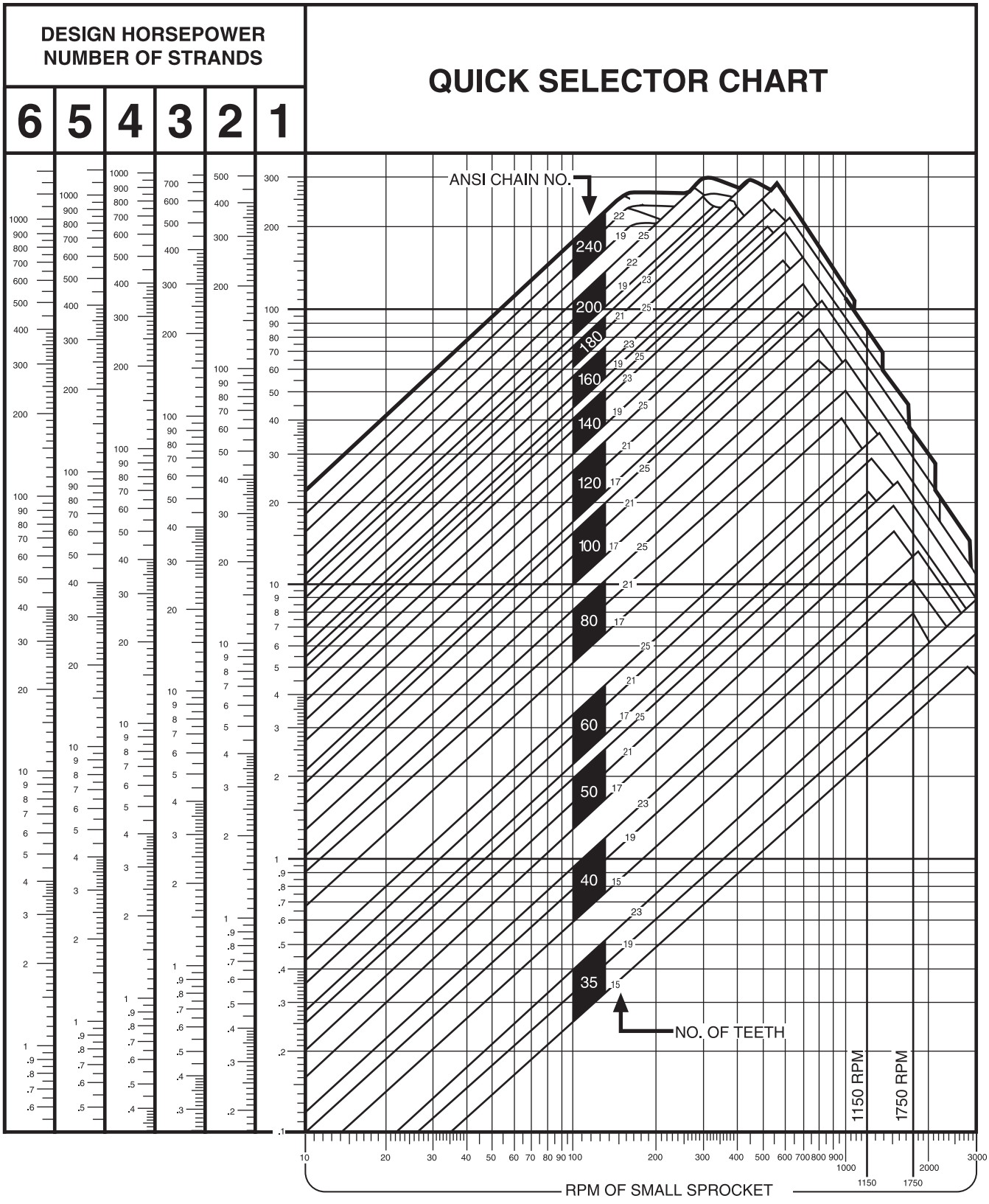
Sprocket Diameter

No. 240 3" Pitch

Roller Chain Sprocket Diameters

No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter	No. of Pitches	Pitch Diameter	Outside Diameter	Caliper Diameter
6	6.000	7.00	4.125	45	43.007	44.70	41.105	83	79.278	81.02	77.388
7	6.914	8.03	4.866	46	43.961	45.66	42.086	84	80.233	81.98	78.358
8	7.839	9.04	5.964	47	44.915	46.61	43.013	85	81.188	82.93	79.298
9	8.771	10.04	6.764	48	45.869	47.57	43.994	86	82.142	83.89	80.267
10	9.708	11.03	7.833	49	46.824	48.53	44.925	87	83.097	84.84	81.207
11	10.649	12.02	8.666	50	47.778	49.49	45.903	88	84.052	85.80	82.177
12	11.591	13.00	9.716	51	48.732	50.44	46.833	89	85.006	86.75	83.116
13	12.536	13.97	10.568	52	49.687	51.40	47.812	90	85.961	87.71	84.086
14	13.482	14.94	11.607	53	50.641	52.35	48.744	91	86.916	88.67	85.026
15	14.429	15.91	12.473	54	51.595	53.31	49.720	92	87.871	89.62	85.996
16	15.377	16.88	13.502	55	52.550	54.26	50.654	93	88.825	90.58	86.938
17	16.327	17.85	14.383	56	53.504	55.22	51.629	94	89.780	91.53	87.905
18	17.276	18.81	15.401	57	54.458	56.18	52.562	95	90.735	92.48	88.848
19	18.227	19.78	16.289	58	55.413	57.13	53.538	96	91.690	93.44	89.815
20	19.177	20.74	17.302	59	56.368	58.09	54.473	97	92.645	94.40	90.758
21	20.129	21.71	18.197	60	57.322	59.04	55.447	98	93.599	95.35	91.724
22	21.080	22.67	19.205	61	58.277	60.00	56.384	99	94.554	96.31	92.667
23	22.032	23.63	20.106	62	59.231	60.95	57.356	100	95.507	97.26	93.634
24	22.984	24.59	21.109	63	60.185	61.91	58.292	101	96.463	98.22	94.676
25	23.936	25.55	22.013	64	61.140	62.87	59.265	102	97.418	99.17	95.543
26	24.889	26.51	23.014	65	62.095	63.82	60.202	103	98.373	100.13	96.486
27	25.841	27.47	23.921	66	63.049	64.78	61.174	104	99.328	101.08	97.453
28	26.794	28.43	24.919	67	64.004	65.73	62.111	105	100.283	102.04	98.396
29	27.747	29.39	25.833	68	64.958	66.69	63.083	106	101.237	102.99	99.362
30	28.700	30.34	26.825	69	65.913	67.64	64.023	107	102.192	103.95	100.305
31	29.654	31.30	27.740	70	66.868	68.60	64.993	108	103.147	104.90	101.272
32	30.607	32.26	28.732	71	67.822	69.56	65.932	109	104.102	105.86	102.215
33	31.560	33.22	29.649	72	68.777	70.51	66.902	110	105.056	106.82	103.181
34	32.514	34.18	30.639	73	69.731	71.45	67.841	111	106.011	107.77	104.124
35	33.467	35.13	31.559	74	70.686	72.42	68.811	112	106.966	108.72	105.091
36	34.421	36.09	32.546	75	71.641	73.38	69.751	113	107.922	109.68	106.035
37	35.375	37.05	33.467	76	72.595	74.33	70.720	114	108.876	110.63	107.001
38	36.329	38.00	34.454	77	73.550	75.29	71.660	115	109.830	111.59	107.943
39	37.283	38.96	35.378	78	74.505	76.25	72.630	116	110.786	112.55	108.911
40	38.237	39.92	36.362	79	75.459	77.20	73.569	117	111.740	113.50	109.820
41	39.191	40.88	37.286	80	76.414	78.16	74.539	118	112.695	114.46	110.810
42	40.145	41.83	38.270	81	77.369	79.11	75.479	119	113.650	115.41	111.750
43	41.099	42.79	39.197	82	78.323	80.07	76.448	120	114.605	116.36	112.730
44	42.053	43.75	40.178								

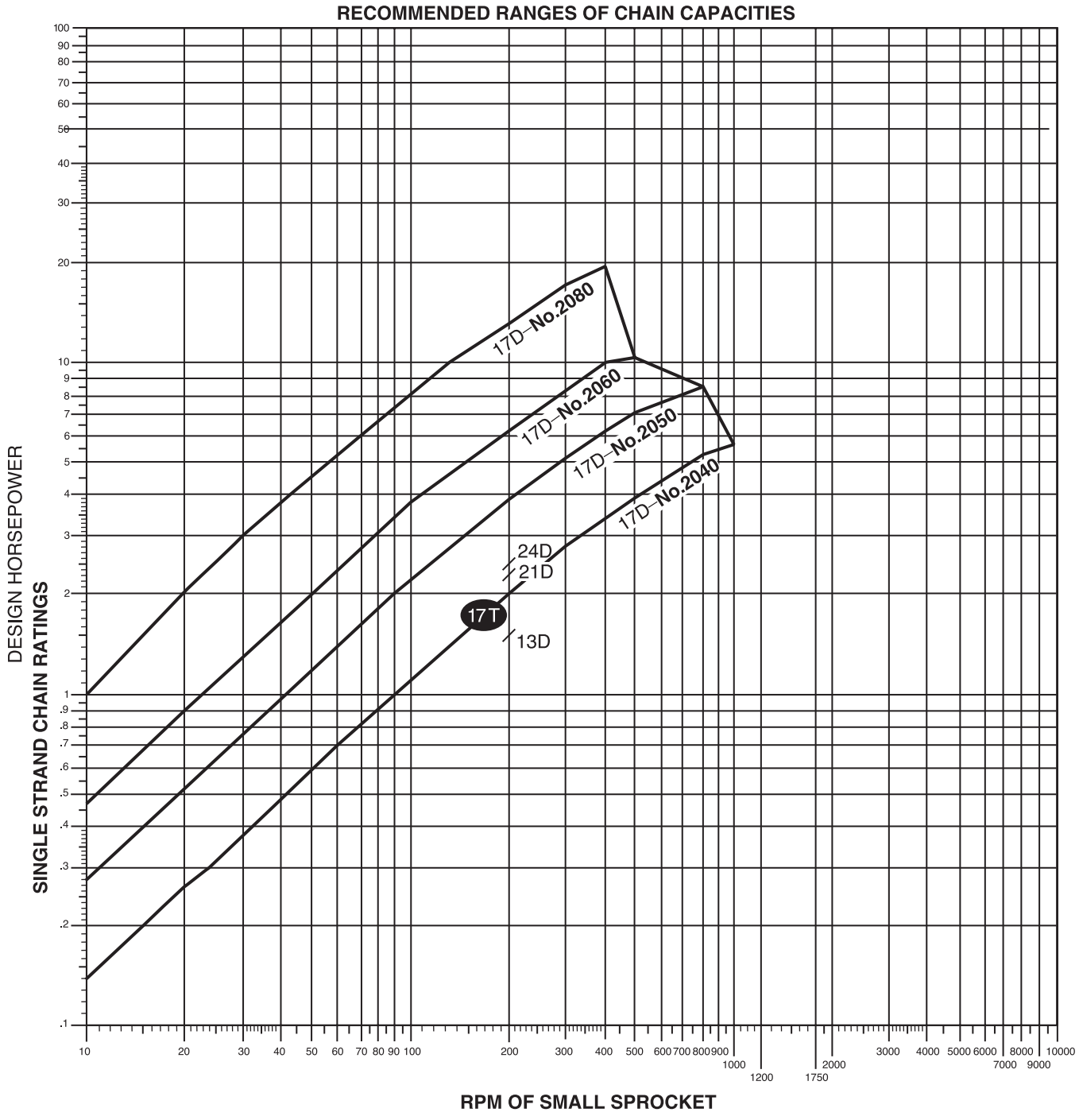
Horsepower Table



Horsepower Table

DOUBLE PITCH CHAIN
Sloping Lines Represent Horsepower Ratings for Chains with 17 Tooth Sprockets

QUICK SELECTOR CHART



Horsepower Ratings
Single Strand Roller Chain

(For multiple strand ratings see chart on page E-187)

1/4" Pitch No. 25

No. of Teeth of Small Sprocket	Revolutions Per Minute - Smalls Sprocket																			
	100	500	900	1200	1800	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	10000
11	0.05	0.23	0.39	0.50	0.73	0.98	1.15	1.32	1.38	1.16	0.99	0.86	0.75	0.67	0.60	0.54	0.49	0.45	0.41	0.35
12	0.06	0.25	0.43	0.55	0.80	1.07	1.26	1.45	1.57	1.32	1.12	0.97	0.86	0.76	0.68	0.61	0.56	0.51	0.47	0.40
13	0.06	0.27	0.47	0.60	0.87	1.17	1.38	1.58	1.77	1.49	1.27	1.10	0.96	0.86	0.77	0.69	0.63	0.57	0.53	0.45
14	0.07	0.30	0.50	0.65	0.94	1.27	1.49	1.71	1.93	1.66	1.42	1.23	1.08	0.96	0.86	0.77	0.70	0.64	0.59	0.50
15	0.07	0.32	0.54	0.70	1.01	1.36	1.61	1.85	2.08	1.84	1.57	1.36	1.20	1.06	0.95	0.86	0.78	0.71	0.65	0.56
16	0.08	0.34	0.58	0.76	1.09	1.46	1.72	1.98	2.23	2.03	1.73	1.50	1.32	1.17	1.05	0.94	0.86	0.78	0.72	0.61
17	0.08	0.37	0.62	0.81	1.16	1.56	1.84	2.11	2.38	2.22	1.90	1.64	1.44	1.28	1.14	1.03	0.94	0.86	0.79	0.67
18	0.09	0.39	0.66	0.86	1.24	1.66	1.96	2.25	2.53	2.42	2.07	1.79	1.57	1.39	1.25	1.12	1.02	0.93	0.86	0.73
19	0.09	0.41	0.70	0.91	1.31	1.76	2.07	2.38	2.69	2.62	2.24	1.94	1.70	1.51	1.35	1.22	1.11	1.01	0.93	0.79
20	0.10	0.44	0.74	0.96	1.38	1.86	2.19	2.52	2.84	2.83	2.42	2.10	1.84	1.63	1.46	1.32	1.20	1.09	1.00	0.86
21	0.11	0.46	0.78	1.01	1.46	1.96	2.31	2.66	2.99	3.05	2.60	2.26	1.98	1.76	1.57	1.42	1.29	1.17	1.08	0.92
22	0.11	0.48	0.82	1.07	1.53	2.06	2.43	2.79	3.15	3.27	2.79	2.42	2.12	1.88	1.69	1.52	1.38	1.26	1.16	0.99
23	0.12	0.51	0.86	1.12	1.61	2.16	2.55	2.93	3.30	3.50	2.98	2.59	2.27	2.01	1.80	1.62	1.47	1.35	1.24	1.06
24	0.13	0.53	0.90	1.17	1.69	2.27	2.67	3.07	3.46	3.73	3.18	2.76	2.42	2.15	1.92	1.73	1.57	1.44	1.32	1.12
25	0.13	0.56	0.94	1.22	1.76	2.37	2.79	3.21	3.61	3.96	3.38	2.93	2.57	2.28	2.04	1.84	1.67	1.53	1.40	1.20
26	0.14	0.58	0.98	1.28	1.84	2.47	2.91	3.34	3.77	4.19	3.59	3.11	2.73	2.42	2.17	1.95	1.77	1.62	1.49	1.27
28	0.15	0.63	1.07	1.38	1.99	2.68	3.15	3.62	4.09	4.54	4.01	3.47	3.05	2.70	2.42	2.18	1.98	1.81	1.66	1.42
30	0.16	0.68	1.15	1.49	2.15	2.88	3.40	3.90	4.40	4.89	4.45	3.85	3.38	3.00	2.68	2.42	2.20	2.01	1.84	1.57
32	0.17	0.73	1.23	1.60	2.30	3.09	3.64	4.18	4.72	5.25	4.90	4.25	3.73	3.30	2.96	2.67	2.42	2.21	2.03	1.73
35	0.19	0.80	1.36	1.76	2.53	3.41	4.01	4.61	5.20	5.78	5.60	4.86	4.26	3.78	3.38	3.05	2.77	2.53	2.32	1.98
40	0.22	0.92	1.57	2.03	2.93	3.93	4.64	5.32	6.00	6.68	6.85	5.93	5.21	4.62	4.13	3.73	3.38	3.09	2.83	2.42
45	0.25	1.05	1.78	2.31	3.32	4.47	5.26	6.05	6.82	7.58	8.17	7.08	6.21	5.51	4.93	4.45	4.04	3.69	3.38	2.89
Lubrication	Type A		Type B						Type C											

3/8" Pitch No. 35

No. of Teeth of Small Sprocket	Revolutions Per Minute - Smalls Sprocket																			
	100	500	900	1200	1800	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	10000
11	0.18	0.77	1.31	1.70	2.45	3.30	2.94	2.33	1.91	1.60	1.37	1.18	1.04	0.92	0.82	0.74	0.67	0.62	0.57	0.48
12	0.20	0.85	1.44	1.87	2.70	3.62	3.35	2.66	2.17	1.82	1.56	1.35	1.18	1.05	0.94	0.85	0.77	0.70	0.64	0.55
13	0.22	0.93	1.57	2.04	2.94	3.95	3.77	3.00	2.45	2.05	1.75	1.52	1.33	1.18	1.06	0.95	0.87	0.79	0.73	0.62
14	0.24	1.01	1.71	2.21	3.18	4.28	4.22	3.35	2.74	2.30	1.96	1.70	1.49	1.32	1.18	1.07	0.97	0.88	0.81	0.69
15	0.25	1.08	1.84	2.38	3.43	4.61	4.68	3.71	3.04	2.55	2.17	1.88	1.65	1.47	1.31	1.18	1.07	0.98	0.90	0.77
16	0.27	1.16	1.97	2.55	3.68	4.94	5.15	4.09	3.35	2.81	2.40	2.08	1.82	1.62	1.45	1.30	1.18	1.08	0.99	0.85
17	0.29	1.24	2.10	2.73	3.93	5.28	5.64	4.48	3.67	3.07	2.62	2.27	2.00	1.77	1.58	1.43	1.30	1.18	1.09	0.93
18	0.31	1.32	2.24	2.90	4.18	5.61	6.15	4.88	3.99	2.35	2.86	2.48	2.17	1.93	1.73	1.56	1.41	1.29	1.18	1.01
19	0.33	1.40	2.37	3.07	4.43	5.95	6.67	5.29	4.33	3.63	3.10	2.69	2.36	2.09	1.87	1.69	1.53	1.40	1.28	1.10
20	0.35	1.48	2.51	3.25	4.68	6.29	7.20	5.72	4.68	3.92	3.35	2.90	2.55	2.26	2.02	1.82	1.65	1.51	1.39	1.18
21	0.37	1.56	2.64	3.42	4.93	6.63	7.75	6.15	5.03	4.22	3.60	3.12	2.74	2.43	2.17	1.96	1.78	1.62	1.49	1.27
22	0.38	1.64	2.78	3.60	5.19	6.97	8.21	6.59	5.40	4.52	3.86	3.35	2.94	2.61	2.33	2.10	1.91	1.74	1.60	1.37
23	0.40	1.72	2.92	3.78	5.44	7.31	8.62	7.05	5.77	4.83	4.13	3.58	3.14	2.79	2.49	2.25	2.04	1.86	1.71	1.46
24	0.42	1.80	3.05	3.96	5.70	7.66	9.02	7.51	6.15	5.15	4.40	3.81	3.35	2.97	2.66	2.40	2.17	1.99	1.82	1.56
25	0.44	1.88	3.19	4.13	5.95	8.00	9.43	7.99	6.54	5.48	4.68	4.05	3.56	3.16	2.82	2.55	2.31	2.11	1.94	1.65
26	0.46	1.96	3.33	4.31	6.21	8.35	9.84	8.47	6.93	5.18	4.96	4.30	3.77	3.35	3.00	2.70	2.45	2.24	2.05	1.75
28	0.50	2.12	3.61	4.67	6.73	9.05	10.7	9.47	7.75	6.49	5.55	4.81	4.22	3.74	3.35	3.02	2.74	2.50	2.30	1.96
30	0.54	2.29	3.89	5.03	7.25	9.74	11.5	10.5	8.59	7.20	6.15	5.33	4.68	4.15	3.71	3.35	3.04	2.77	2.55	2.17
32	0.58	2.45	4.17	5.40	7.77	10.4	12.3	11.6	9.47	7.93	6.77	5.87	5.15	4.57	4.09	3.69	3.35	3.06	2.81	
35	0.64	2.70	4.59	5.95	8.56	11.5	13.6	13.2	10.8	9.08	7.75	6.72	5.90	5.23	4.68	4.22	3.83	3.50	3.21	
40	0.73	3.12	5.30	6.87	9.89	13.3	15.7	16.2	13.2	11.1	9.47	8.21	7.20	6.39	5.72	5.15	4.68			
45	0.83	3.55	6.02	7.80	11.2	15.1	17.8	19.3	15.8	13.2	11.3	9.79	8.59	7.62	6.82					
Lubrication	Type A		Type B		Type C															

1/2" Pitch No. 41

No. of Teeth of Small Sprocket	Revolutions Per Minute - Smalls Sprocket																
	50	100	200	400	500	700	900	1200	1800	2400	3000	3500	4000	5000	6000	7000	8000
11	0.13	0.24	0.44	0.82	1.01	1.37	1.71	1.71	0.93	0.61	0.43	0.34	0.28	0.20	0.15	0.12	0.10
12	0.14	0.26	1.49	0.91	1.11	1.50	1.88	1.95	1.06	0.69	0.49	0.39	0.32	0.23	0.17	0.14	0.11
13	0.15	0.28	0.53	0.99	1.21	1.63	2.05	2.20	1.20	0.78	0.56	0.44	0.36	0.26	0.20	0.16	0.13
14	0.16	0.31	0.57	1.07	1.31	1.77	2.22	2.46	1.34	0.87	0.62	0.49	0.40	0.29	0.22	0.17	0.14
15	0.18	0.33	0.62	1.15	1.41	1.91	2.39	2.73	1.49	0.96	0.69	0.55	0.45	0.32	0.24	0.19	0.16
16	0.19	0.36	0.66	1.24	1.51	2.05	2.57	3.01	1.64	1.06	0.76	0.60	0.49	0.35	0.27	0.21	0.17
17	0.20	0.38	0.71	1.32	1.61	2.18	2.74	3.29	1.79	1.16	0.83	0.66	0.54	0.39	0.29	0.23	0.19
18	0.22	0.40	0.75	1.40	1.72	2.32	2.91	3.59	1.95	1.27	0.91	0.72	0.59	0.42	0.32	0.25	
19	0.23	0.43	0.80	1.49	1.82	2.46	3.09	3.89	2.12	1.38	0.98	0.78	0.64	0.46	0.35	0.28	
20	0.24	0.45	0.84	1.57	1.92	2.60	3.26	4.20	2.29	1.49	1.06	0.84	0.69	0.49	0.38	0.30	
21	0.26	0.48	0.89	1.66	2.03	2.74	3.44	4.46	2.46	1.60	1.14	0.91	0.74	0.53	0.40	0.32	
22	0.27	0.50	0.93	1.74	2.13	2.89	3.62	4.69	2.64	1.71	1.23	0.97	0.80	0.57	0.43	0.34	
23	0.28	0.53	0.98	1.83	2.24	3.03	3.80	4.92	2.82	1.83	1.31	1.04	0.85	0.61	0.46	0.37	
24	0.29	0.55	1.03	1.92	2.34	3.17	3.97	5.15	3.01	1.95	1.40	1.11	0.91	0.65	0.49	0.39	
25	0.31	0.57	1.07	2.00	2.45	3.31	4.15	5.38	3.20	2.08	1.49	1.18	0.96	0.69	0.53		
26	0.32	0.60	1.12	2.09	2.55	3.46	4.33	5.61	3.39	2.20	1.58	1.25	1.02	0.73	0.56		
28	0.35	0.65	1.21	2.26	2.77	3.74	4.69	6.08	3.79	2.46	1.76	1.40	1.14	0.82	0.62		
30	0.38	0.70	1.31	2.44	2.98	4.03	5.06	6.55	4.20	2.73	1.95	1.55	1.27	0.91	0.69		
32	0.40	0.75	1.40	2.61	3.20	4.33	5.42	7.03	4.63	3.01	2.15	1.71	1.40	1.00			
35	0.44	0.83	1.54	2.88	3.52	4.76	5.97	7.74	5.29	3.44	2.46	1.95	1.60	1.14			
40	0.51	0.96	1.78	3.33	4.07	5.50	6.90	8.94	6.47	4.20	3.01	2.39	1.95	1.40			
45	0.58	1.08	2.02	3.78	4.62	6.25	7.84	10.2	7.72	5.01	3.59	2.85	2.33				
Lubrication	Type A		Type B						Type C								

Horsepower Ratings
Single Strand Roller Chain

For Multiple Strand Ratings See Chart at Bottom

1/2" Pitch No. 40

No. of Teeth of Small Sprocket	Revolutions Per Minute - Smalls Sprocket																
	50	100	200	400	500	700	900	1200	1800	2400	3000	3500	4000	5000	6000	7000	8000
11	0.23	0.43	0.80	1.50	1.83	2.48	3.11	4.63	4.66	3.03	2.17	1.72	1.41	1.01	0.77	0.61	0.50
12	0.25	0.47	0.88	1.65	2.01	2.73	3.42	5.09	5.31	3.45	2.47	1.96	1.60	1.15	0.87	0.69	0.57
13	0.28	0.52	0.96	1.80	2.20	2.97	3.73	5.55	5.99	3.89	2.79	2.21	1.81	1.29	0.98	0.78	0.64
14	0.30	0.56	1.04	1.95	2.38	3.22	4.04	6.01	6.70	4.35	3.11	2.47	2.02	1.45	1.10	0.87	0.71
15	0.32	0.60	1.12	2.10	2.56	3.47	4.35	6.47	7.43	4.82	3.45	2.74	2.24	1.60	1.22	0.97	0.79
16	0.35	0.65	1.20	2.25	2.75	3.72	4.66	6.94	8.18	5.31	3.80	3.02	2.47	1.77	1.34	1.07	0.87
17	0.37	0.69	1.29	2.40	2.93	3.97	4.98	7.41	8.96	5.82	4.17	3.31	2.71	1.94	1.47	1.17	0.96
18	0.39	0.73	1.37	2.55	3.12	4.22	5.30	7.88	9.76	6.34	4.54	3.60	2.95	2.11	1.60	1.27	
19	0.42	0.78	1.45	2.71	3.31	4.48	5.62	8.36	10.5	6.88	4.92	3.91	3.20	2.29	1.74	1.38	
20	0.44	0.82	1.53	2.86	3.50	4.73	5.94	8.83	11.1	7.43	5.31	4.22	3.45	2.47	1.88	1.49	
21	0.46	0.87	1.62	3.02	3.69	4.99	6.26	9.31	11.7	7.99	5.72	4.54	3.71	2.66	2.02	1.60	
22	0.49	0.91	1.70	3.17	3.88	5.25	6.58	9.79	12.3	8.57	6.13	4.87	3.98	2.85	2.17	1.72	
23	0.51	0.96	1.78	3.33	4.07	5.51	6.90	10.3	12.9	9.16	6.55	5.20	4.26	3.05	2.32	1.84	
24	0.54	1.00	1.87	3.48	4.26	5.76	7.23	10.8	13.5	9.76	6.99	5.54	4.54	3.25	2.47	1.96	
25	0.56	1.05	1.95	3.64	4.45	6.02	7.55	11.2	14.1	10.4	7.43	5.89	4.82	3.45	2.63		
26	0.58	1.09	2.04	3.80	4.64	6.28	7.88	11.7	14.7	11.0	7.88	6.25	5.12	3.66	2.79		
28	0.63	1.18	2.20	4.11	5.03	6.81	8.54	12.7	15.9	12.3	8.80	6.99	5.72	4.09	3.11		
30	0.68	1.27	2.38	4.43	5.42	7.33	9.20	13.7	17.2	13.6	9.76	7.75	6.34	4.54	3.45		
32	0.73	1.36	2.55	4.75	5.81	7.86	9.86	14.7	18.4	15.0	10.8	8.64	6.99	5.00			
35	0.81	1.50	2.81	5.24	6.40	8.66	10.9	16.2	20.3	17.2	12.3	9.76	7.99	5.76			
40	0.93	1.74	3.24	6.05	7.39	10.0	12.5	18.7	23.4	21.0	15.0	11.9	9.76	6.99			
45	1.06	1.97	3.68	6.87	8.40	11.4	14.2	21.2	26.6	25.1	17.9	14.2	11.7				
Lubrication	Type A		Type B					Type C									

5/8" Pitch No. 50

No. of Teeth of Small Sprocket	Revolutions Per Minute - Smalls Sprocket																	
	50	100	300	500	900	1200	1400	1800	2100	2400	2700	3000	3500	4000	4500	5000	5500	6000
11	0.45	0.84	2.25	3.57	6.06	7.85	8.13	5.58	4.42	3.62	3.04	2.59	2.06	1.68	1.41	1.20	1.04	0.92
12	0.49	0.92	2.47	3.92	6.65	8.62	9.26	6.35	5.04	4.13	3.46	2.95	2.34	1.92	1.61	1.37	1.19	1.04
13	0.54	1.00	2.70	4.27	7.25	9.40	10.4	7.16	5.69	4.65	3.90	3.33	2.64	3.16	1.81	1.55	1.34	
14	0.58	1.09	2.92	4.63	7.86	10.2	11.7	8.01	6.35	5.20	4.36	3.72	2.95	2.42	2.03	1.73	1.50	
15	0.73	1.17	3.15	4.99	8.47	11.0	12.6	8.88	7.05	5.77	4.83	4.13	3.27	2.68	2.25	1.92	1.66	
16	0.67	1.26	3.38	5.35	9.08	11.8	13.5	9.78	7.76	6.35	5.32	4.55	3.61	2.95	2.47	2.11	1.83	
17	0.72	1.34	3.61	5.71	9.69	12.6	14.4	10.7	8.50	6.96	5.83	4.98	3.95	3.23	2.71	2.31	2.01	
18	0.76	1.43	3.83	6.07	10.3	13.4	15.3	11.7	9.26	7.58	6.35	5.42	4.30	3.52	2.95	2.52		
19	0.81	1.51	4.07	6.44	10.9	14.2	16.3	12.7	10.0	8.22	6.89	5.88	4.67	3.82	3.20	2.73		
20	0.86	1.60	4.30	6.80	11.5	15.0	17.2	13.7	10.8	8.88	7.44	6.35	5.04	4.13	3.46	2.95		
21	0.90	1.69	4.53	7.17	12.2	15.8	18.1	14.7	11.7	9.55	8.01	6.84	5.42	4.44	3.72	3.18		
22	0.95	1.77	4.76	7.54	12.8	16.6	19.1	15.8	12.5	10.2	8.59	7.39	5.82	4.76	3.99	3.41		
23	1.00	1.86	5.00	7.91	13.4	17.4	20.0	16.9	13.4	11.0	9.18	7.84	6.22	5.09	4.27			
24	1.04	1.95	5.23	8.29	14.1	18.2	20.9	18.0	14.3	11.7	9.78	8.35	6.33	5.42	4.55			
25	1.09	2.03	5.47	8.66	14.7	19.0	21.9	19.1	15.2	12.4	10.4	8.88	7.05	5.77	4.83			
26	1.14	2.12	5.70	9.03	15.3	19.9	22.8	20.3	16.1	13.2	11.0	9.42	7.47	6.12	5.13			
28	1.23	2.30	6.18	9.79	16.6	21.5	24.7	22.6	18.0	14.7	12.3	10.5	8.35	6.84	5.73			
30	1.33	2.49	6.66	10.5	17.9	23.2	26.6	25.1	19.9	16.3	13.7	11.7	9.26	7.58				
32	1.42	2.66	7.14	11.3	19.2	24.9	28.6	27.7	22.0	18.0	15.1	12.9	10.2	8.35				
35	1.57	2.93	7.86	12.5	21.1	27.4	31.5	31.6	25.1	20.6	17.2	14.7	11.7	9.55				
40	1.81	3.38	9.08	14.4	24.4	31.6	36.3	38.7	30.7	25.1	21.0	18.0	14.3					
45	2.06	3.84	10.3	16.3	27.7	35.9	41.3	46.1	36.6	30.0	25.1	21.4						
Lubrication	Type A		Type B		Type C													

Type A Manual Lubrication

Type B Bath or Disc Lubrication

Type C Oil Stream Lubrication

Multiple Strand Factors

No. Strands	Strand Factor
1	1.0
2	1.9
3	2.8
4	3.7

Horsepower Ratings
Single Strand Roller Chain

(For multiple strand ratings see chart on page E-189)

3/4" Pitch No. 60

No. of Teeth of Small Sprocket	Revolutions Per Minute - Smalls Sprocket															
	50	100	200	500	700	900	1200	1400	1600	1800	2000	2500	3000	3500	4000	4500
11	0.77	1.44	2.69	6.13	8.30	10.4	11.9	9.41	7.70	6.45	5.51	3.94	3.00	2.38	1.95	1.63
12	0.85	1.58	2.95	6.74	9.12	11.4	13.5	10.7	8.77	7.35	6.28	4.49	3.42	2.71	2.22	1.86
13	0.92	1.73	3.22	7.34	9.94	12.5	15.2	12.1	9.89	8.29	7.08	5.06	3.85	3.06	2.50	
14	1.00	1.87	3.49	7.96	10.8	13.5	17.0	13.5	11.1	9.26	7.91	5.66	4.31	3.42	2.80	
15	1.08	2.01	3.76	8.57	11.6	14.5	18.8	15.0	12.3	10.3	8.77	6.28	4.77	3.79	3.10	
16	1.16	2.16	4.03	9.19	12.4	15.6	20.2	16.5	13.5	11.3	9.66	9.61	5.26	4.17	3.42	
17	1.24	2.31	4.30	9.81	13.3	16.7	21.6	18.1	14.8	12.4	10.6	7.57	5.76	4.57	3.74	
18	1.31	2.45	4.58	10.4	14.1	17.7	22.9	19.7	16.1	13.5	11.5	8.25	6.28	4.98	4.08	
19	1.39	2.60	4.85	11.1	15.0	18.8	24.3	21.4	17.5	14.6	12.5	8.95	6.81	5.40	4.42	
20	1.47	2.75	5.13	11.7	15.8	19.8	25.7	23.1	18.9	15.8	13.5	9.66	7.35	5.83		
21	1.55	2.90	5.40	12.3	16.7	20.9	27.1	24.8	20.3	17.0	14.5	10.4	7.91	6.28		
22	1.63	3.05	5.68	13.0	17.5	22.0	28.5	26.6	21.8	18.2	15.6	11.1	8.48	6.73		
23	1.71	3.19	5.96	13.6	18.4	23.1	29.9	28.4	23.3	19.5	16.7	11.9	9.07	7.19		
24	1.79	3.35	6.24	14.2	19.3	24.1	31.3	30.3	24.8	20.8	17.8	12.7	9.66	7.67		
25	1.87	3.50	6.52	14.9	20.1	25.3	32.7	32.2	26.4	22.1	18.9	13.5	10.3	8.15		
26	1.95	3.65	6.81	15.5	21.0	26.4	34.1	34.2	28.0	23.4	20.0	14.3	10.9	8.65		
28	2.12	3.95	7.37	16.8	22.8	28.5	37.0	38.2	31.3	26.2	22.4	16.0	12.2			
30	2.28	4.26	7.94	18.1	24.5	30.8	39.8	42.4	34.7	29.1	24.8	17.8	13.5			
32	2.45	4.56	8.52	19.4	26.3	33.0	42.7	46.7	38.2	32.0	27.3	19.6	14.9			
35	2.69	5.03	9.38	21.4	29.0	36.3	47.1	53.4	43.7	36.6	31.3	22.4	17.0			
40	3.11	5.81	10.8	23.7	33.5	42.0	54.4	62.5	53.4	44.7	38.2	27.3				
45	3.53	6.60	12.3	28.1	38.0	47.7	61.7	70.9	63.7	53.4	45.6	32.6				
Lubrication Type A		Type B			Type C											

1" Pitch No. 80

No. of Teeth of Small Sprocket	Revolutions Per Minute - Smalls Sprocket																				
	25	50	100	200	300	400	500	700	900	1000	1200	1400	1600	1800	2000	2200	2400	2700	3000	3400	
11	0.97	1.80	3.36	6.28	9.04	11.7	14.3	19.4	23.0	19.6	14.9	11.8	9.69	8.12	6.93	6.01	5.27	4.42	3.77	1.70	
12	1.06	1.98	3.69	6.89	9.93	12.9	15.7	21.3	26.2	22.3	17.0	13.5	11.0	9.25	7.90	6.85	6.01	5.04	4.30		
13	1.16	2.16	4.03	7.52	10.8	14.0	17.1	23.2	29.1	25.2	19.2	15.2	12.5	10.4	8.91	7.72	6.78	5.68	4.85		
14	1.25	2.34	4.36	8.14	11.7	15.2	18.6	25.1	31.5	28.2	21.4	17.0	13.9	11.7	9.96	6.83	7.57	6.35	5.42		
15	1.35	2.52	4.70	8.77	12.6	16.4	20.0	27.1	34.0	31.2	23.8	18.9	15.4	12.9	11.0	9.57	8.40	7.04	6.01		
16	1.45	2.70	5.04	9.41	13.5	17.6	21.5	29.0	36.4	34.4	26.2	20.8	17.0	14.2	12.2	10.5	9.25	7.76	6.62		
17	1.55	2.88	5.38	10.0	14.5	18.7	22.9	31.0	38.9	37.7	28.7	22.7	18.6	15.6	13.3	11.5	10.1	8.49	7.25		
18	1.64	3.07	5.72	10.7	15.4	19.9	24.4	33.0	41.4	41.1	31.2	24.8	20.3	17.0	14.5	12.6	11.0	9.25	7.90		
19	1.74	3.25	6.07	11.3	16.3	21.1	25.8	35.0	43.8	44.5	33.9	26.9	22.0	18.4	15.7	13.6	12.0	10.0	8.57		
20	1.84	3.44	6.41	12.0	17.2	22.3	27.3	37.0	46.3	48.1	36.6	29.0	23.8	19.9	17.0	14.7	12.9	10.8			
21	1.94	3.62	6.76	12.6	18.2	23.5	28.8	39.0	48.9	51.7	39.4	31.2	25.6	21.4	18.3	15.9	13.9	11.7			
22	2.04	3.81	7.11	13.3	19.1	24.8	30.3	41.0	51.4	55.5	42.2	33.5	27.4	23.0	19.6	17.0	14.9	12.5			
23	2.14	4.00	7.46	13.9	20.1	26.0	31.8	43.0	53.9	59.3	45.1	35.8	29.3	24.6	21.0	18.2	15.9	13.4			
24	2.24	4.19	7.81	14.6	21.0	27.2	33.2	45.0	56.4	62.0	48.1	38.2	31.2	26.2	22.3	19.4	17.0	14.2			
25	2.34	4.37	8.16	15.2	21.9	28.4	34.7	47.0	59.0	64.8	51.1	40.6	33.2	27.8	23.8	20.6	18.1	15.1			
26	2.45	4.56	8.52	15.9	22.9	29.7	36.2	49.1	61.5	67.6	54.2	43.0	35.2	29.5	25.2	21.8	19.2	16.1			
28	2.65	4.94	9.23	17.2	24.8	32.1	39.3	53.2	66.7	73.3	60.6	48.1	39.4	33.0	28.2	24.4	21.4				
30	2.85	5.33	9.94	18.5	26.7	34.6	42.3	57.3	71.8	78.9	67.2	53.3	43.6	36.6	31.2	27.1	23.8				
32	3.06	5.71	10.7	19.9	28.6	37.1	45.4	61.4	77.0	84.6	74.0	58.7	48.1	40.3	34.4	29.8	26.2				
35	3.37	6.29	11.7	21.9	31.6	40.9	50.0	67.6	84.8	93.3	84.7	67.2	55.0	46.1	39.4	34.1					
40	3.89	7.27	13.6	25.3	36.4	47.2	57.7	78.1	98.0	108	103	82.1	67.2	56.3	48.1	20.0					
45	4.42	8.25	15.4	28.7	41.4	53.6	65.6	88.7	111	122	123	98.0	80.2	67.2	54.1						
Lubrication Type A		Type B			Type C																

1 1/4" Pitch No. 100

No. of Teeth of Small Sprocket	Revolutions Per Minute - Smalls Sprocket																							
	10	25	50	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1600	1800	2000	2200	2400	2600	
11	0.81	1.85	3.45	6.44	12.0	17.3	22.4	27.4	32.3	37.1	32.8	27.5	23.4	20.3	17.8	15.8	14.2	11.6	9.71	8.29	7.19	6.31	1.29	
12	0.89	2.03	3.79	7.08	13.2	19.0	24.6	30.1	35.5	40.8	37.3	31.3	26.7	23.2	20.3	18.0	16.1	13.2	11.1	9.45	8.19	7.19		
13	0.97	2.22	4.13	7.72	14.4	20.7	26.9	32.8	38.7	44.5	42.1	35.3	30.1	26.1	22.9	20.3	18.2	14.9	12.5	10.6	9.23	8.10		
14	1.05	2.40	4.48	8.36	15.6	22.5	29.1	35.6	41.9	48.2	47.0	39.4	33.7	29.2	25.6	22.7	20.3	16.6	13.9	11.9	10.3	9.06		
15	1.13	2.59	4.83	9.01	16.8	24.2	31.4	38.3	45.2	51.9	52.2	43.7	37.3	32.4	28.4	25.2	22.5	18.4	15.5	13.2	11.4	10.0		
16	1.22	2.77	5.17	9.66	18.0	26.0	33.6	41.1	48.4	55.6	57.5	48.2	41.1	35.7	31.3	27.7	24.8	20.3	17.0	14.5	12.8	11.1		
17	1.30	2.96	5.52	10.3	19.2	27.7	35.9	43.9	51.7	59.4	63.0	52.8	45.0	39.0	34.3	30.4	27.2	22.3	18.7	15.9	13.8	0.79		
18	1.38	3.15	5.88	11.0	20.5	29.5	38.2	46.7	55.0	63.2	68.6	57.5	49.1	42.5	37.3	33.1	29.6	24.2	20.3	17.4	15.0			
19	1.46	3.34	6.23	11.6	21.7	31.2	40.5	49.5	58.3	67.0	74.4	62.3	53.2	46.1	40.5	35.9	32.1	26.3	22.0	18.8	16.3			
20	1.55	3.53	6.58	12.3	22.9	33.0	42.8	52.3	61.6	70.8	79.8	67.3	57.5	49.8	43.7	38.8	34.7	28.4	23.8	20.3	17.6			
21	1.63	3.72	6.94	13.0	24.2	34.8	45.1	55.1	65.0	74.6	84.2	72.4	61.8	53.6	47.0	41.7	37.3	30.6	25.6	21.9	19.0			
22	1.71	3.91	7.30	13.6	25.4	36.6	47.4	58.0	68.3	78.5	88.5	77.7	66.3	57.5	50.4	44.7	40.0	32.8	27.5	23.4	20.3			
23	1.60	4.10	7.66	14.3	26.7	38.4	49.8	60.8	71.7	82.3	92.8	83.0	70.9	61.4	53.9	47.8	42.8	35.0	29.4	25.1	7.74			
24	1.88	4.30	8.02	15.0	27.9	40.2	52.1	63.7	75.0	86.2	97.2	88.5	75.6	65.5	57.5	51.0	45.6	37.3	31.3	26.7				
25	1.97	4.49	8.38	15.6	29.2	42.0	54.4	66.6	78.4	90.1	102	94.1	80.3	69.6	61.1	54.2	48.5	39.7	33.3	28.4				
26	2.05	4.68	8.74	16.3	30.4	43.8	56.8	69.4	81.8	94.0	106	99.8	85.2	73.8	64.8	57.5	51.4	42.1	35.3	30.1				
28	2.22	5.07	9.47	17.7	33.0	47.5	61.5	75.2	88.6	102	115	112	95.2	82.5	72.4	64.2	57.5	47.0	39.4	33.7				
30	2.40	5.47	10.2	19.0	35.5	51.2	66.3	81.0	95.5	110	124	124	106	91.5	80.3	7.12	63.7	52.2	43.7	10.0				
32	2.57	5.86	10.9	20.4	38.1	54.9	71.1	86.9	102	118	133	136	116	101	88.5	78.5	70.2	57.5	48.2					
35	2.83	6.46	12.0	22.5	42.0	60.4	78.3	95.7	113	130	146	156	133	115	101	89.8	80.3	65.8	55.1					
40	3.27	7.46	13.9	26.0	48.5	69.8	90.4	111	130	150	169	188	163	141	124	110	98.1	80.3						
45	3.71	8.47	15.8	29.5	55.0	79.3	103	126	148	170	192	213	194	168	148	131	117	45.3						
Lubrication Type A			Type B			Type C																		

Horsepower Ratings
Single Strand Roller Chain

For Multiple Strand Ratings See Chart at Bottom

1 1/2" Pitch No. 120

No. of Teeth of Small Sprocket	Revolutions Per Minute - Smalls Sprocket																								
	10	25	50	100	150	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100
11	1.37	3.12	5.83	10.9	15.7	20.3	29.2	37.9	46.3	54.6	46.3	37.9	31.8	27.1	23.5	20.6	18.3	16.4	13.8	14.4	12.2	11.2	10.4	9.59	
12	1.50	3.43	6.40	11.9	17.2	22.3	32.1	41.6	50.9	59.9	52.8	43.2	36.2	30.9	26.8	23.5	20.9	18.7	16.8	15.3	13.9	12.8	11.8	10.9	
13	1.64	3.74	6.98	13	18.8	24.3	35.0	45.4	55.5	65.3	59.5	48.7	40.8	34.9	30.2	26.5	23.5	21.0	19.0	17.2	15.7	14.4	13.3	12.3	
14	1.78	4.05	7.56	14.1	20.3	26.3	37.9	49.1	60.1	70.8	66.5	54.4	45.6	39.0	33.8	29.6	26.3	23.5	21.2	19.2	17.6	16.1	14.9	8.94	
15	1.91	4.37	8.15	15.2	21.9	28.4	40.9	53.0	64.7	76.3	73.8	60.4	50.6	43.2	37.4	32.9	29.1	26.1	23.5	21.3	19.5	17.0	16.5		
16	2.05	4.68	8.74	16.3	23.5	30.4	43.8	56.8	69.4	81.8	81.3	66.5	55.7	47.6	41.2	36.2	32.1	28.7	25.9	23.5	21.5	19.7	18.2		
17	2.19	5.00	9.33	17.4	25.1	32.5	46.8	60.6	74.1	87.3	89.0	72.8	61.0	52.1	45.2	39.6	35.2	31.5	28.4	25.8	23.5	21.6	19.9		
18	2.33	5.32	9.92	18.5	26.7	34.6	49.8	64.5	78.8	92.9	97.0	79.4	66.5	56.8	49.2	43.2	38.3	34.3	30.9	28.1	25.6	23.5	11.3		
19	2.47	5.64	10.5	19.6	28.3	36.6	52.8	68.4	83.6	98.5	105	86.1	72.1	61.6	53.4	46.8	41.5	37.2	33.5	30.4	27.8	25.5			
20	2.61	5.96	11.1	20.7	29.9	38.7	55.8	72.2	88.3	104	114	92.9	77.9	66.5	57.6	50.6	44.9	40.1	36.2	32.9	30.0	27.5			
21	2.75	6.28	11.7	21.9	31.5	40.8	58.8	76.2	98.1	110	122	100	83.8	71.6	62.0	54.4	48.3	43.2	39.0	35.4	32.3	29.6			
22	2.90	6.6	12.3	23.0	33.1	42.9	61.8	80.1	97.9	115	131	107	89.9	76.7	66.5	58.4	51.8	46.3	41.8	37.9	34.6	16.6			
23	3.04	6.93	12.9	24.1	34.8	45.0	64.9	84.0	103	121	139	115	96.1	82.0	71.1	62.4	55.3	49.5	44.6	40.5	37.0				
24	3.18	7.25	13.5	25.3	36.4	47.1	67.9	88.0	108	127	146	122	102	87.4	75.8	66.5	59.0	52.8	47.6	43.2	39.4				
25	3.32	7.58	14.1	26.4	38	49.3	71.0	91.9	112	132	152	130	109	92.9	80.6	70.7	62.7	56.1	50.6	45.9	41.3				
26	3.47	7.91	14.8	27.5	39.7	51.4	74.0	95.9	117	138	159	138	115	98.6	85.4	75.0	66.5	59.5	53.7	48.7	26.6				
28	3.76	8.57	16.0	29.8	43	55.7	80.2	104	127	150	172	154	129	110	95.5	83.8	74.3	66.5	60.0	54.4					
30	4.05	9.23	17.2	32.1	46.3	60.0	86.4	112	137	161	185	171	143	122	106	92.9	82.4	73.8	66.5	42.4					
32	4.34	9.9	18.5	34.5	49.6	64.3	92.6	120	147	173	199	188	158	135	117	102	90.8	81.3	73.3						
35	4.78	10.9	20.3	38.0	54.7	70.9	102	132	162	190	219	215	180	154	133	117	104	92.9	47.7						
50	5.52	12.6	23.5	43.9	63.2	81.8	118	153	187	220	253	263	220	188	163	143	127	59.5							
45	6.27	14.3	26.7	49.8	71.7	92.9	134	173	212	250	287	314	263	224	195	171	80								
Lubrication	Type A	Type B					Type C																		

1 3/4" Pitch No. 140

No. of Teeth of Small Sprocket	Revolutions Per Minute - Smalls Sprocket																								
	10	25	50	100	150	200	250	300	350	400	450	500	550	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700
11	2.12	4.83	9.02	16.8	24.2	31.4	38.4	45.2	52	58.6	65.2	71.6	75.2	66.0	52.4	42.9	35.9	30.7	26.6	23.3	20.7	18.5	16.7	15.2	
12	2.33	5.31	9.91	18.5	26.6	34.5	42.2	49.7	57.1	64.4	71.6	78.7	85.7	75.2	59.7	48.9	41.0	35.0	30.3	26.6	23.6	21.1	19.0	17.3	
13	2.54	5.79	10.8	20.2	29.0	37.6	46.0	54.2	62.2	70.2	78.0	85.8	93.5	84.8	67.3	55.1	46.2	39.4	34.2	30.0	26.5	23.8	21.5	19.5	
14	2.75	6.27	11.7	21.8	31.5	40.8	49.8	58.7	67.4	76.0	84.5	93.0	101	94.8	75.2	61.6	51.6	44.1	38.2	33.5	29.7	26.6	24.0	21.8	
15	2.96	6.76	12.6	23.5	33.9	43.9	53.7	63.2	72.7	81.9	91.1	100	109	10.5	83.4	68.3	57.2	48.9	42.4	37.2	33.0	29.5	26.6		
16	3.18	7.24	13.5	25.2	36.3	47.1	57.5	67.8	77.9	87.8	97.7	107	117	116	91.9	75.2	63.1	53.8	46.7	41.0	36.3	32.5	29.3		
17	3.39	7.73	14.4	26.9	38.8	50.3	61.4	72.4	83.2	93.8	104	115	125	127	101	82.4	69.1	59.0	51.1	44.9	39.8	35.6	32.1		
18	3.61	8.23	15.4	28.6	41.3	53.5	65.3	77.0	88.5	99.8	111	122	133	138	110	89.8	75.2	64.2	55.7	48.9	43.3	38.8	35.0		
19	3.82	8.72	16.3	30.4	43.7	56.7	60.3	81.6	93.8	106	118	129	141	150	119	97.4	81.6	69.7	50.4	53.0	47.0	42.1	37.9		
20	4.04	9.22	17.2	32.1	46.2	59.9	73.2	86.3	99.1	112	124	137	149	161	128	105	88.1	75.2	65.2	57.2	50.8	45.4			
21	4.26	9.72	18.1	33.8	48.7	63.1	77.2	91.0	104	118	131	144	157	170	138	113	94.8	80.9	70.2	61.6	54.6	48.9			
22	4.48	10.2	19.1	35.6	51.3	66.4	81.2	95.6	110	124	138	151	165	178	148	121	102	86.8	75.2	66.0	58.6	52.4			
23	4.70	10.7	20	37.3	53.8	69.7	85.2	100	115	130	145	159	173	187	158	130	109	92.8	80.4	70.6	62.6	56.0			
24	4.92	11.2	20.9	39.1	56.3	72.9	89.2	105	121	136	151	166	181	196	169	138	116	98.9	85.7	75.2	66.7	59.7			
25	5.14	11.7	21.9	40.8	58.8	76.2	93.2	110	126	142	158	174	189	205	180	147	123	105	91.1	80.0	70.9	63.5			
26	5.37	12.2	22.8	42.6	61.4	79.5	97.2	115	132	148	165	181	198	214	190	156	131	112	96.7	84.8	75.2				
28	5.81	13.3	24.7	46.2	66.5	86.2	105	124	143	161	179	197	214	232	213	174	146	125	108	94.8	84.1				
30	6.26	14.3	26.7	49.7	71.6	92.8	113	134	154	173	193	212	231	249	236	193	162	138	120	105	93.2				
32	6.71	15.3	28.6	53.3	76.8	99.5	122	143	165	186	206	227	247	267	260	213	178	152	132	116					
35	7.40	16.9	31.5	58.7	84.6	110	134	158	181	205	227	250	272	295	297	243	204	174	151	130					
40	8.54	19.5	36.4	67.9	97.7	127	155	182	210	236	263	289	315	340	363	297	249	213	178						
45	9.70	22.1	41.3	77.1	111	144	176	207	238	268	298	328	357	387	434	355	297	237	92.7						
Lubrication	Type A	Type B					Type C																		

Type A Manual Lubrication

Type B Bath or Disc Lubrication

Type C Oil Stream Lubrication

Multiple Strand Factors

No. Strands	Strand Factor
1	1.0
2	1.9
3	2.8
4	3.7

Horsepower Ratings
Single Strand Roller Chain

(For multiple strand ratings see chart on page E-191)

2" Pitch No. 160

No. of Teeth of Small Sprocket	Revolutions Per Minute - Smalls Sprocket																							
	10	25	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	1000	1100	1200	1300
11	3.07	7.01	13.1	24.4	35.2	45.6	55.7	65.6	75.4	85.0	94.5	96.6	83.7	73.5	65.2	58.3	52.6	47.7	43.6	40.0	34.1	29.6	26.0	23.0
12	3.38	7.70	14.4	26.8	38.6	50.1	61.2	72.1	82.8	93.4	104	110	95.4	83.7	74.2	66.4	59.9	54.4	49.6	45.6	38.9	33.7	29.6	26.3
13	3.68	8.40	15.7	29.2	42.1	54.6	66.7	78.6	90.3	102	113	124	108	94.4	83.7	74.9	67.5	61.3	56.0	51.4	43.9	38.0	33.4	29.6
14	3.99	9.10	17.0	31.7	45.6	59.1	72.3	85.2	97.8	110	123	135	120	105	93.6	83.7	75.5	68.5	62.6	57.4	49.0	42.5	37.3	33.1
15	4.30	9.80	18.3	34.1	49.2	63.7	77.9	91.7	105	119	132	145	133	117	104	92.8	83.7	76.0	69.4	63.7	45.4	47.1	41.4	
16	4.61	10.5	19.6	36.6	52.7	68.3	83.5	98.4	113	127	142	156	147	129	114	102	92.2	83.7	76.4	70.2	59.9	51.9	45.6	
17	4.92	11.2	20.9	39.1	56.3	72.9	89.1	105	121	136	151	166	161	141	125	112	101	91.7	83.7	75.8	65.6	56.9	49.9	
18	5.23	11.9	22.3	41.6	59.9	77.6	94.8	112	128	145	161	177	175	154	136	122	110	99.9	91.2	83.7	71.5	62.0	54.4	
19	5.55	12.7	23.6	44.1	63.5	82.2	101	118	136	153	171	188	190	167	148	132	119	108	98.9	90.8	77.6	67.2	59.0	
20	5.86	13.4	25.0	46.6	67.1	86.9	106	125	144	162	180	198	205	180	160	143	129	117	93.1	83.7	72.6	63.7		
21	6.18	14.1	26.3	49.1	70.7	91.6	112	132	152	171	190	209	221	194	172	154	139	126	115	105	90.1	78.1	68.5	
22	6.50	14.8	27.7	51.6	74.4	96.3	118	139	159	180	200	220	237	208	184	165	149	135	123	113	96.6	83.7		
23	6.82	15.6	29.0	54.2	78.0	101	124	146	167	189	210	231	251	222	197	176	159	144	132	121	103	98.5		
24	7.14	16.3	30.4	56.7	81.7	106	129	152	175	197	220	241	263	237	210	188	169	154	140	129	110	95.4		
25	7.46	17.0	31.8	59.3	85.4	111	135	159	183	206	229	252	275	252	223	200	180	164	149	137	117	101		
26	7.78	17.8	33.1	61.8	89.1	115	141	166	191	215	239	263	287	267	237	212	191	173	158	145	124	108		
28	8.43	19.2	35.9	67.0	96.5	125	153	180	207	233	259	285	311	298	265	237	214	194	177	162	139	120		
30	9.08	20.7	38.7	72.2	104	135	165	194	223	251	279	307	335	331	293	263	237	215	196	180	154			
32	9.74	22.2	41.5	77.4	111	144	176	208	239	269	300	329	359	365	323	289	261	237	216	198	169			
35	10.7	24.5	45.7	85.2	123	159	194	229	263	297	330	363	395	417	370	331	298	271	247	227	180			
40	12.4	28.3	52.8	98.5	142	184	225	265	304	343	381	419	457	494	452	404	365	331	302	257				
45	14.1	32.1	59.9	112	161	209	255	301	345	389	433	476	519	561	538	482	418	348	271	189				
Lubrication	Type A	Type B			Type C																			

2 1/4" Pitch No. 180

No. of Teeth of Small Sprocket	Revolutions Per Minute - Smalls Sprocket																							
	10	25	50	100	150	200	250	300	350	400	450	500	550	600	650	750	800	850	900	950	1000	1050	1100	1150
11	4.24	9.68	18.1	33.7	48.6	62.9	76.9	90.6	104	117	124	106	92.0	80.7	71.6	57.8	52.4	47.9	43.9	40.5	37.5	34.9	32.5	
12	4.66	10.6	19.8	37.0	53.4	69.1	84.5	99.6	114	129	142	121	105	92.0	81.6	65.8	59.7	54.6	50.1	46.2	42.8	39.7	37.1	
13	5.08	11.6	21.6	40.4	58.2	75.4	92.1	109	125	141	156	136	118	104	92.0	74.2	67.4	61.5	55.5	52.1	48.2	44.8		
14	5.51	12.6	23.4	43.7	63.0	81.6	99.8	118	135	152	169	152	132	116	103	82.9	75.3	68.7	63.1	58.2	53.9	50.1		
15	5.93	13.5	25.3	47.1	67.9	88.0	108	127	146	164	182	169	146	129	114	92.0	83.5	76.2	70.0	64.5	59.7	55.5		
16	6.36	14.5	27.1	50.5	72.8	94.3	115	136	156	176	196	186	161	142	126	101	92.0	84.0	77.1	71.1	65.8	61.2		
17	6.79	15.5	28.9	54.0	77.7	101	123	145	167	188	209	204	177	155	138	111	101	92.0	84.4	77.9	72.1			
18	7.22	16.5	30.8	57.4	82.7	107	131	154	177	200	222	222	193	169	150	121	110	100	92.0	84.8	78.5			
19	7.66	17.5	32.6	60.8	87.6	114	139	164	188	212	236	241	209	183	163	131	119	109	99.8	92.0	85.2			
20	8.10	18.5	34.5	64.3	92.6	120	147	173	199	224	249	260	226	198	175	142	129	117	108	99.3	92.0			
21	8.53	19.5	36.3	67.8	97.6	126	155	182	209	236	262	280	243	213	189	152	138	126	116	107	99.0			
22	8.97	20.5	38.2	71.3	103	133	163	192	220	248	276	300	260	228	203	163	148	135	124	115				
23	9.41	21.5	40.1	74.8	108	140	171	201	231	260	290	318	278	244	216	175	159	145	133	123				
24	9.86	22.5	42.0	78.3	113	146	179	210	242	273	303	333	296	260	231	186	169	154	142	131				
25	10.3	23.5	43.9	81.8	118	153	187	220	253	285	317	348	315	277	245	198	180	164	151	139				
26	10.7	24.5	45.7	85.4	123	159	195	229	264	297	331	363	334	293	260	210	191	174	160					
28	11.6	26.6	49.6	92.5	133	173	211	249	286	322	358	394	374	328	291	235	213	194	178					
30	12.5	28.6	53.4	99.6	144	186	227	268	308	347	386	424	414	364	322	260	236	216	198					
32	13.4	30.7	57.2	107	154	199	244	287	330	372	414	455	456	401	355	287	260	238						
35	14.8	33.8	63.1	118	170	220	268	316	363	410	456	501	522	458	406	328	291	220						
40	17.1	39.0	72.9	136	196	254	310	365	420	473	526	579	575	524	465	324	244							
45	19.4	44.3	82.7	154	222	288	352	415	477	538	598	631	578	514	441	271								
Lubrication	Type A	Type B			Type C																			

2 1/2" Pitch No. 200

No. of Teeth of Small Sprocket	Revolutions Per Minute - Smalls Sprocket																		
	10	15	20	30	40	50	70	100	150	200	250	300	350	400	450	550	600	650	
11	5.64	8.12	10.5	15.1	19.6	24.0	32.5	44.8	64.5	83.5	102	120	138	156	135	100	87.8	77.9	
12	6.19	8.92	11.6	16.6	21.6	26.4	35.7	49.2	70.8	91.8	112	132	152	171	154	114	100		
13	6.75	9.72	12.6	18.1	23.5	28.7	38.9	53.6	77.2	100	122	144	168	187	174	129	113		
14	7.31	10.5	13.6	19.7	25.5	31.1	42.1	58.1	83.7	108	132	156	179	202	194	144	126		
15	7.88	11.3	14.7	21.2	27.4	33.5	45.4	62.6	90.1	117	143	168	183	218	215	159	140		
16	8.45	12.2	15.8	22.7	29.4	36.0	48.7	67.1	96.6	125	153	180	207	234	237	176	154		
17	9.02	13.0	16.8	24.2	31.4	38.4	52.0	71.6	103	134	163	193	221	249	260	192	169		
18	9.59	13.8	17.9	25.8	33.4	40.8	55.3	76.2	110	142	174	205	235	265	283	209	184		
19	10.2	14.6	19.0	27.3	35.4	43.3	58.6	80.8	116	151	184	217	249	281	307	227	198		
20	10.7	15.5	20.1	28.9	37.4	45.8	61.9	85.4	123	159	195	229	264	297	331	245			
21	11.3	16.3	21.1	30.5	39.5	48.2	65.3	90.0	130	168	205	242	278	313	348	264			
22	11.9	17.2	22.2	32.0	41.5	50.7	68.7	94.6	136	177	216	254	292	330	366	283			
23	12.5	18.0	23.3	33.6	43.5	53.2	72.0	99.3	143	185	226	267	307	346	384	303			
24	13.1	18.9	24.4	35.2	45.6	55.7	75.4	104	150	194	237	279	321	362	402	323			
25	13.7	19.7	25.5	36.8	47.6	58.2	78.8	109	156	203	248	292	335	378	421	343			
26	14.3	20.6	26.6	38.4	49.7	60.7	82.2	113	163	212	259	305	350	395	439	364			
Lubrication	Type A		Type B							Type C									

Horsepower Ratings
Single Strand Roller Chain

For Multiple Strand Ratings See Chart at Bottom

3" Pitch No. 240

No. of Teeth of Small Sprocket	Revolutions Per Minute - Smalls Sprocket																				
	5	10	15	20	25	30	40	50	60	80	100	125	150	175	200	250	300	350	400	450	
11	4.86	9.08	13.1	16.9	20.7	24.4	31.6	38.6	45.5	59.0	72.1	88.1	104	119	135	164	194	223	187	156	
12	5.34	9.97	14.4	18.6	22.7	26.8	34.7	42.4	50.0	64.8	79.2	96.8	114	131	148	181	213	245	218		
13	5.83	10.9	15.7	20.3	24.8	29.2	37.9	46.3	54.5	70.6	86.4	106	124	143	161	197	232	267	240		
14	6.31	11.8	17.0	22.0	26.9	31.7	41.0	50.1	59.1	76.5	93.6	114	135	155	175	213	251	289	268		
15	6.80	12.7	18.3	23.7	28.9	34.1	44.2	54.0	63.6	82.4	101	123	145	167	188	230	274	311	297		
16	7.29	13.6	19.6	25.4	31.0	36.6	47.4	57.9	68.2	88.4	108	132	156	179	202	247	290	334	328		
17	7.78	14.5	20.9	27.1	33.1	39.0	50.6	61.8	72.9	94.4	115	141	166	191	215	263	310	356	359		
18	8.28	15.4	22.3	28.8	35.2	41.5	53.8	65.8	77.5	100	123	150	177	203	229	280	330	379	377		
19	8.78	16.4	23.6	30.6	37.4	44.0	57.0	69.7	82.2	106	130	159	187	215	243	297	360	402	393		
20	9.28	17.3	24.9	32.3	39.5	46.5	60.3	73.7	86.8	112	138	168	198	228	257	314	370	423	407		
21	9.78	18.2	26.3	34.1	41.6	49.0	63.5	77.7	91.5	119	145	177	209	240	270	331	390	439	421		
22	10.3	19.2	27.6	35.8	43.8	51.6	66.8	81.7	96.2	125	152	186	220	252	284	348	410	454	435		
23	10.8	20.1	29.0	37.6	45.9	54.1	70.1	85.7	101	131	160	195	230	265	298	365	430	469	448		
24	11.3	21.1	30.4	39.3	48.1	56.7	73.4	89.7	106	137	167	205	241	277	312	282	450	483			
25	11.8	22.0	31.7	41.1	50.3	59.2	76.7	93.8	110	143	175	214	252	290	327	399	470	496			
26	12.3	23.0	33.1	42.9	52.4	61.8	80.0	97.8	115	149	183	223	263	302	341	416	491	509			
Lubrication	Type A		Type B									Type C									

Type A Manual Lubrication

Type B Bath or Disc Lubrication

Type C Oil Stream Lubrication

Multiple Strand Factors

No. Strands	Strand Factor	No. Strands	Strand Factor
1	1.0	3	2.8
2	1.9	4	3.7

American Standard No. 2040

No. of Teeth of Small Sprocket	Revolutions Per Minute - Smalls Sprocket																
	25	50	100	150	200	250	300	400	500	600	700	800	900	1000	1100	1200	1300
11	.202	.379	.687	.958	1.19	1.41	1.59	1.89	2.14	2.32							
12	.223	.419	.766	1.07	1.34	1.58	1.81	2.16	2.46	2.71	2.88						
13	.243	.458	.842	1.18	1.48	1.76	2.00	2.44	2.79	3.08	3.31	3.48					
14	.263	.497	.914	1.28	1.63	1.93	2.20	2.67	3.09	3.44	3.70	3.91	4.10				
15	.283	.535	.989	1.39	1.76	2.09	2.40	2.93	3.38	3.77	4.08	4.32	4.52	4.67			
16	.303	.572	1.06	1.49	1.89	2.25	2.59	3.17	3.67	4.09	4.44	4.73	4.96	5.13			
17	.322	.611	1.13	1.59	2.02	2.41	2.77	3.41	3.95	4.41	4.80	5.10	5.38	5.57	5.72		
18	.342	.648	1.20	1.70	2.15	2.57	2.94	3.63	4.21	4.71	5.13	5.48	5.76	5.97	6.15		
19	.361	.687	1.27	1.80	2.28	2.72	3.14	3.86	4.49	5.02	5.48	5.85	6.17	6.41	6.61	6.70	
20	.380	.720	1.34	1.90	2.40	2.87	3.29	4.07	4.72	5.29	5.76	6.17	6.50	6.77	6.98	7.13	
21	.399	.758	1.41	1.99	2.52	3.01	3.47	4.27	4.97	5.57	6.07	6.50	6.86	7.13	7.35	7.50	
22	.419	.794	1.48	2.08	2.64	3.15	3.63	4.48	5.20	5.83	6.37	6.81	7.18	7.48	7.71	7.87	
23	.437	.829	1.54	2.18	2.76	3.30	3.79	4.68	5.42	6.09	6.64	7.11	7.49	7.80	8.04	8.21	8.30
24	.456	.866	1.60	2.27	2.88	3.44	3.96	4.87	5.67	6.35	6.92	7.40	7.80	8.12	8.37	8.54	8.63
25	.475	.902	1.67	2.36	3.00	3.58	4.11	5.07	5.90	6.60	7.19	7.73	8.10	8.42	8.67	8.84	8.94
30	.568	1.076	1.99	2.81	3.56	4.24	4.86	5.95	6.93	7.76	8.40	8.90	9.38	9.72	9.95	10.09	10.15
35	.657	1.247	2.30	3.24	4.09	4.86	5.56	6.81	7.86	8.71	9.42	9.99	10.43	10.72	10.93	10.97	
40	.748	1.413	2.60	3.65	4.59	5.44	6.22	7.57	8.67	9.60	10.31	10.86	11.23	11.49	11.61		
Lubrication	Type 1				Type 2				Type 3								

American Standard No. 2050

No. of Teeth of Small Sprocket	Revolutions Per Minute - Smalls Sprocket															
	25	50	100	150	200	250	300	350	400	450	500	550	600	700	800	900
11	.385	.72	1.29	1.78	2.19	2.56	2.85	3.12	3.33	3.53						
12	.428	.80	1.44	1.99	2.48	2.90	3.26	3.58	3.86	4.10	4.31					
13	.457	.87	1.59	2.20	2.74	3.23	3.65	4.03	4.36	4.66	4.91	5.11	5.30			
14	.506	.95	1.73	2.41	3.01	3.55	4.02	4.45	4.84	5.17	5.48	5.73	5.96			
15	.544	1.02	1.87	2.61	3.27	3.86	4.39	4.88	5.31	5.68	6.02	6.31	6.57	6.94		
16	.582	1.09	2.00	2.81	3.52	4.16	4.74	5.26	5.73	6.16	6.55	6.87	7.19	7.61		
17	.620	1.16	2.14	2.99	3.77	4.46	5.09	5.66	6.17	6.63	7.05	7.42	7.75	8.24	8.62	
18	.658	1.23	2.27	3.19	4.01	4.75	5.41	6.03	6.58	7.09	7.54	7.94	8.31	8.84	9.28	
19	.696	1.31	2.41	3.39	4.25	5.05	5.76	6.42	7.00	7.55	8.04	8.46	8.87	9.42	9.90	
20	.732	1.38	2.54	3.56	4.48	5.32	6.07	6.75	7.38	7.95	8.46	8.92	9.35	9.97	10.49	
21	.769	1.45	2.66	3.75	4.70	5.59	6.38	7.10	7.77	8.37	8.90	9.39	9.84	10.50	11.06	11.44
22	.806	1.52	2.79	3.92	4.92	5.86	6.69	7.45	8.14	8.76	9.33	9.84	10.31	11.01	11.59	12.00
23	.842	1.58	2.91	4.09	5.16	6.12	6.98	7.78	8.50	9.15	9.74	10.27	10.76	11.50	12.10	12.52
24	.879	1.65	3.05	4.27	5.37	6.38	7.28	8.10	8.85	9.54	10.16	10.70	11.21	11.97	12.59	13.03
25	.914	1.72	3.17	4.45	5.59	6.62	7.58	8.42	9.20	9.91	10.55	11.12	11.64	12.42	13.05	13.50
30	1.092	2.06	3.77	5.28	6.63	7.84	8.93	9.92	10.82	11.62	12.35	12.99	13.57	14.39	15.06	15.48
36	1.267	2.38	4.35	6.07	7.59	8.96	10.18	11.27	12.26	13.14	13.92	14.59	15.17	16.00	16.62	16.94
40	1.44	2.70	4.91	6.82	8.51	10.00	11.33	12.51	13.57	14.49	15.28	15.95	16.57	17.29	17.78	
Lubrication	Type 1			Type 2					Type 3							

Type 1 Manual drip (4 to 10 drops per minute), or splash.

Type 2 Rapid drip (20 drops per minute minimum), splash, or disc.

Type 3 Disc or forced.

Multiple Strand Factors

No. Strands	Strand Factor
2	1.7
3	2.5
4	3.3

Horsepower Ratings
Single Strand Roller Chain

For Multiple Strand Ratings See Chart at Bottom

American Standard No. 2060

No. of Teeth of Small Sprocket	Revolutions Per Minute - Smalls Sprocket																
	25	50	75	100	125	150	200	250	300	350	400	450	500	550	600	650	700
11	.66	1.21	1.70	2.15	2.54	2.93	3.58	4.12	4.56	4.93							
12	.73	1.34	1.90	2.41	2.85	3.30	4.05	4.70	5.24	5.71	6.08						
13	.79	1.48	2.09	2.65	3.15	3.65	4.52	5.27	5.91	6.46	6.92	7.32					
14	.86	1.60	2.27	2.90	3.45	4.00	4.97	5.79	6.54	7.17	7.72	8.18	8.58				
15	.92	1.72	2.45	3.14	3.74	4.34	5.39	6.32	7.14	7.86	8.48	9.01	9.48				
16	.99	1.85	2.64	3.36	4.01	4.66	5.82	6.82	7.73	8.52	9.21	9.80	10.34	10.77			
17	1.05	1.97	2.82	3.59	4.28	4.98	6.22	7.32	8.29	9.14	9.91	10.56	11.14	11.64	12.06		
18	1.12	2.10	2.99	3.82	4.56	5.31	6.63	7.82	8.85	9.78	10.60	11.31	11.96	12.50	12.97		
19	1.18	2.23	3.17	4.05	4.83	5.62	7.03	8.29	9.42	10.41	11.29	12.08	12.76	13.35	13.87	14.30	
20	1.25	2.34	3.34	4.26	5.09	5.93	7.41	8.74	9.92	10.97	11.91	12.74	13.46	14.08	14.64	15.10	
21	1.31	2.46	3.51	4.49	5.36	6.24	7.80	9.19	10.43	11.55	12.52	13.40	14.14	14.83	15.42	15.90	
22	1.37	2.58	3.67	4.70	5.62	6.54	8.16	9.62	10.93	12.08	13.13	14.04	14.84	15.55	16.15	16.67	
23	1.44	2.69	3.83	4.90	5.86	6.83	8.53	10.06	11.42	12.62	13.71	14.67	15.49	16.22	16.87	17.38	17.83
24	1.50	2.80	4.00	5.11	6.11	7.12	8.90	10.47	11.90	13.16	14.28	15.27	16.14	16.89	17.56	18.11	18.57
25	1.56	2.92	4.17	5.32	6.36	7.41	9.27	10.89	12.37	13.67	14.84	15.86	16.76	17.53	18.21	18.79	19.24
30	1.86	3.48	4.96	6.32	7.55	8.78	10.94	12.76	14.55	16.05	17.38	18.54	19.53	20.38	21.11	21.70	22.16
35	2.16	4.03	5.73	7.29	8.67	10.06	12.52	14.67	16.54	18.17	19.61	20.80	21.88	22.73	23.40	23.99	
40	2.45	4.55	6.46	8.20	9.70	11.31	13.99	16.33	18.35	20.08	21.57	22.84	23.86	24.64	25.42		
Lubrication	**Type 1**				**Type 2**						**Type 3**						

American Standard No. 2080

No. of Teeth of Small Sprocket	Revolutions Per Minute - Smalls Sprocket																
	10	20	30	40	50	80	70	BO	90	100	150	200	250	300	350	400	450
11	.66	1.24	1.78	2.26	2.76	3.20	3.60	3.99	4.38	4.78	6.36	7.60					
12	.72	1.37	1.96	2.52	3.08	3.56	4.03	4.48	4.92	5.36	7.20	8.68	9.82				
13	.79	1.49	2.15	2.77	3.36	3.91	4.44	4.95	5.45	5.93	8.02	9.73	11.08				
14	.85	1.62	2.33	3.01	3.66	4.26	4.85	5.42	5.96	6.49	8.82	10.75	12.29	13.60			
15	.91	1.74	2.52	3.25	3.95	4.60	5.25	5.86	6.45	7.03	9.60	11.74	13.46	14.94			
16	.98	1.87	2.70	3.48	4.24	4.94	5.64	6.29	6.93	7.56	10.36	12.70	14.59	16.24	17.65		
17	1.04	1.99	2.88	3.71	4.52	5.28	6.02	6.72	7.40	8.09	11.10	13.63	15.69	17.50	19.04		
18	1.11	2.11	3.05	3.94	4.80	5.61	6.40	7.14	7.87	8.60	11.82	14.53	16.76	18.72	20.38	21.77	
19	1.17	2.23	3.23	4.17	5.09	5.94	6.77	7.56	8.33	9.10	12.52	15.40	17.80	19.90	21.67	23.18	
20	1.23	2.35	3.40	4.40	5.36	6.26	7.13	7.98	8.78	9.60	13.20	16.25	18.81	21.04	22.91	24.52	
21	1.29	2.47	3.57	4.62	5.62	6.58	7.49	8.39	9.23	10.09	13.87	17.08	19.79	22.14	24.11	25.80	
22	1.36	2.58	3.74	4.84	5.90	6.89	7.84	8.79	9.67	10.57	14.53	17.90	20.74	23.20	25.27	27.03	
23	1.42	2.70	3.90	5.06	6.16	7.20	8.19	9.18	10.10	11.05	15.18	18.71	21.66	24.23	26.40	28.22	
24	1.48	2.82	4.05	5.27	6.43	7.51	8.54	9.56	10.53	11.52	15.82	19.51	22.55	25.23	27.50	29.38	30.98
25	1.54	2.92	4.20	5.48	6.69	7.81	8.89	9.94	10.95	11.98	16.45	20.30	23.42	26.20	28.57	30.52	32.16
30	1.84	3.50	5.02	6.54	7.96	9.29	10.59	11.74	12.97	14.23	19.46	23.91	27.52	30.70	33.56	35.52	37.26
35	2.14	4.07	5.82	7.56	9.19	10.71	12.21	13.48	14.92	16.35	22.26	27.23	31.21	34.65	37.57	39.66	
40	2.43	4.61	6.60	8.55	10.38	12.09	13.76	15.17	16.80	18.36	24.88	30.28	34.52	38.09	40.96	43.07	
Lubrication	**Type 1**									**Type 2**			**Type 3**				

Type 1 Manual drip (4 to 10 drops per minute), or splash.

Type 2 Rapid drip (20 drops per minute minimum), splash, or disc.

Type 3 Disc or forced.

Multiple Strand Factors

No. Strands	Strand Factor
2	1.7
3	2.5
4	3.3

ENGINEERED CLASS SPROCKETS

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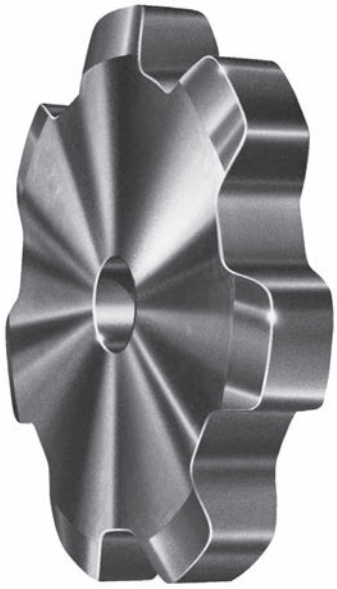
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6.000 PITCH (2180)	F-42
12.000 PITCH (4850)	F-42
2.500 PITCH (9250)	F-42
TRACTION WHEELS	**F-43 – 45**
SEGMENTAL HUBS	**F-46**
SEGMENTAL RIM SPROCKETS	**F-47**
KEY SEATING AND SET SCREWS	**F-48**

Engineered Class Sprockets
Steel Cut and Cast Iron



Martin's engineering class sprockets are manufactured to the highest quality standards. Martin offers engineering class sprockets in both flame cut (accu-torch) and cast iron.

ASME standard torch profiles – elongated root design promotes a self- cleaning effect of the root to keep your demanding applications moving.





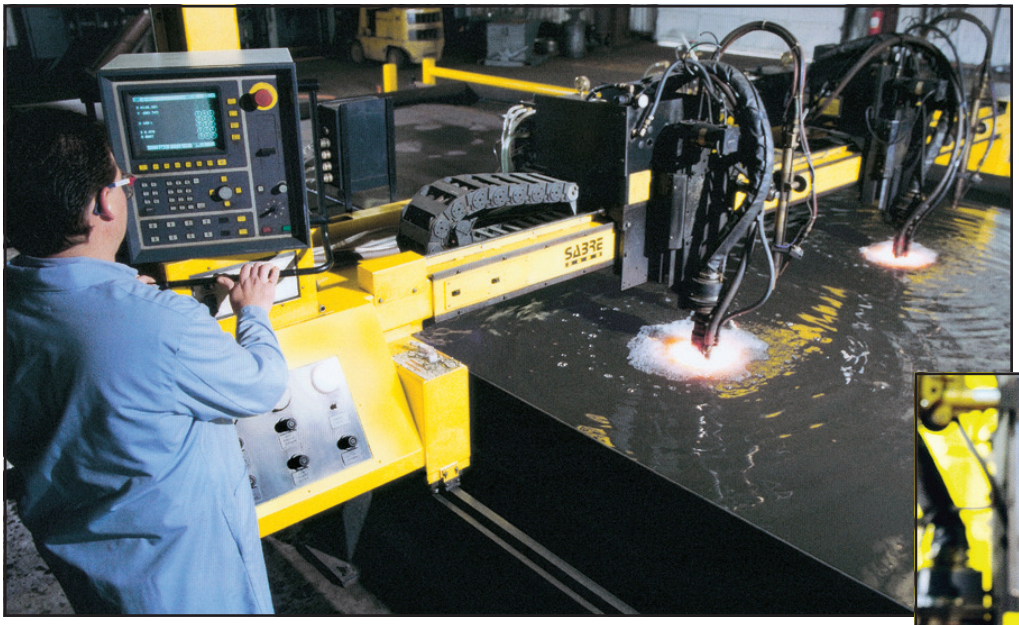
These sprockets are available in A, B, and C hub types:

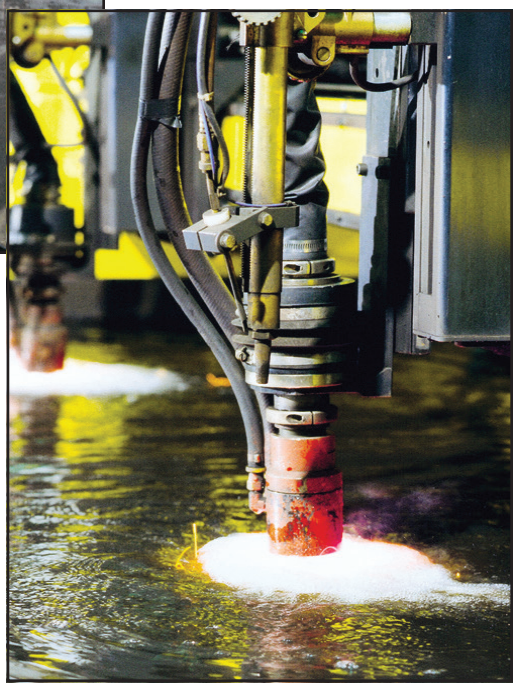
- A style (no hub) typically used in weld-on applications.
- B style (hub one side) is used in applications where clearance width is narrow (these are typically more economical than C style).
- C style (hub both sides) which is used in applications where B style is not wide enough to withstand torques produced by drive.

Martin also offers split style construction. The split style allows for easy removal or installation. They can be used in nearly all applications. The shaft/keyway security is much tighter than a typical setscrew mount.

Flame hardening, induction heat treating, and chilled rim are available for longer wear life.

Steel Accu-Torch® Sprockets for Engineering Chain





Martin Accu-Torch® steel sprockets are available for virtually all engineering class chains in style A, B, and C. Also available as split with welded hub and split or solid detachable hub. May also be furnished as shear pin type. Send us your inquiries.

Where possible please specify chain number, pitch diameter, number of teeth, bore and keyway size, and hub style required.

Accu-Torch® sprockets are not intended to replace cut tooth roller chain sprockets.

MTO Engineered Class Sprockets



ALL STEEL WIDE DRAG SPROCKET



SPLINED MUD RELIEF ACCU-TORCH®



SPECIAL ACCU-TORCH® FOR SEWAGE TREATMENT



10 FT. DIAMETER ACCU-TORCH® FOR PAPER MILLS

For quality and dependable service, call Martin for all your made-to-order requirements.

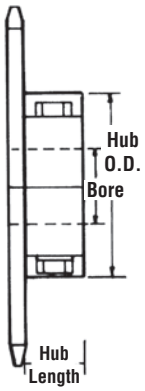
Instant Split® Sprockets

Martin Instant Split® / Accu-Torch® sprockets offer unlimited design and are simply installed with a hand wrench... greatly reducing costly downtime.



Accu-Torch® Size for Instant Split® Hubs

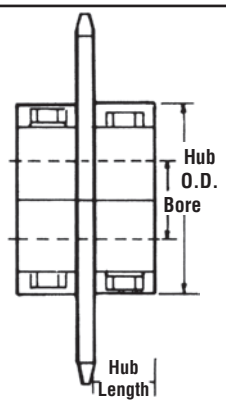
Split Hub Number	Bore	Minimum Number of Teeth Chain Number / Pitch 62 1.654	78 2.609	1568 3.067	1030 3.075	82 3.075	238 3.500	124 4.000	1240 4.063	635 4.500	1207 5000	132 6.050
S-1	.75" – 1.5"	9	7									
S-2	1.375" – 2.25"	12	8	8	8	7	8	6	7			
S-3	2" – 3"	15	10	10	9	9	9	7	8	8		
S-4	2.75" – 4"	18	12	12	11	11	10	9	9	9	8	
S-5	3.75" – 5"	21	14	13	13	12	12	10	10	10	9	7
S-6	4.75" – 6"	23	15	14	14	13	13	11	11	11	10	8
S-7	5.75" – 7"	27	18	16	16	15	15	12	13	12	11	9
S-8	6.25" – 8"	31	20	18	18	17	16	14	14	14	13	10



Pricing Example Style B
1030B25 split with S-3 Hub,
2.938" bore, KW and SS

S-3 Hub
1030A25 Plate

See Hub List
See Plate List
Total Price List



Pricing Example Style B
1030B25 split with S-3 Hub,
2.938" bore, KW and SS

Two S-3 Hubs
1030A25 Plate

See Hub List
See Plate List
Total Price List

Instant split hubs are for use with plate sprockets only.

Hub Number	Bore	Hub O.D.	Hub ★ Length	Bolts	Weight (lb)
S-1	.75" - 1.5"	3.125"	1"	.375" × 2.25"	1.8
S-2	1.375" - 2.25"	4.375"	1.25"	.5" × 3"	4.1
S-3	2" - 3"	6"	1.375"	.625" × 4.5"	8.4
S-4	2.75" - 4"	7.625"	1.5"	.75" × 5.5"	14.4
S-5	3.75" - 5"	9.25"	2"	1" × 6"	27.8
S-6	4.75" - 6"	10.25"	2.25"	1" × 6"	35.4
S-7	5.75" - 7"	12.5"	2.5"	1" × 7"	64.4
S-8	6.25" - 8"	14.5"	3"	1" × 8"	98.5

★Add hub length to plate thickness to determine length thru bore.

Solid and Split Detachable Hubs

TYPE D SPROCKETS — STOCK DETACHABLE HUBS

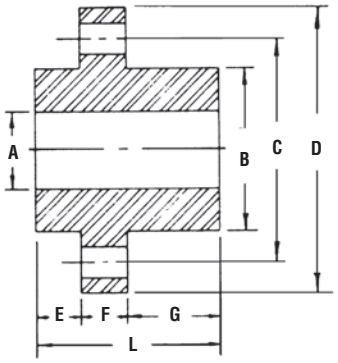
Type D sprockets consist of a Type A plate sprocket bolted to a detachable hub. A solid or split plate sprocket may be assembled to a solid or split hub. When ordering a Type D sprocket, be sure to select a plate sprocket large enough to allow chain clearance over the hub flange diameter, dimension D.

Bolt holes of Type D hubs are drilled for interchangeability. Speed ratios may be changed simply by removing the plate sprocket and substituting another with a different number of teeth. When worn, the sprocket may be reversed to use the unworn tooth surfaces, increasing the life of the sprocket.

Solid Hubs - Steel — Dimensions (Inches)

Hub Number	Bore Range A		Hub Diameter B	Bolt Circle C	Flange Diameter D	Bolt Holes		E	F	G★	L
	Stock	Maximum				Number	Bolt Size				
101	0.625	1.75	2.5	3.375	4.25	6	0.375	0.5	0.375	1.125	2
102	1.438	2	3	4	5	6	0.438	0.5	0.5	1.5	2.5
103	1.813	2.5	4	5.063	6	6	0.5	0.5	0.625	1.625	2.75
104	2.313	3	4.5	5.75	7	6	0.625	0.5	0.75	2	3.25
105	2.563	3.25	5	6.25	7.5	6	0.625	0.563	0.938	2.5	4
106	2.813	3.75	5.5	7	8.5	6	0.625	0.625	1	2.375	4
107	3.313	4	6	7.5	9	6	0.625	0.625	1.25	2.375	4.25
108	3.563	4.5	7	8.625	10.375	6	0.75	0.625	1.375	2.5	4.5
109	4.063	7	10.5	13	15.5	6	1	0.75	1.5	2.75	5

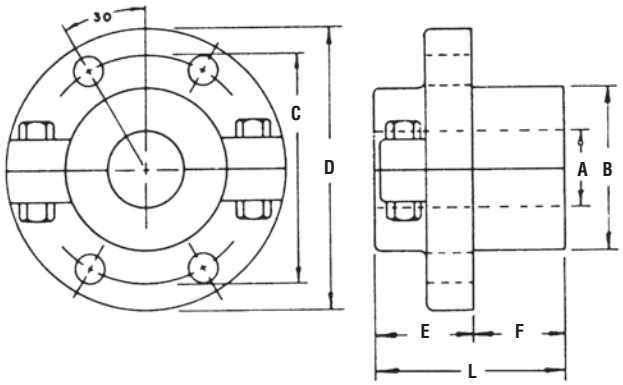
★Maximum bores shown are maximum bores with standard keyseat and setscrew.



ALTERATION CHARGES

See current list price and discount sheet for alteration charges.

The list price as shown in the list price book is for hub with stock bore. To obtain the price of a complete Type D sprocket add the list price of hub plus alteration charges and the list price of the desired Type A plate sprocket, including rebore, bolt hole drilling, and splitting charge if desired.



Split Hubs - Cast Iron — Dimensions (Inches)

Hub Number	Bore Range A		Hub Diameter B	Bolt Circle C	Flange Diameter D	Bolt Holes		E	F★	L
	Stock	Maximum				Number	Bolt Size			
102S	1.313	1.5	3	4	5	4	0.438	1.75	1.375	3.125
103S	1.563	2.25	4	5.063	6	4	0.5	2	1.5	3.5
104S	2.313	2.5	4.5	5.75	7	4	0.625	2.25	1.75	4
105S	2.563	2.75	5	6.25	7.5	4	0.625	2.25	1.875	4.125
106S	2.813	3.25	5.5	7	8.5	4	0.625	2.5	2	4.5
107S	3.313	3.5	6	7.5	9	4	0.625	3	1.75	4.75
108S	3.563	4	7	8.625	10.375	4	0.75	3.375	1.875	5.25
109S	4.063	6	10.5	13	15.5	4	1	4.125	1.75	5.875

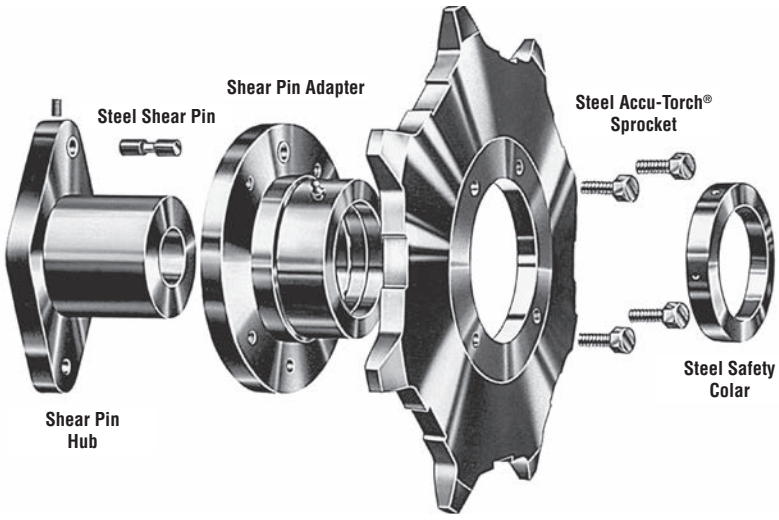
Maximum bores shown are maximum bores with standard keyseat and setscrew.
★Plate thickness of Accu-Torch® not recommended if larger than dimension listed.

Bolt-On Shear Pin Accu-Torch® Sprockets

Shear pin sprockets provide simple, dependable protection against expensive machinery damage caused by overloads or jamming. Torque is transmitted by a single pin, necked to shear when the safe load is exceeded. When an overload occurs, the pin shears, disconnecting the drive immediately.

The bolt-on shear pin adapter converts any plate sprocket into a stock shear pin sprocket allowing immediate delivery of stock shear pin sprockets.

Selection guide on page F-9 gives complete procedure to select the proper shear pin assembly.



Stock Shear Pin Assemblies

Shear Pin Assembly Part Number	Hub Bore Range	Shear Pin Hub Part Number	Shear Pin Adapter Part Number
SP-17	1" and UNDER	SPH-17	SPA-17
SP-18	1.063 - 1.25	SPH-18	SPA-18
SP-19	1.313 - 1.5	SPH-19	SPA-19
SP-20	1.563 - 1.75	SPH-20	SPA-20
SP-21	1.813 - 2	SPH-21	SPA-21
SP-22	2.063 - 2.25	SPH-22	SPA-22
SP-23	2.313 - 2.5	SPH-23	SPA-23
SP-24	2.563 - 2.75	SPH-24	SPA-24
SP-25	2.813 - 3	SPH-25	SPA-25
SP-26	3.063 - 3.5	SPH-26	SPA-26
SP-27	3.563 - 4	SPH-27	SPA-27
SP-28	4.063 - 4.5	SPH-28	SPA-28
SP-29	4.563 - 5	SPH-29	SPA-29
SP-30	4.875 - 5.5	SPH-30	SPA-30
SP-31	5.563 - 6	SPH-31	SPA-31

NOTES ON PRICING:

Shear Pin Hub List Price includes any finished bore within the stated range, standard keyway and setscrew, hardened steel shear pin bushing.

Shear Pin Adapter List Price includes the shear pin bushing, grease fitting.

Complete Assembly List Price includes all components of the shear pin assembly as described above. Total list price of any shear pin sprocket is the complete assembly list price plus the list price of the desired plate sprocket (from tables of stock sprocket list prices).

Replacement Sprockets should be priced as altered stock sprockets directly from list price and alteration charge tables.

Shear Pin Components may be ordered separately and will be treated as stock items when conforming to standard specifications and descriptions above.

PRICING EXAMPLES:

1. Stock Shear Pin Accu-Torch® Sprocket

To price a 25 tooth shear pin sprocket for 1030 chain (1030SP25) using SP-26 shear pin assembly with 3.438" bore, standard keyway and setscrew:

SP-26 Assembly ..... See List Price Sheet
1030A25 .....

2. Shear Pin Adapter and Sprocket for Existing Hub

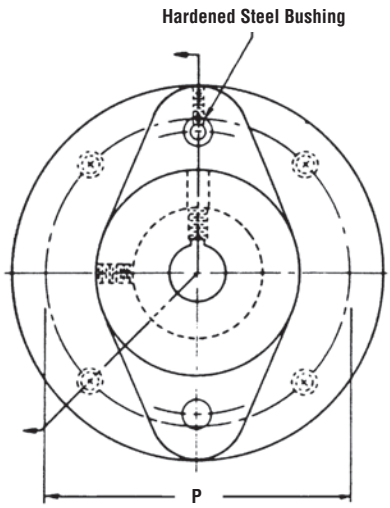
To price a "Bolt-on" shear pin adapter and sprocket to replace the sprocket part of existing 78A12 using SP-20 hub:

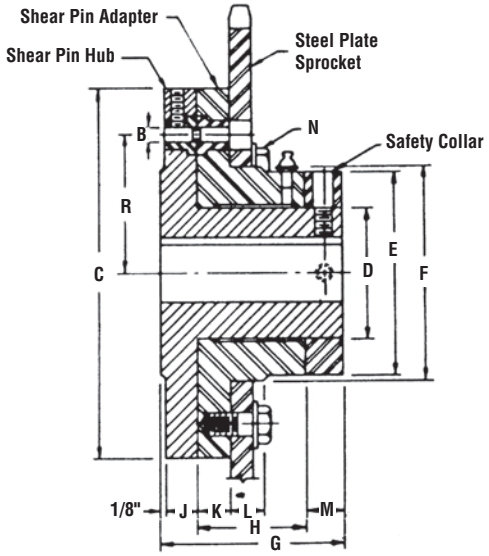
SPA-20 Adapter ..... See List Price Sheet
78A12 .....

Shear Pin Sprockets can also be furnished in other standard styles or made to customers specifications. Price on application.

It is important that torque requirement for selected hub be checked in torque rating on page F-9 and neck diameter of shear pins be specified.

Bolt-On Shear Pin
Accu-Torch® Sprockets







Sprocket Sizes for Stock Shear Pin Assemblies

Shear Pin Assembly Number	Hub Bore Range	Minimum Teeth Number										
		Chain Number / Pitch										
		62	78	1568	1030	82	238	124	1240	635	1207	132
		1.654	2.609	3.067	3.075	3.075	3.500	4.000	4.063	4.500	5.000	6.050
SP-19	1.313 - 1.5	16									AVAILABLE AS MADE TO ORDER CHECK YOUR NEAREST MARTIN FACILITY	AVAILABLE AS MADE TO ORDER CHECK YOUR NEAREST MARTIN FACILITY
SP-20	1.563 - 1.75	17	12									
SP-21	1.813 - 2	19	13			11						
SP-22	2.063 - 2.25	21	14	13	13	12	12					
SP-23	2.313 - 2.5	22	15	14	13	13	12	10				
SP-24	2.563 - 2.75	25	16	15	15	14	13	11	12	11		
SP-25	2.813 - 3	26	18	16	16	15	14	12	13	12		
SP-26	3.063 - 3.5	28	19	17	17	16	15	13	13	13		
SP-27	3.563 - 4	32	21	19	19	18	17	14	15	14		
SP-28	4.063 - 4.5	34	22	20	20	19	18	15	15	15		
SP-29	4.563 - 5	36	24	21	21	20	19	16	16	15		
SP-30	4.875 - 5.5	41	27	24	23	23	21	18	18	17		
SP-31	5.563 - 6	45	30	26	25	25	23	20	20	19		

Shear Pin Assembly Dimensions (Inches)

Shear Pin Assembly Number	Shear Pin		Diameters				Length Thru			Thickness		Sprocket Seat Width	Bolts		Weight (lb)	
	Radius	Pin Diameter	Flange	Shear Pin Hub	Adapter Hub and Collar	Sprocket Seat	Shear Pin Hub	Adapter	Collar	Hub Flange	Adapter Flange		Number and Size	Bolt Circle	Shear Pin Hub	Shear Pin Adapter
	A	B	C	D	E	F	G	H	M	J	K	L	N	P		
SP-19	2.563	0.313	6.75	2.75	4	4.125	3.563	2.125	0.625	0.688	0.688	0.688	4 - 0.5	5.5	7.2	7.6
SP-20	3	0.375	7.75	3.25	4.75	4.875	4.188	2.5	0.75	0.813	0.813	0.688	4 - 0.5	6.25	11.0	11.9
SP-21	3.313	0.438	8.75	3.75	5.25	5.375	4.813	2.875	0.875	0.938	0.938	0.938	4 - 0.625	7	16.2	16.9
SP-22	3.813	0.5	9.75	4.25	6.25	6.375	5.188	3	1	0.688	0.688	0.813	4 - 0.625	8	23.3	24.5
SP-23	4	0.5	10	4.5	6.5	6.625	5.688	3.5	1	0.688	0.688	1.375	4 - 0.625	8.25	26.3	27.7
SP-24	4.375	0.563	11.5	5	7	7.125	6.313	3.875	1.125	0.813	0.813	1.375	4 - 0.625	9.25	40.4	38.6
SP-25	4.875	0.625	12.5	5.5	8	8.125	6.938	4.25	1.25	0.938	0.938	1.375	6 - 0.625	10.25	52.6	53.6
SP-26	5.313	0.688	13.5	6.25	8.75	8.875	7.813	5.875	1.625	1.438	1.438	1.375	6 - 0.625	11.25	66.7	66.8
SP-27	6.063	0.75	15.5	7	10	10.125	8.688	5.5	1.5	1.563	1.5	1.375	6 - 0.625	12.75	96.5	100.0
SP-28	6.438	0.75	16.25	7.75	10.75	10.875	9.688	6.5	1.5	1.563	1.5	1.375	6 - 0.75	13.5	125.0	115.0
SP-29	7 .125	0.875	17.5	8.5	12	12.125	10.688	7	1.75	1.813	1.5	1.75	6 - 1	14.75	160.0	150.0
SP-30	8 .125	1	20.25	9.75	13.75	13.875	11.688	7.5	2	2.063	1.5	1.75	6 - 1	17	215.0	207.0
SP-31	8.875	1 .125	22.5	10.75	15	15.125	12.938	8.25	2.250	2.313	1.5	1.75	6 - 1	18.75	318.0	265.0

Bolt-On Shear Pin Accu-Torch® Sprockets

Shear Pin Sprocket Selection

1. The shear pin assembly required is determined by the shaft size. Select the smallest shear pin assembly which will accommodate the required bore. Table on page 130 contains the bore ranges and minimum sprocket sizes which allow chain clearance over the shear pin assembly flange.

2. Using one of the following formulas, compute the torque load the pin must transmit and enter the torque rating table below to obtain the proper shear pin neck diameter.

$$T = \frac{HP \times 63{,}025 \times 1.5}{RPM} \quad \text{or} \quad T = \frac{D \times CP \times 1.5}{2}$$

or T = Output of reducer x speed ratio of chain drive x 1.5

Where:

T	=	Torque in pound inches
HP	=	Horsepower at sprocket
RPM	=	Sprocket speed
D	=	Pitch diameter of sprocket
CP	=	Chain pull in pounds
1.5	=	Safety factor for starting load

Example:

1. Determine the shear pin assembly and pin neck diameter to transmit 20 horsepower at 67 RPM with a 36 tooth, No. 62 sprocket on a 2.938" shaft.

(1) Referring to Table I, shear pin assembly SP-25 is required for a 2.938" bore. The 36 tooth sprocket is well above the minimum size.

(2) Torque and neck diameter:

$$T = \frac{HP \times 63{,}025 \times 1.5}{RPM}$$

$$T = \frac{20 \times 63{,}025 \times 1.5}{67} = 28{,}200 \text{ lb.in.}$$

Referring to Table II under SP-25, a pin necked to 3⁄8" shows a torque rating of 29,810 lb. in., which exceeds the 28,200 lb. in. required.

(3) Order: 62SP36, SP-25 assembly with 2.938" bore and .375" pin neck diameter.

Shear Pin Assembly Dimensions (Inches)

Shear Pin Neck Diameter (Inches)	Torque Rating – Pound Inches												
	Shear Pin Hub Number												
	SP19	SP20	SP21	SP22	SP23	SP24	SP25	SP26	SP27	SP28	SP29	SP30	SP31
0.094	1022	1204	1323	1556	1603								
0.125	1752	2064	2268	2616	2748								
0.156	2774	3268	3591	4142	4351	4750							
0.188	3942	4944	5103	5886	6183	6750	7317						
0.219	5402	6364	6993	8066	8473	9250	10027						
0.250	7300	8600	9450	10900	11450	12500	13550	15200	17300	18400			
0.281	9052	10664	11718	13516	14198	15500	16802	18848	21452	22816			
0.313	11096	13072	14364	16568	17403	19000	20596	23140	26296	27968	30932		
0.344		15824	17388	20056	21068	23000	24932	27968	31832	33856	37440		
0.375		18920	20790	23980	25190	27500	29810	33440	38060	40480	44770	51040	
0.406			24570	28340	29170	32500	35230	39520	44980	47840	52910	60320	
0.438			28350	32700	34350	37500	41650	45600	51900	55200	61050	69600	
0.469				37060	38930	42500	46070	51680	58820	62560	69190	78880	
0.500				42728	44884	49000	53116	59584	67816	72128	79772	90944	
0.531						55000	59620	66880	76120	80960	89540	102080	
0.563						62000	67280	75392	85808	91264	100936	115072	
0.594							73220	82080	93420	99360	109890	125280	136890
0.625							82800	92720	105530	112240	124135	141520	154635
0.656								103360	117640	126120	138380	157760	172380
0.688								112480	128020	136160	150590	171680	187590
0.719									138400	147200	162800	185600	202800
0.750									152240	161920	179080	204160	223080
0.781											195360	222720	243360
0.813											211640	241280	263640
0.844											227920	259840	283920
0.875											244200	278400	304200
0.906												296960	324480
0.938												301600	329550
0.969												338720	370110
1.000												371200	405600
1.063													446160
1.125													507000

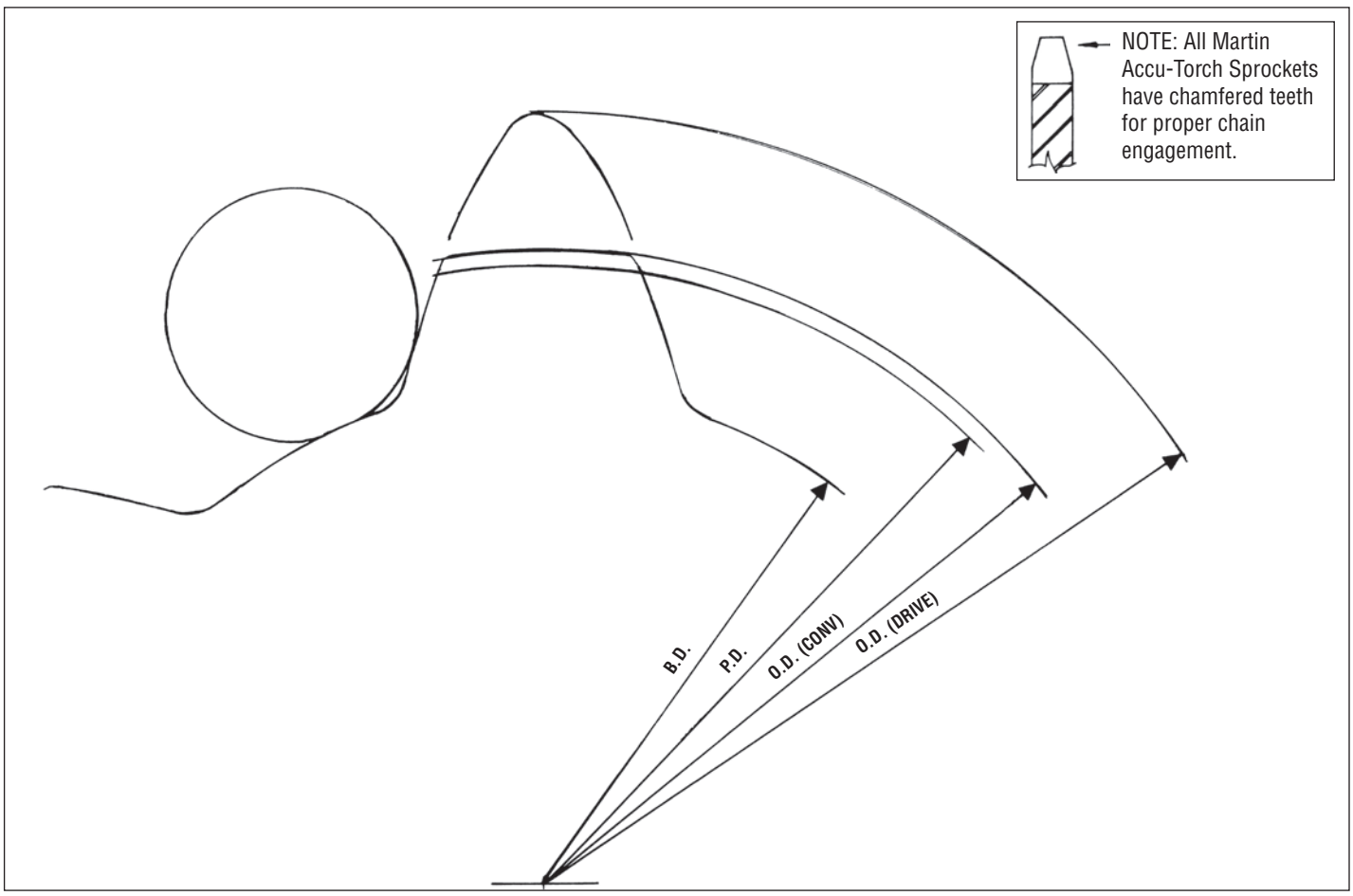
Flame Cut Sprockets for Engineering Chains



Conveyor Style Tooth for Chains:
78 — 82 — 124 — 132



Driver Style Tooth for Chains:
62 — 1568 — 1030 — 238 — 1240 — 635 — 1207



Accu-Torch Sprockets are not intended to replace cut tooth roller chain sprockets.

NOTE: For style other than Type "C" or Type "A", or Tooth Size not shown, consult factory for price. See Current List Price Sheet for Stock Pricing.

Flame Cut Sprockets for Engineering Chains

62 FLAME CUT SPROCKETS FOR CHAINS: 062, 072, 162, 162 R, 2, 378 R, 402 RX, 62 CAST, 62 H, 62 Steel, 62A, 72 1/2, 962, H 62, HF 62 A, IS 620, LXS 627, R 362, R432, RR 362, RR 432, US 620, US 622

Type C — 1.654" Pitch

PLATE THICKNESS 0.75"
ROLLER DIAMETER 0.8125"

Type A

Number of Teeth	Catalog Number	Pitch Diameter	Stock Bore	Max. Bore	Hub Diameter	L.T.B.	Approximate Weight	Catalog Number	Stock Bore	Approximate Weight
12	62C12	6.39	.938	2.75	4.25	3.125	15.8	62A12	.938	6.8
13	62C13	6.91	.938	3.25	4.75	3	19.4	62A13	.938	8.0
14	62C14	7.43	.938	3.25	4.75	3	20.6	62A14	.938	9.2
15	62C15	7.96	.938	3.25	4.75	3	22.0	62A15	.938	10.5
17	62C17	9	.938	3.25	4.75	3	24.0	62A17	.938	12.0
19	62C19	10.05	.938	3.25	4.75	3	28.0	62A19	.938	16.8
20	62C20	10.57	.938	3.25	4.75	3	30.0	62A20	.938	18.6
24	62C24	12.67	1.25	3.75	5.5	4.375	49.0	62A24	1.25	26.0
26	62C26	13.72	1.25	3.75	5.5	4.375	53.0	62A26	1.25	30.0
30	62C30	15.82	1.25	3.75	5.5	4.375	65.0	62A30	1.25	42.0
36	62C36	18.98	1.25	3.75	5.5	4.375	82.0	62A36	1.25	59.0
54	62C54	28.45	1.25	3.75	5.5	4.375	125.0	62A54	1.25	135.0
60	62C60	31.6	1.25	3.75	5.5	4.375	138.0	62A60	1.25	169.0

78 FLAME CUT SPROCKETS FOR CHAINS: 433 1/2, 488, 578 R, 588 R, 7188, 75, 78, 81X, 87R, 88, 988, C 188, H 74, H 75, H 78, H 78 LR, (14, 18 TEETH ONLY), H 78 RT, H 78 SR, H 79, IS 880, IS 881, IS 882, LXS 881, LXS 882, LXS 886, LXS 887, R 588, R 778, RR 588, RR 778, S 188, S 78, SS 188, US 278 R, US 881, US 882, XS 578

Type C — 2.609" Pitch

PLATE THICKNESS 0.875"
ROLLER DIAMETER 0.875"

Type A

Number of Teeth	Catalog Number	Pitch Diameter	Stock Bore	Max. Bore	Hub Diameter	L.T.B.	Approximate Weight	Catalog Number	Stock Bore	Approximate Weight
8	78C8	6.82	.938	3.25	4.75	3.125	21	78A8	.938	9.0
9	78C9	7.63	1.25	3.438	5.25	3.875	29	78A9	1.25	11.3
10	78C10	8.44	1.25	3.438	5.25	3.875	31	78A10	1.25	13.9
11	78C11	9.26	1.25	3.438	5.25	3.875	34	78A11	1.25	16.7
12	78C12	10.08	1.25	3.438	5.25	3.875	37	78A12	1.25	19.8
13	78C13	10.90	1.25	3.75	5.5	4.5	46	78A13	1.25	23.0
14	78C14	11.72	1.25	3.75	5.5	4.5	49	78A14	1.25	27.0
15	78C15	12.55	1.5	3.75	5.5	4.5	53	78A15	1.5	30.0
17	78C17	14.20	1.5	3.75	5.5	4.5	62	78A17	1.5	39.0
19	78C19	15.85	1.5	4.5	6.5	5.375	90	78A19	1.5	50.0
21	78C21	17.51	1.5	4.5	6.5	5.375	101	78A21	1.5	61.0
24	78C24	19.99	1.5	4.5	6.5	5.375	119	78A24	1.5	79.0
25	78C25	20.82	1.5	4.5	6.5	5.375	124	78A25	1.5	84.0
28	78C28	23.31	1.5	4.5	6.5	5.375	132	78A28	1.5	105.0
30	78C30	24.96	1.5	4.5	6.5	5.375	150	78A30	1.5	123.0
35	78C35	29.11	1.5	4.5	6.5	5.375	170	78A35	1.5	166.0
40	78C40	33.25	1.5	4.938	7.25	6.75	226	78A40	1.5	216.0
42	78C42	34.91	1.5	4.938	7.25	6.75	240	78A42	1.5	240.0
46	78C46	38.31	1.5	4.938	7.25	6.75	258	78A46	1.5	286.0
54	78C54	44.87	1.5	4.938	7.25	6.75	368	78A54	1.5	302.0
60	78C60	49.85	1.5	4.938	7.25	6.75	388	78A60	1.5	322.0

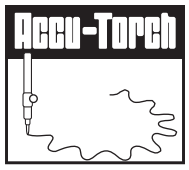
78 BORED-TO-SIZE FLAME CUT SPROCKETS

Type C — 2.609" Pitch

PLATE THICKNESS 0.875"
ROLLER DIAMETER 0.8125"

Part Number	Pitch Diameter	Approximate Weight (lb)	Stock Finished Bores - Includes Keyway and 2 Setscrews						
78CS8	6.82"	21	1.438	1.938	2	2.188	2.438	2.938	—
78CS9	7.63"	29	1.438	1.938	2	2.188	2.438	2.938	—
78CS10	8.44"	31	1.438	1.938	2	2.188	2.438	2.938	3.438*
78CS11	9.26"	34	—	1.938	2	2.188	2.438	2.938	3.438*
78CS12	10.08"	37	—	1.938	2	2.188	2.438	2.938	3.438*
78CS13	10.90"	46	—	1.938	—	2.188	2.438	2.938	3.438*
78CS14	11.72"	49	—	1.938	—	2.188	2.438	2.938	3.438*

Please contact Martin if Hub OD and Length Thru Bore dimensions are critical. These parts have setscrews at 90 degrees and 180 degrees instead of over keyway and 90 degrees.



Flame Cut Sprockets for Engineering Chains

Martin

1568 FLAME CUT SPROCKETS FOR CHAINS: 1803 A, 1803 AB, AX 1568, IS 3010, IS 3011, JS 3011, LXS 3011, LXS 3011 M, MXS 3011, SS 568, US 3011, X568, XX 568

Type C — 3.067" Pitch

PLATE THICKNESS 1.25"
ROLLER DIAMETER 1.625"

Type A

Number of Teeth	Catalog Number	Pitch Diameter	Stock Bore	Max. Bore	Hub Diameter	L.T.B.	Approximate Weight	Catalog Number	Stock Bore	Approximate Weight
10	1568C10	9.92	1.5	3.75	5.5	4.25	46	1568A10	1.5	28
12	1568C12	11.85	1.5	3.75	5.5	4.25	58	1568A12	1.5	40
14	1568C14	13.78	1.5	3.75	5.5	4.25	73	1568A14	1.5	53
30	1568C30	29.34	1.5	4.5	6.5	5.75	217	1568A30	1.5	240
36	1568C36	35.19	1.5	5.375	7.5	5.875	257	1568A36	1.5	290
42	1568C42	41.04	1.5	5.5	8	6.125	407	1568A42	1.5	340
48	1568C48	46.89	1.5	5.5	8	6.125	448	1568A48	1.5	381

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

1030 FLAME CUT SPROCKETS FOR CHAINS: 1030 , 1037, 1190, 1190 R, 1539, API 3, CHAMPION NO. 3, IS 1030, IS 1031, IS 1032, IS 1037, LXS 1031, LXS 1032, R 1033, R 1035, SS 40, SS 40 Hyp, SXX, US 1031, US 1032

Type C — 3.075" Pitch

PLATE THICKNESS 1.25"
ROLLER DIAMETER 1.25"

Type A

Number of Teeth	Catalog Number	Pitch Diameter	Stock Bore	Max. Bore	Hub Diameter	L.T.B.	Approximate Weight	Catalog Number	Stock Bore	Approximate Weight
8	1030C8	8.05	1.25	3.25	5	3.875	31	1030A8	1.25	17.9
9	1030C9	8.99	1.25	3.25	5	3.875	36	1030A9	1.25	22.4
10	1030C10	9.95	1.25	3.25	5	3.875	40	1030A10	1.25	28.0
11	1030C11	10.91	1.5	3.75	5.5	4.25	51	1030A11	1.5	33.0
12	1030C12	11.88	1.5	3.75	5.5	4.25	57	1030A12	1.5	39.0
13	1030C13	12.85	1.5	3.75	5.5	4.25	64	1030A13	1.5	46.0
15	1030C15	14.79	1.5	4	6	5.125	91	1030A15	1.5	60.0
17	1030C17	16.73	1.5	4	6	5.125	109	1030A17	1.5	78.0
19	1030C19	18.68	1.5	4.5	6.5	5.75	137	1030A19	1.5	97.0
21	1030C21	20.63	1.5	4.5	6.5	5.75	158	1030A21	1.5	118.0
24	1030C24	23.56	1.5	4.5	6.5	5.75	176	1030A24	1.5	154.0
25	1030C25	24.53	1.5	5.375	7.5	5.875	206	1030A25	1.5	167.0
28	1030C28	27.46	1.5	5.375	7.5	5.875	236	1030A28	1.5	210.0
30	1030C30	29.42	1.5	5.375	7.5	5.875	254	1030A30	1.5	240.0
35	1030C35	34.30	1.5	5.5	8	6.125	313	1030A35	1.5	327.0
40	1030C40	39.19	1.5	5.5	8	6.125	360	1030A40	1.5	427.0
42	1030C42	41.15	1.5	5.5	8	6.125	410	1030A42	1.5	343.0
48	1030C48	47.03	1.5	6.5	9.5	6.75	501	1030A48	1.5	384.0
54	1030C54	52.89	1.5	6.5	9.5	6.75	549	1030A54	1.5	432.0
60	1030C60	58.75	1.5	7	10	7.5	642	1030A60	1.5	506.0

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

82 FLAME CUT SPROCKETS FOR CHAINS: 103, 131, 382, 4103, 527 R, 527 RX, 6131, C131, C9103, ER131, H 82, S 131, SBO2103, SBS131, SCA9103, SS 131, WH82, WH9103HD, WS 82, WS 82 H

Type C — 3.075" Pitch

PLATE THICKNESS 1.125"
ROLLER DIAMETER 1.219"

Type A

Number of Teeth	Catalog Number	Pitch Diameter	Stock Bore	Max. Bore	Hub Diameter	L.T.B.	Approximate Weight	Catalog Number	Stock Bore	Approximate Weight
7	82C7	7.09	.813	2.938	4.5	3.875	24	82A7	.813	12.6
8	82C8	8.04	1.25	3.75	5.25	4.125	34	82A8	1.25	16
9	82C9	8.99	1.25	3.75	5.25	4.125	38	82A9	1.25	20
10	82C10	9.95	1.25	3.75	5.25	4.125	43	82A10	1.25	25
11	82C11	10.91	1.25	3.938	5.75	4.375	54	82A11	1.25	30
12	82C12	11.88	1.25	3.938	5.75	4.375	60	82A12	1.25	36
13	82C13	12.85	1.25	3.938	5.75	4.375	66	82A13	1.25	42
14	82C14	13.82	1.25	3.938	5.75	4.375	72	82A14	1.25	48
15	82C15	14.79	1.5	4.5	6.5	5.625	94	82A15	1.5	54
16	82C16	15.76	1.5	4.5	6.5	5.625	102	82A16	1.5	62
17	82C17	16.73	1.5	4.5	6.5	5.625	110	82A17	1.5	70
18	82C18	17.71	1.5	4.5	6.5	5.625	119	82A18	1.5	79

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

82 BORED-TO-SIZE FLAME CUT SPROCKETS

Type C — 3.075" Pitch

PLATE THICKNESS 1.125"
ROLLER DIAMETER 1.219"

Number of Teeth	Catalog Number	Pitch Diameter	Approximate Weight (lb)	Stock Finished Bores - Includes Keyway and 2 Setscrews	
10	82CS10	9.95"	43	2.438	2.938
11	82CS11	10.91"	54	2.438	2.938
12	82CS12	11.88"	60	2.438	2.938

Please contact Martin if Hub OD and Length Thru Bore dimensions are critical

238 FLAME CUT SPROCKETS FOR CHAINS: 1616 A, IS 3514 J, LXS 3514, LXS 3514 M, MXS 3514, RX 238, US 3514

Type C — 3.500" Pitch

PLATE THICKNESS 1.25"
ROLLER DIAMETER 1.75"

Type A

Number of Teeth	Catalog Number	Pitch Diameter	Stock Bore	Max. Bore	Hub Diameter	L.T.B.	Approximate Weight	Catalog Number	Stock Bore	Approximate Weight
10	238C10	11.33	1.5	3.75	5.5	4.25	54	238A10	1.5	35
12	238C12	13.52	1.5	3.75	5.5	4.25	70	238A12	1.5	51
14	238C14	15.73	1.5	3.75	5.5	4.25	88	238A14	1.5	60
30	238C30	33.48	1.5	4	6	5.125	312	238A30	1.5	253
36	238C36	40.16	1.5	4	6	5.125	445	238A36	1.5	370
42	238C42	46.84	1.5	5.5	8	6.125	446	238A42	1.5	379
48	238C48	53.52	1.5	5.5	8	6.125	517	238A48	1.5	450

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

Flame Cut Sprockets for Engineering Chains

124 FLAME CUT SPROCKETS FOR CHAINS: H 124, W 124, WH 124, WR 124, WS 124

Type C — 4.000" Pitch

PLATE THICKNESS 1.5"
ROLLER DIAMETER 1.5"

Type A

Number of Teeth	Catalog Number	Pitch Diameter	Stock Bore	Max. Bore	Hub Diameter	L.T.B.	Approximate Weight	Catalog Number	Stock Bore	Approximate Weight
6	124C6	8.00	0.938	3.25	4.75	4.625	36	124A6	0.938	21
7	124C7	9.22	1	3.938	5.75	4.75	52	124A7	1	28
8	124C8	10.45	1	3.938	5.75	4.75	61	124A8	1	37
9	124C9	11.70	1	3.938	5.75	4.75	70	124A9	1	46
10	124C10	12.94	1	3.938	5.75	4.75	79	124A10	1	55
11	124C11	14.20	1.5	4.25	6.25	4.75	95	124A11	1.5	68
12	124C12	15.45	1.5	4.25	6.25	4.75	107	124A12	1.5	80
13	124C13	16.72	1.5	4.25	6.25	4.75	120	124A13	1.5	93
14	124C14	17.98	1.5	4.25	6.25	4.75	135	124A14	1.5	108
15	124C15	19.24	1.5	4.375	6.75	6	168	124A15	1.5	124
16	124C16	20.50	1.5	4.375	6.75	6	185	124A16	1.5	141

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

124 BORED-TO-SIZE FLAME CUT SPROCKETS

Type C — 4.000" Pitch

PLATE THICKNESS 1.5"
ROLLER DIAMETER 1.5"

Part Number	Pitch Diameter	Approximate Weight (lb)	Stock Finished Bores - Includes Keyway and 2 Setscrews			
124CS9	11.70"	70	2.188	2.438	2.938	
124CS10	12.94"	79		2.438	2.938	3.438
124CS11	14.20"	95			2.938	3.438
124CS12	15.45"	107			2.938	3.438

Please contact Martin if Hub OD and Length Thru Bore dimensions are critical

1240 FLAME CUT SPROCKETS FOR CHAINS: 1240, 1244, 3 BAR HYPER, API 4, CHAMPION NO. 4, IS 1242, IS 1425, LXS 1242, LXS 1245, R 1248, SS 124, SS 124, SS 124 D, SS 124 DP

Type C — 4.063" Pitch

PLATE THICKNESS 1.75"
ROLLER DIAMETER 1.75"

Type A

Number of Teeth	Catalog Number	Pitch Diameter	Stock Bore	Max. Bore	Hub Diameter	L.T.B.	Approximate Weight (lb)	Catalog Number	Stock Bore	Approximate Weight (lb)
6	1240C6	8.13	0.938	2.5	4	4	34	1240A6	0.938	26
7	1240C7	9.36	1.25	3.75	5.25	4.75	51	1240A7	1.25	34
8	1240C8	10.62	1.5	4.5	6.5	5	78	1240A8	1.5	44
9	1240C9	11.88	1.5	4.5	6.5	5	89	1240A9	1.5	55
10	1240C10	13.15	1.5	4.5	6.5	5	101	1240A10	1.5	67
11	1240C11	14.42	1.5	4.5	6.5	5	115	1240A11	1.5	81
12	1240C12	15.70	1.5	5.25	7	6	140	1240A12	1.5	96
13	1240C13	16.98	1.5	5.25	7	6	155	1240A13	1.5	111
14	1240C14	18.26	1.5	5.25	7	6	174	1240A14	1.5	130
15	1240C15	19.54	1.5	5.25	7	6	192	1240A15	1.5	148
16	1240C16	20.83	1.5	5.5	8	6.25	230	1240A16	1.5	168
18	1240C18	23.40	1.5	5.5	8	6.25	275	1240A18	1.5	213
20	1240C20	25.97	1.5	5.5	8	6.25	300	1240A20	1.5	263
21	1240C21	27.26	1.5	5.5	8	6.25	319	1240A21	1.5	289
24	1240C24	31.12	1.5	5.5	8	6.25	387	1240A24	1.5	377
25	1240C25	33.42	1.5	6	9	6.25	426	1240A25	1.5	409
28	1240C28	36.29	1.5	6	9	6.25	494	1240A28	1.5	509
30	1240C30	38.87	1.5	7	10	6.75	583	1240A30	1.5	587
35	1240C35	45.33	1.5	7	10	6.75	729	1240A35	1.5	620
40	1240C40	51.78	1.5	7.5	11	7.75	932	1240A40	1.5	721
48	1240C48	62.12	1.5	7.5	11	7.75	1078	1240A48	1.5	867

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

635 FLAME CUT SPROCKETS FOR CHAINS: 1350, 1340 RX, 450 SX, 450 SXX, B 635, IS 4522, LXS 4522 M, RO 635, X 635

Type C — 4.500" Pitch

PLATE THICKNESS 1.75"
ROLLER DIAMETER 2.25"

Type A

Number of Teeth	Catalog Number	Pitch Diameter	Stock Bore	Max. Bore	Hub Diameter	L.T.B.	Approximate Weight (lb)	Catalog Number	Stock Bore	Approximate Weight (lb)
10	635C10	14.56	1.5	4	6.5	5	111	635A10	1.5	87
12	635C12	17.39	1.5	4	6.5	5	148	635A12	1.5	119
14	635C14	20.22	1.5	4	6.5	5	188	635A14	1.5	159
30	635C30	43.05	1.5	5.375	7.5	5.875	592	635A30	1.5	542
36	635C36	51.63	1.5	5.375	7.5	5.875	764	635A36	1.5	715
42	635C42	60.22	1.5	6.5	9.5	7.25	884	635A42	1.5	776
48	635C48	68.81	1.5	7.5	11	7.75	1174	635A48	1.5	963

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

1207 FLAME CUT SPROCKETS FOR CHAINS: 1510 XX, 1602 A, 1602 AA, A 1302, JS 5031, LXS 5028, LXS 6038 M, MXS 5028, RO 1205, RX 1207, US 5201 A

Type C — 5.000" Pitch

PLATE THICKNESS 2.25"
ROLLER DIAMETER 2.5"

Type A

Number of Teeth	Catalog Number	Pitch Diameter	Stock Bore	Max. Bore	Hub Diameter	L.T.B.	Approximate Weight (lb)	Catalog Number	Stock Bore	Approximate Weight (lb)
10	1207C10	16.18	1.5	4.5	6.5	5.5	160	1207A10	1.5	131
12	1207C12	19.32	1.5	4.5	6.5	5.5	215	1207A12	1.5	187
14	1207C14	22.47	1.5	5.375	7.5	5.875	298	1207A14	1.5	254
30	1207C30	47.84	1.5	6	9	6.75	809	1207A30	1.5	730
36	1207C36	57.37	1.5	7	10	8.5	1161	1207A36	1.5	1025
42	1207C42	66.91	1.5	7	10	8.5	1245	1207A42	1.5	1109
48	1207C48	76.45	1.5	7.5	11	10.25	2005	1207A48	1.5	1794

Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

132 FLAME CUT SPROCKETS FOR CHAINS: 6150, 150 X, A 132, A 132 WS, C 132, C 132 M, C 132 W, SX 150, SXA 150, W 157, WH 157, WR 157, WS 132

Type C — 6.050" Pitch

PLATE THICKNESS 2.75"
ROLLER DIAMETER 1.719"

Type A

Number of Teeth	Catalog Number	Pitch Diameter	Stock Bore	Max. Bore	Hub Diameter	L.T.B.	Approximate Weight (lb)	Catalog Number	Stock Bore	Approximate Weight (lb)
6	132C6	12.10	1.5	4.5	6.5	6	119	132A6	1.5	90
7	132C7	13.95	1.5	4.5	6.5	6	149	132A7	1.5	120
8	132C8	15.81	1.5	4.5	6.5	6	182	132A8	1.5	153
9	132C9	17.69	1.5	5.375	7.5	6.375	236	132A9	1.5	192
10	132C10	19.58	1.5	5.375	7.5	6.375	278	132A10	1.5	235
11	132C11	21.47	1.5	5.375	7.5	6.375	326	132A11	1.5	283
12	132C12	23.38	1.5	5.375	7.5	6.375	378	132A12	1.5	334

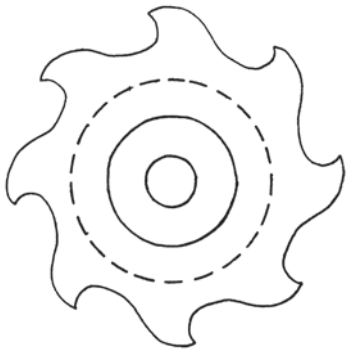
Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

Veneer Dryer Parts

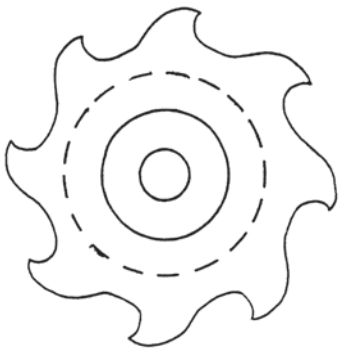
81X 81 X (2.609)

Hooked Tooth Sprocket
B Style (Right and Left Hand)

Number of Teeth	Catalog Number	Outside Diameter	Type	Bore		Hub (Inches)	
				Stock	Max.	Diam.	L.T.B.
8	81X-B8RH	6.5	B	1	1.5	2.375	1.625
8	81X-B8LH	6.5	B	1	1.5	2.375	1.625



(RH) Right Hand

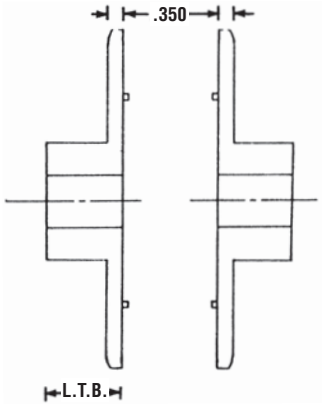


(LH) Left Hand

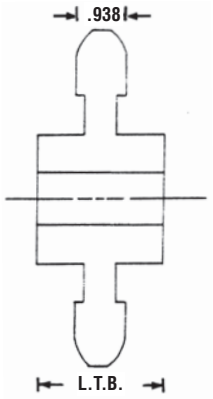
C Style

Number of Teeth	Catalog Number	Outside Diameter	Type	Bore		Hub (Inches)	
				Stock	Max.	Diam.	L.T.B.
7	81X-C7	5.75	C	.75	1.5	2.375	2.375
8	81X-C8	6.75	C	.75	1.5	2.375	2.375
9	81X-C9	7.438	C	.75	1.5	2.375	2.375





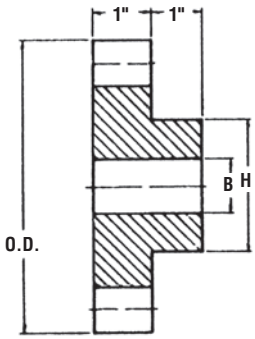
Type B
(Cast Iron)



Type C
(Cast Iron)

Star Gear

Number of Teeth	Catalog Number	Outside Diameter	Type	Bore		Hub (Inches)	
				Stock	Max.	Diam.	L.T.B.
10	SG510	4.484	B	1	1.5	2.375	2



Type B
(Cast Iron)



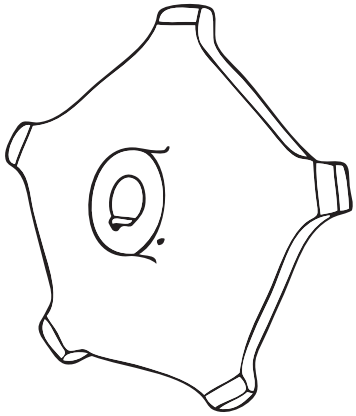
Call Martin for Price and Availability.

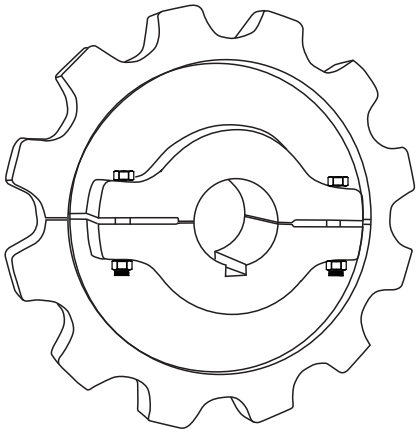
MTO Engineered Class Cast Iron Sprockets

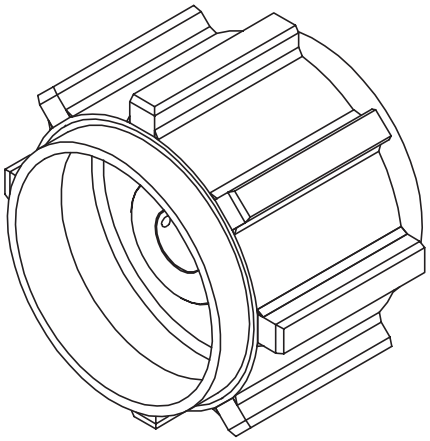




- Cast Split Sprockets
- Hunting Tooth Sprockets
- Rivetless Chain Sprocket
- Drag Chain Sprockets
  - Plain
  - Flanged
- Traction Wheels
  - Plain
  - Flanged
- Plate Body Sprockets
- Chain Saver Rim Sprockets
- Adjustable Hub Sprockets
- Chilled Rim Sprockets







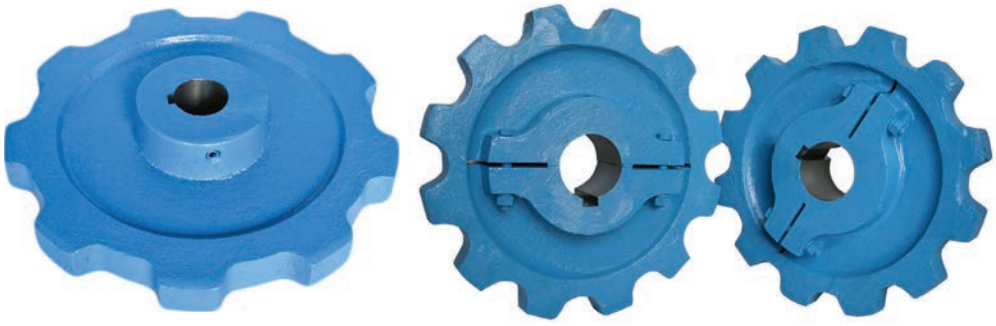
Sprockets Available to fit Standard Chain Sizes

55	103	H121	197	678	856	998
D60	H104	SD121	348	698	859	1030
62	W-106	WD-122	348	CS720S	F912R	1036
67	S-110	WD-123	458	720S	E922	1113
78	WD-110	WD-124	468	730	F922	1120
W-78	111SP	130	WD-480	A730	925R	1131
94R	111	132	483	CS730	933	F1222
95R	WD-112	183	520	823	951	2124
102B	WD-116	188	531	825	D963R	2180
H102	WD-119	194	625R	830	E963R	4850
102.5	WD-120	196	667	844	F963R	9250

Not all sprockets fit all chain sizes, see factory for availability.

Cast Iron Sprocket Types

Now Stocking Select Sizes - Call Martin for Availability



C 830 C 9 CR S

Cast Iron
CWD if Wide Drag

Chain
Example:
132 - 82
102B - 55
78 - 131

Sprocket Type
A - Plate Only
B - Hub One Side
C - Hub Both Sides
D - Detachable Hubs

No. of Teeth

Special Instructions
CR - Chilled Rim
S - Split
CS - Chain Saver
F - Flanged

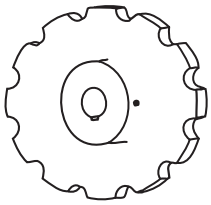


Plate Body

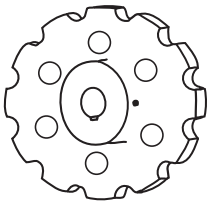
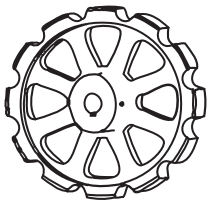
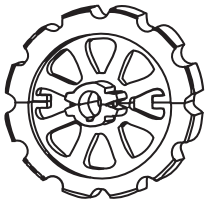


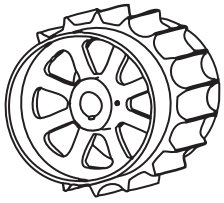
Plate Body with Lightening Holes



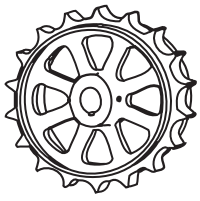
Arm Body



Split Arm Body



Drum Chainsaver Rim Arm Body



Chainsaver Rim

SPROCKET STYLES

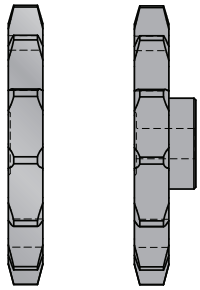
Cast Arm Body is often used in larger diameter sprockets. The arms are advantageous because they reduce the weight as well as the cost.

Cast Split (Arm or Plate) Body- The split style sprocket eases maintenance and installation. The sprocket can be removed without having to disassemble an entire system.

Cast Plate Body style is primarily used in smaller diameter sprockets when the arm body style is unnecessary. Larger diameter sprockets only use this plate body style when the torque is beyond the limits of the arm body style.

Special Sprockets – Martin also offers special made-to-order sprockets such as the flanged-rim sprocket (image to the left).

Cast Iron Sprocket Types



Type A Type B

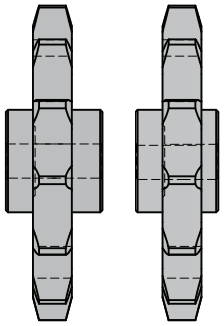
Hub Types
Cast Iron Sprockets are offered in different hub types including Type A, B, and C.

Type A
An A Style Sprocket is a flat sprocket with no hub extension on either side.

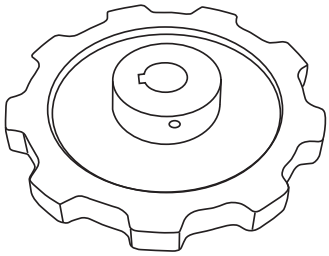
Type B
A B Style Sprocket is a sprocket with a hub extension on one side.

Type C
A C Style Sprocket is a sprocket with a hub extension on both sides.

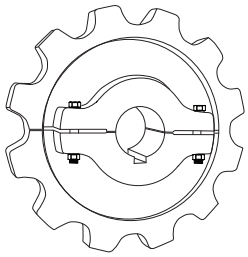
Type C Offset hubs are the same as a "Type C", however the hubs are slightly off center.



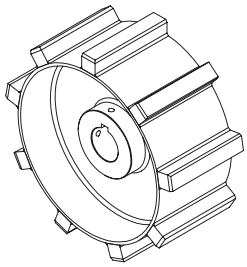
Type C Type C Offset



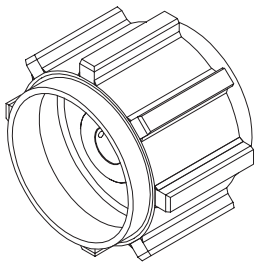
Non-Split Engineering Class Sprockets These sprockets can be supplied in various cast materials, with or without hardened teeth.



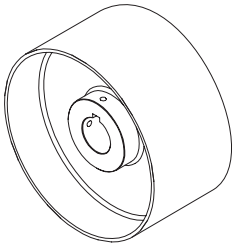
Split Sprockets are made in one piece, machined, then split into two halves after machining. The two halves can then be bolted onto the shaft without removing the shaft or the bearings from the installation. Also available in Chilled Rim.



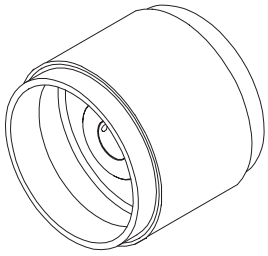
Drag Chain Sprockets are of drum type design with full width teeth. There sprockets are available plain, as shown here, or drum flanged as shown below. All types have been redesigned to provide additional wear life on the welded steel drag chains that have largely replaced malleable types.



Drum Flanged Drag Chain Sprockets have side extension flanges extending from below the root line. These flanges are used with refuse over the end of conveyors and to serve as a guard if chains jump sprockets or traction wheels.

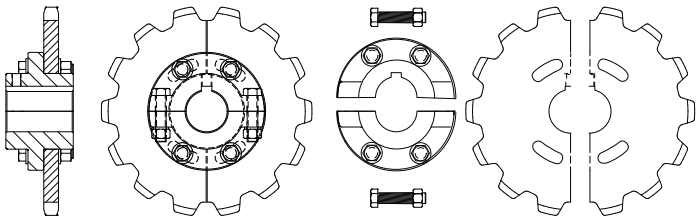


Drag Chain Traction Wheels are identical to sprockets but have no teeth. They are commonly used to turn chains at the ends of conveyors or to increase chain wrap in "S" Wrap" drive designs. They are available plain (left) or drum flanged.

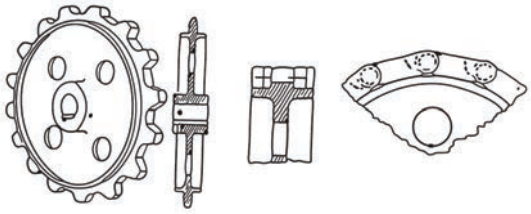


Drum Flanged Traction Wheels are used with drag chains either at the discharge end of the conveyor to guide the refuse over the end, or as a chain guard. Flanges on drag chain sprockets and traction wheels are available in many different lengths.

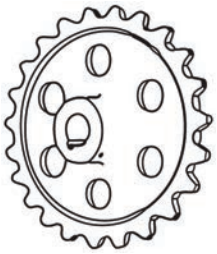
Cast Iron Sprocket Types



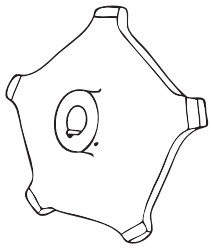
Adjustable Hub Sprockets are designed for use in multi-strand conveyors using top carriers or flights, where alignment of adjacent strands is a problem. The hub allows the chain to be moved forward or backward several inches as conditions in the conveyor require. The adjustable sprockets are available in solid or split construction.



Chainsaver Rims are short flanges below the root line of the sprocket which make contact with the sidebars of the chain. The rims help support the chain and keep the chain running on the true pitch line of the sprocket. Chainsaver Rims are particularly advantageous when used on elevator headshaft sprockets handling heavy or abrasive loads, and in sewage treatment applications where long, unsupported strands are common.



Hunting Tooth Sprockets are designed with an odd number of teeth, with the pitch of the teeth 1/2 the pitch of the chain. This allows each tooth to contact the chain only every other revolution. Wear life of the sprocket is effectively doubled. A Chainsaver Rim is frequently added to these sprocket to give even longer life.



Drop Forged or Rivetless Chain Sprockets are of skip tooth design, since the block link of these chains is solid. Sprockets are available for all popular drop forged chains in both regular and X series.

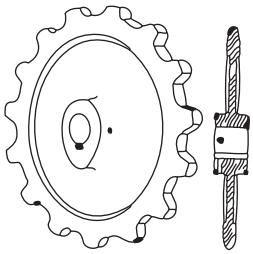


Plate Body with Cam-Shaped Hubs
All sprockets are produced with plate type bodies as shown. Few spoked sprockets are offered due to strength limitations of this type design. As space permits, many smaller sprockets are made with cam-shaped hubs, which give additional strength over the keyway, but reduces weight compared to conventional round hubs of the same diameter.

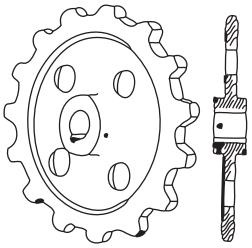
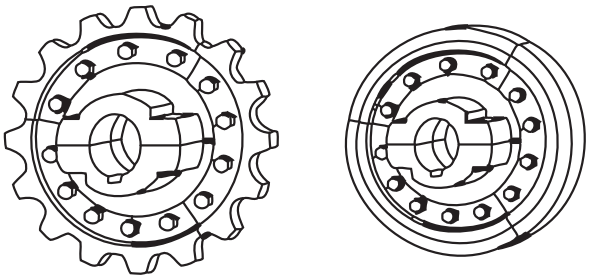
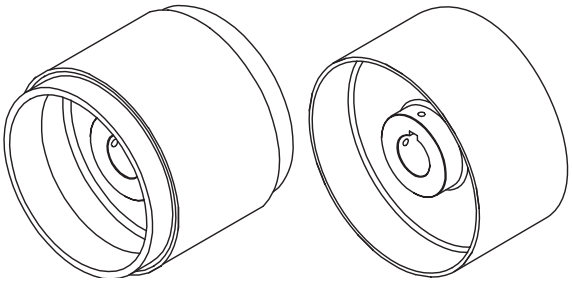


Plate body with Lightening Holes
Where space permits, larger sprockets are made with lightening holes cast through the body to reduce weight and facilitate handling. Standard round hubs are used on most larger sprockets, with diameters of hubs as appropriate according to chain type and ANSI hub specifications.



Segmental Sprockets - Martin offers segmental sprockets with either solid or split hub bodies. Segmental sprockets greatly reduce the labor costs as well as the downtime associated with replacing worn standard type sprockets. Worn segments can be replaced by simply removing and replacing segments only, eliminating the need to remove the shaft, and or bearing assemblies, as well as the need to realign the hub.



Traction Wheels - Traction Wheels are offered in solid or segmental construction. They are often used in bucket elevators and can withstand abrasive materials.

Information Needed to Quote/Order

The following information should be given when ordering sprockets or traction wheels:

1. **QUANTITY** _____
   (Number of sprockets required)

2. **CHAIN** _____
   (Number and type to be used)

3. **NO. OF TEETH** _____
   (The effective number of teeth should be specified when ordering a double duty, hunting tooth or skip tooth sprocket)

4. **PITCH DIAMETER** _____
   (For traction wheels, the outside diameter should be specified in place of the pitch diameter)

5. **MATERIAL** _____
   (Specify Chilled Rim if hardened teeth required)

6. **CONSTRUCTION** _____
   (Standard, split or segmental construction should be specified)

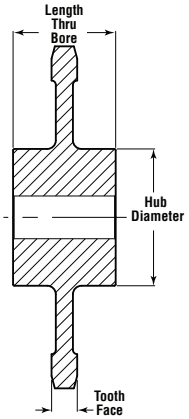
7. **TYPE** _____
   (Standard, hunting tooth, double duty, chain saver, etc., must be specified. Chain saver sprockets increase their life by having flanges on each side of the teeth so that the sidebar engages the flange, thereby distributing the wear over a greater area)

8. **BORE** _____
   (Sprockets and traction wheels are usually furnished with specific bores)

9. **HUB STYLE** _____
   (All hubs are furnished (C style) unless specified otherwise)

10. **KEYWAY AND SETSCREWS** _____
    (Standard straight keyways are finished with one setscrew over the keyway and one at 90°)

Cast Iron Sprocket



55 CAST TOOTH SPROCKETS — PITCH 1.631

FOR CHAINS NO.: 55, SS55, C55L, C55D, C55B, C55A, C55

Tooth Face at Pitch Line: 0.688 — Roller Diameter: 0.718

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
5	C55C5	2.77	C	2.00	2.00	0.94	2.0
6	C55C6	3.26	C	2.00	2.00	0.94	2.0
7	C55B7	3.76	B	2.50	2.00	1.63	3.0
8	C55B8	4.26	B	2.50	2.00	1.63	4.0
9	C55C9	4.76	C	3.00	2.00	1.94	5.0
10	C55C10	5.26	C	3.50	2.00	2.19	5.0
11	C55C11	5.77	C	4.50	3.00	2.88	6.0
12	C55C12	6.30	C	4.50	3.00	2.88	10.0
13	C55C13	6.80	C	4.50	3.00	2.88	10.0
14	C55C14	7.31	C	4.50	3.00	2.88	12.0
15	C55C15	7.83	C	4.50	3.00	2.88	13.0
16	C55C16	8.34	C	4.50	3.00	2.88	13.0
17	C55C17	8.85	C	4.50	3.00	2.88	17.0
18	C55C18	9.39	C	4.50	3.00	2.88	20.0
19	C55C19	9.92	C	4.50	3.00	2.88	20.0
20	C55C20	10.43	C	6.00	3.50	2.88	20.0
21	C55C21	10.94	C	6.00	3.50	4.00	23.0
22	C55C22	11.43	C	6.00	3.50	4.00	24.0
23	C55C23	11.97	C	6.00	3.50	4.00	29.0
24	C55C24	12.47	C	6.00	3.50	4.00	32.0
25	C55C26	13.00	C	8.00	4.00	6.00	31.0
27	C55C27	14.07	C	8.00	4.00	6.00	38.0
28	C55C28	14.54	C	8.00	4.00	6.00	42.0
29	C55C29	15.08	C	8.00	4.00	6.00	26.0
30	C55C30	15.59	C	8.00	4.00	6.00	54.0
31	C55C31	16.11	C	8.00	4.00	6.00	58.0
32	C55C32	16.63	C	8.00	4.00	6.00	63.0
34	C55C34	17.67	C	8.00	4.00	6.00	31.0
35	C55C35	18.20	C	8.00	4.00	6.00	69.0
36	C55C36	18.70	C	8.00	4.00	6.00	77.0
38	C55C38	19.75	C	8.00	4.00	6.00	35.0
40	C55C40	20.79	C	10.00	4.00	8.00	37.0
41	C55C41	21.31	C	10.00	4.00	8.00	36.0
48	C55C48	24.94	C	10.00	4.00	8.00	45.0
50	C55C50	25.98	C	10.00	4.00	8.00	47.0
54	C55C54	28.00	C	10.00	4.00	8.00	50.0

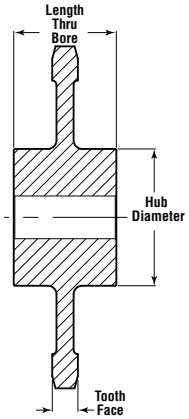
62 CAST TOOTH SPROCKETS — PITCH 1.654 CHILLED RIM

FOR CHAINS NO.: 62, 72, 362, H62

Tooth Face at Pitch Line: 0.812 — Roller Diameter: 0.812

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
5	C62C5CR	2.81	C	1.38	1.25	.75	1.5
6	C62C6CR	3.32	C	1.75	1.25	0.94	3.0
7	C62C7CR	3.82	C	2.50	2.00	1.62	2.0
8	C62C8CR	4.32	C	3.00	2.00	1.81	4.0
9	C62C9CR	4.84	C	3.00	2.00	1.81	5.0
10	C62C10CR	5.35	C	4.00	3.00	2.50	9.0
11	C62C11	5.87	C	4.00	3.00	2.50	9.0
12	C62C12	6.39	C	4.75	3.50	2.50	7.0
13	C62C13	6.91	C	4.75	3.50	3.00	14.0
14	C62C14	7.43	C	4.75	3.50	3.00	24.0
15	C62C15	7.96	C	5.00	3.50	3.50	26.0
16	C62C16	8.48	C	5.00	3.50	3.50	25.0
17	C62C17	9.00	C	5.00	3.50	3.50	26.0
18	C62C18	9.53	C	5.00	3.50	3.50	28.0
19	C62C19	10.05	C	5.00	3.50	3.50	22.0
20	C62C20	10.57	C	5.50	4.00	4.00	24.0
21	C62C21	11.10	C	5.50	4.00	4.00	39.0
22	C62C22	11.63	C	5.50	4.00	4.00	27.0
23	C62C23	12.15	C	5.50	4.00	4.00	30.0
24	C62C24	12.67	C	5.50	4.00	4.00	36.0
25	C62C25	13.20	C	5.50	4.50	4.00	36.0
26	C62C26	13.72	C	5.50	4.50	4.00	36.0
27	C62C27	14.25	C	5.50	4.50	4.00	58.0
28	C62C28	14.77	C	5.50	4.50	4.00	60.0
29	C62C29	15.30	C	5.50	4.50	4.00	31.6
30	C62C30	15.82	C	6.00	4.50	4.50	44.0
32	C62C32	16.88	C	6.00	4.50	4.50	48.0
33	C62C33	17.44	C	6.00	4.50	4.50	50.0
34	C62C34	17.93	C	6.00	4.50	4.50	77.0
36	C62C36	18.98	C	6.00	4.50	4.50	90.0
38	C62C38	20.03	C	6.00	5.00	4.50	93.0
39	C62C39	20.55	C	6.00	5.00	4.50	61.0
40	C62C40	21.07	C	6.00	5.00	4.50	40.2
41	C62C41	21.61	C	6.00	5.00	4.50	65.0
42	C62C42	22.13	C	6.00	5.00	4.50	72.0
43	C62C43	22.66	C	8.00	5.50	6.00	74.0
45	C62C45	23.71	C	8.00	5.50	6.00	77.0
46	C62C46	24.24	C	8.00	5.50	6.00	80.0
47	C62C47	24.77	C	8.00	5.50	6.00	48.6
48	C62C48	25.29	C	8.00	5.50	6.00	83.0
49	C62C49	25.82	C	8.00	5.50	6.00	84.0
54	C62C54	28.45	C	8.00	5.50	6.00	93.0
60	C62C60	31.60	C	8.00	5.50	6.00	71.0

NOTE: Weights and Dimensions are approximate. Please consult Martin for max hub information. All Cast Sprockets available as Split Sprockets.
CHAINSAVER rims available on request.
HEAT TREAT available upon request.



67 CAST TOOTH SPROCKETS — PITCH 2.308 CHILLED RIM

FOR CHAINS NO.: 57, 67, 77, 467, 477, 967, 977, C77, H-60, SM477

Tooth Face at Pitch Line: 0.687 — Roller Diameter: 0.812

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
5	C67C5CR	3.93	C	2.25	1.75	1.19	4.0
6	C67C6CR	4.62	C	3.00	2.00	1.81	6.0
7	C67C7CR	5.32	C	3.50	3.00	2.19	8.0
8	C67C8CR	6.03	C	4.00	3.00	2.50	10.0
9	CRC67C9	6.75	C	4.50	3.00	2.88	12.0
10	C67C10CR	7.46	C	4.50	3.00	2.88	14.0
11	C67C11CR	8.19	C	4.50	3.00	2.88	18.0
12	C67C12CR	8.92	C	4.50	3.00	2.88	20.0
13	C67C13CR	9.64	C	4.50	3.00	2.88	23.0
14	C67C14CR	10.37	C	5.00	3.00	3.50	22.0
15	C67C15CR	11.10	C	5.00	3.5	3.50	28.0
16	C67C16CR	11.83	C	5.00	3.5	3.50	30.0
17	C67C17CR	12.56	C	6.00	3.5	4.50	31.0
18	C67C18CR	13.29	C	6.00	3.5	4.50	35.0
19	C67C19CR	14.02	C	6.00	3.5	4.50	43.0
20	C67C20CR	14.75	C	6.00	4.00	4.50	51.0
21	C67C21CR	15.43	C	6.00	4.00	4.50	55.0
22	C67C22CR	16.16	C	6.00	4.00	4.50	58.0
23	C67C23CR	16.89	C	6.00	4.00	4.50	62.0
24	C67C24CR	17.68	C	6.00	4.00	4.50	67.0
25	C67C25CR	18.35	C	8.00	4.50	6.00	53.0
26	C67C26CR	19.14	C	8.00	4.50	6.00	54.0
27	C67C27CR	19.89	C	8.00	4.50	6.00	59.0
28	C67C28CR	20.61	C	8.00	4.50	6.00	34.0
30	C67C30CR	22.07	C	8.00	4.50	6.00	67.0
32	C67C32CR	23.54	C	8.00	4.50	6.00	23.0
33	C67C33CR	24.27	C	8.00	4.50	6.00	75.0
34	C67C34CR	25.00	C	8.00	4.50	6.00	48.0
35	C67C35CR	25.74	C	8.00	4.50	6.00	80.0
36	C67C36CR	26.47	C	8.00	4.50	6.00	84.0
38	C67C38CR	27.94	C	10.00	6.00	8.00	88.0
40	C67C40CR	29.40	C	10.00	6.00	8.00	94.0
44	C67C44CR	32.34	C	10.00	6.00	8.00	120.0
45	C67C45CR	33.06	C	10.00	6.00	8.00	125.0
48	C67C48CR	35.27	C	10.00	6.00	8.00	115.0
60	C67C60CR	44.08	C	10.00	6.00	8.00	148.0

78 CAST TOOTH SPROCKETS — PITCH 2.609

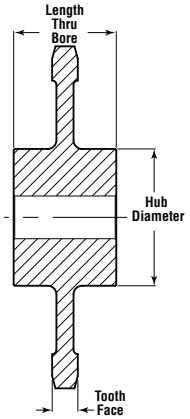
FOR CHAINS NO.: 75, 78, 88, 188, 488, 433-1/2, 81X, BRH, BRH188, C188, H74, H75, H78, H78A, H78B, H78SR, H79, MSR-1288, MW188RT, MXS882, SS188, SS578

Tooth Face at Pitch Line: .937 — Roller Diameter: 0.875

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
5	C78C5	4.44	C	2.50	2.50	1.19	5
6	C78C6	5.22	C	3.50	2.75	1.44	6
7	C78C7	6.01	C	4.00	3.00	2.44	11
8	C78C8	6.82	C	4.75	3.12	2.81	15
9	C78C9	7.63	C	5.25	3.88	3.25	16
10	C78C10	8.44	C	5.25	3.88	3.25	19
11	C78C11	9.26	C	5.25	3.88	3.25	23
12	C78C12	10.08	C	6.00	3.88	3.25	28
13	C78C13	10.90	C	6.00	4.50	3.31	36
14	C78C14	11.72	C	6.00	4.50	3.31	39
15	C78C15	12.55	C	6.00	4.50	3.31	40
16	C78C16	13.37	C	6.00	4.50	3.31	53
17	C78C17	14.20	C	6.00	4.50	3.31	55
18	C78C18	15.02	C	6.00	4.50	4.06	61
19	C78C19	15.85	C	6.50	5.38	4.06	64
20	C78C20	16.68	C	6.50	5.38	4.06	67
21	C78C21	17.50	C	6.50	5.38	4.06	79
22	C78C22	18.33	C	6.50	5.38	4.06	89
23	C78C23	19.16	C	6.50	5.38	4.06	91
24	C78C24	19.99	C	7.00	5.38	4.06	99
25	C78C25	20.81	C	7.00	5.38	4.06	107
26	C78C26	21.64	C	7.00	5.38	4.06	111
27	C78C27	22.47	C	7.00	5.38	4.06	112
28	C78C28	23.30	C	7.00	5.38	4.06	114
29	C78C29	24.05	C	7.00	5.38	4.06	116
30	C78C30	24.96	C	7.00	5.38	4.06	119
31	C78C31	25.79	C	7.00	5.38	4.06	123
32	C78C32	26.62	C	7.00	5.38	4.06	130
33	C78C33	27.38	C	7.00	5.38	4.06	136
34	C78C34	28.28	C	7.00	5.38	4.06	141
35	C78C35	29.11	C	7.00	5.38	4.06	146
36	C78C36	29.93	C	7.00	5.38	4.06	153
38	C78C38	31.60	C	7.00	5.38	4.06	162
39	C78C39	32.42	C	7.00	5.38	4.06	170
40	C78C40	33.25	C	7.25	6.75	4.62	176
41	C78C41	34.08	C	7.25	6.75	4.62	180
42	C78C42	34.91	C	7.25	6.75	4.62	193
43	C78C43	35.65	C	7.25	6.75	4.62	197
44	C78C44	36.57	C	7.25	6.75	4.62	202
45	C78C45	37.31	C	7.25	6.75	4.62	212
46	C78C46	38.23	C	7.25	6.75	4.62	221
48	C78C48	38.89	C	7.25	6.75	4.62	249
54	C78C54	44.87	C	7.25	6.75	4.62	265

NOTE: Weights and Dimensions are approximate. Please consult Martin for max hub information. All Cast Sprockets available as Split Sprockets.
CHAINSAVER rims available on request.
HEAT TREAT available upon request.

Cast Iron Sprocket



95R CAST TOOTH SPROCKETS — PITCH 4.00 CHILLED RIM

FOR CHAINS NO.: 1120, 1520, 4013, 1520C, 95R, LXS4013, MSR 4013, RR1120, RS4013, SS1120

Tooth Face at Pitch Line: .687 — Roller Diameter: 1.500

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
5	C95RC5CR	6.81	C	4.50	3.00	2.50	12.0
6	C95RC6CR	8.00	C	5.00	3.00	3.00	14.0
7	C95RC7CR	9.22	C	6.00	3.00	4.00	18.0
8	C95RC8CR	10.45	C	6.00	3.00	4.00	24.0
9	C95RC9CR	11.70	C	6.00	3.00	4.00	30.0
10	C95RC10CR	12.94	C	6.00	3.00	4.00	40.0
11	C95RC11CR	14.19	C	6.00	3.00	4.00	45.0
12	C95RC12CR	15.45	C	6.00	3.00	4.00	61.0
14	C95RC14CR	17.98	C	6.00	3.00	4.00	76.0
15	C95RC15CR	19.24	C	7.00	4.00	5.00	86.0
18	C95RC18CR	23.04	C	8.00	5.00	6.00	115.0
19	C95RC19CR	24.30	C	8.00	5.00	6.00	125.0
22	C95RC22CR	28.11	C	8.00	5.00	6.00	165.0

94R CAST TOOTH SPROCKETS — PITCH 4.00 CHILLED RIM

FOR CHAINS NO.: 4, 4019, 40SP, 94R, LXS4019, SS4

Tooth Face at Pitch Line: .750 — Roller Diameter: 1.500

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	C94RC5CR	8.00	C	5.00	2.75	3.00	22.0
8	C94RC8CR	10.45	C	6.00	3.00	4.00	27.0
9	C94RC9CR	11.70	C	6.00	3.00	4.00	36.0
10	C94RC10CR	12.94	C	6.50	3.00	4.00	39.0
12	C94RC12CR	15.45	C	6.50	3.00	4.00	59.0
14	C94RC14CR	17.98	C	7.00	4.00	5.00	74.0
15	C94RC15CR	19.24	C	7.00	4.00	5.00	84.0
16	C94RC16CR	20.50	C	7.00	4.00	5.00	95.0

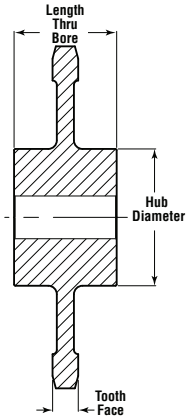
102B CAST TOOTH SPROCKETS — PITCH 4.00 CHILLED RIM

FOR CHAINS NO.: 6102B, A102B, C102B, ER102B, S102B, SBS102B, SS102B

Tooth Face at Pitch Line: 1.875 — Roller Diameter: 1.00

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	C102BC6CR	8.00	C	6.00	4.00	3.94	33.0
7	C102BC7CR	9.22	C	6.00	4.00	3.94	44.0
8	C102BC8CR	10.45	C	6.50	4.00	4.44	47.0
9	C102BC9CR	11.70	C	7.00	5.00	4.56	60.0
10	C102BC10CR	12.94	C	7.00	5.00	4.56	68.0
11	C102BC11CR	14.20	C	7.00	5.00	4.56	72.0
12	C102BC12CR	15.45	C	7.00	5.00	4.56	91.0
13	C102BC13CR	16.71	C	7.00	5.00	4.56	107.0
14	C102BC14CR	17.98	C	7.00	5.00	4.56	110.0
15	C102BC15CR	19.24	C	7.00	5.00	4.56	122.0
16	C102BC16CR	20.50	C	7.00	5.00	4.56	135.0
17	C102BC17CR	21.76	C	7.00	5.00	4.56	145.0
18	C102BC18CR	23.04	C	7.00	5.00	4.56	130.0
19	C102BC19CR	24.30	C	7.00	5.00	4.50	170.0
20	C102BC20CR	25.57	C	10.00	6.00	6.00	175.0
21	C102BC21CR	26.84	C	10.00	6.00	6.00	185.0
22	C102BC22CR	28.11	C	10.00	6.00	6.00	194.0
24	C102BC24CR	30.65	C	10.00	6.00	6.00	214.0

NOTE: Weights and Dimensions are approximate. Please consult Martin for max hub information. All Cast Sprockets available as Split Sprockets.
CHAINSAVER rims available on request.
HEAT TREAT available upon request.



H102 CAST TOOTH SPROCKETS — PITCH 5.00

FOR CHAINS NO.: H102, WD102, WDH102

Tooth Face at Pitch Line: .625 — Roller Diameter: 1.500

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	CWD102C6	10.00	C	6.00	7.25	4.00	65.0
7	CWD102C7	11.52	C	6.00	7.25	4.00	80.0
8	CWD102C8	13.07	C	6.50	7.25	4.50	122.0
8	CWD102C8F	13.07	C	6.50	7.25	4.50	160.0
9	CWD102C9	14.62	C	7.00	8.00	5.00	140.0
10	CWD102C10	16.18	C	7.00	8.00	5.00	143.0
11	CDW102C11	17.75	C	7.00	8.00	5.00	165.0
12	CDW102C12	19.32	C	7.50	8.00	5.50	212.0
13	CDW102C13	20.89	C	7.50	8.00	5.50	245.0

102.5 CAST TOOTH SPROCKETS — PITCH 4.040

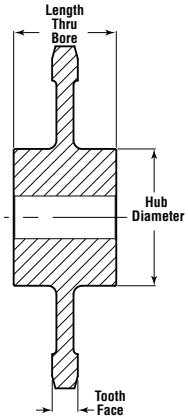
FOR CHAINS NO.: A102-1/2, C102-1/2, C102.5, ER102.5, S102-1/2, SBS102.5, SS102-1/2

Tooth Face at Pitch Line: 1.875 — Roller Diameter: 1.375

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	C102.5C6	8.08	C	5.00	3.50	3.94	30.0
8	C102.5C8	10.56	C	6.00	4.00	4.44	55.0
9	C102.5C9	11.81	C	6.00	4.00	5.44	62.0
10	C102.5C10	13.07	C	6.00	4.00	5.94	62.0
11	C102.5C11	14.34	C	6.00	4.00	5.94	76.0
12	C102.5C12	15.61	C	6.00	4.00	5.94	106.0
13	C102.5C13	16.88	C	6.00	4.00	5.94	85.0
14	C102.5C14	18.16	C	6.00	4.00	5.94	94.0
15	C102.5C15	19.43	C	6.00	4.00	5.94	105.0
16	C102.5C16	20.71	C	8.00	5.00	6.00	112.0
17	C102.5C17	21.98	C	8.00	5.00	6.00	122.0
19	C102.5C19	24.55	C	8.00	5.00	6.00	140.0
20	C102.5C20	25.83	C	10.00	6.00	8.00	150.0
22	C102.5C22	28.39	C	10.00	6.00	8.00	175.0
24	C102.5C24	30.95	C	10.00	6.00	8.00	190.0
25	C102.5C25	32.23	C	10.00	6.00	8.00	210.0
26	C102.5C26	33.33	C	10.00	6.00	8.00	230.0

NOTE: Weights and Dimensions are approximate. Please consult Martin for max hub information. All Cast Sprockets available as Split Sprockets.
CHAINSAVER rims available on request.
HEAT TREAT available upon request.

Cast Iron Sprocket



H104 CAST TOOTH SPROCKETS — PITCH 6.000

FOR CHAINS NO.: 6104, H104, WDH104

Tooth Face at Pitch Line: 4.00 — Roller Diameter: 1.50

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
5	CWD104C5	10.21	C	6.00	4.75	4.00	80.0
6	CWD104C6	12.00	C	6.00	4.75	4.00	91.0
7	CWD104C7	13.83	C	6.00	4.75	4.00	120.0
7	CWD104C7*		C	6.00	4.75	4.00	116.0
8	CWD104C8	15.68	C	7.50	5.00	5.00	122.0
8	CWD104C8*		C	7.50	5.00	5.00	137.0
9	CWD104C9	17.54	C	7.50	5.00	5.00	152.0
9	CWD104C9*		C	7.50	5.00	5.00	167.0
10	CWD104C10	19.42	C	8.00	5.50	6.00	160.0
10	CWD104C10*		C	8.00	5.50	6.00	175.0
11	CWD104C11	21.30	C	8.00	5.50	6.00	172.0
12	CWD104C12	23.18	C	8.00	5.50	6.00	185.0
13	CWD104C13	25.07	C	8.00	5.50	6.00	198.0

*Available Flanged - Consult Factory.

W106 CAST TOOTH SPROCKETS — PITCH 6.000

FOR CHAINS NO.: W106 WH106HD, WH110, WR106, WR106HD

Tooth Face at Pitch Line: 1.50 — Roller Diameter: 1.25

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
5	C106C5CR	10.15	C	6.00	4.75	4.00	30.0
8	C106C8CR	15.68	C	7.00	4.75	5.00	85.0
9	C106C9CR	17.54	C	7.00	4.75	5.00	100.0

S110 CAST TOOTH SPROCKETS — PITCH 6.000

FOR CHAINS NO.: 6110, C110, C110,ER110, C110C, RR542, SBS110, SS110, WH110, WS110

Tooth Face at Pitch Line: 1.875 — Roller Diameter: 1.250

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	C110C6	12.00	C	6.00	4.00	3.94	63.0
7	C110C7	13.84	C	7.00	4.00	4.50	68.0
8	C110C8	15.68	C	7.00	5.00	4.50	76.0
9	C110C9	17.54	C	7.00	5.00	4.50	83.0
10	C110C10	19.42	C	7.50	5.00	5.00	88.0
11	C110C11	21.30	C	7.50	5.00	5.00	121.0
12	C110C12	23.18	C	7.50	5.00	5.00	131.0
13	C110C13	25.07	C	7.50	5.00	5.00	152.0
14	C110C14	26.96	C	7.50	5.00	5.00	160.0
15	C110C15	28.86	C	7.50	5.00	5.00	170.0
16	C110C16	30.76	C	8.00	6.00	6.00	181.0
18	C110C18	34.55	C	8.00	6.00	6.00	206.0
19	C110C19	36.46	C	10.00	6.00	6.00	214.0
24	C110C24	45.97	C	10.00	8.00	8.00	340.0

WD110 CAST TOOTH SPROCKETS — PITCH 6.000

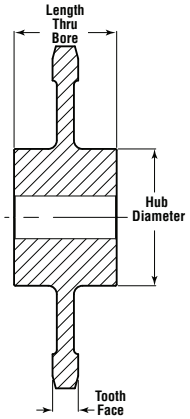
FOR CHAINS NO.: 6110 (DRAG), H-110, H110, WD110, WD113, WDH2210, WHD110, WS110 (PT-C), WSD110

Tooth Face at Pitch Line: 8.875 — Roller Diameter: 1.500

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
5	CWD110C5	10.15	C	6.00	3.00	4.00	120.0
6	CWD110C6*	12.00	C	6.00	3.00	4.00	129.0
7	CWD110C7*	13.84	C	7.00	3.00	5.00	172.0
8	CWD110C8*	15.68	C	8.00	3.50	6.00	202.0
9	CWD110C9*	17.54	C	8.00	3.50	6.00	240.0
10	CWD110C10*	19.42	C	8.00	3.50	6.00	253.0
11	CWD110C11*	21.30	C	8.00	4.00	6.00	265.0
12	CWD110C12*	23.18	C	8.00	4.00	6.00	352.0
15	CWD110C15	28.86	C	8.00	4.00	6.00	610.0

*Available Flanged - Consult Factory.

NOTE: Weights and Dimensions are approximate. Please consult Martin for max hub information. All Cast Sprockets available as Split Sprockets.
CHAINSAVER rims available on request.
HEAT TREAT available upon request.



111SP CAST TOOTH SPROCKETS — DOUBLE PITCH 4.760 AND 7.240 — CHILLED RIM

FOR CHAINS NO.: 6111 Spec., C111 Spec., ER111SP, SS111 Spec.

Tooth Face at Pitch Line: 2.375 — Roller Diameter: 1.438

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
8	CDP111C8CR	15.74	C	7.50	6.00	5.00	90.0
10	CDP111C10CR	19.40	C	7.50	6.00	5.00	107.0
12	CDP111C12CR	23.22	C	8.00	6.00	6.00	190.0

111 CAST TOOTH SPROCKETS — PITCH 4.760 CHILLED RIM

FOR CHAINS NO.: 6111 Spec., C111 Spec., ER111SP, SS111 Spec.

Tooth Face at Pitch Line: 2.375 — Roller Diameter: 1.438

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	C111C6CR	9.52	C	7.00	4.00	4.00	64.0
7	C111C7CR	10.99	C	7.00	4.00	5.00	81.0
8	C111C8CR	12.44	C	7.50	6.00	5.06	98.0
9	C111C9CR	13.92	C	7.00	6.00	5.06	107.0
10	C111C10CR	15.40	C	7.50	6.00	5.06	122.0
11	C111C11CR	16.90	C	7.50	6.00	5.06	136.0
12	C111C12CR	18.39	C	7.50	6.00	5.06	145.0
13	C111C13CR	19.89	C	7.50	6.00	5.06	120.0
14	C111C14CR	21.39	C	8.00	6.00	6.00	125.0
15	C111C15CR	24.35	C	8.00	6.00	6.00	180.0
16	C111C16CR	24.35	C	8.00	6.00	6.00	189.0
17	C111C17CR	25.90	C	8.00	6.00	6.00	218.0
18	C111C18CR	27.41	C	8.00	6.00	6.00	228.0
20	C111C20CR	30.34	C	8.00	6.00	6.00	248.0
22	C111C22CR	33.44	C	10.00	6.00	8.00	261.0
24	C111C24CR	36.47	C	10.00	6.00	8.00	274.0

WD112 CAST TOOTH SPROCKETS — PITCH 8.00

FOR CHAINS NO.: H112, SDH112, WD112, WSD112

Tooth Face at Pitch Line: 9.000 — Roller Diameter: 1.500

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
7	CWD112C7	18.44	C	8.00	6.00	6.938	260.0
8	CWD112C8	20.90	C	8.00	6.00	6.938	281.0
9	CWD112C9	23.39	C	8.00	6.00	6.938	308.0
10	CWD112C10	25.89	C	8.00	6.00	6.938	346.0

WD116 CAST TOOTH SPROCKETS — PITCH 8.00 ALLOY IRON

FOR CHAINS NO.: 8116, HC8116, WD116, WDH116, WDH2316, WS116, WSD116

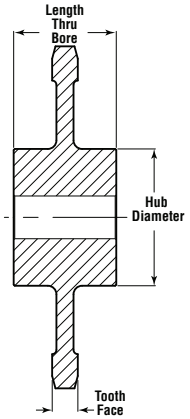
Tooth Face at Pitch Line: 9.000 — Roller Diameter: 1.500

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	CWD116C6*	16.00	C	7.00	6.00	5.00	210.0
7	CWD116C7*	18.44	C	7.00	6.00	5.00	303.0
8	CWD116C8*	20.90	C	8.00	6.00	6.00	346.0
9	CWD116C9*	23.39	C	8.00	6.00	6.00	442.0
10	CDWD116C10	25.92	C	8.00	6.00	6.00	450.0

*Available Flanged - Consult Factory.

NOTE: Weights and Dimensions are approximate. Please consult Martin for max hub information. All Cast Sprockets available as Split Sprockets.
CHAINSAVER rims available on request.
HEAT TREAT available upon request.

Cast Iron Sprocket



WD119 CAST TOOTH SPROCKETS — PITCH 6.000

FOR CHAINS NO.: CC119, HC119, SD-19, SD19A

Tooth Face at Pitch Line: 3.625 — Roller Diameter: 2.000

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	CWD119C6	12.00	C	6.00	5.00	4.00	95.0

WD120 CAST TOOTH SPROCKETS — PITCH 6.000

FOR CHAINS NO.: H-120, WD120, WDH120

Tooth Face at Pitch Line: 8.750 — Roller Diameter: 2.000

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	CWD120C6	12.00	C	6.00	5.00	5.00	130.0
8	CWD120C8	15.68	C	6.00	5.00	5.00	250.0
9	CWD120C9	17.54	C	8.00	5.00	6.00	232.0
10	CWD120C10	19.42	C	8.00	5.00	6.00	215.0
11	CWD120C11	21.30	C	8.00	5.00	6.00	308.0

H121 CAST TOOTH SPROCKETS — PITCH 9.00

FOR CHAINS NO.: CC121, HC121, SD21, SD21A

Tooth Face at Pitch Line: 8.625 — Roller Diameter: 2.500

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
8	CWD121C8	23.52	C	10.00	6.00	8.00	130.0

WD122 CAST TOOTH SPROCKETS — PITCH 8.00 CHILLED RIM

FOR CHAINS NO.: H-122, WD122, WDH122

Tooth Face at Pitch Line: 8.750 — Roller Diameter: 2.000

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	CWD122C6CR	16.00	C	7.50	5.00	6.00	180.0
6	CWD122C6CRF*	16.00	C	8.00	5.00	6.00	270.0
7	CWD122C7CR	18.44	C	8.00	5.00	6.00	210.0

* Standard Flange Width is 16.75"

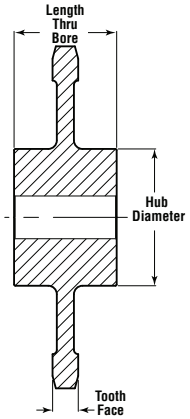
WD123 CAST TOOTH SPROCKETS — PITCH 9.00

FOR CHAINS NO.: C123, CC123, HC123, SD23, SD23A

Tooth Face at Pitch Line: 6.250 — Roller Diameter: 2.50

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
8	CWD123C8	23.52	C	8.00	6.00	6.44	481.0

NOTE: Weights and Dimensions are approximate. Please consult Martin for max hub information. All Cast Sprockets available as Split Sprockets.
CHAINSAVER rims available on request.
HEAT TREAT available upon request.



H124 CAST TOOTH SPROCKETS — PITCH 4.00 CHILLED RIM

FOR CHAINS NO.: C124, H124, H87, WH124, WHX124, WHX124HD, WR124, WS124, WSX124

Tooth Face at Pitch Line: 1.500 — Roller Diameter: 1.438

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
7	C124C7CR	9.22	C	6.00	4.00	3.94	38.0
8	C124C8CR	10.45	C	6.50	4.25	4.94	52.0
9	C124C9CR	11.70	C	6.50	4.25	5.44	45.0
10	C124C10CR	12.94	C	7.00	4.25	5.44	73.0
11	C124C11CR	14.20	C	7.00	4.25	5.95	75.0
12	C124C12CR	15.45	C	7.00	4.25	6.00	80.0
13	C124C13CR	16.71	C	7.00	5.25	6.00	100.0
15	C124C15CR	17.98	C	7.00	5.25	6.00	103.0
16	C124C16CR	19.24	C	7.00	5.25	6.00	112.0
17	C124C17CR	20.50	C	7.00	5.25	6.00	125.0
18	C124C18CR	21.77	C	7.50	5.50	6.50	135.0
19	C124C19CR	23.04	C	7.50	5.50	6.50	145.0
20	C124C20CR	24.30	C	7.50	5.50	6.50	154.0
22	C124C22CR	25.57	C	8.00	6.00	6.50	161.0
27	C124C27CR	28.11	C	8.00	6.00	6.50	176.0
28	C124C28CR	34.46	C	10.00	6.00	8.00	240.0
30	C124C30CR	38.27	C	10.00	6.00	8.00	290.0
34	C124C34CR	43.35	C	10.00	6.00	8.00	300.0
37	C124C37CR	47.18	C	10.00	6.00	8.00	410.0

130 CAST TOOTH SPROCKETS — PITCH 4.000 CHILLED RIM

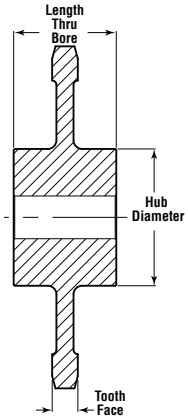
FOR CHAINS NO.: 131, 138, 130RT, 138RT, H-130, H-138, WH784, WHT130/138, WS784

Tooth Face at Pitch Line: 1.000 — Roller Diameter: 1.000

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
5	C130C5CR	6.77	C	3.00	2.75	2.00	18.0
6	C130C6CR	8.00	C	4.50	3.00	2.50	20.0
7	C130C7CR	9.22	C	4.75	3.00	3.94	24.0
8	C130C8CR	10.45	C	5.25	3.00	4.50	27.0
9	C130C9CR	11.70	C	5.75	3.00	4.50	33.0
10	C130C10CR	12.94	C	6.00	4.00	5.00	46.0
11	C130C11CR	14.20	C	6.00	4.00	5.00	54.0
12	C130C12CR	15.45	C	6.50	4.00	5.50	73.0
13	C130C13CR	16.71	C	6.50	4.00	5.50	58.0
14	C130C14CR	17.95	C	6.50	4.00	5.50	80.0
16	C130C16CR	20.50	C	6.50	4.00	5.50	75.0
24	C130C24CR	36.47	C	10.00	6.00	8.00	274.0

NOTE: Weights and Dimensions are approximate. Please consult Martin for max hub information. All Cast Sprockets available as Split Sprockets.
CHAINSAVER rims available on request.
HEAT TREAT available upon request.

Cast Iron Sprocket



132 CAST TOOTH SPROCKETS — PITCH 6.050 CHILLED RIM

FOR CHAINS NO.: 6150PM, A132, A132WS, AX132, AX132WS, AZ132WS, C132, C132C, C132M, C132W1, C132W2, CR-N132, DW132, ER150, ERA150, HSB150, MBP132, MBP132C, MPB132, MPBP132C, PW132, SS150+, SXA150, W132, W157, WH132, WH132HD, WH132XHD, WH150, WH150HD, WH150XHD, WH157, WH2012, WH2855, WH3855, WHX132, WHX150, WHX150,SX150, WHX155, WHX157, WHX159, WHX2855, WHX3855, WSX132

Tooth Face at Pitch Line: 2.750 — Roller Diameter: 1.750

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
5	C132C5CR	10.20	C	6.00	6.00	4.00	59.0
6	C132C6CR	12.10	C	6.00	6.00	4.00	100.0
8	C132C8CR*	15.81	C	8.00	7.00	6.00	163.0
9	C132C9CR*	17.69	C	8.00	7.00	6.00	165.0
10	C132C10CR*	19.57	C	8.00	7.00	6.00	186.0
11	C132C11CR*	21.47	C	8.00	8.00	6.00	215.0
12	C132C12CR*	23.38	C	8.00	8.00	6.00	258.0
13	C132C13CR	25.28	C	8.00	8.00	6.00	280.0
14	C132C14CR	27.19	C	10.00	8.00	8.00	296.0
15	C132C15CR	29.10	C	10.00	8.00	8.00	372.0
16	C132C16CR	31.01	C	10.00	8.00	8.00	302.0
18	C132C17CR	34.84	C	10.00	8.00	8.00	445.0
19	C132C18CR	36.76	C	10.00	8.00	8.00	486.0
20	C132C19CR	38.67	C	10.00	8.00	8.00	495.0

*Available Flanged - Consult Factory.

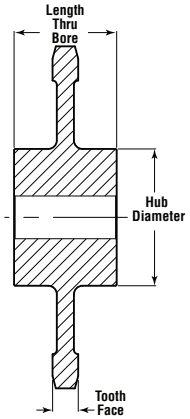
182 CAST TOOTH SPROCKETS — PITCH 3.000 CHILLED RIM

FOR CHAINS NO.: 1183, 1583, 3013, 53R, MSR-3013, RS3013, SR183

Tooth Face at Pitch Line: 0.8125 — Roller Diameter: 1.500

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	C183C6CR	6.00	C	4.00	3.00	2.68	10.0
7	C183C7CR	6.92	C	4.00	3.00	2.68	14.0
8	C183C8CR	7.84	C	4.00	3.00	2.68	14.0
9	C183C9CR	8.77	C	5.00	3.00	2.94	22.0
10	C183C10CR	9.71	C	5.00	3.00	2.94	21.0
11	C183C11CR	10.65	C	5.00	3.00	2.94	30.0
12	C183C12CR	11.59	C	5.00	3.00	3.18	28.0
13	C183C13CR	12.54	C	6.00	3.00	3.49	38.0
14	C183C14CR	13.48	C	6.00	4.00	4.00	40.0
15	C183C15CR	14.43	C	6.00	4.00	4.00	43.0
16	C183C16CR	15.38	C	6.00	4.00	4.00	46.0
18	C183C18CR	17.28	C	6.00	4.00	4.00	55.0
19	C183C19CR	18.23	C	6.00	4.00	4.00	67.0
20	C183C20CR	19.18	C	8.00	4.00	6.00	65.0
24	C183C24CR	22.98	C	8.00	4.00	6.00	75.0
25	C183C25CR	23.94	C	8.00	4.00	6.00	85.0
38	C183C38CR	36.33	C	8.00	4.00	6.00	140.0

NOTE: Weights and Dimensions are approximate. Please consult Martin for max hub information. All Cast Sprockets available as Split Sprockets.
CHAINSAVER rims available on request.
HEAT TREAT available upon request.



188 CAST TOOTH SPROCKETS — PITCH 4.000 CHILLED RIM

FOR CHAINS NO.: 1188, 2188, 4113, 91R, LXS-4113, RS2188, RS4113. NOT for C-188 (2.609P) see W-78, SR188, SS218

Tooth Face at Pitch Line: 0.9375 — Roller Diameter: 1.750

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
5	C188C5CR	6.78	C	4.00	3.00	2.50	14.0
6	C188C6CR	8.00	C	4.00	3.00	3.44	15.0
7	C188C7CR	9.22	C	4.00	3.00	3.68	27.0
8	C188C8CR	10.45	C	6.00	4.00	3.94	35.0
9	C188C9CR	11.70	C	6.00	4.00	3.94	32.0
10	C188C10CR	12.94	C	6.00	4.00	3.94	43.0
11	C188C11CR	14.19	C	6.50	4.00	4.44	50.0
12	C188C12CR	15.45	C	6.50	4.00	4.44	60.0
13	C188C13CR	16.71	C	8.00	5.00	5.00	36.0
15	C188C15CR	19.24	C	8.00	5.00	5.00	39.0
19	C188C19CR	24.30	C	10.00	5.00	6.00	48.0
24	C188C24CR	30.64	C	10.00	5.00	6.00	58.0

194 CAST TOOTH SPROCKETS — PITCH 4.000 CHILLED RIM

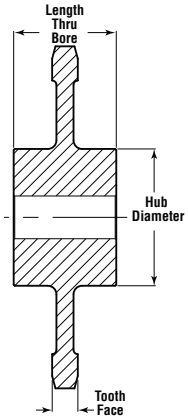
FOR CHAINS NO.: 194, 1400, 1594, 2066, 4215, 14-1/2, 83-R, 83R, GL-194, LXS-4216, S1194, SR-194, SR194, U194, US-90-R, US90R

Tooth Face at Pitch Line: 1.000 — Roller Diameter: 2.000

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
7	C194C7CR	9.22	C	5.00	4.00	3.62	30.0
8	C194C8CR	10.45	C	5.00	4.00	3.62	36.0
9	C194C9CR	11.70	C	5.00	4.00	3.62	40.0
10	C194C10CR	12.94	C	6.00	4.00	3.62	47.0
11	C194C11CR	14.20	C	6.50	4.00	3.62	62.0
12	C194C12CR	15.46	C	6.50	4.00	3.62	55.0
13	C194C13CR	16.71	C	6.50	4.00	3.62	64.0
14	C194C14CR	17.98	C	6.50	4.00	3.62	90.0
15	C194C15CR	19.14	C	7.50	4.00	3.62	81.0
19	C194C19CR	24.30	C	7.50	4.00	3.62	121.0

NOTE: Weights and Dimensions are approximate. Please consult Martin for max hub information. All Cast Sprockets available as Split Sprockets.
CHAINSAVER rims available on request.
HEAT TREAT available upon request.

Cast Iron Sprocket



196 CAST TOOTH SPROCKETS — PITCH 6.000 CHILLED RIM

FOR CHAINS NO.: 196, 1114, 1116, 2126, 6018, 604R, 627R, 634R, GL-196, MSR-1116, MSR-6018, SR196, SR911, SRC196, SRD1960, SS-1114, US196R, US196RA42

Tooth Face at Pitch Line: 1.000 — Roller Diameter: 2.000

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
5	C196C5CR	10.21	C	6.00	4.00	4.00	28.0
6	C196C6CR	12.00	C	6.00	4.00	4.00	33.0
7	C196C7CR	13.83	C	6.50	4.00	4.00	49.0
8	C196C8CR	15.68	C	6.50	5.00	4.56	84.0
9	C196C9CR	17.54	C	6.50	5.00	4.56	93.0
10	C196C10CR	19.42	C	7.00	5.00	4.56	114.0
12	C196C12CR	23.18	C	7.00	5.00	4.56	148.0
13	C196C13CR	25.07	C	7.00	5.00	4.56	119.0
14	C196C14CR	26.96	C	7.00	5.00	4.56	128.0
16	C196C16CR	30.76	C	8.00	5.00	4.56	160.0
18	C196C18CR	34.55	C	8.00	5.00	4.56	195.0
19	C196C19CR	36.45	C	8.00	5.00	4.56	210.0
25	C196C25CR	47.87	C	8.00	5.00	4.56	304.0

197 CAST TOOTH SPROCKETS — PITCH 6.000 CHILLED RIM

FOR CHAINS NO.: 614, 1130, 1617, 6018, 607R, 614R, CC5, GL-197, LXS-6238, MR-1130, RS2190 197, SR-3130, SS-2190

Tooth Face at Pitch Line: 1.125 — Roller Diameter: 2.500

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	C197C6CR	12.00	C	6.00	5.00	4.75	45.0
7	C197C7CR	13.83	C	6.50	5.00	4.75	60.0
8	C197C8CR	15.68	C	6.50	5.00	4.75	75.0
9	C197C9CR	17.54	C	6.50	5.00	4.75	84.0
10	C197C10CR	19.42	C	7.00	5.00	4.75	94.0
11	C197C11CR	21.30	C	7.00	5.00	4.75	100.0
12	C197C12CR	23.18	C	7.00	5.00	4.75	125.0
15	C197C15CR	28.86	C	7.00	5.00	4.75	178.0

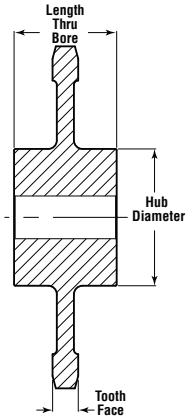
348 CAST TOOTH SPROCKETS — PITCH 3.031 CHILLED RIM

FOR CHAINS NO.: 348, N348, S348, X348

Tooth Face at Pitch Line: 0.687 — Roller Diameter: 1.0625

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
4	C348C4CR	7.92	C	4.00	4.00	2.00	11.0
5	C348C5CR	9.71	C	4.00	4.00	2.00	19.0
6	C348C6CR	11.59	C	5.00	4.00	3.00	24.0
7	C348C7CR	13.48	C	5.00	4.00	3.00	43.0
8	C348C8CR	15.54	C	5.00	4.00	3.00	43.0
9	C348C9CR	17.28	C	7.00	4.00	5.00	51.0
10	C348C10CR	19.18	C	7.00	4.00	5.00	68.0
11	C348C11CR	21.03	C	7.00	4.00	5.00	75.0
12	C348C12CR	22.98	C	7.00	4.00	5.00	83.0
16	C348C16CR	30.60	C	7.00	4.00	5.00	120.0
19	C348C19CR	36.33	C	7.00	4.00	5.00	159.0

NOTE: Weights and Dimensions are approximate. Please consult Martin for max hub information. All Cast Sprockets available as Split Sprockets.
CHAINSAVER rims available on request.
HEAT TREAT available upon request.



458 CAST TOOTH SPROCKETS — PITCH 4.031 CHILLED RIM

FOR CHAINS NO.: 458, S458, X458

Tooth Face at Pitch Line: 0.875 — Roller Diameter: 1.380

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
3	C458C3CR	7.95	C	4.50	5.00	2.00	14.0
4	C458C4CR	10.54	C	5.00	5.00	3.00	27.0
5	C458C5CR	13.05	C	6.00	5.00	5.06	40.0
6	C458C6CR	15.58	C	6.00	5.00	5.06	63.0
7	C458C7CR	18.12	C	7.00	5.00	5.06	70.0
8	C458C8CR	20.66	C	7.00	5.00	5.06	93.0
9	C458C9CR	23.13	C	7.50	5.00	5.06	130.0
10	C458C10CR	25.77	C	7.50	5.00	5.06	145.0
11	C458C11CR	28.33	C	7.50	5.00	5.06	193.0
12	C458C12CR	30.68	C	7.50	5.00	5.06	200.0
14	C458C14CR	35.87	C	8.00	5.00	5.06	228.0
19	C458C19CR	48.63	C	8.00	5.00	5.06	345.0

WD480 CAST TOOTH SPROCKETS — PITCH 8.000 CHILLED RIM

FOR CHAINS NO.: 480, 8480, H480, WD480, WDH2380, WDH480, WDH580, WDH680, WS480, WSD480

Tooth Face at Pitch Line: 11.125 — Roller Diameter: 2.00

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	CWD480C6*	16.00	C	7.00	5.00	5.00	237.0
7	CWD480C7*	18.44	C	7.50	5.00	5.00	295.0
8	CWD480C8*	20.90	C	7.50	6.00	5.00	290.0
9	CWD480C9*	23.39	C	7.50	6.00	5.00	380.0
10◊	CWD480C10*	25.89	C	8.00	6.00	5.00	381.0
11◊	CWD480C11	28.40	C	8.00	6.00	5.00	505.0

*Available Flanged - Consult Factory.

468 CAST TOOTH SPROCKETS — PITCH 4.031 CHILLED RIM

FOR CHAINS NO.: 468, 468A ,S468

Tooth Face at Pitch Line: 1.375 — Roller Diameter: 1.880

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
4	C468C4CR	10.53	C	5.00	4.00	3.00	36.0
5	C468C5CR	13.05	C	6.00	4.00	4.00	52.0
6	C468C6CR	15.58	C	6.50	4.00	4.50	80.0
7	C468C7CR	18.12	C	6.50	4.00	4.50	92.0
8	C468C8CR	20.66	C	6.50	4.00	4.50	118.0
9	C468C9CR	23.21	C	7.00	4.00	5.00	148.0
10	C468C10CR	25.77	C	7.00	4.00	5.00	160.0
12	C468C12CR	30.88	C	7.00	4.00	5.00	240.0

463 CAST TOOTH SPROCKETS — PITCH 4.000

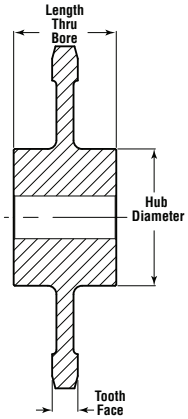
FOR CHAINS NO.: 483, S4830K23

Tooth Face at Pitch Line: 0.875 — Roller Diameter: 0.940

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
8	C483C8	10.45	C	5.00	5.00	2.75	30.0
9	C483C9	11.70	C	5.00	5.00	2.75	35.0
12	C483C12	15.45	C	6.00	5.00	3.00	65.0
13	C483C13	16.72	C	6.00	5.00	3.00	70.0
19	C483C19	24.30	C	8.00	5.00	6.00	124.0

NOTE: Weights and Dimensions are approximate. Please consult Martin for max hub information. All Cast Sprockets available as Split Sprockets.
CHAINSAVER rims available on request.
HEAT TREAT available upon request.
* Standard Flange Plain Chain is 18.625" OAW; Standard Chain is 22" OAW.
◊ Special machining charges apply.

Cast Iron Sprocket



520 CAST TOOTH SPROCKETS — PITCH 2.563 CHILLED RIM

FOR CHAINS NO.: 520-RX, 520RX, A520, IS-2625, IS2625, SS-520, SS520

Tooth Face at Pitch Line: 0.875 — Roller Diameter: 1.125

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
10	C520C10CR	8.29	C	4.00	3.00	2.00	4.0
12	C520C12CR	9.90	C	4.00	3.00	2.00	5.0
14	C520C14CR	11.53	C	5.00	3.00	2.50	34.0
18	C520C18CR	14.76	C	5.00	3.00	2.50	65.0
24	C520C24CR	19.64	C	6.00	3.00	3.00	100.0
30	C520C30CR	24.52	C	7.50	3.00	3.00	112.0
40	C520C40CR	32.67	C	7.50	3.00	3.00	165.0

531 CAST TOOTH SPROCKETS — PITCH 4.000

FOR CHAINS NO.: 149, 531, 4328, 89R, IS4328, LXS4328, MSR4328, RS4328, S531, SS149

Tooth Face at Pitch Line: 1.187 — Roller Diameter: 2.25

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	C531C6	8.00	C	5.00	4.00	2.94	34.0
8	C531C8	10.45	C	6.00	4.00	3.44	34.0
10	C531C10	12.94	C	7.00	4.00	3.94	47.0
12	C531C12	15.45	C	7.00	4.00	4.44	66.0
14	C531C14	17.99	C	7.50	4.00	5.00	75.0
15	C531C15	19.24	C	7.50	4.00	5.00	85.0
16	C531C16	20.50	C	7.50	4.00	5.00	94.0
17	C531C17	21.77	C	7.50	4.00	5.00	107.0
19	C531C19	24.30	C	7.50	4.00	5.00	120.0

625R CAST TOOTH SPROCKETS — PITCH 6.000 CHILLED RIM

FOR CHAINS NO.: 1258, 1604R, 625R, 626R, 629R, SS658

Tooth Face at Pitch Line: 1.125 — Roller Diameter: 3.000

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	C625C6CR	12.00	C	6.00	4.00	4.00	62.0
8	C625C8CR	15.68	C	7.00	4.00	5.00	78.0
10	C625C10CR	19.42	C	8.00	5.00	6.00	96,0
12	C625C12CR	23.18	C	8.00	5.00	6.00	114.0
13	C625C13CR	25.07	C	8.00	5.00	6.00	123.0

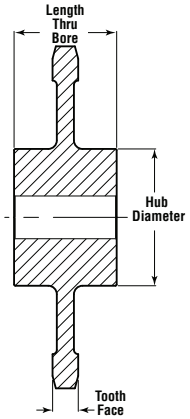
667 CAST TOOTH SPROCKETS — PITCH 2.250 CHILLED RIM

FOR CHAINS NO.: 667, J-X-K-53

Tooth Face at Pitch Line: 1.000 — Roller Diameter: 1.062

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	C667C6CR	4.50	C	2.50	2.50	1.50	9.0
8	C667C8CR	5.87	C	3.00	2.75	1.50	10.0
11	C667C11CR	7.98	C	4.00	2.75	2.00	15.0

NOTE: Weights and Dimensions are approximate. Please consult Martin for max hub information. All Cast Sprockets available as Split Sprockets.
CHAINSAVER rims available on request.
HEAT TREAT available upon request.



678 CAST TOOTH SPROCKETS — PITCH 6.031 CHILLED RIM

FOR CHAINS NO.: 678, S678, X678

Tooth Face at Pitch Line: 1.187 — Roller Diameter: 2.00

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
3	C678C3CR	12.06	C	6.00	4.50	3.00	30.0
4	C678C4CR	15.72	C	6.00	4.50	3.00	77.0
5	C678C5CR	19.52	C	7.00	4.50	3.50	93.0
6	C678C6CR	23.34	C	8.00	4.50	4.00	146.0
7	C678C7CR	27.03	C	8.50	4.50	4.00	190.0
8	C678C8CR	30.83	C	8.50	4.50	4.00	240.0

698 CAST TOOTH SPROCKETS — PITCH 6.031 CHILLED RIM

FOR CHAINS NO.: 698, S698, S698HD

Tooth Face at Pitch Line: 1.375 — Roller Diameter: 2.69

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
5	C698C5CR	19.52	C	8.00	5.00	6.00	122.0
6	C698C6CR	23.38	C	8.00	5.00	6.00	135.0
7	C698C7CR	26.96	C	8.00	5.00	6.00	200.0
8	C698C8CR	30.92	C	8.00	5.00	6.00	275.0

CS720S CAST TOOTH SPROCKETS — PITCH 6.000 CHILLED RIM

FOR CHAINS NO.: CS720S, WH720CS

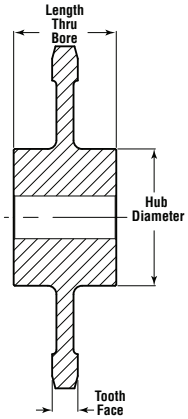
Tooth Face at Pitch Line: 1.00 — Roller Diameter: 1.44

Number of Teeth	Catalog Number	Pitch Diam.	Style	Hub Diam.	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6.5P-13T	C720C13HCR*	12.89	C	6.00	4.00	3.00	65.0
8.5P-17T	C720C17HCR*	16.59	C	6.00	4.00	3.00	98.2
9	C720C9CR	17.51	C	6.00	4.00	3.00	80.0
9.5P-19T	C720C19HCR*	18.48	C	6.00	4.00	3.00	115.3
10	C720C10CR	19.42	C	6.00	4.00	3.00	95.0
10.5P-21T	C720C21HCR*	20.33	C	7.00	5.00	3.50	110.0
11	C720C11CR	21.30	C	7.00	5.00	3.50	105.0
11.5P-23T	C720C23HCR*	22.24	C	7.00	5.00	3.50	127.7
12.5P-25T	C720C25HCR*	24.12	C	7.00	5.00	3.50	141.3
13	C720C13CR	25.07	C	7.00	5.00	3.50	130.0
16	C720C16CR	30.75	C	7.00	5.00	3.50	180.0

* Regular and DoubleLife (Hunting Tooth) Designs

NOTE: Weights and Dimensions are approximate. Please consult Martin for max hub information. All Cast Sprockets available as Split Sprockets.
CHAINSAVER rims available on request.
HEAT TREAT available upon request.

Cast Iron Sprocket



720S CAST TOOTH SPROCKETS — PITCH 6.000 CHILLED RIM

FOR CHAINS NO.: 720, 720S

Tooth Face at Pitch Line: 1.00 — Roller Diameter: 1.4375

Number of Teeth	Catalog Number	Pitch Diam.	Style	Hub Diam.	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	C720C6CR	12.00	C	6.00	4.00	3.00	47.0
6.5P-13T	C720C13HCR*	12.91	C	6.00	4.00	3.00	53.1
8	C720C8CR	15.68	C	6.00	4.00	3.00	70.0
8.5P-17T	C720C17HCR*	16.61	C	6.00	4.00	3.00	92.2
9	C720C9CR	17.51	C	6.00	4.00	3.00	80.0
9.5P-19T	C720C19HCR*	18.48	C	6.00	4.00	3.00	107.3
10	C720C10CR	19.42	C	6.00	4.00	3.00	95.0
10.5P-21T	C720C21HCR*	20.33	C	6.00	4.00	3.00	110.0
11	C720C11CR	21.30	C	6.00	4.00	3.00	105.0
11.5P-23T	C720C23HCR*	24.12	C	6.00	4.00	3.00	131.5
12	C720C12CR	23.18	C	7.00	5.00	3.50	120.0
12.5P-25T	C720C25HCR*	24.12	C	7.00	5.00	3.50	131.5
13	C720C13CR	25.07	C	7.00	5.00	3.50	130.0
15	C720C15CR	28.86	C	7.00	5.00	3.50	155.0
16	C720C16CR	30.75	C	7.00	5.00	3.50	180.0
19	C720C19CR	36.44	C	7.50	5.00	3.75	220.0
20	C720C20CR	38.36	C	7.50	5.00	3.75	242.0
21	C720C21CR	40.25	C	7.50	5.00	3.75	261.0
23	C720C23CR	44.06	C	7.50	5.00	3.75	318.0
25	C720C25CR	47.87	C	7.50	5.00	3.75	342.0

* Regular and DoubleLife (Hunting Tooth) Designs

A730 CAST TOOTH SPROCKETS — PITCH 6.000 CHILLED RIM

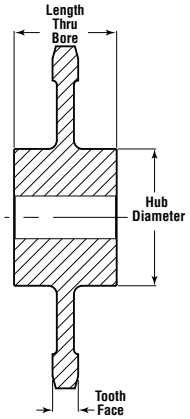
FOR CHAINS NO.: 730, A730

Tooth Face at Pitch Line: 1.125 — Roller Diameter: 1.500

Number of Teeth	Catalog Number	Pitch Diam.	Style	Hub Diam.	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	C730C6CR	12.00	C	6.00	4.00	3.00	47.9
8	C730C8CR	15.68	C	6.00	4.00	3.00	71.3
9	C730C9CR	17.54	C	6.00	4.00	3.00	85.5
9.5P-19T	C730C19HCR*	18.48	C	6.00	4.00	3.00	107.3
10P-20T	C730C20HCR*	19.42	C	6.00	4.00	3.00	115.4
11	C730C11CR	21.30	C	6.00	4.00	3.00	105.0
11.5P-23T	C730C23HCR*	22.24	C	6.00	4.00	3.00	104.5
12	C730C12CR	23.14	C	7.00	5.00	3.50	110.8
12.5P-25T	C730C25HCR*	24.12	C	7.00	5.00	3.50	117.9
13	C730C13CR	25.07	C	7.00	5.00	3.50	125.1
13.5P-27T	C730C27HCR*	26.02	C	7.00	5.00	3.50	132.5
14	C730C14CR	26.96	C	7.00	5.00	3.50	153.7
15	C730C15CR	28.86	C	7.00	5.00	3.50	170.0
16	C730C16CR	30.75	C	7.00	5.00	3.50	187.2
18	C730C18CR	34.55	C	8.00	5.00	4.00	225.2
24	C730C24CR	45.79	C	8.00	5.00	4.00	363.5
27	C730C27CR	57.68	C	8.00	5.00	4.00	408.

* Regular and DoubleLife (Hunting Tooth) Designs

NOTE: Weights and Dimensions are approximate. Please consult Martin for max hub information. All Cast Sprockets available as Split Sprockets.
CHAINSAVER rims available on request.
HEAT TREAT available upon request.



823 CAST TOOTH SPROCKETS — PITCH 6.000 CHILLED RIM

FOR CHAINS NO.: 823

Tooth Face at Pitch Line: 1.130 — Roller Diameter: 0.780

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
8	C823C8CR	10.45	C	6.00	4.00	2.44	25.0
10	C823C10CR	12.95	C	6.00	4.00	3.18	45.0
11	C823C11CR	14.40	C	6.00	4.00	3.68	54.0
12	C823C12CR	15.46	C	6.00	4.00	3.94	56.0
13	C823C13CR	16.71	C	6.00	4.00	4.44	60.0
14	C823C14CR	17.98	C	7.00	4.00	4.94	65.0
16	C823C16CR	20.51	C	7.00	4.00	5.44	81.0
17	C823C17CR	21.77	C	7.50	4.00	5.94	86.0
18	C823C18CR	23.04	C	7.50	4.00	5.94	91.0
19	C823C19CR	24.26	C	8.00	4.00	6.00	95.0
24	C823C24CR	30.65	C	8.00	4.00	6.00	138.0

825 CAST TOOTH SPROCKETS — PITCH 4.000 CHILLED RIM

FOR CHAINS NO.: 825, SR825

Tooth Face at Pitch Line: 1.250 — Roller Diameter: 1.156

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
10	C825C10CR	12.94	C	6.00	4.00	3.00	58.0
11	C825C11CR	14.20	C	6.00	4.00	3.00	65.0
12	C825C12CR	15.45	C	6.00	4.00	3.00	78.0
13	C825C13CR	16.71	C	6.00	4.00	3.00	82.0
14	C825C14CR	17.98	C	8.00	4.00	3.00	94.0
15	C825C15CR	19.24	C	8.00	4.00	4.00	112.0
16	C825C16CR	20.50	C	8.00	4.00	4.00	115.0
19	C825C19CR	24.30	C	8.00	4.00	4.00	140.0

830 CAST TOOTH SPROCKETS — PITCH 6.000 CHILLED RIM

FOR CHAINS NO.: 830, 6830, 830R, HSB830, RR830, SR830

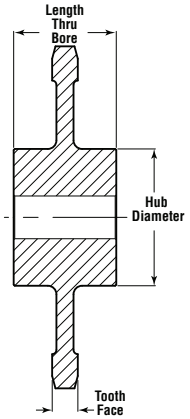
Tooth Face at Pitch Line: 1.312 — Roller Diameter: 1.156

Number of Teeth	Catalog Number	Pitch Diam.	Style	Hub Diam.	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	C830C6CR	12.00	C	6.00	4.00	4.00	58.5
8	C830C8CR	15.65	C	7.00	4.00	5.00	83.0
9	C830C9CR	17.54	C	7.00	4.00	5.00	95.0
10	C830C10CR	19.42	C	7.00	4.00	5.00	102.0
11	C830C11CR	21.20	C	7.00	4.00	5.00	105.0
11.5 -23T	C830C23HCR*	22.21	C	7.50	5.00	5.50	125.0
12	C830C12CR	23.18	C	7.50	5.00	5.50	121.0
13	C830C13CR	25.07	C	8.50	5.00	6.00	142.0
15	C830C15CR	28.86	C	8.50	5.00	6.00	168.0
16	C830C16CR	30.75	C	8.50	5.00	6.00	180.0

* Hunting Tooth

NOTE: Weights and Dimensions are approximate. Please consult Martin for max hub information. All Cast Sprockets available as Split Sprockets.
CHAINSAVER rims available on request.
HEAT TREAT available upon request.

Cast Iron Sprocket



844 CAST TOOTH SPROCKETS — PITCH 6.000 CHILLED RIM

FOR CHAINS NO.: 844, 6844, 6844M, 844R, HSB844, HSB844S, S844, SBS844, SR844

Tooth Face at Pitch Line: 2.125 — Roller Diameter: 1.190

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
8	C844C8CR	15.88	C	7.00	5.00	5.00	94.0
9	C844C9CR	17.54	C	7.00	5.00	5.00	112.0
10	C844C10CR	19.42	C	7.00	5.00	5.00	125.0
11	C844C11CR	21.30	C	7.00	5.00	5.00	140.0
12	C844C12CR	23.18	C	8.00	6.00	6.00	160.0
13	C844C13CR	25.07	C	8.00	6.00	6.00	171.0
15	C844C15CR	28.86	C	8.00	6.00	6.00	200.0
16	C844C16CR	30.75	C	8.00	6.00	6.00	217.0
19	C844C19CR	36.45	C	8.00	6.00	6.00	275.0

856 CAST TOOTH SPROCKETS — PITCH 6.000 CHILLED RIM

FOR CHAINS NO.: 844, 6844, 6844M, 844R, HSB844, HSB844S, S844, SBS844, SBS844, SR844

Tooth Face at Pitch Line: 2.125 — Roller Diameter: 1.190

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
7	C856C7	13.83	C	6.50	5.00	4.75	122.0
8	C856C8	15.68	C	6.50	5.00	4.75	130.0
10	C856C10	19.42	C	7.00	5.00	4.75	200.0
11	C856C11	21.30	C	7.00	5.00	4.75	230.0
12	C856C12	23.18	C	7.00	5.50	5.00	245.0
13	C856C13	25.07	C	7.50	5.50	5.00	260.0
14	C856C14	26.96	C	7.50	5.50	5.00	285.0
15	C856C15	28.86	C	7.50	5.50	5.00	300.0

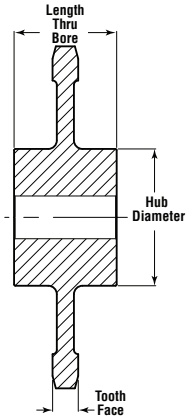
E922 CAST TOOTH SPROCKETS — PITCH 6.000 CHILLED RIM

FOR CHAINS NO.: 1751, ER922, MRS927, SS927

Tooth Face at Pitch Line: 1.625 — Roller Diameter: 3.500

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	CE922C6CR	18.00	C	8.00	6.00	5.94	112.0
8	CE922C8CR	23.52	C	8.00	6.00	5.94	170.0

NOTE: Weights and Dimensions are approximate. Please consult Martin for max hub information. All Cast Sprockets available as Split Sprockets.
CHAINSAVER rims available on request.
HEAT TREAT available upon request.



F933 CAST TOOTH SPROCKETS — PITCH 9.000 CHILLED RIM

FOR CHAINS NO.: 933, B964R, E933, ER933, F-933, F929, F932, F933, F940, FB40, FR933, RS933F, RS933P, SS932, SS933, SS940

Tooth Face at Pitch Line: 1.250 — Roller Diameter: 4.000

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	CF933C6CR	18.00		8.00	8.00	5.94	93.0
7	CF933C7CR	20.74		8.00	8.00	5.94	120.0
8	CF933C8CR	23.52		8.00	8.00	5.94	152.0

B963R CAST TOOTH SPROCKETS — PITCH 9.000 CHILLED RIM

FOR CHAINS NO.: 809, 925R, B963R, E931, F922, F930, FR922, SS4002, SS922, SS930

Tooth Face at Pitch Line: 1.125 — Roller Diameter: 3.500

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	CB963CR6CR	18.00	C	6.00	6.00	2.93	74.0
8	CB963CR8CR	23.52	C	8.00	6.00	3.44	150.0
9	CB963CR9CR	26.31	C	8.00	6.00	3.44	160.0
10	CB963CR10CR	29.12	C	8.00	6.00	3.44	175.0
11	CB963CR11CR	31.95	C	8.00	6.00	4.00	181.0
12	CB963CR12CR	34.77	C	8.00	6.00	4.00	195.0

951 CAST TOOTH SPROCKETS — PITCH 9.000 CHILLED RIM

FOR CHAINS NO.: 1734, 1906, 2183, 2184, 1131R, 126C, 126CMR, 156CMR, 2184AC, 2184R, 6 Spec., 626R, 631R, F2183, LXS6438, MR126C, MR156C, S1131, S951, SS1131, SS2184, SS314, SS951, U1131

Tooth Face at Pitch Line: 1.062 — Roller Diameter: 3.00

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	C951C6CR	12.00	C	6.00	6.00	3.94	62.0
8	C951C8CR	15.68	C	6.00	6.00	3.94	78.0
9	C951C9CR	17.54	C	6.00	6.00	3.94	92.0
12	C951C12CR	23.18	C	8.00	6.00	4.44	153.0
13	C951C13CR	25.03	C	8.00	6.00	4.44	175.0
14	C951C14CR	26.96	C	8.00	6.00	4.44	190.0
16	C951C16CR	30.75	C	8.00	6.00	4.44	225.0
25	C951C25CR	47.87	C	8.00	6.00	4.44	350.0

D963R CAST TOOTH SPROCKETS — PITCH 9.000 CHILLED RIM

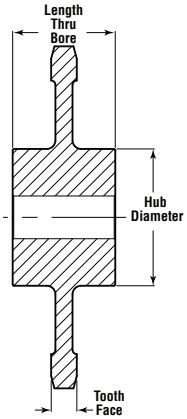
FOR CHAINS NO.: D-963R

Tooth Face at Pitch Line: 1.750 — Roller Diameter: 3.500

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
8	CD963C8CR	23.52	C	10.00	8.00	6.44	170.0
9	CD963C9CR	26.31	C	10.00	8.00	6.44	182.0
10	CD963C10CR	29.12	C	10.00	8.00	6.44	198.0
11	CD963C11CR	31.95	C	10.00	8.00	6.44	215.0
12	CD963C12CR	34.77	C	10.00	8.00	6.44	230.0

NOTE: Weights and Dimensions are approximate. Please consult Martin for max hub information. All Cast Sprockets available as Split Sprockets.
CHAINSAVER rims available on request.
HEAT TREAT available upon request.

Cast Iron Sprocket



E963R CAST TOOTH SPROCKETS — PITCH 9.000 CHILLED RIM

FOR CHAINS NO.: E-963R

Tooth Face at Pitch Line: 1.250 — Roller Diameter: 4.000

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
8	CE963C8	23.52	C	10.00	8.00	6.44	152.0
9	CE963C9	26.31	C	10.00	8.00	6.44	164.0
10	CE963C10	29.12	C	10.00	8.00	6.44	179.0
11	CE963C11	31.95	C	10.00	8.00	6.44	194.0
12	CE963C12	34.77	C	10.00	8.00	6.44	224.0

F963R CAST TOOTH SPROCKETS — PITCH 9.000 CHILLED RIM

FOR CHAINS NO.: F-963R (Hitachi)

Tooth Face at Pitch Line: 1.250 — Roller Diameter: 4.000

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	CF963C8	18.00	C	8.00	6.00	6.00	80.0
8	CF963C9	23.52	C	8.00	6.00	6.00	80.0

998 CAST TOOTH SPROCKETS — PITCH 9.031 CHILLED RIM

FOR CHAINS NO.: 998, S998, SS5998

Tooth Face at Pitch Line: 1.375 — Roller Diameter: 2.690

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
4	C197C6CR	23.53	C	9.00	6.00	6.44	195.0
5	C197C7CR	29.14	C	9.00	6.00	6.44	258.0
6	C197C8CR	34.81	C	9.00	6.00	6.44	325.0

1030 CAST TOOTH SPROCKETS — PITCH 3.075 CHILLED RIM

FOR CHAINS NO.: 1030, 1037, 1359, CHAMP 3, JS-1030, MSR·1539, MXS·1031, MXS·3075, MXS·40, R1033, R1035, R1037, ROA1031, ROA1032, ROA40 HYPER, RS1539,CHAMP3, SJLR1037, SS40, SS554, US-1030

Tooth Face at Pitch Line: 1.250 — Roller Diameter: 1.250

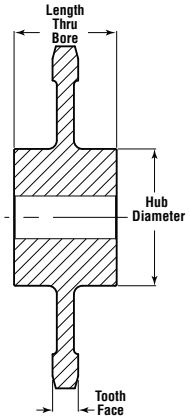
Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	C1030C6CR	6.15	C	3.00	3.00	2.44	21.0
8	C1030C8CR	8.04	C	4.00	4.00	2.44	24.0
9	C1030C9CR	8.99	C	4.00	4.00	2.44	44.0
10	C1030C10CR	9.95	C	5.00	4.00	3.44	43.0
11◊	C1030C11CR	10.92	C	5.00	4.00	3.44	51.0
12	C1030C12CR	11.88	C	5.00	4.00	3.44	50.0
13◊	C1030C13CR	12.85	C	5.00	4.00	3.44	64.0
14	C1030C14CR	13.82	C	5.00	4.00	3.44	73.0
15	C1030C15CR	14.79	C	6.00	4.00	3.94	76.0
16	C1030C16CR	15.76	C	6.00	4.00	3.94	82.0
17	C1030C17CR	16.73	C	6.00	4.00	3.94	100.0
18◊	C1030C18CR	17.71	C	6.00	4.00	3.94	105.0
19	C1030C19CR	18.68	C	6.00	4.00	3.94	112.0
20	C1030C20CR	19.66	C	6.00	4.00	3.94	100.0
21	C1030C21CR	20.63	C	7.50	5.00	4.88	105.0
22	C1030C22CR	21.61	C	7.50	5.00	4.88	130.0
23	C1030C23CR	22.57	C	7.50	5.00	4.88	132.0
24	C1030C24CR	23.56	C	7.50	5.00	4.88	145.0
26	C1030C26CR	25.51	C	7.50	5.00	4.88	148.0
27	C1030C27CR	26.49	C	7.50	5.00	4.88	165.0
28	C1030C28CR	27.46	C	7.50	5.00	4.88	171.0
30◊	C1030C30CR	29.42	C	8.00	5.00	4.94	180.0
31	C1030C31CR	30.39	C	8.00	5.00	4.94	189.0
32	C1030C32CR	31.37	C	8.00	5.00	4.94	193.0
33	C1030C33CR	32.35	C	8.00	5.00	4.94	215.0
34	C1030C34CR	33.33	C	8.00	5.00	4.94	217.0
35	C1030C35CR	34.31	C	9.50	6.50	5.88	220.0
36	C1030C36CR	35.28	C	9.50	6.50	5.88	229.0
37◊†	C1030C37CR	36.26	C	9.50	6.50	5.88	234.0
38†	C1030C38CR	37.24	C	9.50	6.50	5.88	252.0
39	C1030C39CR	38.25	C	9.50	6.50	5.88	250.0
40	C1030C40CR	39.19	C	9.50	6.50	5.88	261.0
42	C1030C42CR	41.15	C	9.50	6.50	5.88	300.0
44	C1030C44CR	43.10	C	9.50	6.50	5.88	321.0
46	C1030C46CR	45.06	C	9.50	6.50	5.88	330.0
48	C1030C48CR	47.02	C	10.00	6.50	5.88	600.0
55	C1030C55CR	53.86	C	10.00	6.50	6.88	782.0

NOTE: Weights and Dimensions are approximate. Please consult Martin for max hub information. All Cast Sprockets available as Split Sprockets.

CHAINSAVER rims available on request.

HEAT TREAT available upon request.

Cast Iron Sprockets



1113 CAST TOOTH SPROCKETS — PITCH 4.040 CHILLED RIM

FOR CHAINS NO.: 3420, A3420, B3420, RO2113, RS1113, SR3113, SS1113, SS60

Tooth Face at Pitch Line: 1.125 — Roller Diameter: 2.00

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	C1113C6CR	8.08	C	4.00	3.00	2.44	24.0
8	C1113C8CR	10.56	C	4.00	4.00	2.94	38.0
9	C1113C9CR	11.81	C	5.00	4.00	3.18	40.0
10	C1113C10CR	13.07	C	5.00	4.00	3.68	45.0
11	C1113C11CR	14.34	C	5.00	5.00	3.94	50.0
12	C1113C12CR	15.61	C	6.00	5.00	4.44	60.0
13	C1113C13CR	16.88	C	6.00	5.00	4.94	68.0
14	C1113C14CR	18.16	C	6.00	5.00	4.94	85.0
16	C1113C16CR	20.71	C	6.00	5.00	4.94	95.0
17	C1113C17CR	21.99	C	6.00	5.00	4.94	104.0
18	C1113C18CR	23.67	C	8.00	6.00	4.94	110.0
24	C1113C24CR	30.95	C	8.00	6.00	4.94	178.0

1120 CAST TOOTH SPROCKETS — PITCH 4.000 CHILLED RIM

FOR CHAINS NO.: 1120 (TBL 13-47), 2761, 4, 40SP, LXS 4019, RR1120 (TBL 13-14 R95), , RS4029, SS4

Tooth Face at Pitch Line: 0.750 — Roller Diameter: 1.500

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
5	C1120C5CR	6.81	C	3.50	3.00	2.18	12.0
6	C1120C6CR	8.00	C	4.00	3.00	2.44	23.0
7	C1120C7CR	9.22	C	4.50	3.00	3.68	72.0
8	C1120C8CR	10.45	C	4.50	3.00	3.68	29.0
9	C1120C9CR	11.70	C	5.00	3.00	3.94	38.0
10	C1120C10CR	12.94	C	5.00	4.00	3.94	40.0
11	C1120C11CR	14.19	C	6.00	4.00	4.25	50.0
12	C1120C12CR	15.45	C	6.00	4.00	4.25	65.0
14	C1120C14CR	17.98	C	6.00	4.00	4.25	77.0
15	C1120C15CR	19.24	C	6.00	4.00	4.25	86.0
16	C1120C16CR	20.50	C	8.00	5.00	6.00	97.0
18	C1120C18CR	23.04	C	8.00	5.00	6.00	115.0
19	C1120C19CR	24.30	C	8.00	5.00	6.00	125.0
22	C1120C22CR	28.11	C	8.00	5.00	6.00	165.0
24	C1120C24CR	30.65	C	8.00	5.00	6.00	190.0
31	C1120C31CR	39.54	C	9.50	6.00	7.00	244.0
35	C1120C35CR	44.62	C	9.50	6.00	7.00	322.0

1131 CAST TOOTH SPROCKETS — PITCH 6.000 CHILLED RIM

FOR CHAINS NO.: 2183, 6SP, A2184, RS1131

Tooth Face at Pitch Line: 1.250 — Roller Diameter: 3.000

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	C1131C6CR	12.00	C	6.00	5.00	3.94	62.0
8	C1131C8CR	15.68	C	6.00	5.00	3.94	78.0
9	C1131C9CR	17.54	C	6.00	5.00	3.95	120.0
12	C1131C12CR	23.18	C	7.00	6.00	4.44	153.0
13	C1131C13CR	25.03	C	7.00	6.00	4.94	175.0
14	C1131C14CR	26.96	C	8.00	6.00	5.00	190.0
16	C1131C16CR	30.75	C	8.00	6.00	5.00	225.0
24	C1131C24CR	47.87	C	8.00	6.00	5.00	350.0

F1222 CAST TOOTH SPROCKETS — PITCH 12.000 CHILLED RIM

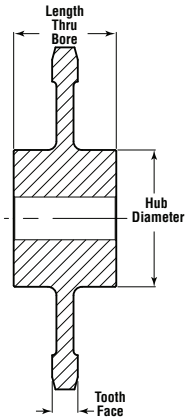
FOR CHAINS NO.: A1263, B1263R, FR1222, SS1222

Tooth Face at Pitch Line: 1.000 — Roller Diameter: 4.500

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	CF1222C6CR	24.00	C	7.50	5.00	5.94	143.0
8	CF1222C8CR	31.36	C	8.00	5.00	5.94	210.0

NOTE: Weights and Dimensions are approximate. Please consult Martin for max hub information. All Cast Sprockets available as Split Sprockets.
CHAINSAVER rims available on request.
HEAT TREAT available upon request.

Cast Iron Sprocket



2180 CAST TOOTH SPROCKETS — PITCH 6.000 CHILLED RIM

FOR CHAINS NO.: 530, 1126, 1212, 1670, 2180, 628R, A1670, B1670

Tooth Face at Pitch Line: 1.125 — Roller Diameter: 2.250

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	C2180C6CR	12.00	C	6.00	5.00	4.00	50.0
8	C2180C8CR	15.68	C	6.00	5.00	4.00	64.0
16	C2180C16CR	30.76	C	8.00	6.00	6.00	200.0
20	C2180C20CR	38.36	C	10.00	6.00	8.00	260.0

9250 CAST TOOTH SPROCKETS — PITCH 2.500 CHILLED RIM

FOR CHAINS NO.: SM120

Tooth Face at Pitch Line: 0.750 — Roller Diameter: 1.130

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	C9250C6CR	5.00	C	3.00	2.75	1.50	5.0
7	C9250C6CR	5.76	C	3.00	2.75	1.50	9.0
8	C9250C6CR	6.53	C	4.00	2.75	2.00	10.0
10	C9250C6CR	8.09	C	4.00	3.00	2.50	13.0
11	C9250C6CR	8.87	C	4.00	3.00	2.50	16.0
12	C9250C6CR	9.66	C	4.00	3.00	2.50	18.0
14	C9250C6CR	11.24	C	6.00	3.00	3.00	23.0
15	C9250C6CR	12.03	C	6.00	3.00	3.00	28.0
16	C9250C6CR	12.81	C	6.00	3.00	3.00	30.0

1240 CAST TOOTH SPROCKETS — PITCH 4.063 CHILLED RIM

FOR CHAINS NO.: 1240, 1241, 1244, IS-4106, IS-4110, LXS1242, R1248, ROA124, ROA1242, SS124

Tooth Face at Pitch Line: 1.750 — Roller Diameter: 1.750

Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
6	C1240C6CR	8.13	C	4.00	4.00	2.31	30.0
7	C1240C7CR	9.36	C	5.25	4.75	3.25	39.0
8	C1240C8CR	10.82	C	6.50	5.00	4.06	52.0
9	C1240C9CR	11.88	C	6.50	5.00	4.06	61.0
10	C1240C10CR	13.15	C	6.50	5.00	4.06	69.0
11	C1240C11CR	14.42	C	6.50	5.00	4.06	78.0
12	C1240C12CR	15.70	C	7.00	6.00	4.56	96.0
13	C1240C13CR	16.98	C	7.00	6.00	4.56	102.0
14	C1240C14CR	18.26	C	7.00	6.00	4.56	112.0
15	C1240C15CR	19.54	C	7.00	6.00	4.56	122.0
16	C1240C16CR	20.82	C	8.00	6.25	5.31	140.0
17	C1240C17CR	22.11	C	8.00	6.25	5.31	142.0
18	C1240C18CR	23.40	C	8.00	6.25	5.31	161.0
19	C1240C19CR	24.68	C	8.00	6.25	5.31	175.0
21	C1240C21CR	27.26	C	8.00	6.25	5.31	210.0
22	C1240C22CR	28.55	C	8.00	6.25	5.31	218.0
24	C1240C24CR	31.12	C	8.00	6.25	5.31	240.0
25	C1240C25CR	33.42	C	9.00	6.25	6.06	250.0
28	C1240C28CR	36.29	C	9.00	6.25	6.06	310.0
29	C1240C29CR	37.58	C	9.00	6.75	6.06	330.0
30	C1240C30CR	38.87	C	10.00	6.75	7.13	346.0
32	C1240C32CR	41.45	C	10.00	6.75	7.13	378.0
34	C1240C34CR	44.03	C	10.00	6.75	7.13	402.0
37	C1240C37CR	47.90	C	11.00	7.75	7.13	471.0

4050 CAST TOOTH SPROCKETS — PITCH 12.000 CHILLED RIM

FOR CHAINS NO.: RS4850, SS1265R

Tooth Face at Pitch Line: 2.000 — Roller Diameter: 3.000

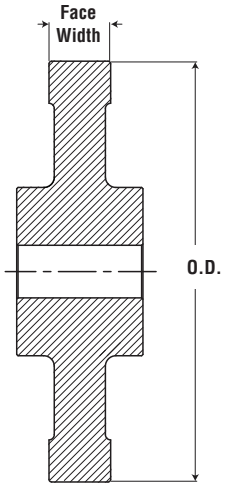
Number of Teeth	Catalog Number	Pitch Diameter	Style	Hub Diameter	Length Thru Bore	Max. Bore	Approx. Weight (lb)
8	C4850C8CR	31.43	C	10.00	6.00	6.00	220.0

NOTE: Weights and Dimensions are approximate. Please consult Martin for max hub information. All Cast Sprockets available as Split Sprockets.
CHAINSAVER rims available on request.
HEAT TREAT available upon request.

Traction Wheels







Martin traction wheels are offered as either solid construction or as a solid hub with segmental teeth. Segmental traction wheels can greatly reduce downtime since you do not have to disassemble the components around it. Traction wheels are in bucket elevators and can withstand abrasive materials.

Cast Traction Wheels and Drum Flanged Traction Wheels

Chain: 78, 88 **F = 0.94**

Part Number	Outside Diameter	Face Width	Weight Each (lb)
C10.0TW	10.00	0.94	30.0
C12.0TW	12.00	0.94	45.0
C12.5TW	12.50	0.94	50.0
C13.25TW	13.25	0.94	58.0
C14.0TW	14.00	0.94	62.0
C15.0TW	15.00	0.94	65.0
C15.5TW	15.50	0.94	68.0
C16.0TW	16.00	0.94	70.0
C18.0TW	18.00	0.94	75.0
C19.0TW	19.00	0.94	80.0
C20.0TW	20.00	0.94	85.0

Chain: H102 **F = 6.25**

Part Number	Outside Diameter	Face Width	Weight Each (lb)
C8.5TW	8.50	6.25	76.0
C10.0TW	10.00	6.25	126.0
C11.5TW	11.50	6.25	185.0
C13.0TW	13.00	6.25	144.0
C14.63TW	14.63	6.25	153.0
C16.25TW	16.25	6.25	162.0
C17.75TW	17.75	6.25	190.0
C19.38TW	19.38	6.25	215.0

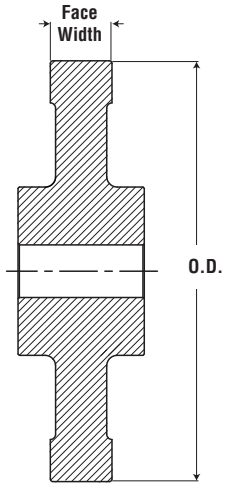
Chain: C102B, C110, C102-1/2 **F = 1.88**

Part Number	Outside Diameter	Face Width	Weight Each (lb)
C12.0TW	12.00	1.88	50.0
C13.5TW	13.50	1.88	60.0
C14.0TW	14.00	1.88	63.0
C16.63TW	14.63	1.88	68.0
C15.75TW	15.75	1.88	78.0
C16.75TW	16.75	1.88	89.0
C17.0TW	17.00	1.88	92.0
C18.0TW	18.00	1.88	100.0
C19.75TW	19.75	1.88	108.0
C21.0TW	21.00	1.88	117.0
C22.0TW	22.00	1.88	127.0
C22.75TW	22.75	1.88	135.0
C23.0TW	23.00	1.88	139.0
C23.75TW	23.75	1.88	143.0
C27.63TW	27.63	1.88	160.0
C29.63TW	29.63	1.88	166.0
C33.0TW	33.00	1.88	175.0

Chain: H82, C131, 823, 4103, S131, 103, 730 **F = 1.13**

Part Number	Outside Diameter	Face Width	Weight Each (lb)
C7.0TW	7.00	1.13	25.0
C9.63TW	9.63	1.13	38.0
C14.63TW	14.63	1.13	49.0
C16.0TW	16.00	1.13	60.0
C17.0TW	17.00	1.13	70.0
C18.0TW	18.00	1.13	75.0
C20.0TW	20.00	1.13	90.0
C22.0TW	22.00	1.13	115.0
C22.5TW	22.50	1.13	125.0
C24.0TW	24.00	1.13	135.0
C29.38TW	29.38	1.13	170.0

Traction Wheels



Chain: H104 — F = 4.00

Part Number	Outside Diameter	Face Width	Drum Width	Weight Each (lb)
C10.5TW	10.50	4.00	12.00	125.0
C12.38TW	12.38	4.00	12.00	145.0
C14.0TW	14.00	4.00	12.00	170.0
C16.0TW	16.00	4.00	12.00	205.0
C17.75TW	17.75	4.00	12.00	250.0
C19.75TW	19.75	4.00	12.00	305.0
C20.0TW	20.03	4.00	12.00	345.0

Chain: H110 — F = 8.88

Part Number	Outside Diameter	Face Width	Drum Width	Weight Each (lb)
C10.25TW	10.25	8.88	16.38	175.0
C14.0TW	14.00	8.88	16.38	250.0
C15.0TW	15.88	8.88	16.38	290.0
C17.75TW	17.75	8.88	16.38	335.0
C19.63TW	19.63	8.88	16.38	365.0

Chain: C111 — F = 2.25

Part Number	Outside Diameter	Face Width	Weight Each (lb)
C9.5TW	9.50	2.25	50.0
C14.5TW	14.56	2.25	85.0
C15.5TW	15.50	2.25	91.0
C18.0TW	18.00	2.25	105.0
C20.0TW	20.00	2.25	135.0
C22.0TW	22.00	2.25	143.0
C23.0TW	23.00	2.25	146.0
C23.75TW	23.75	2.25	149.0
C26.0TW	26.00	2.25	165.0
C29.5TW	29.50	2.25	198.0
C30.75TW	30.75	2.25	210.0

Chain: H112 — F = 9.00

Part Number	Outside Diameter	Face Width	Drum Width	Weight Each (lb)
C16.75TW	16.75	9.00	16.5	200.0
C19.25TW	19.25	9.00	16.5	230.0

Chain: H116 — F = 13.00

Part Number	Outside Diameter	Face Width	Drum Width	Weight Each (lb)
C16.88TW	16.88	13.0	20.5	395.0
C19.0TW	19.00	13.0	20.5	485.0
C21.75TW	21.75	13.0	20.5	550.0

Chain: H118 — F = 13.00

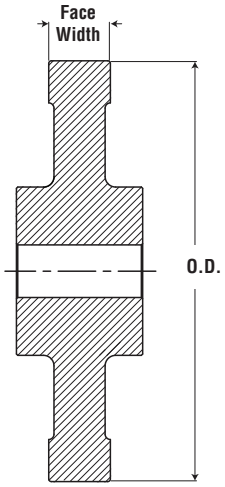
Part Number	Outside Diameter	Face Width	Weight Each (lb)
C13.88TW	13.88	13.00	495.0
C16.5TW	16.50	13.00	560.0

Chain: C132 — F = 2.75

Part Number	Outside Diameter	Face Width	Drum Width	Weight Each (lb)
C13.0TW	13.00	2.75		120.0
C13.75TW	13.75	2.75		124.0
C16.0TW	16.00	2.75		128.0
C16.25TW	16.25	2.75	14.00	510.0
C17.0TW	17.00	2.75		138.0
C18.0TW	18.00	2.75		147.0
C18.25TW	18.25	2.75	14.00	570.0
C20.25TW	20.25	2.75	14.00	620.0
C21.63TW	21.63	2.75		186.0
C22.0TW	22.00	2.75		190.0
C24.0TW	24.00	2.75		205.0
C26.19TW	26.19	2.75		210.0
C27.75TW	27.75	2.75		225.0
C30.0TW	30.00	2.75		280.0

Unit Number H480 — F = 11.13

Part Number	Outside Diameter	Face Width	Drum Width	Weight Each (lb)
C13.88TW	13.88	11.13	22.00	440.0
C16.25TW	16.25	11.13	22.00	510 0
C18.75TW	18.75	11.13	22.00	540 0
C21.13TW	21.13	11.13	22.00	600 0
C23.75TW	23.75	11.13	22.00	630.0



Chain: SS40, 825, 830 — F = 1.25

Part Number	Outside Diameter	Face Width	Weight Each (lb)
C10.5TW	10.50	1.25	45.0
C14.0TW	14.00	1.25	60.0
C15.5TW	15.50	1.25	68.0
C16.0TW	16.00	1.25	72.0
C17.0TW	17.00	1.25	79.0
C18.25TW	18.25	1.25	86.0
C20.0TW	20.00	1.25	95.0
C22.0TW	22.00	1.25	105.0
C24.0TW	24.00	1.25	120.0
C27.75TW	27.75	1.25	140.0
C31.0TW	31.00	1.25	160.0

Chain: 844, 844R — F = 2.13

Part Number	Outside Diameter	Face Width	Weight Each (lb)
C12.0TW	12.00	2.13	65.0
C16.0TW	16.00	2.13	90.0
C19.75TW	19.75	2.13	109.0
C22.25TW	22.25	2.13	130.0
C23.75TW	23.75	2.13	148.0
C27.75TW	27.75	2.13	172.0
C29.0TW	29.00	2.13	190.0

Chain: S856 — F = 2.63

Part Number	Outside Diameter	Face Width	Weight Each (lb)
C20.0TW	20.00	2.63	170.0
C21.5TW	21.50	2.63	187.0
C26.0TW	26.00	2.63	200.0
C27.75TW	27.75	2.63	218.0
C29.5TW	29.50	2.63	225.0
C30.0TW	30.00	2.63	236.0

Chain: 955 — F = 0.69

Part Number	Outside Diameter	Face Width	Weight Each (lb)
C08.0TW	8.00	0.69	24.0
C18.75TW	18.75	0.69	65.0

Chain: 720 — F = 1.00

Part Number	Outside Diameter	Face Width	Weight Each (lb)
C15.0TW	15.00	1.00	62.0
C15.5TW	15.50	1.00	65.0
C18.25TW	18.25	1.00	85.0

Segmental Hubs

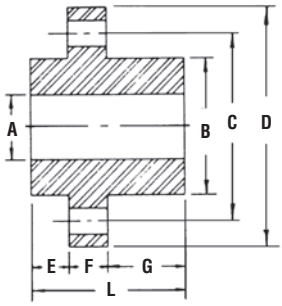
Segmental sprockets greatly reduce the labor costs as well as the downtime associated with replacing worn standard type sprockets. Worn segments can be replaced by simply disassembling the unit, eliminating the need to remove shaft and or bearing assemblies as well as the need to re-align the hub.

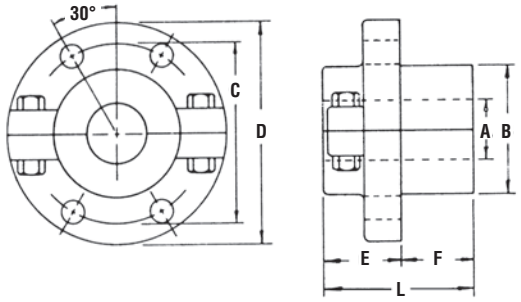
Solid Hub Bodies

Solid hub bodies are recommended for new installations. They are available precisely machined of high quality cast iron or USA grade alloy steel.

Split Hub Bodies

Split hubs can be easily installed on existing installations without the need to remove the shaft, bearings or the chain. They are available precisely machined of high quality cast iron or USA grade alloy steel.





Steel Solid Hub

Part Number	Outside Diameter	Bore Range		Length Thru Bore Range	
		Minimum	Maximum	Minimum	Maximum
MUS10	12.00	1.94	4.94	4.250	6.00
MUS12	14.50	1.94	5.94	4.250	6.00
MUS16	18.50	1.94	8.44	4.250	8.00
MUS20	22.50	2.44	9.94	5.000	9.50
MUS25	27.50	1.94	8.44	5.500	11.00
MUS35	38.00	1.94	8.44	5.500	11.00

Cast Solid Hub

Part Number	Outside Diameter	Bore Range		Length Thru Bore Range	
		Minimum	Maximum	Minimum	Maximum
MUS10C	12.00	1.94	4.44	4.250	6.00
MUS12C	14.50	1.94	4.94	4.250	6.00
MUS16C	18.50	1.94	6.94	4.250	8.00
MUS20C	22.50	2.44	6.94	5.000	9.50

Steel Split Hub

Part Number	Outside Diameter	Bore Range		Length Thru Bore Range	
		Minimum	Maximum	Minimum	Maximum
MUS12S	14.50	1.94	4.94	6.750	7.75
MUS16S	18.50	1.94	5.94	6.750	7.75
MUS20S	22.50	1.94	8.94	6.750	8.75
MUS25S	27.50	1.94	7.94	6.750	8.75
MUS35S	38.00	1.94	8.94	6.750	8.75

★ Maximum bores shown are maximum bores with standard keyseat and setscrew.

Cast Split Hub

Part Number	Outside Diameter	Bore Range		Length Thru Bore Range	
		Minimum	Maximum	Minimum	Maximum
MUS10SC	12.00	1.94	2.44	5.625	5.625
MUS12SC	14.50	1.94	3.94	5.625	7.00
MUS16SC	18.50	1.94	4.94	6.500	8.25
MUS20SC	22.50	2.44	7.44	6.500	11.12

Segmental Rim Sprockets and Traction Wheels

Cast Rims

Each traction wheel rim and sprocket rim is induction hardened to the highest practical hardness around the entire circumference. The hardness depth is controlled to give the longest wear life, yet leaving the interior tough and ductile - perfect qualities for absorbing the impact and shock loads encountered in elevator - conveyor service.

Segmental sprocket rims can be reversed (back side of tooth becomes the working face), in order to maximize wear.

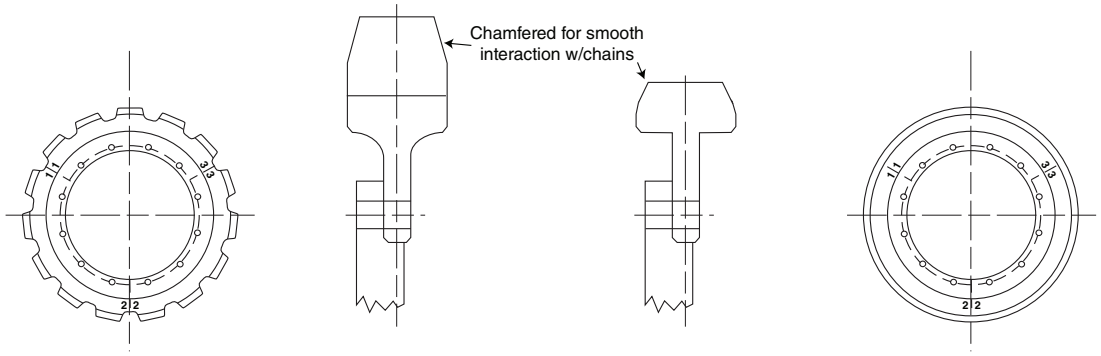
Segmental traction wheel rims can be easily installed, no need to even remove the chain in order to replace worn out rims. No burning or cutting is necessary.

The "T" head traction wheel design moves the center of the chain load more closely over the body flange, thus reducing the possibility of hub fatigue problems.

Segmental rim traction wheels are split with cuts in the rims that are made diagonally. These diagonal cuts eliminate the possibility of the segments spalling or chipping at the line of split as a result of chain bushing or barrel impact.

The sides of the segmental traction wheel and sprocket rims are chamfered to allow the chain to "enter" and "leave" smoothly without damaging the chain components.

All rims are furnished with high strength UNC thread nuts and bolts as standard.



Sprocket Rims | Sprocket Cross Section | Traction Wheel Cross Section | Traction Wheel Rims

Available Cast Traction Wheel Rims

Rex Chain No.	Link-Belt Chain No.	No. of Teeth	Use Body No.*	Pitch Dia.	Wt. Each Lbs.	Pitch Dia.
S110 A102B S102B S102-1/2 S102-1/2	SBS110 C102B SBS102B C102-1/2 SBS102-1/2	24	16	45.97	1.75	115
ES111 A111	SBX856 SBX2857	22	16	33.45	2.25	110
		24	16	34.47		130
		26	20	39.49		140
		30	20	45.54		165
RS856 ER857 ER956	SBX856 SBX2857	20	12	38.36	2.75	90
		22	16	42.16		115
		24	16	45.97		145
		26	20	49.78		155
		28	20	53.89		170
		30	20	57.40		185
ER859 ER864	SBX2856 SBX2864	24	16	45.97	3.50	165
		26	20	49.78		185
		30	20	57.40		215
		36	20	68.84		265
		42	35	80.29		300
		49	35	93.65		375

Keyways and Setscrews

Keyseating, Keys and Setscrews

All Martin bored-to-size Cast Iron Sprockets include a keyway and two setscrews. All parts are shipped less key stock. Keyway and setscrew sizes are supplied according to the table below, unless specified. Our standard setscrew locations are one over the keyway and one at 90 degrees.

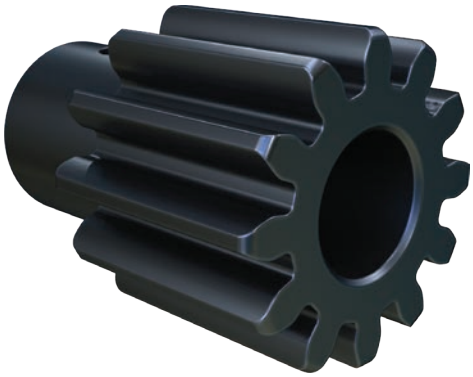
Standard Keyways and Setscrews

Bore (Inches)	Keyway Width × Depth	Diameter of Screw	Bore (Inches)	Keyway Width × Depth	Diameter of Screw
0.50 to 0.56	0.13 × 0.06	#10	2.31 to 2.75	0.63 × 0.31	0.63
0.63 to 0.88	0.19 × 0.09	0.25	2.81 to 3.25	0.75 × 0.38	0.63
0.94 to 1.25	0.25 × 0.13	0.31	3.31 to 3.75	0.88 × 0.44	0.75
1.31 to 1.38	0.31 × 0.16	0.38	3.81 to 4.50	1.00 × 0.50	0.75
1.44 to 1.75	0.38 × 0.19	0.38	4.56 to 5.50	1.25 × 0.63	0.88
1.81 to 2.25	0.50 × 0.25	0.50	5.56 to 6.50	1.50 × 0.75	1.00

GEARS

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6DP	G-12 – G-13
8DP	G-14 – G-15
10DP	G-16 – G-17
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20DP	G-22 – G-23
24DP	G-24
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Stock Gears







Spur Gears



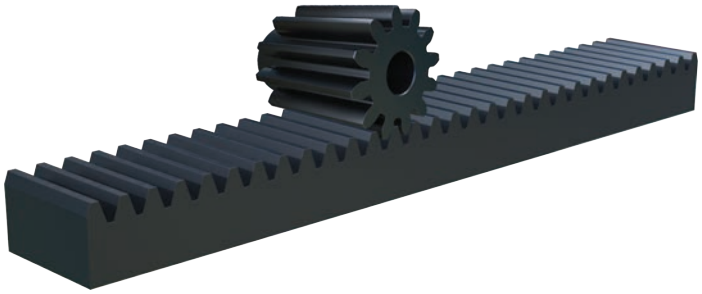
Bevel Gears



Miter Gears



Worm And Worm Gears



Gear Rack



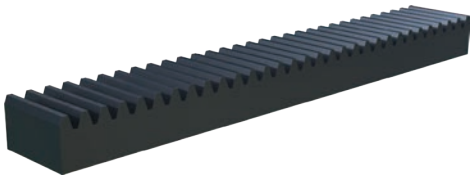



MARTIN



Stock Gears
Numbering System

Letters (Prefix) Indicate Material and Type Gear.
Letters (Suffix) Indicate Hardened, Number of Threads, Direction of Rotation and KW and SS.
Numbers Indicate Pitch, Number of Teeth, and Ratio (Suffix).



Racks

R	Steel
RA	Steel, Heavy Backing
TR	Steel, 20°, Heavy Backing
R20	Steel, 20°, Wide Face

Examples:

R6X2	14½° STD Backing 6DPX2' Long
RA6X4	14½° Heavy Backing 6DPX4' Long
TR6X6	20° STD Width 6DPX6' Long
R206X6	20° Wide Face 6DPX6' Long



Worm Gear

W	Worm, Cast Iron
WB	Worm, Bronze
D / Q	(Suffix) Double or Quadruple Thread

Worms and Worm Gears come standard as right hand. If left hand is needed, it must be specified.

Examples:

W660	Cast Iron 6DP 60T Right Hand
WB1020	Bronze 10DP 20T Right Hand
W640D	Cast Iron 6DP 40T Double Thread Right Hand



Bevel Gears

B	Bevel Gear, Cast Iron
B	Pinion, Steel
BS	Bevel Gear, Steel
BS	Pinion, Steel

Examples:

B1060-3	Cast Iron 10DP 60T 3:1 Ratio
B1020-3	Steel 10DP 20T 3:1 Ratio
BS1040-2	Steel 10DP 40T 2:1 Ratio
BS1020-2	Steel 10DP 20T 2:1 Ratio

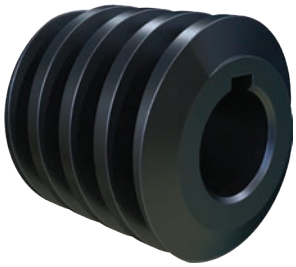


Spur Gears

S	Steel
TS	Steel, 20°
C	Cast Iron
TC	Cast Iron, 20°
H	Hardened Teeth
NM	Non-Metallic

Examples:

S620	Steel 6DP 20T 14½°PA
TS621	Steel 6DP 21T 20°PA
C675	Cast Iron 6DP 75T 14½°PA
S620H	Steel 6DP 20T Hardened 14½°PA
NM620	Non-Metallic 6DP 20T 14½°PA
S612BS 1	Steel 6DP 12T 1" Bore 14½°PA
TS816BS 7/8	Steel 8DP 16T .875 Bore 20°PA



Worm

W	Steel
WH	Steel With Hub Projection
WG	Steel Hardened Ground Threads
WHG	Steel Hardened Ground Threads with Hub Projection
D / Q	(Suffix) Double or Quadruple Thread

Examples:

W6	Steel 6DP Right Hand
WH6	Steel w/Hub Projection 6DP Right Hand
WG6	Steel Case Hardened Ground Threads 6DP Right Hand
WHG6	Steel w/Hub Projection Hardened Ground Threads 6DP Right Hand
W6D	Steel 6DP Double Thread Right Hand



Miter Gears

M	Miter Gear, Steel
A / B	Larger Bore (Suffix)
HM	Miter, Hardened Teeth
K	KW & SS

Notes:
ALWAYS 1: 1 RATIO.
Same number of teeth on each mating Gear.

Examples:

M824	Steel 8DP 24T
M824A	Steel 8DP 24T Larger Bore
HM1020	Steel Hardened Teeth 10DP 20T
HMK1020	Steel Hardened 10DP 20T with KW & SS

Styles of Spur Gears

Martin stock spur gears are available in five different styles. Steel gears are furnished in plain style and plain style with hub. Cast gears are furnished, plain with hub, web with lightening holes, and spoke. Cast gears are machined on all operating surFace. Martin cast gears are cast with larger hub to provide extra strength and to allow for larger bores.



Type A

- Plain without hubs
- All steel



Type B_1

- Web
- All steel
- Cast



Type B

- Plain with hubs
- All steel
- Cast



Type B_2

- Web with lighten holes
- All steel
- Cast



Type B_3

- Spoke style
- Cast

3 DP
3" Face

Steel Stock Spur Gears
14½°Pressure Angle



Type A
Plain without hubs



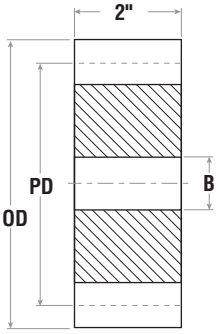
Type B
Plain with hubs



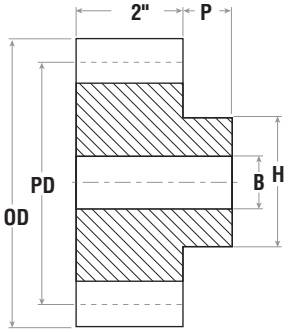
Type B_1
Web



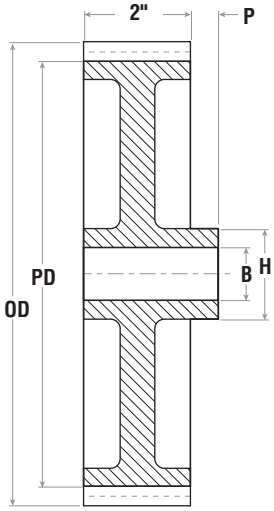
Type B_2
Web with lighten holes



Type A



Type B



Type B_1, B_2

Steel

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
11	S311	14 1/2	4.000 • †	4.666	A	1 5/16	2	–	–	12.0
12	S312	14 1/2	4.000 •	4.666	A	1 5/16	2	–	–	11.0
13	S313	14 1/2	4.333	5.000	A	1 5/16	2 1/4	–	–	10.7
14	S314	14 1/2	4.667	5.333	A	1 5/16	2 3/8	–	–	12.8
15	S315	14 1/2	5.000	5.666	A	1 5/16	2 3/4	–	–	14.8
16	S316	14 1/2	5.333	6.000	A	1 5/16	2 13/16	–	–	17.0
18	S318	14 1/2	6.000	6.666	A	1 5/16	3 1/4	–	–	22.0
20	S320	14 1/2	6.667	7.333	A	1 7/16	3 5/8	–	–	27.4
21	S321	14 1/2	7.000	7.666	A	1 7/16	3 7/8	–	–	30.7
24	S324	14 1/2	8.000	8.666	B	1 7/16	3 1/4	5 1/2	1 1/4	48.2
30	S330	14 1/2	10.000	10.666	B	1 9/16	3 7/8	6 1/4	1 1/4	74.5
36	S336	14 1/2	12.000	12.666	B	1 9/16	4 1/8	6 1/2	1 3/4	114.0
42	S342	14 1/2	14.000	14.666	B1	1 9/16	4 1/8	6 1/2	1 3/4	106.0
48	S348	14 1/2	16.000	16.666	B1	1 9/16	4 1/8	6 1/2	1 3/4	120.0
54	S354	14 1/2	18.000	18.666	B2	1 9/16	4 1/8	6 1/2	1 3/4	134.0
60	S360	14 1/2	20.000	20.666	B2	1 9/16	4 1/8	6 1/2	1 3/4	150.0
72	S372	14 1/2	24.000	24.666	B2	1 9/16	4 1/2	7	1 3/4	180.0
84	S384	14 1/2	28.000	28.666	B2	1 9/16	4 1/2	7	1 3/4	215.0
96	S396	14 1/2	32.000	32.666	B2	1 11/16	4 1/2	7	1 3/4	264.0
108	S3108	14 1/2	36.000	36.666	B2	1 15/16	4 1/2	7	1 3/4	305.0
120	S3120	14 1/2	40.000	40.666	B2	1 15/16	5	7 1/2	1 3/4	367.0

* Recommended maximum bore with keyway and setscew.
† Enlarged pitch diameter with special tooth form.
• 4" Face.

14½° P.A. gears will not operate with 20° P.A.

Cast Iron Stock Spur Gears

14½°Pressure Angle

3 DP

3" Face



Type B

Plain with hubs



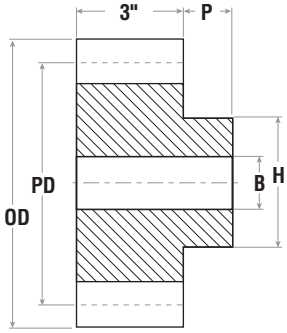
Type B_2

Web with lighten holes

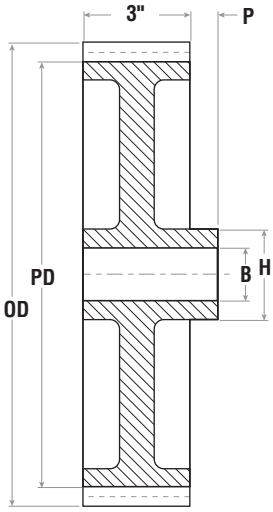


Type B_3

Spoke style



Type B



Type B_2, B_3

Cast — Style B

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
24	C324	14 1/2	8.000	8.666	B	1 7/16	2 11/16	4 1/2	1 1/4	40.4
28	C328	14 1/2	9.333	10.000	B	1 7/16	3 3/16	5 1/4	1 1/4	54.2
30	C330	14 1/2	10.000	10.666	B	1 7/16	3 3/16	5 1/4	1 1/4	57.1
32	C332	14 1/2	10.667	11.333	B	1 7/16	3 3/16	5 1/4	1 1/4	62.4
36	C336	14 1/2	12.000	12.666	B2	1 7/16	3 1/4	5 1/2	1 3/4	71.3
40	C340	14 1/2	13.333	14.000	B2	1 7/16	3 1/4	5 1/2	1 3/4	75.9
42	C342	14 1/2	14.000	14.666	B2	1 7/16	3 1/4	5 1/2	1 3/4	79.5
45	C345	14 1/2	15.000	15.666	B2	1 7/16	3 1/4	5 1/2	1 3/4	85.0
48	C348	14 1/2	16.000	16.666	B3	1 9/16	3 1/4	5 1/2	1 3/4	92.9
54	C354	14 1/2	18.000	18.666	B3	1 9/16	3 1/4	5 1/2	1 3/4	104.0
60	C360	14 1/2	20.000	20.666	B3	1 9/16	3 1/4	5 1/2	1 3/4	115.0
72	C372	14 1/2	24.000	24.666	B3	1 9/16	3 11/16	6	1 3/4	153.0
75	C375	14 1/2	25.000	25.666	B3	1 9/16	3 11/16	6	1 3/4	155.0
84	C384	14 1/2	28.000	28.666	B3	1 11/16	3 11/16	6	1 3/4	178.0
90	C390	14 1/2	30.000	30.666	B3	1 11/16	3 11/16	6	1 3/4	185.0
96	C396	14 1/2	32.000	32.666	B3	1 11/16	3 11/16	6	1 3/4	205.0
105	C3105	14 1/2	35.000	35.666	B3	1 11/16	3 11/16	6	1 3/4	216.0
108	C3108	14 1/2	36.000	36.666	B3	1 15/16	3 11/16	6	1 3/4	228.0
120	C3120	14 1/2	40.000	40.666	B3	1 15/16	4 1/8	6 1/2	1 3/4	226.0

* Recommended maximum bore with keyway and setscew.

14½° P.A. gears will not operate with 20° P.A.

4 DP
2" Face

Steel Stock Spur Gears
14½°Pressure Angle



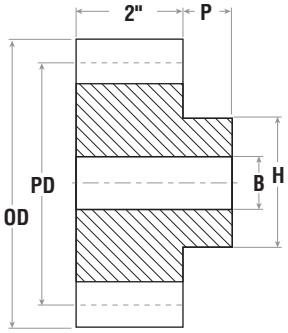
Type B
Plain with hubs



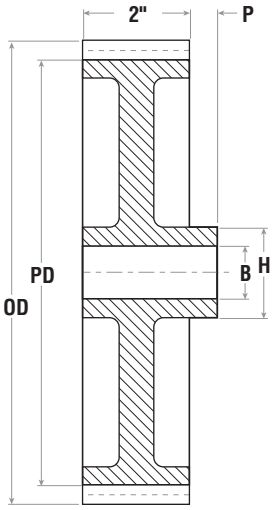
Type B_1
Web



Type B_2
Web with lighten holes



Type B



Type B_1, B_2

Steel

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
11	S411	14 1/2	3.000 †	3.500	B	1 1/8	1 5/16	2 1/4	7/8	4.0
12	S412	14 1/2	3.000	3.500	B	1 1/8	1 5/16	2 1/4	7/8	3.9
13	S413	14 1/2	3.250	3.750	B	1 1/8	1 5/16	2 1/4	7/8	4.6
14	S414	14 1/2	3.500	4.000	B	1 1/8	1 5/8	2 3/4	7/8	5.7
15	S415	14 1/2	3.750	4.250	B	1 1/8	1 3/4	3	7/8	6.8
16	S416	14 1/2	4.000	4.500	B	1 1/8	1 3/4	3 1/4	7/8	8.0
17	S417	14 1/2	4.250	4.750	B	1 1/8	2	3 1/2	7/8	9.2
18	S418	14 1/2	4.500	5.000	B	1 1/8	2 1/4	3 3/4	7/8	10.4
19	S419	14 1/2	4.750	5.250	B	1 1/8	2 1/4	4	7/8	10.5
20	S420	14 1/2	5.000	5.500	B	1 1/8	2 3/8	4 1/4	7/8	13.4
21	S421	14 1/2	5.250	5.750	B	1 1/8	2 5/8	4 1/2	7/8	14.9
22	S422	14 1/2	5.500	6.000	B	1 1/8	2 3/4	4 3/4	7/8	16.5
24	S424	14 1/2	6.000	6.500	B	1 1/8	2 3/4	4 3/4	1 1/2	22.8
26	S426	14 1/2	6.500	7.000	B	1 1/8	2 3/4	4 3/4	1 1/2	24.8
28	S428	14 1/2	7.000	7.500	B	1 1/8	2 3/4	4 3/4	1 1/2	27.8
30	S430	14 1/2	7.500	8.000	B	1 1/4	2 3/4	4 3/4	1 1/2	31.0
32	S432	14 1/2	8.000	8.500	B	1 1/4	2 3/4	4 3/4	1 1/2	34.4
36	S436	14 1/2	9.000	9.500	B	1 1/4	2 3/4	4 3/4	1 1/2	41.7
40	S440	14 1/2	10.000	10.500	B	1 1/4	3 1/8	5 1/8	1 1/2	51.8
42	S442	14 1/2	10.500	11.000	B	1 1/4	3 1/8	5 1/8	1 1/2	56.0
44	S444	14 1/2	11.000	11.500	B	1 1/4	3 1/8	5 1/8	1 1/2	60.8
48	S448	14 1/2	12.000	12.500	B	1 1/4	3 1/8	5 1/8	1 1/2	70.8
54	S454	14 1/2	13.500	14.000	B1	1 1/4	3	5	1 1/2	57.4
56	S456	14 1/2	14.000	14.500	B1	1 1/4	3	5	1 1/2	59.9
60	S460	14 1/2	15.000	15.500	B2	1 1/4	3	5	1 1/2	62.8
64	S464	14 1/2	16.000	16.500	B2	1 1/4	3	5	1 1/2	66.2
72	S472	14 1/2	18.000	18.500	B2	1 1/4	3 1/4	5 1/2	1 1/2	82.9
80	S480	14 1/2	20.000	20.500	B2	1 3/8	3 1/4	5 1/2	1 1/2	95.0
84	S484	14 1/2	21.000	21.500	B2	1 3/8	3 1/4	5 1/2	1 1/2	92.0
88	S488	14 1/2	22.000	22.500	B2	1 3/8	3 3/4	6 1/8	1 3/4	95.8
96	S496	14 1/2	24.000	24.500	B2	1 3/8	3 3/4	6 1/8	1 3/4	124.0
120	S4120	14 1/2	30.000	30.500	B2	1 3/8	3 5/8	6	1 3/4	155.0
144	S4144	14 1/2	36.000	36.500	B2	1 3/8	4	6 1/2	1 3/4	208.0

* Recommended maximum bore with keyway and setscew.
† Enlarged pitch diameter with special tooth form.

14½° P.A. gears will not operate with 20° P.A.

Cast Iron Stock Spur Gears

14½°Pressure Angle

4 DP

2" Face



Type B

Plain with hubs



Type B_1

Web



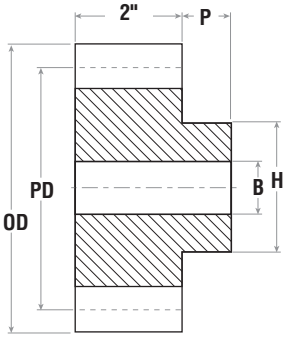
Type B_2

Web with lighten holes

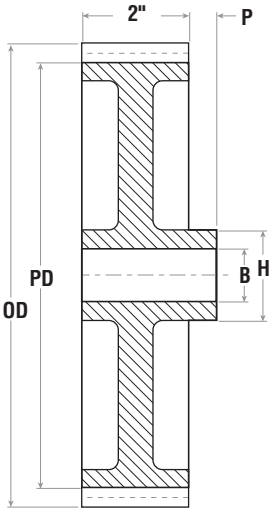


Type B_3

Spoke style



Type B



Type B_1, B_2, B_3

Cast — Style B

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
24	C424	14 1/2	6.000	6.500	B	1 1/8	2 1/8	3 1/2	1 1/2	17.0
28	C428	14 1/2	7.000	7.500	B1	1 1/4	2 1/8	3 1/2	1 1/2	20.2
30	C430	14 1/2	7.500	8.000	B1	1 1/4	2 1/8	3 1/2	1 1/2	21.1
32	C432	14 1/2	8.000	8.500	B1	1 1/4	2 1/8	3 1/2	1 1/2	23.2
36	C436	14 1/2	9.000	9.500	B2	1 1/4	2 1/4	3 3/4	1 1/2	30.5
40	C440	14 1/2	10.000	10.500	B2	1 1/4	2 1/2	4	1 1/2	26.4
42	C442	14 1/2	10.500	11.000	B2	1 1/4	2 1/2	4	1 1/2	33.9
44	C444	14 1/2	11.000	11.500	B2	1 1/4	2 1/2	4	1 1/2	32.0
48	C448	14 1/2	12.000	12.500	B3	1 1/4	2 1/2	4	1 1/2	38.4
52	C452	14 1/2	13.000	13.500	B3	1 1/4	2 1/2	4	1 1/2	42.5
54	C454	14 1/2	13.500	14.000	B3	1 1/4	2 1/2	4	1 1/2	44.7
56	C456	14 1/2	14.000	14.500	B3	1 1/4	2 1/2	4	1 1/2	46.7
60	C460	14 1/2	15.000	15.500	B3	1 1/4	2 1/2	4	1 1/2	49.5
64	C464	14 1/2	16.000	16.500	B3	1 1/4	2 1/2	4	1 1/2	54.5
68	C468	14 1/2	17.000	17.500	B3	1 1/4	2 1/2	4	1 1/2	56.0
72	C472	14 1/2	18.000	18.500	B3	1 1/4	2 11/16	4 1/2	1 1/2	63.0
80	C480	14 1/2	20.000	20.500	B3	1 3/8	2 11/16	4 1/2	1 1/2	72.0
84	C484	14 1/2	21.000	21.500	B3	1 3/8	2 11/16	4 1/2	1 1/2	73.0
88	C488	14 1/2	22.000	22.500	B3	1 3/8	2 11/16	4 1/2	1 3/4	75.0
96	C496	14 1/2	24.000	24.500	B3	1 3/8	2 11/16	4 1/2	1 3/4	86.0
100	C4100	14 1/2	25.000	25.500	B3	1 3/8	2 11/16	4 1/2	1 3/4	91.0
104	C4104	14 1/2	26.000	26.500	B3	1 3/8	2 11/16	4 1/2	1 3/4	105.0
112	C4112	14 1/2	28.000	28.500	B3	1 3/8	3 1/8	5	1 3/4	108.0
120	C4120	14 1/2	30.000	30.500	B3	1 3/8	3 1/8	5	1 3/4	115.0
132	C4132	14 1/2	33.000	33.500	B3	1 3/8	3 1/8	5	1 3/4	129.0
144	C4144	14 1/2	36.000	36.500	B3	1 3/8	3 1/4	5 1/2	1 3/4	140.0

* Recommended maximum bore with keyway and setscew.

14½° P.A. gears will not operate with 20° P.A.

5 DP
1¾" Face

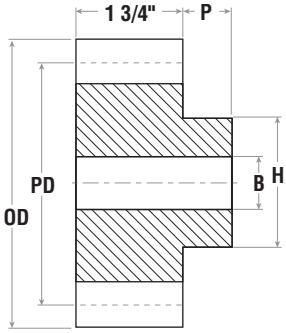
Steel Stock Spur Gears
14½°Pressure Angle



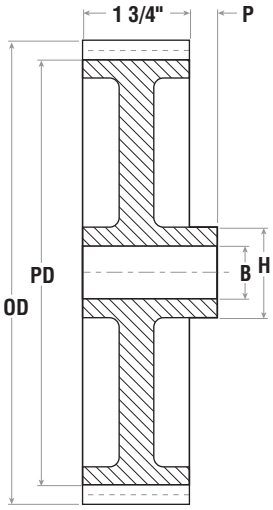
Type B
Plain with hubs



Type B_2
Web with lighten holes



Type B



Type B_2

Steel

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
11	S511	14 1/2	2.400 †	2.800	B	1 1/16	1 1/16	1 25/32	7/8	2.0
12	S512	14 1/2	2.400	2.800	B	1 1/16	1 1/16	1 25/32	7/8	2.0
13	S513	14 1/2	2.600	3.000	B	1 1/16	1 1/4	2	7/8	2.6
14	S514	14 1/2	2.800	3.200	B	1 1/16	1 5/16	2 3/16	7/8	3.1
15	S515	14 1/2	3.000	3.400	B	1 1/16	1 7/16	2 3/8	7/8	3.7
16	S516	14 1/2	3.200	3.600	B	1 1/16	1 5/8	2 19/32	7/8	4.5
17	S517	14 1/2	3.400	3.800	B	1 1/16	1 13/16	2 7/8	7/8	5.2
18	S518	14 1/2	3.600	4.000	B	1 1/16	1 7/8	3	7/8	5.9
19	S519	14 1/2	3.800	4.200	B	1 1/16	2 1/8	3 1/4	7/8	6.7
20	S520	14 1/2	4.000	4.400	B	1 1/16	2 1/4	3 3/8	7/8	7.5
21	S521	14 1/2	4.200	4.600	B	1 1/16	2 1/4	3 3/8	7/8	8.1
22	S522	14 1/2	4.400	4.800	B	1 1/16	2 1/4	3 3/8	7/8	8.8
23	S523	14 1/2	4.600	5.000	B	1 1/16	2 1/4	3 3/8	7/8	9.5
24	S524	14 1/2	4.800	5.200	B	1 1/16	2 1/4	3 3/8	1 1/4	11.0
25	S525	14 1/2	5.000	5.400	B	1 1/16	2 1/4	3 3/8	1 1/4	11.8
26	S526	14 1/2	5.200	5.600	B	1 1/16	2 1/4	3 3/8	1 1/4	12.9
28	S528	14 1/2	5.600	6.000	B	1 1/16	2 1/4	3 3/8	1 1/4	14.3
30	S530	14 1/2	6.000	6.400	B	1 1/16	2 1/4	3 3/8	1 1/4	16.0
35	S535	14 1/2	7.000	7.400	B	1 3/16	2 5/8	4 1/4	1 1/4	22.8
40	S540	14 1/2	8.000	8.400	B	1 3/16	2 5/8	4 1/4	1 1/4	28.5
45	S545	14 1/2	9.000	9.400	B	1 3/16	2 11/16	4 5/8	1 1/4	35.0
50	S550	14 1/2	10.000	10.400	B	1 3/16	2 13/16	4 3/4	1 1/4	43.6
55	S555	14 1/2	11.000	11.400	B	1 3/16	2 13/16	4 3/4	1 1/4	52.0
60	S560	14 1/2	12.000	12.400	B	1 3/16	2 13/16	4 3/4	1 1/4	60.9
70	S570	14 1/2	14.000	14.400	B2	1 3/16	3 1/8	5	1 1/4	48.4
80	S580	14 1/2	16.000	16.400	B2	1 3/16	3 1/8	5	1 1/4	57.0
90	S590	14 1/2	18.000	18.400	B2	1 3/16	3 1/8	5	1 1/4	67.0
100	S5100	14 1/2	20.000	20.400	B2	1 5/16	3 1/4	5 1/2	1 1/2	62.0
110	S5110	14 1/2	22.000	22.400	B2	1 5/16	3 1/4	5 1/2	1 1/2	87.6
120	S5120	14 1/2	24.000	24.400	B2	1 5/16	3 1/2	6 1/8	1 1/2	113.0

* Recommended maximum bore with keyway and setscew.
† Enlarged pitch diameter with special tooth form.

14½° P.A. gears will not operate with 20° P.A.

Cast Iron Stock Spur Gears

14½°Pressure Angle

5 DP

1¾" Face



Type B

Plain with hubs



Type B_1

Web



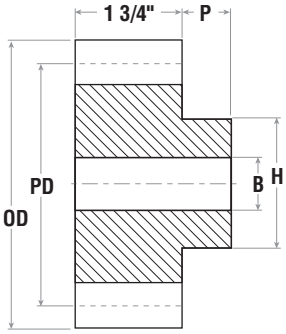
Type B_2

Web with lighten holes

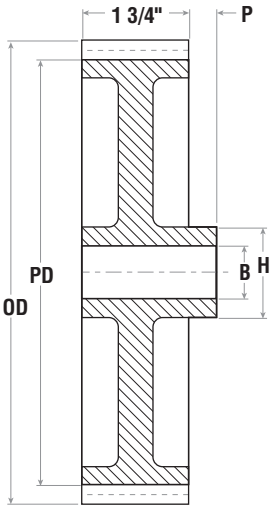


Type B_3

Spoke style



Type B



Type B_1, B_2, B_3

Cast — Style B

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
24	C524	14 1/2	4.800	5.200	B	1 1/16	2 1/16	3 1/4	1 1/4	9.9
25	C525	14 1/2	5.000	5.400	B	1 1/16	2 1/16	3 1/4	1 1/4	10.6
28	C528	14 1/2	5.600	6.000	B1	1 1/16	2 1/16	3 1/4	1 1/4	12.1
30	C530	14 1/2	6.000	6.400	B1	1 1/16	2 1/16	3 1/4	1 1/4	13.9
32	C532	14 1/2	6.400	6.800	B1	1 1/16	2 1/16	3 1/4	1 1/4	13.5
35	C535	14 1/2	7.000	7.400	B1	1 3/16	2 1/16	3 1/4	1 1/4	16.9
36	C536	14 1/2	7.200	7.600	B1	1 3/16	2 1/16	3 1/4	1 1/4	15.5
40	C540	14 1/2	8.000	8.400	B1	1 3/16	2 1/16	3 1/4	1 1/4	17.4
45	C545	14 1/2	9.000	9.400	B2	1 3/16	2 1/16	3 1/4	1 1/4	20.3
48	C548	14 1/2	9.600	10.000	B2	1 3/16	2 5/16	3 3/4	1 1/4	25.2
50	C550	14 1/2	10.000	10.400	B3	1 3/16	2 5/16	3 3/4	1 1/4	23.7
54	C554	14 1/2	10.800	11.200	B3	1 3/16	2 5/16	3 3/4	1 1/4	25.1
55	C555	14 1/2	11.000	11.400	B3	1 3/16	2 5/16	3 3/4	1 1/4	26.0
60	C560	14 1/2	12.000	12.400	B3	1 3/16	2 5/16	3 3/4	1 1/4	30.6
64	C564	14 1/2	12.800	13.200	B3	1 3/16	2 5/16	3 3/4	1 1/4	31.2
66	C566	14 1/2	13.200	13.600	B3	1 3/16	2 5/16	3 3/4	1 1/4	30.8
70	C570	14 1/2	14.000	14.400	B3	1 3/16	2 9/16	4	1 1/4	34.5
72	C572	14 1/2	14.400	14.800	B3	1 3/16	2 9/16	4	1 1/4	35.0
75	C575	14 1/2	15.000	15.400	B3	1 3/16	2 9/16	4	1 1/4	36.7
80	C580	14 1/2	16.000	16.400	B3	1 3/16	2 9/16	4	1 1/4	40.8
84	C584	14 1/2	16.800	17.200	B3	1 3/16	2 9/16	4	1 1/4	40.0
90	C590	14 1/2	18.000	18.400	B3	1 3/16	2 9/16	4	1 1/4	45.4
96	C596	14 1/2	19.200	19.600	B3	1 3/16	2 9/16	4	1 1/4	48.6
100	C5100	14 1/2	20.000	20.400	B3	1 5/16	2 5/8	4 1/2	1 1/2	54.4
120	C5120	14 1/2	24.000	24.400	B3	1 5/16	2 13/16	4 3/4	1 1/2	56.1
130	C5130	14 1/2	26.000	26.400	B3	1 5/16	2 13/16	4 3/4	1 1/2	70.2

* Recommended maximum bore with keyway and setscew.
Quotes for large quantity discontinued cast iron sizes, contact your nearest Martin Facility.

14½° P.A. gears will not operate with 20° P.A.

6 DP
1½" Face

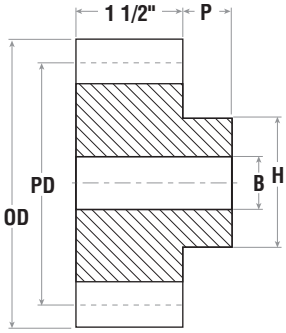
Steel Stock Spur Gears
14½°Pressure Angle



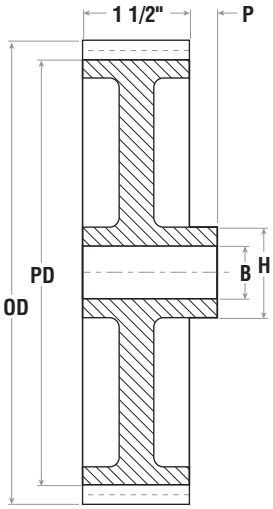
Type B
Plain with hubs



Type B_2
Web with lighten holes



Type B



Type B_2

Steel

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
11	S611	14 1/2	2.000 †	2.333	B	1	**	1 1/2	7/8	1.1
12	S612	14 1/2	2.000	2.333	B	1	**	1 1/2	7/8	1.1
14	S614	14 1/2	2.333	2.666	B	1	1 1/16	1 13/16	7/8	1.8
15	S615	14 1/2	2.500	2.833	B	1	1 1/4	2	7/8	2.2
16	S616	14 1/2	2.666	3.000	B	1	1 5/16	2 5/32	7/8	2.6
18	S618	14 1/2	3.000	3.333	B	1	1 1/2	2 1/2	7/8	3.5
20	S620	14 1/2	3.333	3.666	B	1	1 3/4	2 27/32	7/8	4.6
21	S621	14 1/2	3.500	3.833	B	1	1 7/8	3	7/8	5.1
22	S622	14 1/2	3.666	4.000	B	1	1 7/8	3	7/8	5.5
24	S624	14 1/2	4.000	4.333	B	1 1/8	1 7/8	3	1	6.5
27	S627	14 1/2	4.500	4.833	B	1 1/8	1 7/8	3	1	6.6
28	S628	14 1/2	4.666	5.000	B	1 1/8	1 7/8	3	1	8.3
30	S630	14 1/2	5.000	5.333	B	1 1/8	2”	3 1/8	1	9.5
32	S632	14 1/2	5.333	5.666	B	1 1/8	2”	3 1/8	1	10.7
33	S633	14 1/2	5.500	5.833	B	1 1/8	2 1/8	3 1/4	1	11.3
36	S636	14 1/2	6.000	6.333	B	1 1/8	2 1/8	3 1/4	1	13.3
39	S639	14 1/2	6.500	6.833	B	1 1/8	2 1/2	4	1	16.6
40	S640	14 1/2	6.666	7.000	B	1 1/8	2 1/2	4	1	17.6
42	S642	14 1/2	7.000	7.333	B	1 1/8	2 1/2	4	1	18.9
45	S645	14 1/2	7.500	7.833	B	1 1/8	2 1/2	4	1	21.3
48	S648	14 1/2	8.000	8.333	B	1 1/8	2 1/2	4 1/8	1	24.3
52	S652	14 1/2	8.666	9.000	B	1 1/8	2 5/8	4 1/4	1	27.9
54	S654	14 1/2	9.000	9.333	B	1 1/8	2 5/8	4 3/8	1	30.4
58	S658	14 1/2	9.666	10.000	B	1 1/8	2 5/8	4 3/8	1	33.9
60	S660	14 1/2	10.000	10.333	B	1 1/4	2 5/8	4 3/8	1 1/4	34.3
64	S664	14 1/2	10.666	11.000	B	1 1/4	2 5/8	4 3/8	1 1/4	42.2
66	S666	14 1/2	11.000	11.333	B	1 1/4	2 5/8	4 3/8	1 1/4	50.0
72	S672	14 1/2	12.000	12.333	B	1 1/4	2 11/16	4 3/8	1 1/4	53.0
84	S684	14 1/2	14.000	14.333	B2	1 1/4	2 11/16	4 1/2	1 1/4	40.0
96	S696	14 1/2	16.000	16.333	B2	1 1/4	2 13/16	5 1/8	1 1/4	43.8
108	S6108	14 1/2	18.000	18.333	B2	1 1/4	2 13/16	5 1/8	1 1/4	53.0
120	S6120	14 1/2	20.000	20.333	B2	1 1/4	2 13/16	5 1/8	1 1/2	63.2
132	S6132	14 1/2	22.000	22.333	B2	1 1/4	2 13/16	5 1/8	1 1/2	68.3
144	S6144	14 1/2	24.000	24.333	B2	1 1/4	3 1/8	5	1 1/2	82.7

* Recommended maximum bore with keyway and setscew.
** Check application with factory.
† Enlarged pitch diameter with special tooth form.

14½° P.A. gears will not operate with 20° P.A.

Cast Iron Stock Spur Gears

14½°Pressure Angle

6 DP

1½" Face



Type B
Plain with hubs



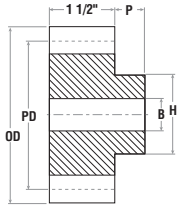
Type B_1
Web



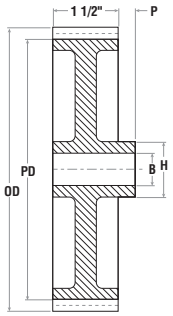
Type B_2
Web with lighten holes



Type B_3
Spoke style



Type B



Type B_1, B_2, B_3

Cast — Style B

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
• 32	C632	14 1/2	5.333	5.666	B1	1 1/8	1 7/16	2 1/2	1	7.2
• 40	C640	14 1/2	6.666	7.000	B1	1 1/8	1 13/16	3	1	11.9
• 42	C642	14 1/2	7.000	7.333	B1	1 1/8	1 13/16	3	1	13.0
• 48	C648	14 1/2	8.000	8.333	B3	1 1/8	1 13/16	3	1	12.1
• 54	C654	14 1/2	9.000	9.333	B3	1 1/8	2 1/16	3 1/4	1	14.4
• 60	C660	14 1/2	10.000	10.333	B3	1 1/4	2 1/16	3 1/4	1 1/4	17.0
• 64	C664	14 1/2	10.666	11.000	B3	1 1/4	2 1/16	3 1/4	1 1/4	18.5
66	C666	14 1/2	11.000	11.333	B3	1 1/4	2 1/16	3 1/4	1 1/4	19.0
70	C670	14 1/2	11.666	12.000	B3	1 1/4	2 1/16	3 1/4	1 1/4	20.6
72	C672	14 1/2	12.000	12.333	B3	1 1/4	2 3/16	3 1/2	1 1/4	23.7
75	C675	14 1/2	12.500	12.833	B3	1 1/4	2 3/16	3 1/2	1 1/4	25.4
80	C680	14 1/2	13.333	13.666	B3	1 1/4	2 3/16	3 1/2	1 1/4	25.8
84	C684	14 1/2	14.000	14.333	B3	1 1/4	2 3/16	3 1/2	1 1/4	25.0
90	C690	14 1/2	15.000	15.333	B3	1 1/4	2 3/16	3 1/2	1 1/4	25.8
96	C696	14 1/2	16.000	16.333	B3	1 1/4	2 3/16	3 1/2	1 1/4	28.0
108	C6108	14 1/2	18.000	18.333	B3	1 1/4	2 5/16	3 3/4	1 1/4	32.0
120	C6120	14 1/2	20.000	20.333	B3	1 1/4	2 5/16	3 3/4	1 1/2	34.8
132	C6132	14 1/2	22.000	22.333	B3	1 1/4	2 5/16	3 3/4	1 1/2	43.4
144	C6144	14 1/2	24.000	24.333	B3	1 1/4	2 9/16	4	1 1/2	45.2
180	C6180	14 1/2	30.000	30.333	B3	1 1/4	2 9/16	4	1 1/2	58.3

Bored-To-Size

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Setscrew	Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Keyway		Diameter	Projection	
11	S611BS 1	14 1/2	2.000	2.333	B	1	1/4 × 1/8	(1) 1/4-20 @ 90	1 1/2	7/8	1.10
12	S612BS 1	14 1/2	2.000	2.333	B	1	1/4 × 1/8	(1) 1/4-20 @ 90	1 1/2	7/8	1.10
14	S614BS 1	14 1/2	2.333	2.667	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	1 13/16	7/8	1.80
14	S614BS 1 1/8	14 1/2	2.333	2.667	B	1 1/8	1/4 × 1/8	(1) 5/16-18 @ 90	1 13/16	7/8	1.80
15	S615BS 1	14 1/2	2.500	2.833	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	2	7/8	2.20
15	S615BS 1 1/8	14 1/2	2.500	2.833	B	1 1/8	1/4 × 1/8	(1) 5/16-18 @ 90	2	7/8	2.20
15	S615BS 1 3/16	14 1/2	2.500	2.833	B	1 3/16	1/4 × 1/8	(1) 5/16-18 @ 90	2	7/8	2.20
15	S615BS 1 1/4	14 1/2	2.500	2.833	B	1 1/4	1/4 × 1/8	(1) 5/16-18 @ 90	2	7/8	2.20
16	S616BS 1	14 1/2	2.667	3.000	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	2 5/32	7/8	2.60
16	S616BS 1 1/8	14 1/2	2.667	3.000	B	1 1/8	1/4 × 1/8	(1) 5/16-18 @ 90	2 5/32	7/8	2.60
16	S616BS 1 3/16	14 1/2	2.667	3.000	B	1 3/16	1/4 × 1/8	(1) 5/16-18 @ 90	2 5/32	7/8	2.60
16	S616BS 1 1/4	14 1/2	2.667	3.000	B	1 1/4	1/4 × 1/8	(1) 5/16-18 @ 90	2 5/32	7/8	2.60
18	S618BS 1	14 1/2	3.000	3.333	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	2 1/2	7/8	3.50
18	S618BS 1 1/8	14 1/2	3.000	3.333	B	1 1/8	1/4 × 1/8	(1) 5/16-18 @ 90	2 1/2	7/8	3.50
18	S618BS 1 3/16	14 1/2	3.000	3.333	B	1 3/16	1/4 × 1/8	(1) 5/16-18 @ 90	2 1/2	7/8	3.50
18	S618BS 1 1/4	14 1/2	3.000	3.333	B	1 1/4	1/4 × 1/8	(1) 5/16-18 @ 90	2 1/2	7/8	3.50
20	S620BS 1	14 1/2	3.333	3.667	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	2 27/32	7/8	4.60
20	S620BS 1 1/8	14 1/2	3.333	3.667	B	1 1/8	1/4 × 1/8	(1) 5/16-18 @ 90	2 27/32	7/8	4.60
20	S620BS 1 3/16	14 1/2	3.333	3.667	B	1 3/16	1/4 × 1/8	(1) 5/16-18 @ 90	2 27/32	7/8	4.60
20	S620BS 1 1/4	14 1/2	3.333	3.667	B	1 1/4	1/4 × 1/8	(1) 5/16-18 @ 90	2 27/32	7/8	4.60

14½° P.A. gears will not operate with 20° P.A.

• Consult Factory.

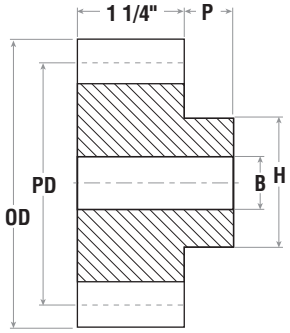
* Recommended maximum bore with keyway and setscew.

8 DP
1¼" Face

Steel Stock Spur Gears
14½°Pressure Angle



Type B
Plain with hubs



Type B

Steel

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
11	S811	14 1/2	1.500 †	1.750	B	3/4	**	1 1/8	3/4	0.5
12	S812	14 1/2	1.500	1.750	B	3/4	**	1 1/8	3/4	0.5
13	S813	14 1/2	1.625	1.875	B	3/4	**	1 1/4	3/4	0.7
14	S814	14 1/2	1.750	2.000	B	3/4	13/16	1 3/8	3/4	0.9
15	S815	14 1/2	1.875	2.125	B	7/8	7/8	1 1/2	3/4	0.9
16	S816	14 1/2	2.000	2.250	B	7/8	15/16	1 5/8	3/4	1.1
17	S817	14 1/2	2.125	2.375	B	7/8	1	1 3/4	3/4	1.3
18	S818	14 1/2	2.250	2.500	B	7/8	1 1/8	1 7/8	3/4	1.6
19	S819	14 1/2	2.375	2.625	B	7/8	1 1/4	2	3/4	1.8
20	S820	14 1/2	2.500	2.750	B	7/8	1 5/16	2 1/8	3/4	2.0
21	S821	14 1/2	2.625	2.875	B	7/8	1 7/16	2 1/4	3/4	2.3
22	S822	14 1/2	2.750	3.000	B	7/8	1 5/8	2 3/8	3/4	2.6
24	S824	14 1/2	3.000	3.250	B	7/8	1 5/8	2 5/8	1	3.6
26	S826	14 1/2	3.250	3.500	B	7/8	1 5/8	2 5/8	1	3.9
28	S828	14 1/2	3.500	3.750	B	7/8	1 5/8	2 5/8	1	4.4
30	S830	14 1/2	3.750	4.000	B	7/8	1 3/4	2 3/4	1	5.1
32	S832	14 1/2	4.000	4.250	B	1	1 13/16	2 7/8	1	5.6
36	S836	14 1/2	4.500	4.750	B	1	1 7/8	3	1	7.0
40	S840	14 1/2	5.000	5.250	B	1	1 7/8	3	1	8.3
42	S842	14 1/2	5.250	5.500	B	1	1 7/8	3	1	9.0
44	S844	14 1/2	5.500	5.750	B	1	1 7/8	3	1	9.7
48	S848	14 1/2	6.000	6.250	B	1	1 7/8	3	1	11.3

* Recommended maximum bore with keyway and setscew.
** Check application with factory.
† Enlarged pitch diameter with special tooth form.

14½° P.A. gears will not operate with 20° P.A.

Cast Iron Stock Spur Gears

14½°Pressure Angle

8 DP

1¼" Face



Type B
Plain with hubs



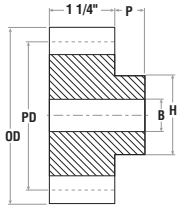
Type B_1
Web



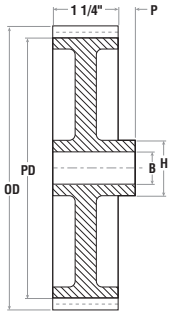
Type B_2
Web with lighten holes



Type B_3
Spoke style



Type B



Type B_1, B_2, B_3

Cast — Style B

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
• 36	C836	14 1/2	4.500	4.750	B1	1	1 7/16	2 1/2	1	4.5
• 40	C840	14 1/2	5.000	5.250	B1	1	1 7/16	2 1/2	1	5.1
• 42	C842	14 1/2	5.250	5.500	B1	1	1 7/16	2 1/2	1	5.5
• 44	C844	14 1/2	5.500	5.750	B1	1	1 7/16	2 1/2	1	6.0
52	C852	14 1/2	6.500	6.750	B1	1	1 11/16	2 3/4	1	10.3
54	C854	14 1/2	6.750	7.000	B2	1	1 11/16	2 3/4	1	8.1
56	C856	14 1/2	7.000	7.250	B3	1	1 11/16	2 3/4	1	8.2
60	C860	14 1/2	7.500	7.750	B3	1	1 11/16	2 3/4	1	8.8
64	C864	14 1/2	8.000	8.250	B3	1	1 11/16	2 3/4	1	11.2
68	C868	14 1/2	8.500	8.750	B3	1	1 13/16	3	1	11.5
72	C872	14 1/2	9.000	9.250	B3	1	1 13/16	3	1	11.7
76	C876	14 1/2	9.500	9.750	B3	1	1 13/16	3	1	12.0
80	C880	14 1/2	10.000	10.250	B3	1 1/8	1 13/16	3	1 1/8	12.2
84	C884	14 1/2	10.500	10.750	B3	1 1/8	1 13/16	3	1 1/8	13.2
88	C888	14 1/2	11.000	11.250	B3	1 1/8	1 13/16	3	1 1/8	13.5
92	C892	14 1/2	11.500	11.750	B3	1 1/8	2 1/16	3 1/4	1 1/8	15.0
96	C896	14 1/2	12.000	12.250	B3	1 1/8	2 1/16	3 1/4	1 1/8	15.8
100	C8100	14 1/2	12.500	12.750	B3	1 1/8	2 1/16	3 1/4	1 1/8	16.5
112	C8112	14 1/2	14.000	14.250	B3	1 1/8	2 1/16	3 1/4	1 1/8	17.7
120	C8120	14 1/2	15.000	15.250	B3	1 1/8	2 1/16	3 1/4	1 1/8	18.4
128	C8128	14 1/2	16.000	16.250	B3	1 1/8	2 3/16	3 1/2	1 1/8	21.3
144	C8144	14 1/2	18.000	18.250	B3	1 1/8	2 3/16	3 1/2	1 1/8	24.2
160	C8160	14 1/2	20.000	20.250	B3	1 1/8	2 5/16	3 3/4	1 1/4	26.6
168	C8168	14 1/2	21.000	21.250	B3	1 1/8	2 5/16	3 3/4	1 1/4	28.9

Bored-To-Size

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Setscrew	Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Keyway		Diameter	Projection	
11	S811BS 3/4	14 1/2	1.500	1.750	B	3/4	3/16 × 3/32	(1) 10-24 @ 90	1 1/8	3/4	0.50
12	S812BS 3/4	14 1/2	1.500	1.750	B	3/4	3/16 × 3/32	(1) 10-24 @ 90	1 1/8	3/4	0.50
14	S814BS 3/4	14 1/2	1.750	2.000	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 3/8	3/4	0.90
15	S815BS 7/8	14 1/2	1.875	2.125	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 1/2	3/4	1.00
16	S816BS 7/8	14 1/2	2.000	2.250	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 5/8	3/4	1.10
16	S816BS 1	14 1/2	2.000	2.250	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	1 5/8	3/4	1.10
18	S818BS 7/8	14 1/2	2.250	2.500	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 7/8	3/4	1.60
18	S818BS 1	14 1/2	2.250	2.500	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	1 7/8	3/4	1.60
18	S818BS 1-1/8	14 1/2	2.250	2.500	B	1 1/8	1/4 × 1/8	(1) 5/16-18 @ 90	1 7/8	3/4	1.60
20	S820BS 7/8	14 1/2	2.500	2.750	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	2 1/8	3/4	2.00
20	S820BS 1	14 1/2	2.500	2.750	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	2 1/8	3/4	2.00
20	S820BS 1-1/8	14 1/2	2.500	2.750	B	1 1/8	1/4 × 1/8	(1) 5/16-18 @ 90	2 1/8	3/4	2.00
22	S822BS 7/8	14 1/2	2.750	3.000	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	2 3/8	3/4	2.60
22	S822BS 1	14 1/2	2.750	3.000	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	2 3/8	3/4	2.60
22	S822BS 1-1/8	14 1/2	2.750	3.000	B	1 1/8	1/4 × 1/8	(1) 5/16-18 @ 90	2 3/8	3/4	2.60

14½° P.A. gears will not operate with 20° P.A.

• Consult Factory.

* Recommended maximum bore with keyway and setscew.

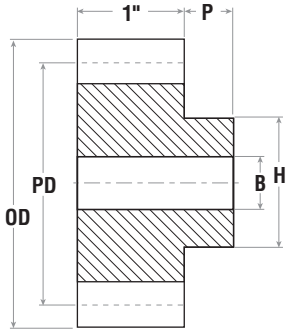
10 DP
1" Face

Steel Stock Spur Gears
14½°Pressure Angle



Type B

Plain with hubs



Type B

Steel

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
11	S1011	14 1/2	1.200 †	1.400	B	5/8	**	15/16	5/8	0.3
12	S1012	14 1/2	1.200	1.400	B	5/8	**	15/16	5/8	0.3
13	S1013	14 1/2	1.300	1.500	B	5/8	**	1	5/8	0.3
14	S1014	14 1/2	1.400	1.600	B	5/8	5/8	1 1/8	5/8	0.4
15	S1015	14 1/2	1.500	1.700	B	3/4	3/4	1 7/32	5/8	0.5
16	S1016	14 1/2	1.600	1.800	B	3/4	3/4	1 5/16	5/8	0.6
17	S1017	14 1/2	1.700	1.900	B	3/4	13/16	1 3/8	5/8	0.6
18	S1018	14 1/2	1.800	2.000	B	3/4	7/8	1 17/32	5/8	0.8
19	S1019	14 1/2	1.900	2.100	B	3/4	7/8	1 9/16	5/8	0.9
20	S1020	14 1/2	2.000	2.200	B	3/4	1	1 23/32	5/8	1.0
21	S1021	14 1/2	2.100	2.300	B	3/4	1	1 3/4	5/8	1.2
22	S1022	14 1/2	2.200	2.400	B	3/4	1 1/8	1 7/8	5/8	1.3
24	S1024	14 1/2	2.400	2.600	B	3/4	1 1/4	2 1/8	5/8	1.6
25	S1025	14 1/2	2.500	2.700	B	3/4	1 1/2	2 7/32	5/8	1.8
26	S1026	14 1/2	2.600	2.800	B	3/4	1 1/4	2 1/8	5/8	1.9
28	S1028	14 1/2	2.800	3.000	B	3/4	1 1/4	2 1/8	7/8	2.3
30	S1030	14 1/2	3.000	3.200	B	3/4	1 1/4	2 1/8	7/8	2.6
32	S1032	14 1/2	3.200	3.400	B	3/4	1 1/4	2 1/8	7/8	2.9
35	S1035	14 1/2	3.500	3.700	B	3/4	1 5/16	2 1/4	7/8	3.4
36	S1036	14 1/2	3.600	3.800	B	3/4	1 5/16	2 1/4	7/8	3.5
38	S1038	14 1/2	3.800	4.000	B	3/4	1 5/16	2 1/4	7/8	3.8
40	S1040	14 1/2	4.000	4.200	B	7/8	1 5/16	2 1/4	7/8	4.1
42	S1042	14 1/2	4.200	4.400	B	7/8	1 5/16	2 1/4	7/8	4.5
45	S1045	14 1/2	4.500	4.700	B	7/8	1 1/2	2 1/2	7/8	5.3
48	S1048	14 1/2	4.800	5.000	B	7/8	1 1/2	2 1/2	7/8	5.9
50	S1050	14 1/2	5.000	5.200	B	7/8	1 1/2	2 1/2	7/8	6.4
54	S1054	14 1/2	5.400	5.600	B	7/8	1 1/2	2 1/2	7/8	7.8
55	S1055	14 1/2	5.500	5.700	B	7/8	1 1/2	2 1/2	7/8	7.9
60	S1060	14 1/2	6.000	6.200	B	7/8	1 1/2	2 1/2	7/8	8.7

* Recommended maximum bore with keyway and setscew.

** Check application with factory.

† Enlarged pitch diameter with special tooth form.

14½° P.A. gears will not operate with 20° P.A.

Cast Iron Stock Spur Gears

14½°Pressure Angle

10 DP

1" Face



Type B
Plain with hubs



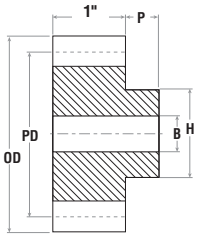
Type B_1
Web



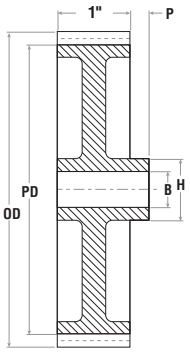
Type B_2
Web with lighten holes



Type B_3
Spoke style



Type B



Type B_1, B_2, B_3

Cast — Style B

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
• 60	C1060	14 1/2	6.000	6.200	B3	7/8	1 3/16	2 1/8	7/8	4.3
64	C1064	14 1/2	6.400	6.600	B3	7/8	1 7/16	2 1/2	7/8	5.6
65	C1065	14 1/2	6.500	6.700	B3	7/8	1 7/16	2 1/2	7/8	5.6
70	C1070	14 1/2	7.000	7.200	B3	7/8	1 7/16	2 1/2	7/8	5.9
72	C1072	14 1/2	7.200	7.500	B3	7/8	1 7/16	2 1/2	7/8	6.3
75	C1075	14 1/2	7.500	7.700	B3	7/8	1 7/16	2 1/2	7/8	6.7
80	C1080	14 1/2	8.000	8.200	B3	7/8	1 7/16	2 1/2	7/8	7.0
84	C1084	14 1/2	8.400	8.600	B3	7/8	1 7/16	2 1/2	7/8	6.9
85	C1085	14 1/2	8.500	8.700	B3	7/8	1 7/16	2 1/2	7/8	7.3
90	C1090	14 1/2	9.000	9.200	B3	7/8	1 7/16	2 1/2	7/8	7.6
95	C1095	14 1/2	9.500	9.700	B3	7/8	1 7/16	2 1/2	7/8	8.1
96	C1096	14 1/2	9.600	9.800	B3	7/8	1 7/16	2 1/2	7/8	8.1
100	C10100	14 1/2	10.000	10.200	B3	1	1 7/16	2 1/2	7/8	10.3
105	C10105	14 1/2	10.500	10.700	B3	1	1 7/16	2 1/2	1	10.4
110	C10110	14 1/2	11.000	11.200	B3	1	1 11/16	2 3/4	1	10.0
112	C10112	14 1/2	11.200	11.400	B3	1	1 11/16	2 3/4	1	10.2
120	C10120	14 1/2	12.000	12.200	B3	1	1 11/16	2 3/4	1	11.1
130	C10130	14 1/2	13.000	13.200	B3	1	1 11/16	2 3/4	1	13.4
140	C10140	14 1/2	14.000	14.200	B1	1	1 11/16	2 3/4	1	30.8
150	C10150	14 1/2	15.000	15.200	B1	1	1 11/16	2 3/4	1	33.0
160	C10160	14 1/2	16.000	16.200	B1	1	1 11/16	2 3/4	1	38.3
180	C10180	14 1/2	18.000	18.200	B3	1	1 13/16	3	1	43.6

Bored-To-Size

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Setscrew	Hub (Inches)		Weight Lb.
			Pitch	Outside		Stock	Keyway		Diameter	Projection	(Approx.)
11	S1011BS 5/8	14 1/2	1.200	1.400	B	5/8	3/16 × 3/32	(1) 10-24 @ 90	15/16	5/8	0.30
12	S1012BS 5/8	14 1/2	1.200	1.400	B	5/8	3/16 × 3/32	(1) 10-24 @ 90	15/16	5/8	0.30
14	S1014BS 5/8	14 1/2	1.400	1.600	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 1/8	5/8	0.40
15	S1015BS 3/4	14 1/2	1.500	1.700	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 7/32	5/8	0.50
16	S1016BS 3/4	14 1/2	1.600	1.800	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 5/16	5/8	0.60
18	S1018BS 3/4	14 1/2	1.800	2.000	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 17/32	5/8	0.80
18	S1018BS 7/8	14 1/2	1.800	2.000	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 17/32	5/8	0.80
20	S1020BS 3/4	14 1/2	2.000	2.200	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 23/32	5/8	1.00
20	S1020BS 7/8	14 1/2	2.000	2.200	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 23/32	5/8	1.00
20	S1020BS 1	14 1/2	2.000	2.200	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	1 23/32	5/8	1.00
24	S1024BS 3/4	14 1/2	2.400	2.600	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	2 1/8	5/8	1.60
24	S1024BS 7/8	14 1/2	2.400	2.600	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	2 1/8	5/8	1.60
24	S1024BS 1	14 1/2	2.400	2.600	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	2 3/8	5/8	1.60

14½° P.A. gears will not operate with 20° P.A.

• Consult Factory.

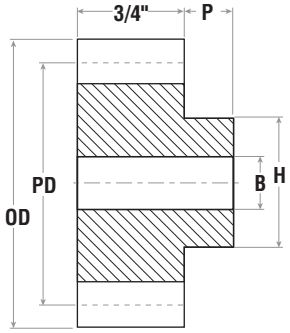
* Recommended maximum bore with keyway and setscew.

12 DP
¾" Face

Steel Stock Spur Gears
14½°Pressure Angle



Type B
Plain with hubs



Type B

Steel

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
11	S1211	14 1/2	1.000 †	1.167	B	1/2	**	3/4	1/2	0.14
12	S1212	14 1/2	1.000	1.167	B	1/2	**	3/4	1/2	0.16
13	S1213	14 1/2	1.083	1.250	B	1/2	**	13/16	1/2	0.20
14	S1214	14 1/2	1.167	1.333	B	1/2	**	29/32	1/2	0.24
15	S1215	14 1/2	1.250	1.417	B	5/8	**	1	1/2	0.27
16	S1216	14 1/2	1.333	1.500	B	5/8	5/8	1 1/16	1/2	0.34
17	S1217	14 1/2	1.417	1.580	B	5/8	5/8	1 1/8	1/2	0.36
18	S1218	14 1/2	1.500	1.667	B	5/8	11/16	1 1/4	1/2	0.42
19	S1219	14 1/2	1.583	1.750	B	5/8	3/4	1 5/16	1/2	0.48
20	S1220	14 1/2	1.667	1.833	B	5/8	13/16	1 13/32	1/2	0.56
21	S1221	14 1/2	1.750	1.917	B	5/8	7/8	1 1/2	1/2	0.64
22	S1222	14 1/2	1.833	2.000	B	5/8	7/8	1 9/16	1/2	0.70
23	S1223	14 1/2	1.917	2.083	B	5/8	15/16	1 5/8	1/2	0.78
24	S1224	14 1/2	2.000	2.166	B	5/8	1	1 3/4	1/2	0.88
25	S1225	14 1/2	2.083	2.250	B	5/8	1 1/16	1 27/32	1/2	0.96
26	S1226	14 1/2	2.167	2.333	B	5/8	1 3/16	1 15/16	5/8	1.14
28	S1228	14 1/2	2.333	2.500	B	5/8	1 1/2	2 1/16	5/8	1.34
30	S1230	14 1/2	2.500	2.667	B	5/8	1 5/16	2 1/4	5/8	1.60
32	S1232	14 1/2	2.667	2.833	B	5/8	1 5/16	2 1/4	5/8	1.72
34	S1234	14 1/2	2.833	3.000	B	5/8	1 5/16	2 1/4	5/8	1.88
36	S1236	14 1/2	3.000	3.167	B	5/8	1 1/2	2 1/2	5/8	2.20
38	S1238	14 1/2	3.167	3.333	B	5/8	1 1/2	2 1/2	5/8	2.38
40	S1240	14 1/2	3.333	3.500	B	5/8	1 1/2	2 1/2	5/8	2.54
42	S1242	14 1/2	3.500	3.666	B	5/8	1 1/2	2 1/2	5/8	2.72
44	S1244	14 1/2	3.667	3.833	B	5/8	1 1/2	2 1/2	5/8	2.94
48	S1248	14 1/2	4.000	4.166	B	5/8	1 1/2	2 1/2	3/4	3.50
54	S1254	14 1/2	4.500	4.666	B	3/4	1 3/4	2 3/4	3/4	4.40
56	S1256	14 1/2	4.667	4.833	B	3/4	1 3/4	2 3/4	3/4	4.60
60	S1260	14 1/2	5.000	5.166	B	3/4	1 3/4	2 3/4	3/4	5.14
64	S1264	14 1/2	5.333	5.500	B	3/4	1 3/4	2 3/4	3/4	5.74
66	S1266	14 1/2	5.500	5.666	B	3/4	1 3/4	2 3/4	3/4	6.02
72	S1272	14 1/2	6.000	6.166	B	3/4	1 3/4	2 3/4	3/4	7.02

* Recommended maximum bore with keyway and setscew.
** Check application with factory.
† Enlarged pitch diameter with special tooth form.

14½° P.A. gears will not operate with 20° P.A.

Cast Iron Stock Spur Gears

14½°Pressure Angle

12 DP

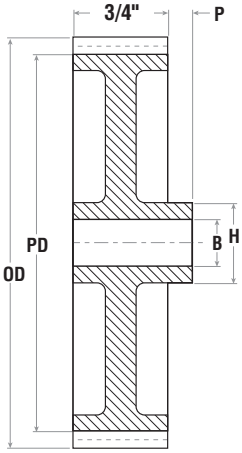
¾" Face



Type B_1
Web



Type B_3
Spoke style



Type B_1, B_3

Cast — Style B

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
78	C1278	14 1/2	6.500	6.666	B3	3/4	1 7/16	2 1/2	3/4	4.1
84	C1284	14 1/2	7.000	7.166	B3	3/4	1 7/16	2 1/2	3/4	4.4
90	C1290	14 1/2	7.500	7.666	B3	3/4	1 11/16	2 3/4	3/4	5.2
96	C1296	14 1/2	8.000	8.166	B3	3/4	1 11/16	2 3/4	3/4	5.5
102	C12102	14 1/2	8.500	8.666	B3	3/4	1 11/16	2 3/4	3/4	5.9
108	C12108	14 1/2	9.000	9.166	B3	3/4	1 11/16	2 3/4	3/4	6.4
112	C12112	14 1/2	9.333	9.500	B3	3/4	1 11/16	2 3/4	3/4	6.4
114	C12114	14 1/2	9.500	9.666	B3	3/4	1 11/16	2 3/4	3/4	6.4
120	C12120	14 1/2	10.000	10.166	B3	7/8	1 11/16	2 3/4	3/4	8.1
126	C12126	14 1/2	10.500	10.666	B3	7/8	1 13/16	3	3/4	7.4
144	C12144	14 1/2	12.000	12.166	B3	7/8	1 13/16	3	1	10.1
168	C12168	14 1/2	14.000	14.166	B1	7/8	1 13/16	3	1	10.6

Bored-To-Size

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Setscrew	Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Keyway		Diameter	Projection	
11	S1211BS 1/2	14 1/2	1.000	1.167	B	1/2	NONE	(1) 10-24	3/4	1/2	0.14
12	S1212BS 1/2	14 1/2	1.000	1.167	B	1/2	NONE	(1) 10-24	3/4	1/2	0.16
13	S1213BS 1/2	14 1/2	1.083	1.250	B	1/2	NONE	(1) 10-24	13/16	1/2	0.20
14	S1214BS 1/2	14 1/2	1.167	1.333	B	1/2	NONE	(1) 10-24	29/32	5/8	0.24
15	S1215BS 5/8	14 1/2	1.250	1.417	B	5/8	3/16 × 3/32	(1) 10-24 @ 90	1	1/2	0.27
16	S1216BS 5/8	14 1/2	1.333	1.500	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 1/16	1/2	0.34
18	S1218BS 5/8	14 1/2	1.500	1.667	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 1/4	1/2	0.42
20	S1220BS 5/8	14 1/2	1.667	1.833	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 13/32	1/2	0.56
20	S1220BS 3/4	14 1/2	1.667	1.833	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 13/32	1/2	0.56
21	S1221BS 5/8	14 1/2	1.750	1.917	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 13/32	1/2	0.56
21	S1221BS 3/4	14 1/2	1.750	1.917	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 13/32	1/2	0.56
21	S1221BS 7/8	14 1/2	1.750	1.917	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 13/32	1/2	0.56
22	S1222BS 5/8	14 1/2	1.833	2.000	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 9/16	1/2	0.70
22	S1222BS 3/4	14 1/2	1.833	2.000	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 9/16	1/2	0.70
22	S1222BS 7/8	14 1/2	1.833	2.000	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 9/16	1/2	0.70
22	S1222BS 1	14 1/2	1.833	2.000	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	1 9/16	1/2	0.70
24	S1224BS 5/8	14 1/2	2.000	2.167	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 3/4	1/2	0.88
24	S1224BS 3/4	14 1/2	2.000	2.167	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 3/4	1/2	0.88
24	S1224BS 7/8	14 1/2	2.000	2.167	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 3/4	1/2	0.88
24	S1224BS 1	14 1/2	2.000	2.167	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	1 3/4	1/2	0.88

14½° P.A. gears will not operate with 20° P.A.

* Recommended maximum bore with keyway and setscew.

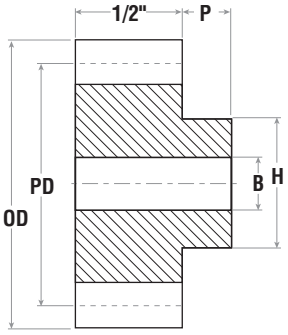
16 DP
½" Face

Steel Stock Spur Gears
14½°Pressure Angle



Type B

Plain with hubs



Type B

Steel

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
11	S1611	14 1/2	0.750†	0.875	B	3/8	**	9/16	7/16	0.06
12	S1612	14 1/2	0.750	0.875	B	3/8	**	9/16	7/16	0.06
13	S1613	14 1/2	0.812	0.937	B	3/8	**	5/8	7/16	0.08
14	S1614	14 1/2	0.875	1.000	B	3/8	**	11/16	7/16	0.08
15	S1615	14 1/2	0.937	1.062	B	1/2	**	3/4	7/16	0.10
16	S1616	14 1/2	1.000	1.125	B	1/2	**	13/16	7/16	0.12
17	S1617	14 1/2	1.062	1.187	B	1/2	**	7/8	7/16	0.14
18	S1618	14 1/2	1.125	1.250	B	1/2	**	15/16	7/16	0.16
19	S1619	14 1/2	1.187	1.312	B	1/2	1/2	1	7/16	0.20
20	S1620	14 1/2	1.250	1.375	B	1/2	9/16	1 1/16	7/16	0.22
21	S1621	14 1/2	1.312	1.438	B	1/2	5/8	1 1/8	7/16	0.24
22	S1622	14 1/2	1.375	1.500	B	1/2	5/8	1 3/16	7/16	0.28
23	S1623	14 1/2	1.437	1.562	B	1/2	11/16	1 1/4	7/16	0.32
24	S1624	14 1/2	1.500	1.625	B	1/2	3/4	1 5/16	7/16	0.34
26	S1626	14 1/2	1.625	1.750	B	1/2	7/8	1 7/16	7/16	0.42
28	S1628	14 1/2	1.750	1.875	B	1/2	7/8	1 1/2	1/2	0.52
30	S1630	14 1/2	1.875	2.000	B	1/2	15/16	1 5/8	1/2	0.60
32	S1632	14 1/2	2.000	2.125	B	1/2	1	1 3/4	1/2	0.70
34	S1634	14 1/2	2.125	2.250	B	1/2	1 1/8	1 7/8	1/2	0.80
36	S1636	14 1/2	2.250	2.375	B	1/2	1 1/4	2	1/2	0.92
38	S1638	14 1/2	2.375	2.500	B	1/2	1 1/4	2	1/2	0.98
40	S1640	14 1/2	2.500	2.626	B	1/2	1 1/4	2	1/2	1.10
44	S1644	14 1/2	2.750	2.875	B	1/2	1 1/4	2	1/2	1.20
48	S1648	14 1/2	3.000	3.125	B	1/2	1 1/4	2	1/2	1.40
52	S1652	14 1/2	3.250	3.375	B	1/2	1 1/4	2	1/2	1.50
54	S1654	14 1/2	3.375	3.500	B	1/2	1 1/4	2	1/2	1.60
56	S1656	14 1/2	3.500	3.625	B	1/2	1 1/4	2	1/2	1.70
60	S1660	14 1/2	3.750	3.875	B	1/2	1 1/4	2	1/2	1.30
64	S1664	14 1/2	4.000	4.125	B	5/8	1 1/4	2	5/8	2.20
68	S1668	14 1/2	4.250	4.375	B	5/8	1 5/16	2 1/4	5/8	2.50
72	S1672	14 1/2	4.500	4.625	B	5/8	1 5/16	2 1/4	5/8	2.80
80	S1680	14 1/2	5.000	5.125	B	5/8	1 5/16	2 1/4	5/8	3.40
84	S1684	14 1/2	5.250	5.375	B	5/8	1 5/16	2 1/4	5/8	3.60
88	S1688	14 1/2	5.500	5.625	B	5/8	1 5/16	2 1/4	5/8	3.90
96	S1696	14 1/2	6.000	6.125	B	5/8	1 5/16	2 1/4	5/8	4.60
104	S16104	14 1/2	6.500	6.625	B	5/8	1 5/16	2 1/4	5/8	5.20

* Recommended maximum bore with keyway and setscew.
** Check application with factory.
† Enlarged pitch diameter with special tooth form.

14½° P.A. gears will not operate with 20° P.A.

Cast Iron Stock Spur Gears

14½°Pressure Angle

16 DP

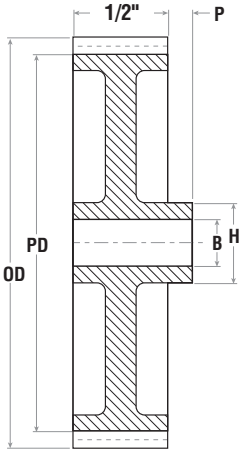
½" Face



Type B_1
Web



Type B_3
Spoke style



Type B_1, B_3

Cast — Style B

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
112	C16112	14 1/2	7.000	7.125	B3	5/8	1 7/16	2 1/2	5/8	3.4
120	C16120	14 1/2	7.500	7.625	B3	5/8	1 7/16	2 1/2	5/8	3.5
128	C16128	14 1/2	8.000	8.125	B3	5/8	1 7/16	2 1/2	5/8	3.7
144	C16144	14 1/2	9.000	9.125	B3	5/8	1 11/16	2 3/4	3/4	5.0
160	C16160	14 1/2	10.000	10.125	B3	5/8	1 11/16	2 3/4	3/4	5.2
192	C16192	14 1/2	12.000	12.125	B1	5/8	1 11/16	2 3/4	3/4	8.1

Bored-To-Size

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Setscrew	Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Keyway		Diameter	Projection	
11	S1611BS 3/8	14 1/2	0.750	0.875	B	3/8	None	(1) 8-32	9/16	7/16	0.06
12	S1612BS 3/8	14 1/2	0.752	0.875	B	3/8	None	(1) 8-32	9/16	7/16	0.06
13	S1613BS 3/8	14 1/2	0.812	0.937	B	3/8	None	(1) 8-32	5/8	7/16	0.08
14	S1614BS 3/8	14 1/2	0.875	1.000	B	3/8	None	(1) 10-24	11/16	7/16	0.08
15	S1615BS 1/2	14 1/2	0.937	1.062	B	1/2	None	(1) 10-24	3/4	7/16	0.10
16	S1616BS 1/2	14 1/2	1.000	1.125	B	1/2	None	(1) 10-24	13/16	7/16	0.12
18	S1618BS 1/2	14 1/2	1.125	1.250	B	1/2	None	(1) 1/4-20	15/16	7/16	0.16
20	S1620BS 1/2	14 1/2	1.250	1.375	B	1/2	None	(1) 1/4-20	1 1/16	7/16	0.22
20	S1620BS 5/8	14 1/2	1.250	1.375	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 1/16	7/16	0.22
22	S1622BS 1/2	14 1/2	1.375	1.500	B	1/2	None	(1) 1/4-20	1 3/16	7/16	0.28
22	S1622BS 5/8	14 1/2	1.375	1.500	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 3/16	7/16	0.28
24	S1624BS 1/2	14 1/2	1.500	1.625	B	1/2	None	(1) 1/4-20	1 5/16	7/16	0.34
24	S1624BS 5/8	14 1/2	1.500	1.625	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 5/16	7/16	0.34
24	S1624BS 3/4	14 1/2	1.500	1.625	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 5/16	7/16	0.34
26	S1626BS 1/2	14 1/2	1.625	1.750	B	1/2	None	(1) 1/4-20	1 7/16	7/16	0.42
26	S1626BS 5/8	14 1/2	1.625	1.750	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 7/16	7/16	0.42
26	S1626BS 3/4	14 1/2	1.625	1.750	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 7/16	7/16	0.42
28	S1628BS 1/2	14 1/2	1.750	1.875	B	1/2	None	(1) 1/4-20	1 1/2	1/2	0.52
28	S1628BS 5/8	14 1/2	1.750	1.875	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 1/2	1/2	0.52
28	S1628BS 3/4	14 1/2	1.750	1.875	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 1/2	1/2	0.52
28	S1628BS 7/8	14 1/2	1.750	1.875	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 1/2	1/2	0.52
30	S1630BS 1/2	14 1/2	1.875	2.000	B	1/2	None	(1) 1/4-20	1 5/8	1/2	0.60
30	S1630BS 5/8	14 1/2	1.875	2.000	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 5/8	1/2	0.60
30	S1630BS 3/4	14 1/2	1.875	2.000	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 5/8	1/2	0.60
30	S1630BS 7/8	14 1/2	1.875	2.000	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 5/8	1/2	0.60
30	S1630BS 1	14 1/2	1.875	2.000	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	1 5/8	1/2	0.60
32	S1632BS 1/2	14 1/2	2.000	2.125	B	1/2	None	(1) 1/4-20	1 3/4	1/2	0.70
32	S1632BS 5/8	14 1/2	2.000	2.125	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 3/4	1/2	0.70
32	S1632BS 3/4	14 1/2	2.000	2.125	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 3/4	1/2	0.70
32	S1632BS 7/8	14 1/2	2.000	2.125	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 3/4	1/2	0.70
32	S1632BS 1	14 1/2	2.000	2.125	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	1 3/4	1/2	0.70

14½° P.A. gears will not operate with 20° P.A.

* Recommended maximum bore with keyway and setscew.

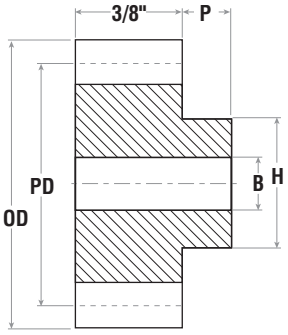
20 DP
3/8" Face

Steel Stock Spur Gears
14½°Pressure Angle



Type B

Plain with hubs



Type B

Steel

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
11	S2011	14 1/2	0.600 †	0.700	B	5/16	**	15/32	3/8	0.02
12	S2012	14 1/2	0.600	0.700	B	5/16	**	15/32	3/8	0.02
13	S2013	14 1/2	0.650	0.750	B	5/16	**	1/2	3/8	0.04
14	S2014	14 1/2	0.700	0.800	B	5/16	**	35/64	3/8	0.04
15	S2015	14 1/2	0.750	0.850	B	3/8	**	39/64	3/8	0.04
16	S2016	14 1/2	0.800	0.900	B	3/8	**	21/32	3/8	0.04
17	S2017	14 1/2	0.850	0.950	B	3/8	**	45/64	3/8	0.08
18	S2018	14 1/2	0.900	1.000	B	3/8	**	3/4	3/8	0.08
19	S2019	14 1/2	0.950	1.050	B	3/8	**	51/64	3/8	0.10
20	S2020	14 1/2	1.000	1.100	B	3/8	**	55/64	3/8	0.12
21	S2021	14 1/2	1.050	1.150	B	3/8	**	7/8	3/8	0.12
22	S2022	14 1/2	1.100	1.200	B	3/8	**	31/32	3/8	0.14
23	S2023	14 1/2	1.150	1.250	B	3/8	**	31/32	3/8	0.16
24	S2024	14 1/2	1.200	1.300	B	3/8	9/16	1 1/16	3/8	0.19
25	S2025	14 1/2	1.250	1.350	B	3/8	5/8	1 7/64	3/8	0.20
28	S2028	14 1/2	1.400	1.500	B	3/8	11/16	1 17/64	3/8	0.26
30	S2030	14 1/2	1.500	1.600	B	3/8	13/16	1 23/64	3/8	0.30
32	S2032	14 1/2	1.600	1.700	B	3/8	7/8	1 7/16	1/2	0.40
35	S2035	14 1/2	1.750	1.850	B	3/8	7/8	1 9/16	1/2	0.50
36	S2036	14 1/2	1.800	1.900	B	3/8	15/16	1 5/8	1/2	0.52
40	S2040	14 1/2	2.000	2.100	B	3/8	1 1/16	1 13/16	1/2	0.64
45	S2045	14 1/2	2.250	2.350	B	3/8	1 1/4	2	1/2	0.82
48	S2048	14 1/2	2.400	2.500	B	3/8	1 1/4	2	1/2	0.88
50	S2050	14 1/2	2.500	2.600	B	3/8	1 1/4	2	1/2	0.90
55	S2055	14 1/2	2.750	2.850	B	3/8	1 1/4	2	1/2	1.04
60	S2060	14 1/2	3.000	3.100	B	3/8	1 1/4	2	1/2	1.16
64	S2064	14 1/2	3.200	3.300	B	3/8	1 1/4	2	1/2	1.26
70	S2070	14 1/2	3.500	3.600	B	3/8	1 1/4	2	1/2	1.40
72	S2072	14 1/2	3.600	3.700	B	3/8	1 5/16	2 1/4	1/2	1.60
75	S2075	14 1/2	3.750	3.850	B	3/8	1 5/16	2 1/4	1/2	1.70
80	S2080	14 1/2	4.000	4.100	B	1/2	1 5/16	2 1/4	1/2	1.82
84	S2084	14 1/2	4.200	4.300	B	1/2	1 5/16	2 1/4	1/2	1.96
90	S2090	14 1/2	4.500	4.600	B	1/2	1 5/16	2 1/4	1/2	2.20
96	S2096	14 1/2	4.800	4.900	B	1/2	1 5/16	2 1/4	1/2	2.42
100	S20100	14 1/2	5.000	5.100	B	1/2	1 5/16	2 1/4	1/2	2.60
112	S20112	14 1/2	5.600	5.700	B	1/2	1	1 3/4	1/2	2.86
120	S20120	14 1/2	6.000	6.100	B1	1/2	1	1 3/4	1/2	3.24
132	S20132	14 1/2	6.600	6.700	B	1/2	1	1 3/4	1/2	3.80

* Recommended maximum bore with keyway and setscew.
† Enlarged pitch diameter with special tooth form.
** Check application with factory.

14½° P.A. gears will not operate with 20° P.A.

Cast Iron Stock Spur Gears

14½°Pressure Angle

20 DP

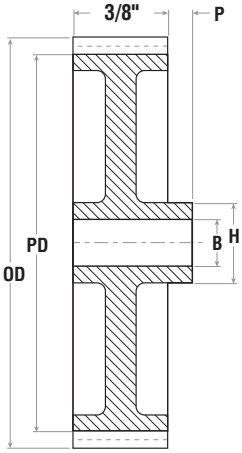
3/8" Face



Type B_1
Web



Type B_3
Spoke style



Type B_1, B_3

Cast — Style B

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
• 48	C2048	14 1/2	2.400	2.500	B1	3/8	9/16	1 1/8	1/2	0.50
• 64	C2064	14 1/2	3.200	3.300	B1	3/8	9/16	1 1/8	1/2	0.68
140	C20140	14 1/2	7.000	7.100	B1	1/2	1	1 3/4	1/2	2.00
160	C20160	14 1/2	8.000	8.100	B1	1/2	1	1 3/4	5/8	2.34
180	C20180	14 1/2	9.000	9.100	B1	1/2	1	1 3/4	5/8	2.66
200	C20200	14 1/2	10.000	10.100	B1	1/2	1	1 3/4	5/8	2.84

Bored-To-Size

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Setscrew	Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Keyway		Diameter	Projection	
11	S2011BS 5/16	14 1/2	0.600	0.700	B	5/16	None	#35 P.H.	15/32	3/8	0.02
12	S2012BS 5/16	14 1/2	0.600	0.700	B	5/16	None	#35 P.H.	15/32	3/8	0.02
13	S2013BS 5/16	14 1/2	0.650	0.750	B	5/16	None	#35 P.H.	1/2	3/8	0.04
14	S2014BS 5/16	14 1/2	0.700	0.800	B	5/16	None	#35 P.H.	35/64	3/8	0.04
15	S2015BS 3/8	14 1/2	0.750	0.850	B	3/8	None	(1) 8-32	39/64	3/8	0.04
16	S2016BS 3/8	14 1/2	1.800	0.900	B	3/8	None	(1) 8-32	21/32	3/8	0.04
18	S2018BS 3/8	14 1/2	1.900	1.000	B	3/8	None	(1) 10-24	3/4	3/8	0.08
20	S2020BS 3/8	14 1/2	1.000	1.100	B	3/8	None	(1) 10-24	55/64	3/8	0.12
20	S2020BS 1/2	14 1/2	1.000	1.100	B	1/2	None	(1) 10-24	55/64	3/8	0.12
22	S2022BS 3/8	14 1/2	1.100	1.200	B	3/8	None	(1) 1/4-20	31/32	3/8	0.14
22	S2022BS 1/2	14 1/2	1.100	1.200	B	1/2	None	(1) 1/4-20	31/32	3/8	0.14
24	S2024BS 3/8	14 1/2	1.200	1.300	B	3/8	None	(1) 1/4-20	1 1/16	3/8	0.19
24	S2024BS 1/2	14 1/2	1.200	1.300	B	1/2	None	(1) 1/4-20	1 1/16	3/8	0.19
25	S2025BS 3/8	14 1/2	1.250	1.350	B	3/8	None	(1) 1/4-20	1 7/64	3/8	0.20
25	S2025BS 1/2	14 1/2	1.250	1.350	B	1/2	None	(1) 1/4-20	1 7/64	3/8	0.20
28	S2028BS 3/8	14 1/2	1.400	1.500	B	3/8	None	(1) 1/4-20	1 17/64	3/8	0.26
28	S2028BS 1/2	14 1/2	1.400	1.500	B	1/2	None	(1) 1/4-20	1 17/64	3/8	0.26
30	S2030BS 3/8	14 1/2	1.500	1.600	B	3/8	None	(1) 1/4-20	1 23/64	3/8	0.30
30	S2030BS 1/2	14 1/2	1.500	1.600	B	1/2	None	(1) 1/4-20	1 23/64	3/8	0.30
32	S2032BS 3/8	14 1/2	1.600	1.700	B	3/8	None	(1) 1/4-20	1 7/16	1/2	0.40
32	S2032BS 1/2	14 1/2	1.600	1.700	B	1/2	None	(1) 1/4-20	1 7/16	1/2	0.40
35	S2035BS 3/8	14 1/2	1.750	1.850	B	3/8	None	(1) 1/4-20	1 9/16	1/2	0.50
35	S2035BS 1/2	14 1/2	1.750	1.850	B	1/2	None	(1) 1/4-20	1 9/16	1/2	0.50
36	S2036BS 3/8	14 1/2	1.800	1.900	B	3/8	None	(1) 1/4-20	1 5/8	1/2	0.52
36	S2036BS 1/2	14 1/2	1.800	1.900	B	1/2	None	(1) 1/4-20	1 5/8	1/2	0.52
40	S2040BS 3/8	14 1/2	2.000	2.100	B	3/8	None	(1) 1/4-20	1 13/16	1/2	0.64
40	S2040BS 1/2	14 1/2	2.000	2.100	B	1/2	None	(1) 1/4-20	1 13/16	1/2	0.64
40	S2040BS 5/8	14 1/2	2.000	2.100	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 13/16	1/2	0.64
40	S2040BS 3/4	14 1/2	2.000	2.100	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 13/16	1/2	0.64

14½° P.A. gears will not operate with 20° P.A.

• Consult Factory.

* Recommended maximum bore with keyway and setscew.

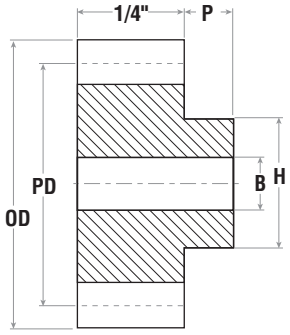
24 DP
¼" Face

Steel Stock Spur Gears
14½°Pressure Angle



Type B

Plain with hubs



Type B

Steel

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
11	S2411	14 1/2	0.500 †	0.583	B	1/4	**	3/8	5/16	0.02
12	S2412	14 1/2	0.500	0.583	B	1/4	**	3/8	5/16	0.02
14	S2414	14 1/2	0.583	0.666	B	1/4	**	15/32	5/16	0.04
15	S2415	14 1/2	0.625	0.708	B	1/4	**	1/2	5/16	0.04
16	S2416	14 1/2	0.666	0.750	B	5/16	**	35/64	5/16	0.04
17	S2417	14 1/2	0.709	0.791	B	5/16	**	9/16	5/16	0.04
18	S2418	14 1/2	0.750	0.833	B	5/16	**	5/8	5/16	0.04
19	S2419	14 1/2	0.791	0.875	B	5/16	**	5/8	5/16	0.06
20	S2420	14 1/2	0.833	0.917	B	5/16	**	23/32	5/16	0.06
21	S2421	14 1/2	0.875	0.959	B	3/8	**	3/4	5/16	0.06
22	S2422	14 1/2	0.917	1.000	B	3/8	**	3/4	5/16	0.06
24	S2424	14 1/2	1.000	1.083	B	3/8	**	7/8	3/8	0.10
26	S2426	14 1/2	1.083	1.166	B	3/8	**	7/8	3/8	0.10
27	S2427	14 1/2	1.125	1.208	B	3/8	**	7/8	3/8	0.12
30	S2430	14 1/2	1.250	1.333	B	3/8	1/2	1	3/8	0.16
32	S2432	14 1/2	1.333	1.416	B	3/8	1/2	1	3/8	0.20
33	S2433	14 1/2	1.375	1.458	B	3/8	5/8	1 1/8	3/8	0.20
36	S2436	14 1/2	1.500	1.583	B	3/8	5/8	1 1/8	3/8	0.20
40	S2440	14 1/2	1.666	1.750	B	3/8	5/8	1 1/8	3/8	0.24
42	S2442	14 1/2	1.750	1.833	B	3/8	11/16	1 1/4	3/8	0.28
44	S2444	14 1/2	1.833	1.917	B	3/8	11/16	1 1/4	3/8	0.30
45	S2445	14 1/2	1.875	1.959	B	3/8	11/16	1 1/4	3/8	0.30
48	S2448	14 1/2	2.000	2.083	B	3/8	11/16	1 1/4	3/8	0.32
54	S2454	14 1/2	2.250	2.333	B	3/8	11/16	1 1/4	3/8	0.38
56	S2456	14 1/2	2.333	2.416	B	3/8	11/16	1 1/4	3/8	0.40
60	S2460	14 1/2	2.500	2.583	B	3/8	11/16	1 1/4	3/8	0.46
66	S2466	14 1/2	2.750	2.833	B	3/8	11/16	1 1/4	3/8	0.52
72	S2472	14 1/2	3.000	3.083	B	1/2	13/16	1 3/8	1/2	0.64
84	S2484	14 1/2	3.500	3.583	B	1/2	7/8	1 1/2	1/2	0.88
96	S2496	14 1/2	4.000	4.083	B	1/2	7/8	1 1/2	1/2	1.08
120	S24120	14 1/2	5.000	5.083	B	1/2	7/8	1 1/2	1/2	2.60
144	S24144	14 1/2	6.000	6.083	B	1/2	15/16	1 5/8	17/32	2.28

* Recommended maximum bore with keyway and setscew.
** Check application with factory.
† Enlarged pitch diameter with special tooth form.

14½° P.A. gears will not operate with 20° P.A.

14½° Spur Gear Horsepower Ratings

(S) = Steel (CI) = Cast Iron

3 D.P. — 3" Face

No. Teeth	50 RPM		100 RPM		200 RPM		300 RPM		600 RPM		900 RPM		1200 RPM		1800 RPM	
	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI
12	6.14		11.37		19.8		26.3		39.14		46.74		51.78			
15	8.76		15.96		27.06		35.24		50.49		59.01					
18	11.37		20.38		33.75		43.2		60		68.93					
21	13.92		24.59		39.84		50.24		67.96							
24	16.32	9.67	28.53	16.84	45.16	26.76	56.19	33.3	74.34	44.05						
48	32.28	19.5	51.3	30.98	72.69	43.9	84.44	51.39								
72	45.01	27.06	66.98	40.29	88.62	53.32										
96	54.74	32.95	77.57	46.7	98.01	59.01										
120	62.89	37.74	85.79	51.48	104.88	62.93										

4 D.P. — 2" Face

No. Teeth	50 RPM		100 RPM		200 RPM		300 RPM		600 RPM		900 RPM		1200 RPM		1800 RPM	
	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI
12	2.35		4.42		7.92		10.77		16.8		20.65		23.33		27	
16	3.81		6.85		11.92		15.82		23.6		28.18		31.23			
20	5.06		9.22		15.65		20.38		29.19		31.11					
24	6.27	3.77	11.25	6.75	18.64	11.19	23.86	14.32	33.14	19.88	38.17	22.84				
36	10.03	5.96	17.23	10.24	28.01	15.98	33.05	16.94	42.89	25.49						
48	12.94	7.82	21.44	12.95	31.91	19.28	38.12	23.02	47.31	28.58						
72		11.1		17.32		24.05		27.65								
96		13.78		20.5		27.12										
144		18		25		31										

5 D.P. — 1 3/4" Face

No. Teeth	50 RPM		100 RPM		200 RPM		300 RPM		600 RPM		900 RPM		1200 RPM		1800 RPM	
	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI
12	1.32		2.54		4.63		6.4		10.33		12.98		14.9		17.48	
18	2.5		4.66		8.22		11		16.67		20.13		22.45			
24	3.64	2.16	6.55	3.95	11.18	6.73	14.62	8.79	21.09	12.69	24.74	14.88				
30	4.68	2.79	8.45	5.02	14	8.31	17.92	10.65	24.88	14.79	28.58	17				
45	7.59	4.32	12.2	7.43	19.03	11.59	23.41	14.27	30.38	18.52						
60		5.62		9.31		13.86		16.56		20.55						
80	11.96	7.25	19	11.54	26.92	16.35	31.28	18.99								
100		8.51		13.07		17.84										
120	16.23	9.74	24.16	14.49	31.95	19.18										
160		11.77		16.68		21.09										

Note:

1. Pitch line velocities exceeding 1000 feet per minute are not recommended. They should be used for interpolation purposes only.
2. Non-metallic gears are most commonly used for the driving pinion of a pair of gears, with mating gear made of cast iron or steel, where pitch line velocities exceed 1000 FPM and are not subjected to shock loads.

14½° Spur Gear Horsepower Ratings

(S) = Steel (CI) = Cast Iron

6 D.P. — 1 1/2" Face

No. Teeth	100 RPM		200 RPM		300 RPM		600 RPM		900 RPM		1200 RPM		1800 RPM	
	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI
12	1.54		2.83		3.97		6.57		8.4		9.78		11.69	
18	2.83		5.09		6.91		10.8		13.28		14.98		17.22	
24	4.02		7.02		9.32		13.86		16.56		18.35			
30	5.16		8.75		11.41		16.35		19.1					
36	6.26	3.77	10.37	6.24	13.28	7.98	18.44	11.09						
48	7.56	4.88	12.91	7.75	15.98	9.64	20.66	12.75						
84	12.86	7.6	17.62	11.02	20.51	12.96								
120	15.99	9.5	20.86	12.95										
180		12		15										

8 D.P. — 1 1/4" Face

No. Teeth	100 RPM		200 RPM		300 RPM		600 RPM		900 RPM		1200 RPM		1800 RPM	
	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI
12	0.72		1.37		1.95		3.32		4.36		5.21		6.38	
18	1.37		2.52		3.49		5.69		7.2		8.30		9.8	
24	1.98	1.18	3.59	2.13	4.81	2.86	7.55	4.48	9.25	5.49	10.48	6.22	12.08	7.17
36	3.02		5.13		6.73		9.85							
48	4.08	2.5	6.76	4.14	8.58	5.26	11.91	7.29						
60		2.98		4.79		5.98								
72		3.47		5.45		6.67								
96		4.4		6.49		7.75								
112		4.83		7.01										
120		5.05		7.22										
160		6.02		8.21										

10 D.P. — 1" Face

No. Teeth	100 RPM		200 RPM		300 RPM		600 RPM		900 RPM		1200 RPM		1800 RPM	
	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI
12	0.38		0.75		1.08		1.88		2.50		3.00		3.75	
18	0.72		1.33		1.87		3.15		4.07		4.76		5.75	
24	1.08		1.98		2.71		4.33		5.41		7.21		7.21	
28	1.24	0.80	2.24	1.44	3.06	1.94	4.83	3.03	5.98	3.71	6.79	4.85	7.85	
48	2.26	1.31	3.77	2.23	4.94	2.91	7.13	4.2	8.23	4.92				
60	2.68	1.61	4.45	2.66	5.65	3.41	7.84	4.73	9.04	5.43				
72		1.88		3.02		3.80		5.16						
96		2.37		3.65		4.46		5.73						
120		2.80		4.17		4.98		6.18						
140		3.12		4.52		5.33								
180		3.63		5.04		5.81								
200		3.88		5.29		6.02								

Note:

1. Pitch line velocities exceeding 1000 feet per minute are not recommended. They should be used for interpolation purposes only.
2. Non-metallic gears are most commonly used for the driving pinion of a pair of gears, with mating gear made of cast iron or steel, where pitch line velocities exceed 1000 FPM and are not subjected to shock loads.

14½° Spur Gear Horsepower Ratings

12 D.P. — 3/4" Face

No. Teeth	100 RPM		200 RPM		300 RPM		600 RPM		900 RPM		1200 RPM		1800 RPM	
	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI
12	0.21		0.39		0.55		0.99		1.33		1.64		2.09	
18	0.38		0.71		1.01		1.73		2.28		2.70		3.32	
24	0.56		1.05		1.43		2.37		3.01		3.50		4.17	
36	0.88	0.53	1.57	0.95	2.13	1.28	3.33	2.01	4.09	2.46	4.62	2.46	5.31	3.21
48	1.16	0.70	2.02	1.22	2.70	1.62	3.99	2.41	4.76	2.88	4.76	3.19		
60	1.46	0.87	2.44	1.47	3.19	1.91	4.61	2.74	5.32	3.21				
72	1.71	1.04	2.84	1.72	3.60	2.18	5.00	3.03	5.76	3.49				
96		1.30		2.06		2.56		3.39						
120		1.54		2.37		2.90		3.68						
200		2.19		3.08		3.56								

16 D.P. — 1/2" Face

No. Teeth	100 RPM		200 RPM		300 RPM		600 RPM		900 RPM		1200 RPM		1800 RPM	
	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI
12	0.08		0.14		0.21		0.40		0.53		0.66		0.87	
18	0.14		0.27		0.39		0.70		0.94		1.14		1.44	
24	0.21		0.39		0.56		0.96		1.26		1.50		1.84	
36	0.32	0.14	0.60	0.27	0.82	0.37	1.35	0.60	1.71	0.68	1.97	0.87	2.33	1.03
48	0.45		0.82		1.10		1.72		2.11		2.39		2.75	
60		0.34		0.60		0.80		1.20		1.44		1.60		
72		0.40		0.69		0.91		1.33		1.57				
80	0.76	0.45	1.26	0.75	1.65	0.99	2.38	1.43	2.75	1.64				
120		0.63		1.00		1.25		1.68						
160		0.78		1.21		1.48		1.78						
200		0.93		1.34		1.60		1.78						

20 D.P. — 3/8" Face

No. Teeth	100 RPM		200 RPM		300 RPM		600 RPM		900 RPM		1200 RPM		1800 RPM	
	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI
12	0.05		0.07		0.10		0.19		0.27		0.33		0.46	
18	0.07		0.13		0.19		0.35		0.48		0.59		0.76	
24	0.11		0.20		0.29		0.51		0.68		0.81		1.02	
48	0.22	0.14	0.43	0.26	0.58	0.35	0.93	0.56	1.16	0.70	1.34	0.81	1.55	0.94
60	0.28		0.50		0.67		1.06		1.29		1.47		1.69	
80		0.22		0.39		0.52		0.76		0.91		1.01		
96	0.46	0.26	0.76		0.99		1.44		1.66		1.70			
120		0.32		0.53		0.66		0.92		1.06				
160		0.40		0.64		0.79		1.05		1.16				
200		0.47		0.73		0.89		1.08		1.14				

24 D.P. — 1/4" Face

No. Teeth	100 RPM		200 RPM		300 RPM		600 RPM		900 RPM		1200 RPM	
	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI
12	0.017		0.033		0.049		0.092		0.131		0.165	
18	0.030		0.060		0.090		0.170		0.230		0.290	
24	0.047		0.091		0.132		0.236		0.321		0.391	
36	0.080		0.150		0.210		0.360		0.470		0.550	
48	0.105		0.197		0.275		0.455		0.583		0.679	
60	0.130		0.240		0.330		0.530		0.670		0.760	
96	0.210		0.360		0.480		0.710		0.850		0.940	
144	0.291		0.482		0.617		0.857		0.984			

Note:

1. Pitch line velocities exceeding 1000 feet per minute are not recommended. They should be used for interpolation purposes only.
2. Non-metallic gears are most commonly used for the driving pinion of a pair of gears, with mating gear made of cast iron or steel, where pitch line velocities exceed 1000 FPM and are not subjected to shock loads.

4 DP
3½" Face

Steel Stock Spur Gears
20°Pressure Angle



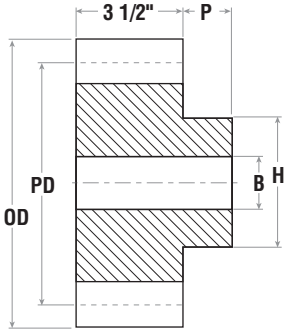
Type B
Plain with hubs



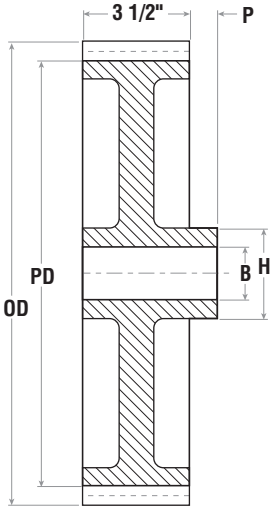
Type B_1
Web



Type B_2
Web with lighten holes



Type B



Type B_1, B_2

Steel

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
12	TS412	20	3.000	3.500	B	1 1/8	1 5/16	2 17/64	7/8	6.8
14	TS414	20	3.500	4.000	B	1 1/8	1 3/4	2 49/64	7/8	9.8
15	TS415	20	3.750	4.250	B	1 1/8	1 7/8	3 1/64	7/8	11.5
16	TS416	20	4.000	4.500	B	1 1/8	2 1/8	3 17/64	7/8	13.3
18	TS418	20	4.500	5.000	B	1 1/8	2 3/8	3 49/64	7/8	17.3
20	TS420	20	5.000	5.500	B	1 1/8	2 3/4	4 17/64	7/8	21.8
22	TS422	20	5.500	6.000	B	1 1/8	3	4 49/64	7/8	26.7
24	TS424	20	6.000	6.500	B	1 1/8	3 1/8	5	1 1/4	33.7
28	TS428	20	7.000	7.500	B	1 1/8	3 1/8	5	1 1/4	43.8
30	TS430	20	7.500	8.000	B	1 1/8	3 1/8	5	1 1/4	49.4
32	TS432	20	8.000	8.500	B	1 1/4	3 1/8	5	1 1/2	56.8
36	TS436	20	9.000	9.500	B	1 1/4	3 1/8	5	1 1/2	70.0
40	TS440	20	10.000	10.500	B	1 1/4	3 1/8	5 1/8	1 1/2	85.2
44	TS444	20	11.000	11.500	B	1 1/4	3 1/8	5 1/8	1 1/2	101.6
48	TS448	20	12.000	12.500	B	1 1/4	3 1/8	5 1/8	1 1/2	119.5
56	TS456	20	14.000	14.500	B1	1 1/4	3 1/4	5 1/2	1 1/2	96.9
60	TS460	20	15.000	15.500	B2	1 1/4	3 1/4	5 1/2	1 1/2	88.1
64	TS464	20	16.000	16.500	B2	1 1/4	3 1/4	5 1/2	1 1/2	86.9
72	TS472	20	18.000	18.500	B2	1 1/4	3 1/4	5 1/2	1 1/2	86.5
80	TS480	20	20.000	20.500	B2	1 1/4	3 1/4	5 1/2	1 1/2	90.9

* Recommended maximum bore with keyway and setscew.

20° P.A. gears will not operate with 14 1/2° P.A.

Steel Stock Spur Gears

20°Pressure Angle

5 DP

2½" Face



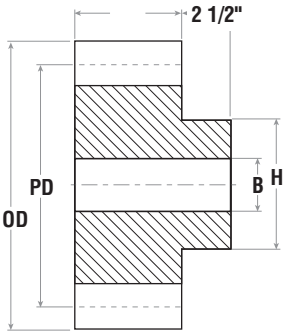
Type B

Plain with hubs

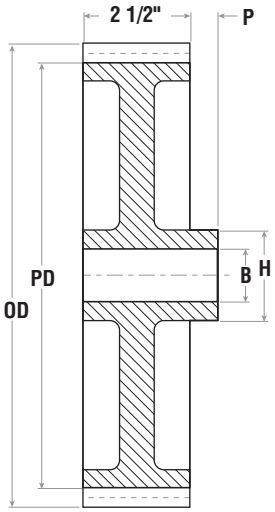


Type B_2

Web with lighten holes



Type B



Type B_2

Steel

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
12	TS512	20	2.400	2.800	B	1 1/8	1 1/8	1 25/32	7/8	2.9
14	TS514	20	2.800	3.200	B	1 1/8	1 5/16	2 3/16	7/8	4.3
15	TS515	20	3.000	3.400	B	1 1/8	1 7/16	2 3/8	7/8	5.2
16	TS516	20	3.200	3.600	B	1 1/8	1 5/8	2 19/32	7/8	6.1
18	TS518	20	3.600	4.000	B	1 1/8	1 7/8	3	7/8	8.0
20	TS520	20	4.000	4.400	B	1 1/8	2 1/4	3 3/8	7/8	10.2
24	TS524	20	4.800	5.200	B	1 1/8	2 3/8	3 3/4	1 1/4	15.7
25	TS525	20	5.000	5.400	B	1 1/8	2 3/8	3 3/4	1 1/4	20.3
28	TS528	20	5.600	6.000	B	1 1/8	2 3/8	3 3/4	1 1/4	22.9
30	TS530	20	6.000	6.400	B	1 1/8	2 3/8	3 3/4	1 1/4	23.9
35	TS535	20	7.000	7.400	B	1 1/4	2 3/8	3 3/4	1 1/4	29.9
40	TS540	20	8.000	8.400	B	1 1/4	2 3/8	3 3/4	1 1/4	38.2
45	TS545	20	9.000	9.400	B	1 1/4	2 3/8	3 3/4	1 1/4	47.7
50	TS550	20	10.000	10.400	B	1 1/4	2 13/16	4 5/8	1 1/4	60.3
60	TS560	20	12.000	12.400	B	1 1/4	2 13/16	4 5/8	1 1/4	84.7
70	TS570	20	14.000	14.400	B2	13/16	3 1/8	5 1/4	1 1/4	51.6
80	TS580	20	16.000	16.400	B2	13/16	3 1/8	5 1/4	1 1/4	55.8
90	TS590	20	18.000	18.400	B2	13/16	3 1/8	5 1/4	1 1/4	59.7
100	TS5100	20	20.000	20.400	B2	15/16	3 1/4	5 3/4	1 1/2	69.2
110	TS5110	20	22.000	22.400	B2	15/16	3 1/4	5 3/4	1 1/2	72.3
120	TS5120	20	24.000	24.400	B2	15/16	3 1/2	6 1/4	1 1/2	80.2

* Recommended maximum bore with keyway and setscew.

20° P.A. gears will not operate with 14 1/2° P.A.

6 DP
2" Face

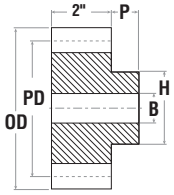
Steel Stock Spur Gears
20°Pressure Angle



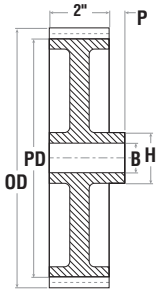
Type B
Plain with hubs



Type B_2
Web with lighten holes



Type B



Type B_2

Steel

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
11	TS611†	20	2.000	2.333	B	1	1	1 1/2	7/8	1.6
12	TS612	20	2.000	2.333	B	1	1	1 1/2	7/8	1.6
14	TS614	20	2.333	2.666	B	1	1	1 13/16	7/8	2.4
15	TS615	20	2.500	2.833	B	1	1 1/4	2	7/8	2.9
16	TS616	20	2.666	3.000	B	1	1 5/16	2 1/8	7/8	3.4
18	TS618	20	3.000	3.333	B	1	1 1/2	2 1/2	7/8	4.6
21	TS621	20	3.500	3.833	B	1	1 7/8	3	7/8	6.6
24	TS624	20	4.000	4.333	B	1 1/8	1 7/8	3	7/8	8.1
27	TS627	20	4.500	4.833	B	1 1/8	2 1/8	3 1/2	7/8	10.6
30	TS630	20	5.000	5.333	B	1 1/8	2 1/2	4	7/8	13.4
33	TS633	20	5.500	5.833	B	1 1/8	2 1/2	4	1 1/2	17.8
36	TS636	20	6.000	6.333	B	1 1/8	2 1/2	4	1 1/2	20.4
42	TS642	20	7.000	7.333	B	1 1/8	2 1/2	4	1 1/2	26.2
48	TS648	20	8.000	8.333	B	1 1/8	2 1/2	4	1 1/2	32.8
54	TS654	20	9.000	9.333	B	1 1/8	2 1/2	4	1 1/2	40.4
60	TS660	20	10.000	10.333	B	1 1/4	2 11/16	4 5/8	1 1/2	50.0
64	TS664	20	10.666	11.000	B	1 1/4	2 11/16	4 5/8	1 1/2	56.5
66	TS666	20	11.000	11.333	B	1 1/4	2 11/16	4 5/8	1 1/2	59.8
72	TS672	20	12.000	12.333	B	1 1/4	2 11/16	4 5/8	1 1/2	70.0
84	TS684	20	14.000	14.333	B2	1 1/4	2 13/16	5	1 1/2	42.8
96	TS696	20	16.000	16.333	B2	1 1/4	2 13/16	5	1 1/2	46.0
108	TS6108	20	18.000	18.333	B2	1 1/4	2 13/16	5	1 1/2	48.8
120	TS6120	20	20.000	20.333	B2	1 1/4	2 13/16	5	1 1/2	51.3

Bored-To-Size

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Setscrew	Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Keyway		Diameter	Projection	
12	TS612BS 1	20	2.000	2.333	B	1	1/4 × 1/8	(1) 1/4-20 @90	1 1/2	7/8	1.60
14	TS614BS 1	20	2.333	2.667	B	1	1/4 × 1/8	(1) 5/16-18 @90	1 13/16	7/8	2.40
14	TS614BS 1-1/8	20	2.333	2.667	B	1 1/8	1/4 × 1/8	(1) 5/16-18 @90	1 13/16	7/8	2.40
15	TS615BS 1	20	2.500	2.833	B	1	1/4 × 1/8	(1) 5/16-18 @90	2	7/8	2.90
15	TS615BS 1-1/8	20	2.500	2.833	B	1 1/8	1/4 × 1/8	(1) 5/16-18 @90	2	7/8	2.90
15	TS615BS 1-3/16	20	2.500	2.833	B	1 3/16	1/4 × 1/8	(1) 5/16-18 @90	2	7/8	2.90
15	TS615BS 1-1/4	20	2.500	2.833	B	1 1/4	1/4 × 1/8	(1) 5/16-18 @90	2	7/8	2.90
16	TS616BS 1	20	2.667	3.000	B	1	1/4 × 1/8	(1) 5/16-18 @90	2 1/8	7/8	3.40
16	TS616BS 1-1/8	20	2.667	3.000	B	1 1/8	1/4 × 1/8	(1) 5/16-18 @90	2 1/8	7/8	3.40
16	TS616BS 1-3/16	20	2.667	3.000	B	1 3/16	1/4 × 1/8	(1) 5/16-18 @90	2 1/8	7/8	3.40
16	TS616BS 1-1/4	20	2.667	3.000	B	1 1/4	1/4 × 1/8	(1) 5/16-18 @90	2 1/8	7/8	3.40
18	TS618BS 1	20	3.000	3.333	B	1	1/4 × 1/8	(1) 5/16-18 @90	2 1/2	7/8	4.60
18	TS618BS 1-1/8	20	3.000	3.333	B	1 1/8	1/4 × 1/8	(1) 5/16-18 @90	2 1/2	7/8	4.60
18	TS618BS 1-3/16	20	3.000	3.333	B	1 3/16	1/4 × 1/8	(1) 5/16-18 @90	2 1/2	7/8	4.60
18	TS618BS 1-1/4	20	3.000	3.333	B	1 1/4	1/4 × 1/8	(1) 5/16-18 @90	3	7/8	4.60
21	TS621BS 1	20	3.500	3.833	B	1	1/4 × 1/8	(1) 5/16-18 @90	3	7/8	6.60
21	TS621BS 1-1/8	20	3.500	3.833	B	1 1/8	1/4 × 1/8	(1) 5/16-18 @90	3	7/8	6.60
21	TS621BS 1-3/16	20	3.500	3.833	B	1 3/16	1/4 × 1/8	(1) 5/16-18 @90	3	7/8	6.60
21	TS621BS 1-1/4	20	3.500	3.833	B	1 1/4	1/4 × 1/8	(1) 5/16-18 @90	3	7/8	6.60

20° P.A. gears will not operate with 14 1/2° P.A.

* Recommended maximum bore with keyway and setscew.

Steel & Cast Stock Spur Gears

20°Pressure Angle

8 DP

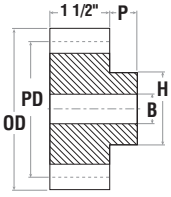
1½" Face



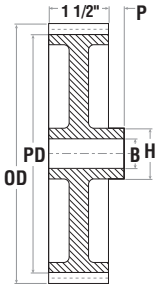
Type B
Plain with hubs



Type B_3
Spoke style



Type B



Type B_3

Steel

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
12	TS812	20	1.500	1.750	B	3/4	3/4	1 1/8	3/4	0.7
14	TS814	20	1.750	2.000	B	3/4	13/16	1 5/16	3/4	1.0
15	TS815	20	1.875	2.125	B	3/4	7/8	1 7/16	3/4	1.2
16	TS816	20	2.000	2.250	B	7/8	15/16	1 9/16	7/8	1.4
18	TS818	20	2.250	2.500	B	7/8	1 1/8	1 13/16	7/8	1.9
19	TS819	20	2.375	2.625	B	7/8	1 1/4	2	7/8	2.3
20	TS820	20	2.500	2.750	B	7/8	1 5/16	2 1/16	7/8	2.5
22	TS822	20	2.750	3.000	B	7/8	1 1/2	2 5/16	7/8	3.2
24	TS824	20	3.000	3.250	B	7/8	1 5/8	2 9/16	7/8	3.9
26	TS826	20	3.250	3.500	B	7/8	1 3/4	2 3/4	7/8	4.6
28	TS828	20	3.500	3.750	B	7/8	1 3/4	2 3/4	7/8	5.2
30	TS830	20	3.750	4.000	B	1	1 3/4	2 3/4	7/8	5.6
32	TS832	20	4.000	4.250	B	1	1 7/8	3 1/4	7/8	6.6
36	TS836	20	4.500	4.750	B	1	2 1/8	3 1/2	7/8	8.6
40	TS840	20	5.000	5.250	B	1	2 1/8	3 1/2	7/8	10.2
42	TS842	20	5.250	5.500	B	1	2 1/8	3 1/2	1	11.4
44	TS844	20	5.500	5.750	B	1	2 1/8	3 1/2	1	12.3
48	TS848	20	6.000	6.250	B	1	2 1/8	3 1/2	1	14.2

Cast

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
52	TC852	20	6.500	6.750	B	1	1 7/8	3	1	11.9
56	TC856	20	7.000	7.250	B	1	1 7/8	3	1	13.0
60	TC860	20	7.500	7.750	B2	1	1 7/8	3	1	12.0
64	TC864	20	8.000	8.250	B3	1	1 7/8	3	1	12.1
72	TC872	20	9.000	9.250	B3	1	2 1/16	3 1/4	1	14.4
80	TC880	20	10.000	10.250	B3	1 1/8	2 1/16	3 1/4	1 1/4	17.0
88	TC888	20	11.000	11.250	B3	1 1/8	2 1/16	3 1/4	1 1/4	19.0
96	TC896	20	12.000	12.250	B3	1 1/8	2 1/8	3 1/2	1 1/4	23.7
112	TC8112	20	14.000	14.250	B3	1 1/8	2 1/8	3 1/2	1 1/4	25.0
120	TC8120	20	15.000	15.250	B3	1 1/8	2 1/8	3 1/2	1 1/4	25.8
128	TC8128	20	16.000	16.250	B3	1 1/8	2 1/8	3 1/2	1 1/4	28.0
144	TC8144	20	18.000	18.250	B3	1 1/8	2 1/4	3 3/4	1 1/4	32.0
160	TC8160	20	20.000	20.250	B3	1 1/4	2 1/4	3 3/4	1 1/2	34.8

Bored-To-Size

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Setscrew	Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Keyway		Diameter	Projection	
12	TS812BS 3/4	20	1.500	1.750	B	3/4	3/16 × 3/32	(1) 10-24 @ 90	1 1/8	3/4	0.70
14	TS814BS 3/4	20	1.750	2.000	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 5/16	3/4	1.00
15	TS815BS 3/4	20	1.875	2.125	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 7/16	3/4	1.20
15	TS815BS 7/8	20	1.875	2.125	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 7/16	3/4	1.20
16	TS816BS 7/8	20	2.000	2.250	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 9/16	7/8	1.40
16	TS816BS 1	20	2.000	2.250	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	1 9/16	7/8	1.40
18	TS818BS 7/8	20	2.250	2.500	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 13/16	7/8	1.90
18	TS818BS 1	20	2.250	2.500	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	1 13/16	7/8	1.90
18	TS818BS 1-1/8	20	2.250	2.500	B	1 1/8	1/4 × 1/8	(1) 5/16-18 @ 90	1 13/16	7/8	1.90
20	TS820BS 7/8	20	2.500	2.750	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	2 1/16	7/8	2.50
20	TS820BS 1	20	2.500	2.750	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	2 1/16	7/8	2.50
20	TS820BS 1-1/8	20	2.500	2.750	B	1 1/8	1/4 × 1/8	(1) 5/16-18 @ 90	2 1/16	7/8	2.50
22	TS822BS 7/8	20	2.750	3.000	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	2 5/16	7/8	3.20
22	TS822BS 1	20	2.750	3.000	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	2 5/16	7/8	3.20
22	TS822BS 1-1/8	20	2.750	3.000	B	1 1/8	1/4 × 1/8	(1) 5/16-18 @ 90	2 5/16	7/8	3.20
24	TS824BS 7/8	20	3.000	3.250	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	2 9/16	7/8	3.90
24	TS824BS 1	20	3.000	3.250	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	2 9/16	7/8	3.90
24	TS824BS 1-1/8	20	3.000	3.250	B	1 1/8	1/4 × 1/8	(1) 5/16-18 @ 90	2 9/16	7/8	3.90

20° P.A. gears will not operate with 14 1/2° P.A.

* Recommended maximum bore with keyway and setscew.

10 DP
1¼" Face

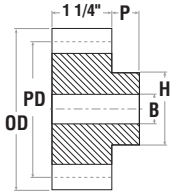
Steel & Cast Stock Spur Gears
20°Pressure Angle



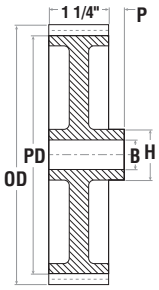
Type B
Plain with hubs



Type B_3
Spoke style



Type B



Type B_3

Steel

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
12	TS1012	20	1.200	1.400	B	5/8	5/8	29/32	5/8	0.4
14	TS1014	20	1.400	1.600	B	5/8	5/8	1 7/64	5/8	0.6
15	TS1015	20	1.500	1.700	B	3/4	3/4	1 7/32	5/8	0.6
16	TS1016	20	1.600	1.800	B	3/4	3/4	1 5/16	5/8	0.7
18	TS1018	20	1.800	2.000	B	3/4	13/16	1 11/32	5/8	0.9
20	TS1020	20	2.000	2.200	B	7/8	7/8	1 39/64	5/8	1.2
22	TS1022	20	2.200	2.400	B	7/8	1 1/16	1 13/16	5/8	1.5
24	TS1024	20	2.400	2.600	B	7/8	1 3/16	2 1/64	5/8	1.8
25	TS1025	20	2.500	2.700	B	7/8	1 1/4	2 7/64	5/8	2.0
26	TS1026	20	2.600	2.800	B	7/8	1 1/4	2 1/8	5/8	2.2
28	TS1028	20	2.800	3.000	B	7/8	1 5/16	2 13/32	5/8	2.7
30	TS1030	20	3.000	3.200	B	7/8	1 3/8	2 1/2	7/8	3.4
32	TS1032	20	3.200	3.400	B	7/8	1 3/8	2 1/2	7/8	3.7
35	TS1035	20	3.500	3.700	B	1	1 3/8	2 1/2	7/8	4.2
36	TS1036	20	3.600	3.800	B	1	1 3/8	2 1/2	7/8	4.3
40	TS1040	20	4.000	4.200	B	1	2 1/8	3 1/2	7/8	6.4
45	TS1045	20	4.500	4.700	B	1	2 1/8	3 1/2	7/8	7.5
48	TS1048	20	4.800	5.000	B	1	2 3/8	3 3/4	7/8	8.7
50	TS1050	20	5.000	5.200	B	1	2 1/2	4	7/8	9.6
55	TS1055	20	5.500	5.700	B	1	2 1/2	4	1	11.5
60	TS1060	20	6.000	6.200	B	1	2 1/2	4	1	13.1

Cast

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
70	TC1070	20	7.000	7.200	B3	1	1 11/16	2 3/4	1	8.2
80	TC1080	20	8.000	8.200	B3	1	1 11/16	2 3/4	1	11.2
90	TC1090	20	9.000	9.200	B3	1	1 13/16	3	1	11.7
100	TC10100	20	10.000	10.200	B3	1 1/8	1 13/16	3	1 1/8	12.2

Bored-To-Size

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Setscrew	Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Keyway		Diameter	Projection	
12	TS1012BS 5/8	20	1.200	1.400	B	5/8	3/16 × 3/32	(1) 10-24 @ 90	29/32	5/8	0.40
14	TS1014BS 5/8	20	1.400	1.600	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 7/64	5/8	0.60
15	TS1015BS 3/4	20	1.500	1.700	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 7/32	5/8	0.60
16	TS1016BS 3/4	20	1.600	1.800	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 5/16	5/8	0.70
18	TS1018BS 3/4	20	1.800	2.000	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 11/32	5/8	0.88
18	TS1018BS 7/8	20	1.800	2.000	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 11/32	5/8	0.90
20	TS1020BS 7/8	20	2.000	2.200	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 39/64	5/8	1.20
20	TS1020BS 1	20	2.000	2.200	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	1 39/64	5/8	1.20
24	TS1024BS 7/8	20	2.400	2.600	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 13/16	5/8	1.50
24	TS1024BS 1	20	2.400	2.600	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	1 13/16	5/8	1.50
25	TS1025BS 7/8	20	2.500	2.700	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	2 7/64	5/8	2.00
25	TS1025BS 1	20	2.500	2.700	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	2 7/64	5/8	2.00
28	TS1028BS 7/8	20	2.800	3.000	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	2 13/32	5/8	2.70
28	TS1028BS 1	20	2.800	3.000	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	2 13/32	5/8	2.70

20° P.A. gears will not operate with 14 1/2° P.A.

* Recommended maximum bore with keyway and setscew.

Steel& Cast Stock Spur Gears

20°Pressure Angle

12 DP

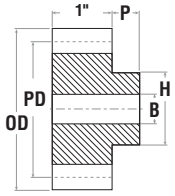
1" Face



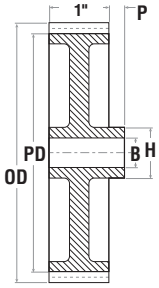
Type B
Plain with hubs



Type B_3
Spoke style



Type B



Type B_3

Steel

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
12	TS1212	20	1.000	1.167	B	1/2	1/2	3/4	5/8	0.21
13	TS1213	20	1.083	1.250	B	5/8	5/8	13/16	5/8	0.21
14	TS1214	20	1.167	1.333	B	5/8	5/8	29/32	5/8	0.28
15	TS1215	20	1.250	1.417	B	5/8	5/8	63/64	5/8	0.34
16	TS1216	20	1.333	1.500	B	5/8	5/8	1 1/16	5/8	0.41
18	TS1218	20	1.500	1.667	B	3/4	3/4	1 1/4	5/8	0.51
19	TS1219	20	1.583	1.750	B	3/4	3/4	1 5/16	5/8	0.59
20	TS1220	20	1.667	1.833	B	3/4	3/4	1 5/16	5/8	0.65
21	TS1221	20	1.750	1.917	B	3/4	13/16	1 25/64	5/8	0.75
22	TS1222	20	1.833	2.000	B	3/4	7/8	1 9/16	5/8	0.88
24	TS1224	20	2.000	2.166	B	3/4	15/16	1 41/64	5/8	1.06
25	TS1225	20	2.083	2.250	B	3/4	1 1/16	1 13/16	5/8	1.22
26	TS1226	20	2.167	2.333	B	3/4	1 1/8	1 7/8	5/8	1.33
28	TS1228	20	2.333	2.500	B	3/4	1 1/4	2 1/16	5/8	1.60
30	TS1230	20	2.500	2.667	B	3/4	1 5/16	2 5/32	5/8	1.83
32	TS1232	20	2.667	2.833	B	3/4	1 5/16	2 1/4	5/8	2.08
36	TS1236	20	3.000	3.167	B	3/4	1 3/8	2 1/2	7/8	2.98
42	TS1242	20	3.500	3.666	B	3/4	1 3/8	2 1/2	7/8	3.71
48	TS1248	20	4.000	4.166	B	7/8	1 7/8	3	7/8	4.99
54	TS1254	20	4.500	4.666	B	7/8	2 1/8	3 1/2	7/8	6.57
60	TS1260	20	5.000	5.166	B	7/8	2 1/8	3 1/2	7/8	7.63
66	TS1266	20	5.500	5.666	B	7/8	2 1/8	3 1/2	7/8	8.80
72	TS1272	20	6.000	6.166	B	7/8	2 1/8	3 1/2	7/8	10.08

Cast

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
84	TC1284	20	7.000	7.166	B3	7/8	1 7/16	2 1/2	7/8	5.9
96	TC1296	20	8.000	8.166	B3	7/8	1 7/16	2 1/2	7/8	7.0
108	TC12108	20	9.000	9.166	B3	7/8	1 7/16	2 1/2	7/8	7.6
120	TC12120	20	10.000	10.166	B3	1	1 7/16	2 1/2	7/8	10.3
144	TC12144	20	12.000	12.166	B3	1	1 11/16	2 3/4	1	10.4

Bored-To-Size

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Setscrew	Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*		Diameter	Projection	
12	TS1212BS 1/2	20	1.000	1.167	B	1/2	NONE	(1) 10-24	3/4	5/8	0.21
13	TS1213BS 5/8	20	1.083	1.250	B	5/8	NONE	(1) 1/4-20 @ 90	13/16	5/8	0.21
14	TS1214BS 5/8	20	1.167	1.333	B	5/8	3/16 × 3/32	(1) 10-24 @ 90	29/32	5/8	0.28
15	TS1215BS 5/8	20	1.250	1.417	B	5/8	3/16 × 3/32	(1) 10-24 @ 90	63/64	5/8	0.34
16	TS1216BS 5/8	20	1.333	1.500	B	5/8	3/16 × 3/32	(1)1/4-20 @ 90	1 1/16	5/8	0.41
18	TS1218BS 3/4	20	1.500	1.667	B	3/4	3/16 × 3/32	(1)1/4-20 @ 90	1 1/4	5/8	0.51
20	TS1220BS 3/4	20	1.667	1.833	B	3/4	3/16 × 3/32	(1)1/4-20 @ 90	1 5/16	5/8	0.65
21	TS1221BS 3/4	20	1.750	1.917	B	3/4	3/16 × 3/32	(1)1/4-20 @ 90	1 25/64	5/8	0.75
21	TS1221BS 7/8	20	1.750	1.917	B	7/8	3/16 × 3/32	(1)1/4-20 @ 90	1 25/64	5/8	0.75
24	TS1224BS 3/4	20	2.000	2.167	B	3/4	3/16 × 3/32	(1)1/4-20 @ 90	1 41/64	5/8	1.06
24	TS1224BS 7/8	20	2.000	2.167	B	7/8	3/16 × 3/32	(1)1/4-20 @ 90	1 41/64	5/8	1.06
24	TS1224BS 1	20	2.000	2.167	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	1 41/64	5/8	1.06
28	TS1228BS 3/4	20	2.333	2.500	B	3/4	3/16 × 3/32	(1)1/4-20 @ 90	2 1/16	5/8	1.60
28	TS1228BS 7/8	20	2.333	2.500	B	7/8	3/16 × 3/32	(1)1/4-20 @ 90	2 1/16	5/8	1.60
28	TS1228BS 1	20	2.333	2.500	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	2 1/16	5/8	1.60

20° P.A. gears will not operate with 14 1/2° P.A.

* Recommended maximum bore with keyway and setscew.

16 DP
¾" Face

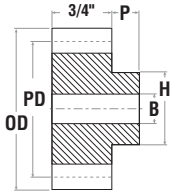
Steel & Cast Stock Spur Gears
20°Pressure Angle



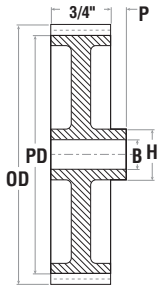
Type B
Plain with hubs



Type B_3
Spoke style



Type B



Type B_3

Steel

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
12	TS1612	20	0.750	0.875	B	3/8	3/8	9/16	1/2	0.09
13	TS1613	20	0.812	0.938	B	3/8	3/8	5/8	1/2	0.11
14	TS1614	20	0.875	1.000	B	3/8	3/8	11/16	1/2	0.14
15	TS1615	20	0.937	1.063	B	3/8	1/2	3/4	1/2	0.17
16	TS1616	20	1.000	1.125	B	1/2	1/2	13/16	1/2	0.17
17	TS1617	20	1.062	1.188	B	1/2	1/2	7/8	1/2	0.20
18	TS1618	20	1.125	1.250	B	1/2	1/2	15/16	1/2	0.24
20	TS1620	20	1.250	1.375	B	5/8	5/8	11/16	1/2	0.28
21	TS1621	20	1.312	1.438	B	5/8	5/8	11/8	1/2	0.32
22	TS1622	20	1.375	1.500	B	5/8	5/8	13/16	1/2	0.36
24	TS1624	20	1.500	1.625	B	5/8	3/4	15/16	1/2	0.46
26	TS1626	20	1.625	1.750	B	5/8	7/8	1 7/16	1/2	0.56
28	TS1628	20	1.750	1.875	B	5/8	7/8	1 1/2	1/2	0.65
30	TS1630	20	1.875	2.000	B	5/8	15/16	1 5/8	1/2	0.77
32	TS1632	20	2.000	2.125	B	5/8	1	1 3/4	1/2	0.90
36	TS1636	20	2.250	2.375	B	5/8	1 1/4	2	1/2	1.18
40	TS1640	20	2.500	2.625	B	5/8	1 1/4	2	5/8	1.48
48	TS1648	20	3.000	3.125	B	5/8	1 1/4	2	5/8	1.94
56	TS1656	20	3.500	3.625	B	5/8	1 3/8	2 1/2	5/8	2.79
60	TS1660	20	3.750	3.875	B	5/8	1 1/2	2 3/4	5/8	3.28
64	TS1664	20	4.000	4.125	B	3/4	1 1/2	2 3/4	3/4	3.74
72	TS1672	20	4.500	4.625	B	3/4	1 7/8	3	3/4	4.69
80	TS1680	20	5.000	5.125	B	3/4	2 1/8	3 1/2	3/4	6.03
84	TS1684	20	5.250	5.375	B	3/4	2 1/8	3 1/2	3/4	6.46
96	TS1696	20	6.000	6.125	B	3/4	2 1/8	3 1/2	3/4	7.86

Cast

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
112	TC16112	20	7.000	7.125	B3	3/4	1 7/16	2 1/2	3/4	4.4
128	TC16128	20	8.000	8.125	B3	3/4	1 11/16	2 3/4	3/4	5.5
144	TC16144	20	9.000	9.125	B3	3/4	1 11/16	2 3/4	3/4	6.4
160	TC16160	20	10.000	10.125	B3	7/8	1 11/16	2 3/4	3/4	8.1
192	TC16192	20	12.000	12.125	B3	7/8	1 13/16	3	1	10.1

Bored-To-Size

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Setscrew	Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*		Diameter	Projection	
12	TS1612BS 3/8	20	0.750	0.875	B	3/8	NONE	(1) 8-32	9/16	1/2	0.09
14	TS1614BS 3/8	20	0.875	1.000	B	3/8	NONE	(1) 10-24	11/16	1/2	0.14
15	TS1615BS 3/8	20	0.937	1.063	B	3/8	NONE	(1) 10-24	3/4	1/2	0.17
15	TS1615BS 1/2	20	0.937	1.063	B	1/2	NONE	(1) 10-24	3/4	1/2	0.17
16	TS1616BS 1/2	20	1.000	1.125	B	1/2	NONE	(1) 10-24	13/16	1/2	0.17
18	TS1618BS 1/2	20	1.125	1.250	B	1/2	NONE	(1) 1/4-20	15/16	1/2	0.24
20	TS1620BS 5/8	20	1.250	1.375	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 1/16	1/2	0.28
24	TS1624BS 5/8	20	1.500	1.625	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 5/16	1/2	0.46
24	TS1624BS 3/4	20	1.500	1.625	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 5/16	1/2	0.46
28	TS1628BS 5/8	20	1.750	1.875	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 1/2	1/2	0.65
28	TS1628BS 3/4	20	1.750	1.875	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 1/2	1/2	0.65
30	TS1630BS 5/8	20	1.875	2.000	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 5/8	1/2	0.77
30	TS1630BS 3/4	20	1.875	2.000	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 5/8	1/2	0.77
30	TS1630BS 7/8	20	1.875	2.000	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 5/8	1/2	0.77
32	TS1632BS 5/8	20	2.000	2.125	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 3/4	1/2	0.90
32	TS1632BS 3/4	20	2.000	2.125	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 3/4	1/2	0.90
32	TS1632BS 7/8	20	2.000	2.125	B	7/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 3/4	1/2	0.90
32	TS1632BS 1	20	2.000	2.125	B	1	1/4 × 1/8	(1) 5/16-18 @ 90	1 3/4	1/2	0.90

20° P.A. gears will not operate with 14 1/2° P.A.

* Recommended maximum bore with keyway and setscew.

Steel Stock Spur Gears

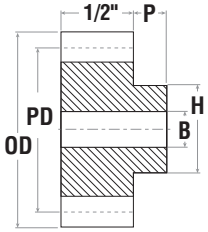
20°Pressure Angle

20 DP

½" Face



Type B
Plain with hubs



Type B

Steel

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Max.*	Diameter	Projection	
12	TS2012	20	0.600	0.700	B	5/16	5/16	15/32	7/16	0.04
14	TS2014	20	0.700	0.800	B	5/16	5/16	35/64	7/16	0.06
15	TS2015	20	0.750	0.850	B	3/8	3/8	39/64	7/16	0.07
16	TS2016	20	0.800	0.900	B	3/8	3/8	21/32	7/16	0.08
18	TS2018	20	0.900	1.000	B	3/8	3/8	3/4	7/16	0.12
20	TS2020	20	1.000	1.100	B	1/2	1/2	55/64	7/16	0.13
21	TS2021	20	1.050	1.150	B	1/2	1/2	7/8	7/16	0.15
22	TS2022	20	1.100	1.200	B	1/2	1/2	31/32	7/16	0.17
24	TS2024	20	1.200	1.300	B	1/2	9/16	1 1/16	7/16	0.22
25	TS2025	20	1.250	1.350	B	1/2	5/8	1 7/64	7/16	0.24
28	TS2028	20	1.400	1.500	B	1/2	11/16	1 17/64	7/16	0.32
30	TS2030	20	1.500	1.600	B	1/2	13/16	1 23/64	7/16	0.38
32	TS2032	20	1.600	1.700	B	1/2	7/8	1 7/16	1/2	0.46
35	TS2035	20	1.750	1.850	B	1/2	7/8	1 9/16	1/2	0.56
36	TS2036	20	1.800	1.900	B	1/2	15/16	1 5/8	1/2	0.60
40	TS2040	20	2.000	2.100	B	1/2	1 1/16	1 13/16	1/2	0.76
45	TS2045	20	2.250	2.350	B	1/2	1 1/4	2	1/2	0.95
50	TS2050	20	2.500	2.600	B	1/2	1 1/4	2	1/2	1.08
60	TS2060	20	3.000	3.100	B	1/2	1 5/16	2 1/8	1/2	1.45
70	TS2070	20	3.500	3.600	B	1/2	1 7/16	2 3/8	1/2	1.93
72	TS2072	20	3.600	3.700	B	1/2	1 7/16	2 3/8	1/2	2.01
80	TS2080	20	4.000	4.100	B	5/8	1 1/2	2 1/2	5/8	2.35
84	TS2084	20	4.200	4.300	B	5/8	1 1/2	2 1/2	5/8	2.53
90	TS2090	20	4.500	4.600	B	5/8	1 1/2	2 1/2	5/8	2.82
96	TS2096	20	4.800	4.900	B	5/8	1 1/2	2 1/2	5/8	3.14
100	TS20100	20	5.000	5.100	B	5/8	1 1/2	2 1/2	5/8	3.35
120	TS20120	20	6.000	6.100	B	5/8	1 1/2	2 1/2	5/8	4.58

Bored-To-Size

No. Teeth	Part Number	Pressure Angle	Diameter		Type	Bore (Inches)		Setscrew	Hub (Inches)		Weight Lb. (Approx.)
			Pitch	Outside		Stock	Keyway		Diameter	Projection	
12	TS2012BS 5/16	20	0.600	0.700	B	5/16	NONE	#35 P.H.	15/32	7/16	0.04
14	TS2014BS 5/16	20	0.700	0.800	B	5/16	NONE	#35 P.H.	35/64	7/16	0.06
15	TS2015BS 3/8	20	0.750	0.850	B	3/8	NONE	(1) 8-32	39/64	7/16	0.07
16	TS2016BS 3/8	20	0.800	0.900	B	3/8	NONE	(1) 8-32	21/32	7/16	0.08
18	TS2018BS 3/8	20	0.900	1.000	B	3/8	NONE	(1) 10-24	3/4	7/16	0.12
20	TS2020BS 1/2	20	1.000	1.100	B	1/2	NONE	(1) 10-24	55/64	7/16	0.13
24	TS2024BS 1/2	20	1.200	1.300	B	1/2	NONE	(1) 1/4-20	1 1/16	7/16	0.22
25	TS2025BS 1/2	20	1.250	1.350	B	1/2	NONE	(1) 1/4-20	1 7/64	7/16	0.24
30	TS2030BS 1/2	20	1.500	1.600	B	1/2	NONE	(1) 1/4-20	1 23/64	7/16	0.38
35	TS2035BS 1/2	20	1.750	1.850	B	1/2	NONE	(1) 1/4-20	1 9/16	1/2	0.56
40	TS2040BS 1/2	20	2.000	2.100	B	1/2	NONE	(1) 1/4-20	1 13/16	1/2	0.76
40	TS2040BS 5/8	20	2.000	2.100	B	5/8	3/16 × 3/32	(1) 1/4-20 @ 90	1 13/16	1/2	0.76
40	TS2040BS 3/4	20	2.000	2.100	B	3/4	3/16 × 3/32	(1) 1/4-20 @ 90	1 13/16	1/2	0.76

20° P.A. gears will not operate with 14 1/2° P.A.

* Recommended maximum bore with keyway and setscew.

20° Horsepower Ratings (Approximate)

For Class I Service (Service Factor = 1.0)

4 Diametral Pitch **20° Pressure Angle** **3 1/2" Face**

No. Teeth	25 RPM		50 RPM		100 RPM		200 RPM		300 RPM		500 RPM		600 RPM		900 RPM		1200 RPM	
	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI
11	2.62		5.09		9.64		17.41		23.81		33.72		37.64		46.69		53.06	
12 •	3.10		6.02		11.40		20.59		28.15		39.88		44.52		55.21		62.75	
13	3.62		7.03		13.30		24.03		32.86		46.55		51.97		64.45		73.25	
14 •	4.07		7.91		14.98		27.06		37.00		52.41		58.51		72.57		82.48	
15 •	4.57		8.88		16.80		30.35		41.51		58.80		65.64		81.41		92.53	
16 •	4.97		9.67		18.30		33.05		45.20		64.03		71.47		88.64		100.75	
17	5.41		10.51		19.90		35.95		49.16		69.64		77.74		96.42			
18 •	5.84		11.35		21.49		38.82		53.09		75.20		83.95		104.12			
19	6.29		12.22		23.13		41.77		57.13		80.93		90.33		112.04			
20 •	6.74		13.11		24.81		44.81		61.29		86.81		96.91					
21	7.19		13.98		26.46		47.79		65.36		92.58		103.34					
22 •	7.65		14.87		28.14		50.83		69.52		98.48		109.93					
24 •	8.52		16.56		31.35		56.63		77.45		109.71		122.47					
25	8.96		17.41		32.95		59.52		81.39		115.30		128.70					
26	9.43		18.32		34.67		62.63		85.65		121.32		135.43					
27	9.90		19.24		36.42		65.79		89.97		127.45		142.27					
28 •	10.39		20.18		38.21		69.01		94.38		133.69		149.24					
30 •	11.32		22.00		41.63		75.20		102.84		145.69							
32 •	12.27		23.85		45.15		81.56		111.54		158.00							
33	12.76		24.80		46.95		84.80		115.97		164.28							
35	13.79		26.81		50.74		91.66		125.35		177.56							
36 •	14.30		27.79		52.61		95.03		129.96		184.10							
40 •	16.40		31.87		60.32		108.95		149.00									
42	17.39		33.80		63.98		115.58		158.06									
44 •	18.41		35.77		67.71		122.31		167.27									
45	18.92		36.77		69.60		125.72		171.93									
48 •	20.54		39.91		75.54		136.46		186.61									
50	21.50		41.78		79.08		142.84		195.35									
52	22.52		43.77		82.85		149.65		204.66									
54	23.56		45.78		86.66		156.54		214.08									
55	24.00		46.63		88.26		159.44		218.04									
56 •	24.49		47.59		90.09		162.73											
60 •	26.62		51.73		97.92		176.87											
64 •	28.60		55.57		105.19		190.01											
66	29.63		57.58		108.99		196.87											
70	31.65		61.50		116.41		210.27											
72 •	32.55		63.26		119.73		216.28											
80 •	36.76		71.43		135.21		244.23											
84	38.86		75.52		142.94		258.21											
88	40.80		79.30		150.09													
90	41.83		81.28		153.85													
96	44.92		87.29		165.23													
100	46.90		91.13		172.50													
108	50.87		98.87		187.14													
110	51.93		100.92		191.03													
112	52.88		102.76		194.50													
120	57.03		110.84		209.79													
144	54.18		105.28		199.28													
160	77.39		150.40		284.68													
200	97.58		189.64		358.95													

ALL STEEL

Ratings are based on strength calculation.

• Designates stock sizes for this pitch.

Note: 1. Pitch line velocities exceeding 1000 feet per minute are not recommended. They should be used for interpolation purposes only.

2. Non-metallic gears are most commonly used for the driving pinion of a pair of gears, with mating gear made of cast iron or steel, where pitch line velocities exceed 1000 FPM and are not subjected to shock loads.

20° Horsepower Ratings (Approximate)

For Class I Service (Service Factor = 1.0)

5 Diametral Pitch — **20° Pressure Angle** — **2 1/2" Face**

No. Teeth	25 RPM		50 RPM		100 RPM		200 RPM		300 RPM		500 RPM		600 RPM		900 RPM		1200 RPM		1800 RPM	
	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI
11 •	1.20		2.35		4.50		8.28		11.49		16.67		18.78		23.82		27.50		32.54	
12	1.42		2.78		5.32		9.79		13.59		19.71		22.21		28.17		32.53			
13 •	1.66		3.25		6.21		11.43		15.86		23.01		25.93		32.88		37.97			
14 •	1.87		3.66		7.00		12.87		17.86		25.90		29.19		37.02		42.75			
15 •	2.10		4.10		7.85		14.44		20.04		29.06		32.75		41.53		47.96			
16	2.29		4.47		8.55		15.72		21.82		31.64		35.66		45.22		52.22			
17 •	2.49		4.86		9.30		17.10		23.73		34.42		38.79		49.19		56.80			
18	2.69		5.25		10.04		18.46		25.63		37.17		41.88		53.11		61.34			
19 •	2.89		5.65		10.80		19.87		27.58		40.00		45.07		57.16		66.01			
20	3.10		6.06		11.59		21.31		29.58		42.91		48.35		61.31					
21	3.31		6.46		12.36		22.73		31.55		45.76		51.56		65.39					
22 •	3.52		6.87		13.15		24.18		33.56		48.67		54.85		69.55					
24 •	3.92		7.66		14.65		26.93		37.39		54.22		61.10		77.49					
25	4.12		8.05		15.39		28.30		39.29		56.98		64.21		81.43					
26	4.33		8.47		16.20		29.78		41.34		59.96		67.57							
27 •	4.55		8.90		17.02		31.29		43.43		62.99		70.98							
28 •	4.78		9.33		17.85		32.82		45.56		66.08		74.46							
30	5.20		10.17		19.45		35.76		49.64		72.00		81.14							
32	5.64		11.03		21.09		38.79		53.84		78.09		88.00							
33 •	5.87		11.47		21.93		40.33		55.98		81.19		91.49							
35	6.34		12.40		23.70		43.59		60.51		87.76		98.89							
36 •	6.58		12.85		24.58		45.19		62.73		90.99									
40	7.54		14.73		28.18		51.81		71.92		104.32									
42	8.00		15.63		29.89		54.96		76.30		110.66									
44 •	8.46		16.54		31.63		58.17		80.74		117.11									
45	8.70		17.00		32.51		59.79		82.99											
48 •	9.44		18.45		35.29		64.89		90.08											
50	9.89		19.32		36.94		67.93		94.30											
52	10.36		20.24		38.70		71.17		98.79											
54	10.83		21.17		40.48		74.44		103.34											
55	11.03		21.56		41.23		75.82		105.25											
56 •	11.26		22.01		42.08		77.39		107.42											
60	12.24		23.92		45.74		84.11		116.76											
64	13.15		25.70		49.14		90.36		125.43											
66 •	13.62		26.62		50.91		93.62		129.96											
70	14.55		28.44		54.38		100.00		138.81											
72 •	14.97		29.25		55.93		102.85													
80	16.90		33.03		63.16		116.15													
84	17.87		34.92		66.78		122.79													
88 •	18.76		36.67		70.12		128.93													
90	19.23		37.58		71.87		132.16													
96 •	20.65		40.36		77.19		141.93													
100	21.56		42.14		80.58															
108 •	23.39		45.71		87.42															
110	23.88		46.67		89.24															
112 •	24.31		47.51																	
120	26.23		51.25																	
144	24.91		48.68																	
160	35.59		69.54																	
200	44.87		87.69																	

ALL STEEL

Ratings are based on strength calculation.

• Designates stock sizes for this pitch.

Note: 1. Pitch line velocities exceeding 1000 feet per minute are not recommended. They should be used for interpolation purposes only.

2. Non-metallic gears are most commonly used for the driving pinion of a pair of gears, with mating gear made of cast iron or steel, where pitch line velocities exceed 1000 FPM and are not subjected to shock loads.

20° Horsepower Ratings (Approximate)

For Class I Service (Service Factor = 1.0)

6 Diametral Pitch **20° Pressure Angle** **2" Face**

No. Teeth	25 RPM		50 RPM		100 RPM		200 RPM		300 RPM		500 RPM		600 RPM		900 RPM		1200 RPM		1800 RPM	
	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI
11 •	0.67		1.32		2.54		4.73		6.63		9.79		11.11		14.34		16.78		20.21	
12 •	0.79		1.56		3.00		5.59		7.84		11.58		13.14		16.96		19.84		23.91	
13	0.93		1.82		3.50		6.52		9.15		13.51		15.34		19.80		23.16		27.91	
14 •	1.04		2.05		3.94		7.35		10.31		15.21		17.27		22.29		26.08		31.42	
15 •	1.17		2.30		4.43		8.24		11.56		17.07		19.37		25.01		29.26		35.25	
16 •	1.28		2.50		4.82		8.97		12.59		18.58		21.10		27.23		31.85		38.38	
17	1.39		2.72		5.24		9.76		13.69		20.21		22.95		29.61		34.65			
18 •	1.50		2.94		5.66		10.54		14.79		21.83		24.78		31.98		37.42			
19	1.61		3.16		6.09		11.34		15.91		23.49		26.66		34.41		40.26			
20	1.73		3.39		6.53		12.17		17.07		25.20		28.60		36.92		43.19			
21 •	1.84		3.62		6.97		12.97		18.21		26.87		30.50		39.37		46.06			
22	1.96		3.85		7.41		13.80		19.37		28.59		32.45		41.88		49.00			
24 •	2.19		4.29		8.26		15.38		21.57		31.85		36.15		46.65		54.59			
25	2.30		4.51		8.68		16.16		22.67		33.47		37.99		49.03					
26	2.42		4.74		9.13		17.00		23.86		35.22		39.97		51.59					
27 •	2.54		4.98		9.59		17.86		25.06		37.00		41.99		54.20					
28	2.66		5.22		10.06		18.74		26.29		38.81		44.05		56.85					
30 •	2.90		5.69		10.97		20.42		28.65		42.29		48.00		61.95					
32	3.15		6.17		11.89		22.14		31.07		45.86		52.06							
33 •	3.27		6.42		12.36		23.02		32.31		47.69		54.13							
35	3.54		6.94		13.36		24.88		34.92		51.54		58.50							
36 •	3.67		7.19		13.86		25.80		36.20		53.44		60.66							
40	4.21		8.25		15.89		29.58		41.51		61.27		69.54							
42 •	4.46		8.75		16.85		31.38		44.03		64.99		73.77							
44	4.72		9.26		17.83		33.21		46.59		68.78		78.07							
45	4.85		9.52		18.33		34.13		47.89		70.70		80.25							
48 •	5.27		10.33		19.90		37.05		51.98		76.73									
50	5.51		10.81		20.83		38.78		54.42		80.32									
52	5.78		11.33		21.82		40.63		57.01		84.15									
54 •	6.04		11.85		22.82		42.50		59.63		88.02									
55	6.15		12.07		23.25		43.29		60.74											
56	6.28		12.32		23.73		44.18		61.99											
60 •	6.83		13.39		25.79		48.02		67.38											
64 •	7.33		14.39		27.70		51.59		72.38											
66 •	7.60		14.91		28.71		53.45		75.00											
70	8.12		15.92		30.66		57.09		80.10											
72 •	8.35		16.37		31.54		58.72		82.39											
80	9.43		18.49		35.61		66.31		93.04											
84 •	9.97		19.55		37.65		70.10		98.36											
88	10.46		20.53		39.53		73.61		103.28											
90	10.73		21.04		40.52		75.45													
96 •	11.52		22.60		43.52		81.03													
100	12.03		23.59		45.43		84.60													
108 •	13.05		25.59		49.29		91.77													
110	13.32		26.12		50.31		93.68													
112	13.56		26.60		51.23		95.39													
120 •	14.63		28.69		55.25															
144	13.89		27.25		52.49															
160	19.85		38.93		74.98															
200	25.03		49.09		94.54															

ALL STEEL

Ratings are based on strength calculation.

• Designates stock sizes for this pitch.

Note: 1. Pitch line velocities exceeding 1000 feet per minute are not recommended. They should be used for interpolation purposes only.

2. Non-metallic gears are most commonly used for the driving pinion of a pair of gears, with mating gear made of cast iron or steel, where pitch line velocities exceed 1000 FPM and are not subjected to shock loads.

20° Horsepower Ratings (Approximate)

For Class I Service (Service Factor = 1.0)

8 Diametral Pitch — **20° Pressure Angle** — **1 1/2" Face**

No. Teeth	25 RPM		50 RPM		100 RPM		200 RPM		300 RPM		500 RPM		600 RPM		900 RPM		1200 RPM		1800 RPM	
	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI
11	0.28		0.56		1.09		2.06		2.94		4.45		5.10		6.76		8.07		10.00	
12 •	0.34		0.66		1.29		2.44		3.48		5.26		6.03		7.99		9.54		11.83	
13	0.39		0.78		1.51		2.85		4.06		6.14		7.04		9.33		11.14		13.81	
14 •	0.44		0.87		1.70		3.21		4.57		6.91		7.93		10.50		12.54		15.55	
15 •	0.50		0.98		1.90		3.60		5.13		7.76		8.90		11.78		14.07		17.45	
16 •	0.54		1.07		2.07		3.92		5.58		8.44		9.69		12.83		15.31		18.99	
17	0.59		1.16		2.25		4.26		6.07		9.18		10.53		13.95		16.66		20.66	
18 •	0.64		1.25		2.43		4.61		6.56		9.92		11.38		15.07		17.99		22.31	
19 •	0.68		1.35		2.62		4.96		7.06		10.67		12.24		16.22		19.36		24.01	
20 •	0.73		1.45		2.81		5.32		7.57		11.45		13.13		17.40		20.77		25.76	
21	0.78		1.54		3.00		5.67		8.07		12.21		14.00		18.55		22.14			
22 •	0.83		1.64		3.19		6.03		8.59		12.99		14.90		19.73		23.56			
24 •	0.93		1.83		3.55		6.72		9.56		14.47		16.60		21.98		26.24			
25	0.97		1.92		3.73		7.06		10.05		15.21		17.44		23.10		27.58			
26 •	1.02		2.02		3.93		7.43		10.58		16.00		18.35		24.31		29.02			
27	1.08		2.12		4.12		7.80		11.11		16.81		19.28		25.54		30.49			
28 •	1.13		2.23		4.33		8.19		11.66		17.63		20.22		26.79		31.98			
30 •	1.23		2.43		4.71		8.92		12.70		19.21		22.04		29.19		34.85			
32 •	1.33		2.63		5.11		9.68		13.77		20.84		23.90		31.66					
33	1.39		2.73		5.31		10.06		14.32		21.67		24.85		32.92					
35	1.50		2.96		5.74		10.87		15.48		23.42		26.86		35.58					
36 •	1.56		3.06		5.96		11.27		16.05		24.28		27.85		36.89					
40 •	1.78		3.51		6.83		12.92		18.40		27.84		31.93		42.29					
42 •	1.89		3.73		7.24		13.71		19.52		29.53		33.87		44.86					
44 •	2.00		3.94		7.67		14.51		20.66		31.25		35.84		47.48					
45	2.06		4.05		7.88		14.91		21.23		32.12		36.84				**STEEL**			
48 •	2.23		4.40		8.55		16.19		23.05		34.86		39.99							
50		1.12		2.21		4.30		8.13		11.58		17.52		20.09			**CAST**			
52 •		1.18		2.32		4.50		8.52		12.13		18.35		21.05						
54		1.23		2.42		4.71		8.91		12.69		19.20		22.02						
55		1.25		2.47		4.80		9.08		12.93		19.55		22.43						
56 •		1.28		2.52		4.90		9.27		13.19		19.96		22.89						
60 •		1.39		2.74		5.32		10.07		14.34		21.69		24.88						
64 •		1.49		2.94		5.72		10.82		15.40		23.30								
66		1.55		3.05		5.92		11.21		15.96		24.14								
70		1.65		3.26		6.33		11.97		17.05		25.79								
72 •		1.70		3.35		6.51		12.32		17.53										
80 •		1.92		3.78		7.35		13.91		19.80										
84		2.03		4.00		7.77		14.70		20.93										
88 •		2.13		4.20		8.16		15.44		21.98										
90		2.18		4.30		8.36		15.82		22.53										
96 •		2.34		4.62		8.98		16.99		24.20										
100		2.45		4.82		9.37		17.74		25.26										
108		2.66		5.23		10.17		19.25		27.40										
110		2.71		5.34		10.38		19.65		27.97										
112 •		2.76		5.44		10.57		20.01		28.48										
120 •		2.98		5.87		11.40		21.58		30.72										
144 •		2.83		5.57		10.83		20.50												
160 •		4.04		7.96		15.47		29.28												
200		5.09		10.04		19.51		36.92												

Ratings are based on strength calculation.

• Designates stock sizes for this pitch.

Note: 1. Pitch line velocities exceeding 1000 feet per minute are not recommended. They should be used for interpolation purposes only.

2. Non-metallic gears are most commonly used for the driving pinion of a pair of gears, with mating gear made of cast iron or steel, where pitch line velocities exceed 1000 FPM and are not subjected to shock loads.

20° Horsepower Ratings (Approximate)

For Class I Service (Service Factor = 1.0)

10 Diametral Pitch | **20° Pressure Angle** | **1 1/4" Face**

No. Teeth	25 RPM		50 RPM		100 RPM		200 RPM		300 RPM		500 RPM		600 RPM		900 RPM		1200 RPM		1800 RPM	
	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI
11	0.15		0.30		0.59		1.13		1.62		2.49		2.87		3.88		4.70		5.95	
12 •	0.18		0.36		0.70		1.33		1.91		2.94		3.40		4.58		5.55		7.04	
13	0.21		0.42		0.81		1.55		2.23		3.43		3.97		5.35		6.48		8.22	
14 •	0.24		0.47		0.91		1.75		2.51		3.87		4.47		6.02		7.30		9.25	
15 •	0.27		0.53		1.03		1.96		2.82		4.34		5.01		6.76		8.19		10.38	
16 •	0.29		0.57		1.12		2.14		3.07		4.72		5.45		7.36		8.91		11.30	
17	0.31		0.62		1.22		2.32		3.34		5.14		5.93		8.00		9.70		12.30	
18 •	0.34		0.67		1.31		2.51		3.61		5.55		6.41		8.64		10.47		13.28	
19	0.37		0.72		1.41		2.70		3.88		5.97		6.89		9.30		11.27		14.29	
20 •	0.39		0.78		1.52		2.90		4.16		6.40		7.40		9.98		12.09		15.33	
21	0.42		0.83		1.62		3.09		4.44		6.83		7.89		10.64		12.89		16.35	
22 •	0.44		0.88		1.72		3.29		4.72		7.26		8.39		11.32		13.71		17.39	
24 •	0.50		0.98		1.91		3.66		5.26		8.09		9.35		12.61		15.28		19.37	
25 •	0.52		1.03		2.01		3.85		5.53		8.50		9.82		13.25		16.05		20.36	
26 •	0.55		1.08		2.12		4.05		5.82		8.95		10.34		13.94		16.89			
27	0.58		1.14		2.22		4.25		6.11		9.40		10.86		14.65		17.75			
28 •	0.60		1.19		2.33		4.46		6.41		9.86		11.39		15.37		18.61			
30 •	0.66		1.30		2.54		4.86		6.99		10.74		12.41		16.74		20.28			
32 •	0.71		1.41		2.76		5.27		7.58		11.65		13.46		18.16		22.00			
33	0.74		1.47		2.87		5.48		7.88		12.11		14.00		18.88		22.87			
35 •	0.80		1.59		3.10		5.93		8.52		13.09		15.13		20.41		24.72			
36 •	0.83		1.64		3.21		6.14		8.83		13.58		15.68		21.16		25.63			
40 •	0.95		1.88		3.68		7.04		10.12		15.56		17.98		24.26					
42	1.01		2.00		3.91		7.47		10.74		16.51		19.07		25.73					
44	1.07		2.12		4.14		7.91		11.36		17.47		20.19		27.23					
45 •	1.10		2.18		4.25		8.13		11.68		17.96		20.75		27.99					
48 •	1.19		2.36		4.61		8.82		12.68		19.49		22.52		30.38					
50 •	1.25		2.47		4.83		9.24		13.27		20.41		23.57							
52	1.31		2.59		5.06		9.68		13.90		21.38		24.70							
54	1.37		2.71		5.29		10.12		14.54		22.36		25.83							
55 •	1.40		2.76		5.39		10.31		14.81		22.78		26.31							
56	1.42		2.82		5.50		10.52		15.12		23.25		26.86							
60 •	1.55		3.06		5.98		11.44		16.43		25.27		29.19							
64		0.80		1.58		3.08		5.90		8.47		13.03		15.05						
66		0.83		1.63		3.19		6.11		8.78		13.50		15.60						
70 •		0.88		1.75		3.41		6.53		9.38		14.42		16.66						
72		0.91		1.80		3.51		6.71		9.65		14.83		17.13						
80 •		1.03		2.03		3.96		7.58		10.89		16.75								
84		1.08		2.14		4.19		8.01		11.52		17.71								
88		1.14		2.25		4.40		8.41		12.09		18.59								
90 •		1.17		2.31		4.51		8.62		12.39		19.06								
96		1.25		2.48		4.84		9.26		13.31										
100 •		1.31		2.59		5.06		9.67		13.90										
108		1.42		2.81		5.49		10.49		15.08										
110		1.45		2.87		5.60		10.71		15.39										
112		1.48		2.92		5.70		10.90		15.67										
120		1.59		3.15		6.15		11.76		16.90										
144		1.51		2.99		5.84		11.17		16.05										
160		2.16		4.27		8.35		15.96		22.93										
200		2.72		5.38		10.52		20.12		28.92										

STEEL

CAST

Ratings are based on strength calculation.

• Designates stock sizes for this pitch.

Note: 1. Pitch line velocities exceeding 1000 feet per minute are not recommended. They should be used for interpolation purposes only.

2. Non-metallic gears are most commonly used for the driving pinion of a pair of gears, with mating gear made of cast iron or steel, where pitch line velocities exceed 1000 FPM and are not subjected to shock loads.

20° Horsepower Ratings (Approximate)

For Class I Service (Service Factor = 1.0)

12 Diametral Pitch **20° Pressure Angle** **1" Face**

No. Teeth	25 RPM		50 RPM		100 RPM		200 RPM		300 RPM		500 RPM		600 RPM		900 RPM		1200 RPM		1800 RPM	
	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI
11	0.08		0.17		0.33		0.63		0.92		1.43		1.66		2.27		2.78		3.58	
12 •	0.10		0.20		0.39		0.75		1.09		1.69		1.96		2.68		3.28		4.24	
13 •	0.12		0.23		0.45		0.88		1.27		1.97		2.29		3.13		3.83		4.95	
14 •	0.13		0.26		0.51		0.99		1.43		2.22		2.58		3.52		4.32		5.57	
15 •	0.15		0.29		0.57		1.11		1.60		2.49		2.89		3.95		4.84		6.25	
16 •	0.16		0.32		0.63		1.20		1.74		2.71		3.15		4.30		5.27		6.81	
17	0.18		0.35		0.68		1.31		1.90		2.95		3.42		4.68		5.74		7.40	
18 •	0.19		0.37		0.73		1.42		2.05		3.18		3.70		5.06		6.19		7.99	
19 •	0.20		0.40		0.79		1.52		2.20		3.43		3.98		5.44		6.67		8.60	
20 •	0.22		0.43		0.85		1.63		2.36		3.68		4.27		5.84		7.15		9.23	
21 •	0.23		0.46		0.90		1.74		2.52		3.92		4.55		6.22		7.63		9.84	
22 •	0.25		0.49		0.96		1.85		2.68		4.17		4.84		6.62		8.11		10.47	
24 •	0.28		0.55		1.07		2.06		2.99		4.64		5.39		7.38		9.04		11.66	
25 •	0.29		0.57		1.13		2.17		3.14		4.88		5.67		7.75		9.50		12.26	
26 •	0.31		0.60		1.19		2.28		3.30		5.14		5.96		8.16		9.99		12.90	
27	0.32		0.63		1.25		2.40		3.47		5.40		6.27		8.57		10.50		13.55	
28 •	0.34		0.67		1.31		2.52		3.64		5.66		6.57		8.99		11.01		14.21	
30 •	0.37		0.73		1.42		2.74		3.96		6.17		7.16		9.79		12.00		15.49	
32 •	0.40		0.79		1.54		2.97		4.30		6.69		7.77		10.62		13.01			
33	0.41		0.82		1.61		3.09		4.47		6.95		8.08		11.05		13.53			
35	0.45		0.88		1.73		3.34		4.83		7.52		8.73		11.94		14.63			
36 •	0.46		0.92		1.80		3.46		5.01		7.79		9.05		12.38		15.16			
40	0.53		1.05		2.06		3.97		5.74		8.94		10.38		14.19		17.39			
42 •	0.56		1.12		2.19		4.21		6.09		9.48		11.01		15.05		18.44			
44	0.60		1.18		2.32		4.46		6.45		10.03		11.65		15.93		19.52			
45	0.61		1.21		2.38		4.58		6.63		10.31		11.97		16.37		20.06			
48 •	0.66		1.32		2.58		4.97		7.19		11.19		13.00		17.77					
50	0.70		1.38		2.70		5.21		7.53		11.71		13.60		18.60					
52	0.73		1.44		2.83		5.45		7.89		12.27		14.25		19.49					
54 •	0.76		1.51		2.96		5.71		8.25		12.84		14.91		20.39					
55	0.78		1.54		3.02		5.81		8.41		13.08		15.18		20.77					
56	0.79		1.57		3.08		5.93		8.58		13.35		15.50		21.19					
60 •	0.86		1.71		3.35		6.45		9.33		14.51		16.84		23.04					
64	0.93		1.83		3.60		6.93		10.02		15.58		18.10		24.75					
66 •	0.96		1.90		3.73		7.18		10.38		16.15		18.75							
70	1.02		2.03		3.98		7.66		11.09		17.24		20.03				**STEEL**			
72 •	1.05		2.09		4.09		7.88		11.40											
80		0.57		1.13		2.22		4.27		6.18		9.61		11.16			**CAST**			
84 •		0.60		1.20		2.35		4.52		6.53		10.16		11.80						
88		0.63		1.26		2.46		4.74		6.86		10.67		12.39						
90		0.65		1.29		2.52		4.86		7.03		10.94								
96 •		0.70		1.38		2.71		5.22		7.55		11.75								
100		0.73		1.44		2.83		5.45		7.89		12.27								
108 •		0.79		1.57		3.07		5.91		8.55		13.31								
110		0.81		1.60		3.13		6.04		8.73		13.58								
112		0.82		1.63		3.19		6.15		8.89										
120 •		0.89		1.76		3.44		6.63		9.59										
144 •		0.84		1.67		3.27		6.30		9.11										
160		1.20		2.38		4.67		9.00		13.01										
200		1.52		3.00		5.89		11.34		16.41										

Ratings are based on strength calculation.

• Designates stock sizes for this pitch.

Note: 1. Pitch line velocities exceeding 1000 feet per minute are not recommended. They should be used for interpolation purposes only.

2. Non-metallic gears are most commonly used for the driving pinion of a pair of gears, with mating gear made of cast iron or steel, where pitch line velocities exceed 1000 FPM and are not subjected to shock loads.

20° Horsepower Ratings (Approximate)

For Class I Service (Service Factor = 1.0)

16 Diametral Pitch — 20° Pressure Angle — 3/4" Face

No. Teeth	25 RPM		50 RPM		100 RPM		200 RPM		300 RPM		500 RPM		600 RPM		900 RPM		1200 RPM		1800 RPM	
	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI
11	0.04		0.07		0.14		0.27		0.40		0.63		0.73		1.02		1.28		1.69	
12 •	0.04		0.08		0.17		0.32		0.47		0.74		0.87		1.21		1.51		2.00	
13 •	0.05		0.10		0.19		0.38		0.55		0.87		1.01		1.41		1.76		2.33	
14 •	0.06		0.11		0.22		0.42		0.62		0.98		1.14		1.59		1.98		2.63	
15 •	0.06		0.12		0.24		0.48		0.69		1.10		1.28		1.79		2.22		2.95	
16 •	0.07		0.14		0.27		0.52		0.76		1.19		1.40		1.94		2.42		3.21	
17 •	0.07		0.15		0.29		0.56		0.82		1.30		1.52		2.12		2.63		3.49	
18 •	0.08		0.16		0.31		0.61		0.89		1.40		1.64		2.28		2.84		3.77	
19	0.09		0.17		0.34		0.65		0.95		1.51		1.76		2.46		3.06		4.05	
20 •	0.09		0.18		0.36		0.70		1.02		1.62		1.89		2.64		3.28		4.35	
21 •	0.10		0.20		0.39		0.75		1.09		1.73		2.02		2.81		3.50		4.64	
22 •	0.10		0.21		0.41		0.80		1.16		1.84		2.15		2.99		3.72		4.93	
24 •	0.12		0.23		0.46		0.89		1.29		2.04		2.39		3.33		4.15		5.50	
25	0.12		0.24		0.48		0.93		1.36		2.15		2.51		3.50		4.36		5.78	
26 •	0.13		0.26		0.50		0.98		1.43		2.26		2.64		3.69		4.59		6.08	
27	0.14		0.27		0.53		1.03		1.50		2.38		2.78		3.87		4.82		6.38	
28 •	0.14		0.28		0.56		1.08		1.58		2.49		2.91		4.06		5.06		6.70	
30 •	0.15		0.31		0.61		1.18		1.72		2.72		3.18		4.43		5.51		7.30	
32 •	0.17		0.33		0.66		1.28		1.86		2.94		3.44		4.80		5.98		7.91	
33	0.17		0.35		0.68		1.33		1.94		3.06		3.58		4.99		6.21		8.23	
35	0.19		0.37		0.74		1.44		2.09		3.31		3.87		5.39		6.72		8.89	
36 •	0.20		0.39		0.77		1.49		2.17		3.43		4.01		5.59		6.96		9.22	
40 •	0.22		0.45		0.88		1.71		2.49		3.93		4.60		6.41		7.98		10.57	
42	0.24		0.47		0.93		1.81		2.64		4.17		4.88		6.80		8.47			
44	0.25		0.50		0.99		1.92		2.80		4.42		5.16		7.20		8.96			
45	0.26		0.51		1.01		1.97		2.87		4.54		5.31		7.40		9.21			
48 •	0.28		0.56		1.10		2.14		3.12		4.93		5.76		8.03		10.00			
50	0.29		0.58		1.15		2.24		3.26		5.16		6.03		8.41		10.47			
52	0.31		0.61		1.21		2.34		3.42		5.40		6.32		8.81		10.96			
54	0.32		0.64		1.26		2.45		3.58		5.65		6.61		9.21		11.47			
55	0.33		0.65		1.29		2.50		3.64		5.76		6.73		9.38		11.68			
56 •	0.34		0.67		1.31		2.55		3.72		5.88		6.87		9.58					
60 •	0.36		0.72		1.43		2.77		4.04		6.39		7.47		10.41					
64 •	0.39		0.78		1.53		2.98		4.34		6.86		8.02		11.18					
66	0.41		0.81		1.59		3.08		4.50		7.11		8.31		11.58					
70	0.43		0.86		1.70		3.29		4.81		7.59		8.88		12.37					
72 •	0.45		0.88		1.74		3.39		4.94		7.81		9.13		12.73					
80 •	0.50		1.00		1.97		3.83		5.58		8.82		10.31		14.37					
84 •	0.53		1.06		2.08		4.05		5.90		9.32		10.90		15.19					
88 •	0.56		1.11		2.19		4.25		6.20		9.79		11.45							
90	0.57		1.14		2.24		4.35		6.35		10.03		11.73							
96 •	0.62		1.22		2.41		4.68		6.82		10.78		12.60							
100	0.64		1.27		2.51		4.88		7.12		11.25		13.16							
108		0.33		0.66		1.31		2.54		3.71		5.86		6.85						
110		0.34		0.68		1.34		2.60		3.79		5.98		6.99						
112 •		0.35		0.69		1.36		2.64		3.85		6.09		7.12						
120		0.37		0.74		1.47		2.85		4.16		6.57		7.68						
144 •		0.36		0.71		1.39		2.71		3.95		6.24								
160 •		0.51		1.01		1.99		3.87		5.64		8.91								
200		0.64		1.27		2.51		4.88		7.11		11.24								

STEEL

CAST

Ratings are based on strength calculation.

• Designates stock sizes for this pitch.

Note: 1. Pitch line velocities exceeding 1000 feet per minute are not recommended. They should be used for interpolation purposes only.

2. Non-metallic gears are most commonly used for the driving pinion of a pair of gears, with mating gear made of cast iron or steel, where pitch line velocities exceed 1000 FPM and are not subjected to shock loads.

20° Horsepower Ratings (Approximate)

For Class I Service (Service Factor = 1.0)

20 Diametral Pitch **20° Pressure Angle** **1/2" Face**

No. Teeth	25 RPM		50 RPM		100 RPM		200 RPM		300 RPM		500 RPM		600 RPM		900 RPM		1200 RPM		1800 RPM	
	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI	S	CI
11	0.02		0.03		0.06		0.12		0.17		0.28		0.32		0.46		0.57		0.78	
12 •	0.02		0.04		0.07		0.14		0.20		0.33		0.38		0.54		0.68		0.92	
13	0.02		0.04		0.08		0.16		0.24		0.38		0.45		0.63		0.79		1.07	
14 •	0.02		0.05		0.09		0.18		0.27		0.43		0.50		0.71		0.89		1.20	
15 •	0.03		0.05		0.11		0.21		0.30		0.48		0.56		0.80		1.00		1.35	
16 •	0.03		0.06		0.11		0.22		0.33		0.52		0.61		0.87		1.09		1.47	
17	0.03		0.06		0.12		0.24		0.36		0.57		0.67		0.94		1.19		1.60	
18 •	0.03		0.07		0.13		0.26		0.38		0.61		0.72		1.02		1.28		1.73	
19	0.04		0.07		0.14		0.28		0.41		0.66		0.78		1.10		1.38		1.86	
20 •	0.04		0.08		0.16		0.30		0.44		0.71		0.83		1.18		1.48		2.00	
21 •	0.04		0.08		0.17		0.32		0.47		0.76		0.89		1.25		1.58		2.13	
22 •	0.04		0.09		0.18		0.34		0.50		0.80		0.94		1.33		1.68		2.26	
24 •	0.05		0.10		0.20		0.38		0.56		0.90		1.05		1.49		1.87		2.52	
25 •	0.05		0.10		0.21		0.40		0.59		0.94		1.11		1.56		1.96		2.65	
26	0.06		0.11		0.22		0.42		0.62		0.99		1.16		1.64		2.07		2.79	
27	0.06		0.12		0.23		0.44		0.65		1.04		1.22		1.73		2.17		2.93	
28 •	0.06		0.12		0.24		0.47		0.68		1.09		1.28		1.81		2.28		3.07	
30 •	0.07		0.13		0.26		0.51		0.75		1.19		1.40		1.97		2.48		3.35	
32 •	0.07		0.14		0.28		0.55		0.81		1.29		1.52		2.14		2.69		3.63	
33	0.07		0.15		0.29		0.57		0.84		1.34		1.58		2.22		2.80		3.78	
35 •	0.08		0.16		0.32		0.62		0.91		1.45		1.70		2.40		3.03		4.08	
36 •	0.08		0.17		0.33		0.64		0.94		1.50		1.77		2.49		3.14		4.23	
40 •	0.10		0.19		0.38		0.74		1.08		1.72		2.02		2.86		3.60		4.85	
42	0.10		0.20		0.40		0.78		1.15		1.83		2.15		3.03		3.81		5.15	
44	0.11		0.21		0.42		0.83		1.21		1.93		2.27		3.21		4.04		5.45	
45 •	0.11		0.22		0.44		0.85		1.25		1.99		2.34		3.30		4.15		5.60	
48	0.12		0.24		0.47		0.92		1.35		2.16		2.54		3.58		4.50		6.08	
50 •	0.13		0.25		0.49		0.97		1.42		2.26		2.65		3.75		4.71		6.36	
52	0.13		0.26		0.52		1.01		1.48		2.37		2.78		3.92		4.94		6.66	
54	0.14		0.27		0.54		1.06		1.55		2.48		2.91		4.10		5.17			
55	0.14		0.28		0.55		1.08		1.58		2.52		2.96		4.18		5.26			
56	0.14		0.28		0.56		1.10		1.61		2.57		3.02		4.27		5.37			
60 •	0.16		0.31		0.61		1.20		1.75		2.80		3.29		4.64		5.84			
64	0.17		0.33		0.66		1.28		1.88		3.01		3.53		4.98		6.27			
66	0.17		0.34		0.68		1.33		1.95		3.11		3.66		5.16		6.50			
70 •	0.19		0.37		0.73		1.42		2.08		3.33		3.91		5.51		6.94			
72 •	0.19		0.38		0.75		1.46		2.14		3.42		4.02		5.67		7.14			
80 •	0.22		0.43		0.85		1.65		2.42		3.86		4.54		6.40					
84 •	0.23		0.45		0.89		1.75		2.56		4.08		4.80		6.77					
88	0.24		0.47		0.94		1.83		2.69		4.29		5.04		7.11					
90 •	0.24		0.49		0.96		1.88		2.76		4.40		5.16		7.29					
96 •	0.26		0.52		1.03		2.02		2.96		4.72		5.55		7.83					
100 •	0.27		0.55		1.08		2.11		3.09		4.93		5.79		8.17					
108	0.30		0.59		1.17		2.29		3.35		5.35		6.28							
110	0.30		0.60		1.19		2.33		3.42		5.46		6.41							
112	0.31		0.62		1.22		2.38		3.48		5.56		6.53							
120 •	0.33		0.66		1.31		2.56		3.76		5.99		7.04							
144	0.32		0.63		1.25		2.43		3.57		5.69		6.69							
160	0.45		0.90		1.78		3.48		5.10		8.13		9.56							
200	0.57		1.14		2.24		4.38		6.43		10.26		12.05							

ALL STEEL

Ratings are based on strength calculation.

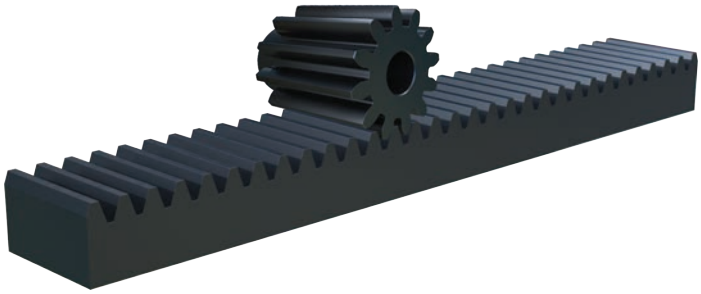
• Designates stock sizes for this pitch.

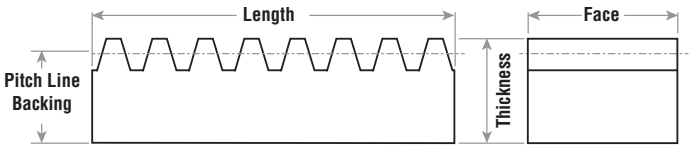
Note: 1. Pitch line velocities exceeding 1000 feet per minute are not recommended. They should be used for interpolation purposes only.

2. Non-metallic gears are most commonly used for the driving pinion of a pair of gears, with mating gear made of cast iron or steel, where pitch line velocities exceed 1000 FPM and are not subjected to shock loads.

Machined Gear Rack

Martin rack is made from low carbon cold drawn steel. It is available in 14½° and 20° pressure angle in 2, 4, and 6 foot lengths. Allowance is made for cutting and machining. Pinions to run with the rack may be selected from the spur gear section of the catalog. Special rack can be supplied in other materials, sizes, and pitches.





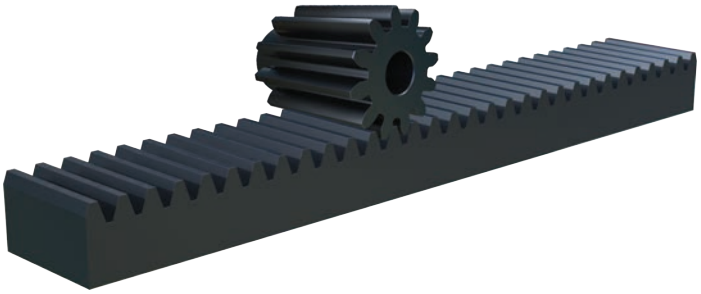
Rack in lengths up to 12' available on request

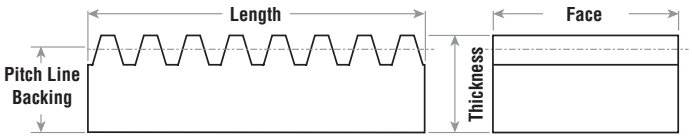
Standard Face Width
Steel — 14½° & 20° Pressure Angle

Part Number		Pitch	Face Width	Overall Thickness	Pitch Line Backing	App. Wt. lb/pc
14½° P.A.	20° P.A.					
R3x2	TR3x2	3	3	1 1/2	1.167	24.00
R3x4	TR3x4	3	3	1 1/2	1.167	48.00
R3x6	TR3x6	3	3	1 1/2	1.167	72.00
R4x2	TR4x2	4	2	1 1/2	1.250	17.40
R4x4	TR4x4	4	2	1 1/2	1.250	34.80
R4x6	TR4x6	4	2	1 1/2	1.250	52.20
RA4x2		4	2	2	1.750	23.60
RA4x4		4	2	2	1.750	47.20
RA4x6		4	2	2	1.750	70.80
R5x2	TR5x2	5	1 3/4	1 1/4	1.050	12.80
R5x4	TR5x4	5	1 3/4	1 1/4	1.050	25.60
R5x6	TR5x6	5	1 3/4	1 1/4	1.050	38.40
RA5x2		5	1 3/4	1 1/2	1.300	16.00
RA5x4		5	1 3/4	1 1/2	1.300	32.00
RA5x6		5	1 3/4	1 1/2	1.300	48.00
R6x2		6	1 1/2	1	0.833	8.60
R6x4		6	1 1/2	1	0.833	17.20
R6x6		6	1 1/2	1	0.833	25.80
RA6x2	TR6x2	6	1 1/2	1 1/2	1.333	13.80
RA6x4	TR6x4	6	1 1/2	1 1/2	1.333	27.60
RA6x6	TR6x6	6	1 1/2	1 1/2	1.333	41.40
R8x2		8	1 1/4	3/4	0.625	5.20
R8x4		8	1 1/4	3/4	0.625	10.40
R8x6		8	1 1/4	3/4	0.625	15.60
RA8x2	TR8x2	8	1 1/4	1 1/4	1.125	9.80
RA8x4	TR8x4	8	1 1/4	1 1/4	1.125	19.60
RA8x6	TR8x6	8	1 1/4	1 1/4	1.125	29.40
R10x2		10	1	5/8	0.525	3.60
R10x4		10	1	5/8	0.525	7.20
R10x6		10	1	5/8	0.525	10.80
RA10x2	TR10x2	10	1	1	0.900	6.00
RA10x4	TR10x4	10	1	1	0.900	12.00
RA10x6	TR10x6	10	1	1	0.900	18.00
R12x2		12	3/4	1/2	0.417	2.00
R12x4		12	3/4	1/2	0.417	4.00
R12x6		12	3/4	1/2	0.417	6.00
RA12x2	TR12x2	12	3/4	3/4	0.667	3.40
RA12x4	TR12x4	12	3/4	3/4	0.667	6.80
RA12x6	TR12x6	12	3/4	3/4	0.667	10.20
R16x2		16	5/16	5/16	0.250	0.50
R16x4		16	5/16	5/16	0.250	1.00
R16x6		16	5/16	5/16	0.250	1.50
RA16x2	TR16x2	16	1/2	1/2	0.438	1.52
RA16x4	TR16x4	16	1/2	1/2	0.438	3.04
RA16x6	TR16x6	16	1/2	1/2	0.438	4.56
R20x2	TR20x2	20	3/8	3/8	0.325	0.84
R20x4	TR20x4	20	3/8	3/8	0.325	1.68
R20x6	TR20x6	20	3/8	3/8	0.325	2.52
R24x2		24	1/4	1/4	0.208	0.38
R24x4		24	1/4	1/4	0.208	0.76
R24x6		24	1/4	1/4	0.208	1.14

Machined Gear Rack

Martin Rack is made from low carbon cold drawn steel. It is available in 14½° and 20° pressure angle in 2, 4, and 6 foot lengths. Allowance is made for cutting and machining. Pinions to run with the rack may be selected from the Spur Gear section of the catalog. Special rack can be supplied in other materials, sizes, and pitches.





Wide Face Width
Steel — 20° Pressure Angle

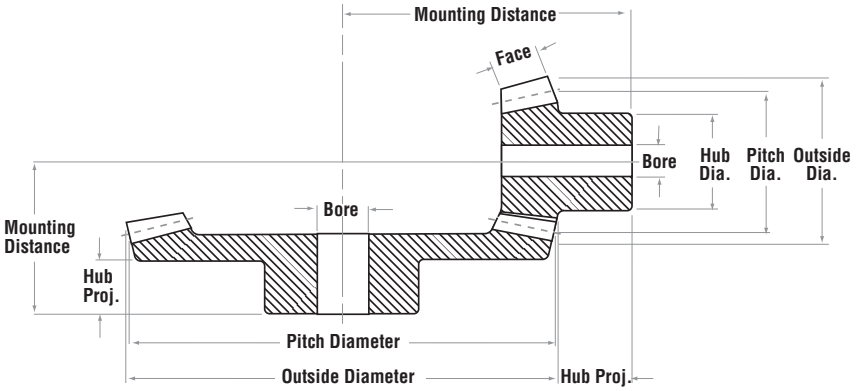
Part Number	Pitch	Face Width	Overall Thickness	Pitch Line Backing	App. Wt. lb/pc
R204x2	4	3 1/2	2	1.750	41.0
R204x4	4	3 1/2	2	1.750	82.0
R204x6	4	3 1/2	2	1.750	123.0
R205x2	5	2 1/2	1 1/2	1.300	22.4
R205x4	5	2 1/2	1 1/2	1.300	44.8
R205x6	5	2 1/2	1 1/2	1.300	67.2
R206x2	6	2	1 1/2	1.333	17.0
R206x4	6	2	1 1/2	1.333	34.0
R206x6	6	2	1 1/2	1.333	51.0
R208x2	8	1 1/2	1 1/2	1.375	13.8
R208x4	8	1 1/2	1 1/2	1.375	27.6
R208x6	8	1 1/2	1 1/2	1.375	41.3
R2010x2	10	1 1/4	1 1/4	1.150	9.0
R2010x4	10	1 1/4	1 1/4	1.150	18.0
R2010x6	10	1 1/4	1 1/4	1.150	27.0
R2012x2	12	1	1	0.917	6.4
R2012x4	12	1	1	0.917	12.8
R2012x6	12	1	1	0.917	19.2
R2016x2	16	3/4	3/4	0.688	3.4
R2016x4	16	3/4	3/4	0.688	6.8
R2016x6	16	3/4	3/4	0.688	10.2
R2020x2	20	1/2	1/2	0.450	0.8
R2020x4	20	1/2	1/2	0.450	1.6
R2020x6	20	1/2	1/2	0.450	2.5

Martin Stocks 14½°and 20° Spur Gears

Rack in lengths up to 12' available on request

Bevel Gears
20° Pressure Angle





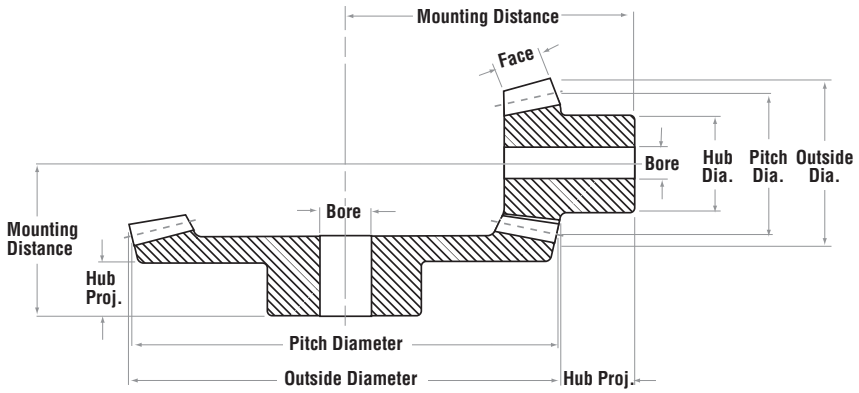
Bevel gears are used as right angle drives where high efficiency is required. They are carried in stock as 1:1 to 6:1 ratios. Bevel gears are cut with the long and short addendum system and 20 degree pressure angle to compensate for tooth undercut in gears and pinions having low numbers of teeth. Most all of Martin bevel gears are cut with the "coniflex" tooth form to allow for a slight misalignment at assembly and during operation. Gears should be mounted at the correct distance from the core of apex center with thrust bearings being used in back of hubs to absorb the backward thrust created in this type of gearing.

Cast Iron Gears With Steel Pinions

Number of Teeth	Part Number	Diameter		Face (Inches)	Bore (inches)		Mounting (Inches)	Hub (Inches)		Wt. Lb. (Approx.)
		Pitch	Outside		Diameter	Length		Diameter	Projection	
3 Pitch										
30	B330-2	10.00	10.19	1.87	1 1/4	3 19/32	5 1/2	5	2	32.8
15	B315-2	5.00	5.80	1.87	1 1/8	4 1/32	7 1/4	3 3/4	1 15/16	13.4
4 Pitch										
32	B432-2	8.00	8.10	1.40	1 1/8	2 11/16	4 1/4	3 3/4	1 9/16	14.7
16	B416-2	4.00	4.60	1.40	1 1/8	3 11/32	6	3 1/4	1 13/16	7.5
42	B442-3	10.50	10.59	1.42	1 1/8	2 11/16	4	3 3/4	1 1/2	20.5
14	B414-3	3.50	4.17	1.42	1 1/8	3 27/64	7 1/4	3 1/4	1 15/16	6.8
56	B456-4	14.00	14.07	1.69	1 1/4	2 7/8	4 1/4	4 1/4	1 5/8	37.8
14	B414-4	3.50	4.20	1.69	1 1/8	3 45/64	9	3 1/4	1 15/16	7.6
5 Pitch										
30	B530-2	6.00	6.12	1.04	1 1/8	2 1/4	3 1/2	3 1/4	1 3/8	8.6
15	B515-2	3.00	3.48	1.04	1	2 25/64	4 3/8	2 5/8	1 9/32	3.1
45	B545-3	9.00	9.07	1.31	1 1/4	2 1/2	3 3/4	3 3/4	1 11/16	14.6
15	B515-3	3.00	3.54	1.31	1	2 11/16	5 7/8	2 5/8	1 5/16	3.6
60	B560-4	12.00	12.05	1.70	1 1/4	2 5/8	3 3/4	4	1 9/16	23.2
15	B515-4	3.00	3.56	1.70	1	3 13/64	7 1/2	3	1 1/2	5.0
6 Pitch										
36	BS636-2	6.00	6.10	1.06	11/8	2 1/4	3 1/2	3 1/4	1 1/2	7.5
18	B618-2	3.00	3.42	1.06	1	2 49/64	4 3/4	2 1/2	1 5/8	3.3
42	B642-2	7.00	7.10	1.05	11/8	2 19/64	3 3/4	3 1/2	1 1/2	9.5
21	B621-2	3.50	3.90	1.05	1	2 33/64	5	2 1/2	1 1/4	3.8
45	B645-3	7.50	7.56	1.07	1 1/8	2 1/8	3	3 1/4	1 1/4	8.9
15	B615-3	2.50	2.94	1.07	7/8	2 9/16	5 1/4	2 1/8	1 7/16	2.2
48	B648-2	8.00	8.10	1.17	1 1/8	1 57/64	3 7/16	3 1/4	1	11.6
24	B624-2	4.00	4.40	1.17	1	2 35/64	5 7/16	2 5/8	1 1/4	4.9
60	B660-4	10.00	10.04	1.21	1 1/8	2 1/4	3 1/4	3 1/4	1 3/8	14.3
15	B615-4	2.50	2.97	1.21	1	2 31/32	6 3/4	21/2	1 3/4	3.2

Steel Bevel Gears may be furnished with hardened teeth at slight additional cost.

Bevel Gears
20° Pressure Angle



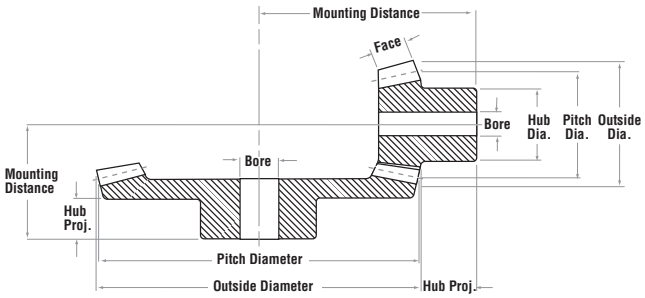
Cast Iron Gears With Steel Pinions

Number of Teeth	Part Number	Diameter		Face (Inches)	Bore (inches)		Mounting (Inches)	Hub (Inches)		Wt. Lb. (Approx.)
		Pitch	Outside		Diameter	Length		Diameter	Projection	
8 Pitch										
40	BS840-2	5.00	5.07	0.82	1	1 27/32	2 7/8	3	1 1/4	4.9
20	B820-2	2.50	2.80	0.82	7/8	2 9/32	4	2 1/8	1 13/32	1.9
48	B848-3	6.05	6.20	0.84	7/8	1 5/8	2 3/8	2 3/4	1	4.5
16	B816-3	2.00	2.33	0.84	3/4	2 5/64	4 1/4	1 3/4	1 3/16	1.2
64	B864-4	8.00	8.03	0.84	1	1 7/8	2 3/4	2 3/4	1 1/4	9.0
16	B816-4	2.00	2.35	0.84	7/8	2 3/32	5 1/4	1 7/8	1 7/32	1.3
72	B872-4	9.00	9.03	1.22	1 1/8	2 5/16	3 1/4	3	1 11/16	12.2
18	B818-4	2.25	2.60	1.22	7/8	2 15/32	5 3/4	2 1/8	1 7/32	1.9
10 Pitch										
60	B1060-3	6.00	6.04	0.78	7/8	1 29/32	2 3/4	3	1 3/8	5.1
20	B1020-3	2.00	2.27	0.78	3/4	2 5/32	4 3/8	1 3/4	1 5/16	1.3
60	B1060-4	6.00	6.03	0.72	7/8	1 5/8	2 1/4	2 1/2	1 1/8	4.5
15	B1015-4	1.50	1.78	0.72	5/8	1 39/64	3 7/8	1 7/16	27/32	0.6
90	B1090-6	9.00	9.03	0.86	1	1 13/16	2 1/2	2 3/4	1 5/16	9.7
15	B1015-6	1.50	1.79	0.86	5/8	1 55/64	5 1/2	1 7/16	31/32	0.7
12 Pitch										
36	B1236-2	3.00	3.05	0.46	5/8	7/8	1 1/2	1 7/16	1/2	0.8
18	B1218-2	1.50	1.70	0.46	1/2	1 13/64	2 1/4	1 1/4	11/16	0.5
72	B1272-4	6.00	6.02	0.60	3/4	1 5/16	2	2	61/64	2.6
18	B1218-4	1.50	1.73	0.60	1/2	1 23/64	3 3/4	1 1/4	23/32	0.4
72	B1272-6	6.00	6.02	0.74	3/4	1 5/16	1 3/4	2	61/64	2.6
12	B1212-6	1.00	1.24	0.74	1/2	1 31/64	3 3/4	15/16	23/32	0.4

Steel Bevel Gears may be furnished with hardened teeth at slight additional cost.

Bevel Gears
20° Pressure Angle





Steel Gears With Steel Pinions

Number of Teeth	Part Number	Diameter		Face (Inches)	Bore (inches)		Mounting (Inches)	Hub (Inches)		Wt. Lb. (Approx.)
		Pitch	Outside		Diameter	Length		Diameter	Projection	
6 Pitch										
36	BS636-2	6.00	6.10	1.06	1 1/8	2 1/4	3 1/2	3 1/4	1 1/2	8.70
18	BS618-2	3.00	3.42	1.06	1 1/8	2 49/64	4 3/4	2 1/2	1 19/32	3.20
8 Pitch										
40	BS840-2	5.00	5.07	0.82	1	1 27/32	2 7/8	3	1 1/4	4.90
20	BS820-2	2.50	2.80	0.82	1	2 9/32	4	2 1/8	1 13/32	1.80
10 Pitch										
30	BS1030-15	3.00	3.08	0.57	3/4	1 7/16	2 1/4	2 1/2	1	2.00
20	BS1020-15	2.00	2.21	0.57	3/4	1 33/64	2 1/2	1 3/4	29/32	0.80
40	BS1040-2	4.00	4.06	0.71	7/8	1 11/16	2 1/2	3	1 3/16	3.70
20	BS1020-2	2.00	2.24	0.71	3/4	1 51/64	3 1/8	1 3/4	1 1/16	1.00
50	BS1050-2	5.00	5.06	0.70	3/4	1 19/32	2 5/8	2	1	4.00
25	B1025-2	2.50	2.74	0.70	3/4	1 35/64	3 3/8	2	3/4	1.50
60	BS1060-3	6.00	6.04	0.78	1	1 55/64	2 3/4	3	1 3/8	6.00
20	BS1020-3	2.00	2.27	0.78	7/8	2 5/32	4 3/8	1 3/4	1 5/16	0.90
12 Pitch										
27	BS1227-15	2.25	2.32	0.41	1/2	1 1/8	1 3/4	1 1/2	25/32	0.60
18	BS1218-15	1.50	1.67	0.41	1/2	1 1/8	1 7/8	1 1/4	21/32	0.30
36	BS1236-2	3.00	3.05	0.53	1	1 17/64	1 7/8	2 1/8	7/8	1.30
18	BS1218-2	1.50	1.70	0.53	3/4	1 3/8	2 3/8	15/16	13/16	0.30
36	BS1236-2A	3.00	3.05	0.53	5/8	1 17/64	1 7/8	2 1/8	7/8	1.40
18	BS1218-2A	1.50	1.70	0.53	1/2	1 3/8	2 3/8	15/16	13/16	0.40
48	BS1248-2	4.00	4.05	0.59	5/8	1 11/64	2	1 5/8	3/4	1.60
24	B1224-2	2.00	2.20	0.59	1/2	1 7/16	2 7/8	1 1/2	3/4	0.80
54	BS1254-3	4.50	4.53	0.60	5/8	1 1/16	1 3/4	1 3/4	3/4	1.90
18	B1218-3	1.50	1.72	0.60	1/2	1 11/32	3	1 1/4	11/16	0.40
14 Pitch										
28	BS1428-2	2.00	2.04	0.35	1/2	15/16	1 3/8	1 5/8	21/32	0.50
14	BS1414-2	1.00	1.17	0.35	1/2	31/32	1 5/8	13/16	9/16	0.10
16 Pitch										
24	BS1624-2	1.50	1.54	0.19	1/2	5/8	1	1	7/16	0.15
12	BS1612-2	0.75	0.91	0.19	3/8	37/64	1 1/8	21/32	11/32	0.08
24	BS1624-15	1.50	1.55	0.25	1/2	3/4	13/16	1 1/8	9/16	0.40
16	BS1616-15	1.00	1.13	0.25	3/8	47/64	1 1/4	13/16	7/16	0.09
32	BS1632-2	2.00	2.04	0.35	1/2	49/64	13/16	1 1/8	1/2	0.30
16	BS1616-2	1.00	1.15	0.35	3/8	27/32	1 1/2	13/16	7/16	0.04
48	BS1648-3	3.00	3.02	0.42	5/8	7/8	15/16	1 1/2	9/16	0.74
16	B1616-3	1.00	1.17	0.42	7/16	59/64	2	7/8	15/32	0.13
64	BS1664-4	4.00	4.02	0.48	5/8	57/64	1 3/8	2 1/4	9/16	1.70
16	B1616-4	1.00	1.17	0.48	1/2	63/64	2 1/2	13/16	15/32	0.12

Steel Bevel Gears may be furnished with hardened teeth at slight additional cost.

Bevel Gears
Horsepower Ratings

Cast Iron

Part Number	Revolutions per Minute							
	50	100	200	300	600	900	1200	1800
B330-2	2.50	4.50	7.7	10.0	15.3			
B315-2	2.50	4.50	7.7	10.0	15.3			
B432-2	1.33	2.30	4.0	5.3	8.0	9.5		
B416-2	1.33	2.30	4.0	5.3	8.0	9.5		
B442-3	1.10	2.00	3.7	5.0	7.5	9.0		
B414-3	1.10	2.00	3.7	5.0	7.5	9.0		
B456-4	1.40	2.50	4.4	6.0	9.0	10.9		
B414-4	1.40	2.50	4.4	6.0	9.0	10.9		
B530-2	0.50	1.00	1.9	2.5	3.9	4.8	5.5	
B515-2	0.50	1.00	1.9	2.5	3.9	4.8	5.5	
B545-3	0.70	1.40	2.4	3.3	5.2	6.4	7.2	
B515-3	0.70	1.40	2.4	3.3	5.2	6.4	7.2	
B560-4	1.00	1.80	3.3	4.4	6.9	8.4	9.5	
B515-4	1.00	1.80	3.3	4.4	6.9	8.4	9.5	
B636-2	0.50	1.00	1.7	2.3	3.7	4.4	5.0	
B618-2	0.50	1.00	1.7	2.3	3.7	4.4	5.0	
B642-2	0.60	1.10	2.0	2.7	4.0	5.0		
B621-2	0.60	1.10	2.0	2.7	4.0	5.0		
B645-3	0.40	0.80	1.4	2.0	3.2	3.9	4.6	
B615-3	0.40	0.80	1.4	2.0	3.2	3.9	4.6	
B648-2	0.80	1.50	2.5	3.4	5.1	6.1		
B624-2	0.80	1.50	2.5	3.4	5.1	6.1		
B660-4	0.50	0.90	1.7	2.3	3.7	4.6	5.2	
B615-4	0.50	0.90	1.7	2.3	3.7	4.6	5.2	
B840-2	0.40	0.70	1.3	1.8	2.9	3.7	4.2	
B820-2	0.40	0.70	1.3	1.8	2.9	3.7	4.2	
B848-3	0.20	0.40	0.7	1.0	1.7	2.2	2.5	2.9
B816-3	0.20	0.40	0.7	1.0	1.7	2.2	2.5	2.9
B864-4	0.20	0.40	0.7	1.0	1.7	2.2	2.5	
B816-4	0.20	0.40	0.7	1.0	1.7	2.2	2.5	
B872-4	0.40	0.70	1.2	1.8	2.8	3.6	4.2	
B818-4	0.40	0.70	1.2	1.8	2.8	3.6	4.2	
B1060-3	0.17	0.30	0.6	0.8	1.3	1.7	1.9	2.3
B1020-3	0.17	0.30	0.6	0.8	1.3	1.7	1.9	2.3
B1060-4	0.10	0.20	0.4	0.5	0.9	1.2	1.4	1.8
B1015-4	0.10	0.20	0.4	0.5	0.9	1.2	1.4	1.8
B1090-6	0.14	0.25	0.5	0.7	1.2	1.7	1.9	2.3
B1015-6	0.14	0.25	0.5	0.7	1.2	1.7	1.9	2.3
B1236-2	0.05	0.11	0.2	0.3	0.5	0.6	0.8	1.0
B1218-2	0.05	0.11	0.2	0.3	0.5	0.6	0.8	1.0
B1254-3	0.07	0.15	0.3	0.4	0.7	0.9	1.0	1.3
B1218-3	0.07	0.15	0.3	0.4	0.7	0.9	1.0	1.3
B1272-4	0.07	0.15	0.3	0.4	0.7	0.9	1.1	1.4
B1218-4	0.07	0.15	0.3	0.4	0.7	0.9	1.1	1.4
B1272-6	0.06	0.11	0.2	0.3	0.6	0.8	1.0	1.2
B1212-6	0.06	0.11	0.2	0.3	0.6	0.8	1.0	1.2

Steel

Part Number	Revolutions per Minute							
	50	100	200	300	600	900	1200	1800
BS636-2	0.9	1.70	3.00	4.10	6.40	8.00	9.00	
BS618-2	0.9	1.70	3.00	4.10	6.40	8.00	9.00	
BS840-2	0.5	0.90	1.50	2.10	3.50	4.40	5.00	
BS820-2	0.5	0.90	1.50	2.10	3.50	4.40	5.00	
BS1030-15	0.2	0.40	0.70	1.00	1.70	2.10	2.30	2.9
BS1020-15	0.2	0.40	0.70	1.00	1.70	2.10	2.30	2.9
BS1040-2	0.25	0.50	0.90	1.30	2.10	2.70	3.00	3.7
BS1020-2	0.25	0.50	0.90	1.30	2.10	2.70	3.00	3.7
BS1050-2	0.33	0.64	1.20	1.60	2.50	3.20	3.70	
BS1025-2	0.33	0.64	1.20	1.60	2.50	3.20	3.70	
BS1060-3	0.3	0.50	1.00	1.40	2.40	3.00	3.50	4.3
BS1020-3	0.3	0.50	1.00	1.40	2.40	3.00	3.50	4.3
BS1227-15	0.09	0.17	0.33	0.50	0.80	1.00	1.20	1.6
BS1218-15	0.09	0.17	0.33	0.50	0.80	1.00	1.20	1.6
BS1236-2	0.12	0.25	0.40	0.60	1.00	1.40	1.70	2.0
BS1218-2	0.12	0.25	0.40	0.60	1.00	1.40	1.70	2.0
BS1236-2A	0.12	0.25	0.40	0.60	1.00	1.40	1.70	2.0
BS1218-2A	0.12	0.25	0.40	0.60	1.00	1.40	1.70	2.0
BS1248-2	0.18	0.37	0.70	0.90	1.60	2.00	2.30	2.8
B1224-2	0.18	0.37	0.70	0.90	1.60	2.00	2.30	2.8
BS1254-3	0.14	0.28	0.50	0.70	1.20	1.60	1.90	2.3
B1218-3	0.14	0.28	0.50	0.70	1.20	1.60	1.90	2.3
BS1428-2	0.05	0.08	0.16	0.20	0.40	0.54	0.70	0.8
BS1414-2	0.05	0.08	0.16	0.20	0.40	0.54	0.70	0.8
BS1624-2	0.02	0.03	0.05	0.08	0.14	0.20	0.25	0.3
BS1612-2	0.02	0.03	0.05	0.08	0.14	0.20	0.25	0.3
BS1624-15	0.03	0.05	0.09	0.14	0.25	0.33	0.40	0.5
BS1612-15	0.03	0.05	0.09	0.14	0.25	0.33	0.40	0.5
BS1632-2	0.03	0.08	0.14	0.20	0.37	0.50	0.60	0.8
BS1616-2	0.03	0.08	0.14	0.20	0.37	0.50	0.60	0.8
BS1648-3	0.05	0.09	0.17	0.25	0.50	0.60	0.80	1.0
BS1616-3	0.05	0.09	0.17	0.25	0.50	0.60	0.80	1.0
BS1664-4	0.05	0.10	0.20	0.33	0.50	0.70	0.90	1.1
BS1616-4	0.05	0.10	0.20	0.33	0.50	0.70	0.90	1.1

Miter Gears
20° Pressure Angle



Miter gears are ordinarily used as right angle drives, transmitting horsepower between intersecting shafts at a 1:1 ratio. They are used where high efficiency is required. Only miters of the same number of teeth, pitch, and pressure angle can be operated together. More than two miters may be used in sets, as in a differential.

The thrust of miter gears causes the gears to separate; therefore, ball bearings or roller bearings should be used rather than sleeve bearings. Provisions should be made using thrust bearings to absorb backward thrust.

All standard stock miter gears must be mounted at right angles (90 degrees) for proper tooth bearing.

All Martin miter and bevel gears are generated with the "coniflex" tooth form. A slight misalignment of gears is permissible because of the localized tooth bearing running lengthwise along the gear tooth.

The mounting distance must be held in order to maintain proper backlash between gears. This will also insure that the ends of the gear teeth will be flush with each other. The use of a straight mineral oil as a lubricant is recommended for most miter gear applications.

Martin stock miter gears are manufactured from 1144 Carbon steel.

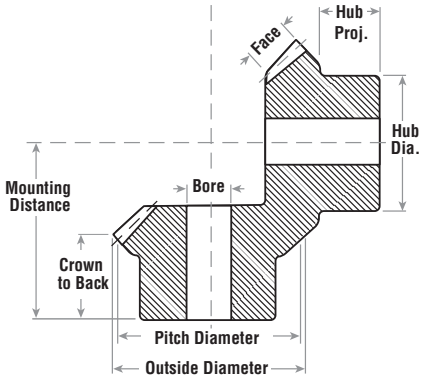
The “M” series is furnished unhardened with plain bore. The “HM” series is furnished hardened teeth with plain bore. The “HMK” series is furnished hardened teeth with keyway and setscrew for installation on the shaft.

Hardened miter gears have approximately 50% more horsepower capacity and provide greater gear wear than untreated gears.

All Martin miter gears are cut with the 20° pressure angle system. They will not operate with any other pressure angle system.

Miter Gears
20° Pressure Angle



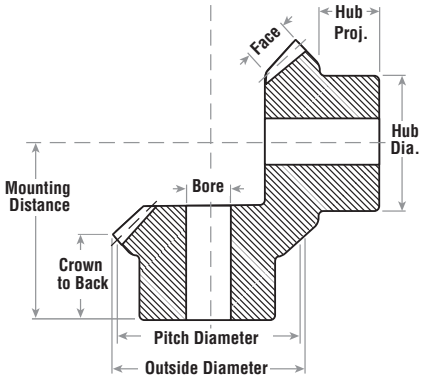


Steel - Plain Bore — Unhardened Teeth

Number of Teeth	Part Number	Diameter		Face (Inches)	Bore (inches)		Mounting (Inches)	Hub (Inches)		Wt. Lb. (Approx.)
		Pitch	Outside		Diameter	Length		Diameter	Projection	
4 Pitch										
24	M424	6.00	6.36	1.33	1 1/2	3 9/16	5 1/2	4	1 15/16	14.4
24	M424A	6.00	6.36	1.33	1 3/4	3 9/16	5 1/2	4	1 15/16	13.7
28	M428	7.00	7.36	1.43	2	3 5/8	6	5	1 15/16	21.1
5 Pitch										
25	M525	5.00	5.29	1.10	1 3/8	3	4 5/8	3 1/2	1 3/4	8.5
25	M525A	5.00	5.29	1.10	1 1/2	3	4 5/8	3 1/2	1 3/4	8.3
25	M525B	5.00	5.29	1.10	1 3/4	3	4 5/8	3 1/2	1 3/4	7.8
6 Pitch										
24	M624	4.00	4.24	0.86	1 1/4	2 5/16	3 5/8	3	1 5/16	4.4
24	M624A	4.00	4.24	0.86	1 1/2	2 5/16	3 5/8	3	1 5/16	4.3
27	M627	4.50	4.74	0.96	1 1/4	2 5/8	4 1/8	3 1/4	1 1/2	6.3
27	M627A	4.50	4.74	0.96	1 1/2	2 5/8	4 1/8	3 1/4	1 1/2	5.9
8 Pitch										
24	M824	3.00	3.18	0.64	3/4	1 37/64	2 9/16	1 3/4	13/16	1.5
24	M824A	3.00	3.18	0.64	1	1 49/64	2 3/4	2 1/2	1	2.1
24	M824B	3.00	3.18	0.64	1 1/4	1 49/64	2 3/4	2 1/2	1	1.9
28	M828	3.50	3.68	0.75	1	2 3/32	3 1/4	2 1/2	1 1/4	2.9
28	M828A	3.50	3.68	0.75	1 3/16	2 3/32	3 1/4	2 1/2	1 1/4	2.8
28	M828B	3.50	3.68	0.75	1 1/4	2 3/32	3 1/4	2 1/2	1 1/4	2.6
32	M832	4.00	4.18	0.84	1	2 9/32	3 5/8	3	1 1/8	4.8
10 Pitch										
20	M1020A	2.00	2.14	0.44	1/2	1 23/64	2	1 5/8	13/16	0.75
20	M1020B	2.00	2.14	0.44	5/8	1 23/64	2	1 5/8	13/16	0.72
20	M1020	2.00	2.14	0.44	3/4	1 23/64	2	1 5/8	13/16	0.67
20	M1020C	2.00	2.14	0.44	7/8	1 23/64	2	1 5/8	13/16	0.58
25	M1025	2.50	2.64	0.55	3/4	1 5/8	2 7/16	2	15/16	1.20
25	M1025A	2.50	2.64	0.55	7/8	1 5/8	2 7/16	2	15/16	1.20
25	M1025B	2.50	2.64	0.55	1	1 5/8	2 7/16	2	15/16	1.20
30	M1030	3.00	3.14	0.64	3/4	1 3/4	2 3/4	2	1	1.80

Miter Gears
20° Pressure Angle



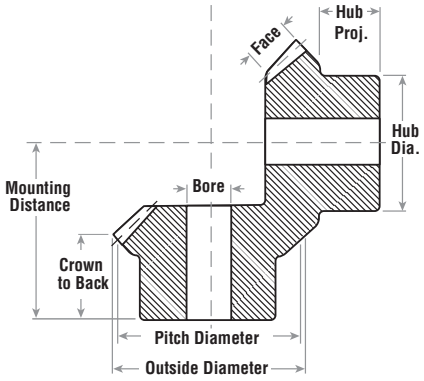


Steel - Plain Bore — Unhardened Teeth

Number of Teeth	Part Number	Diameter		Face (Inches)	Bore (inches)		Mounting (Inches)	Hub (Inches)		Wt. Lb. (Approx.)
		Pitch	Outside		Diameter	Length		Diameter	Projection	
12 Pitch										
15	M1215	1.25	1.37	0.27	3/8	55/64	1 1/4	1	1/2	0.17
15	M1215A	1.25	1.37	0.27	7/16	55/64	1 1/4	1	1/2	0.16
15	M1215B	1.25	1.37	0.27	1/2	55/64	1 1/4	1	1/2	0.15
18	M1218	1.50	1.62	0.32	1/2	1 1/64	1 1/2	1 1/4	5/8	0.30
18	M1218A	1.50	1.62	0.32	5/8	1 1/64	1 1/2	1 1/4	5/8	0.25
18	M1218B	1.50	1.62	0.32	3/4	1 1/64	1 1/2	1 1/4	5/8	0.22
21	M1221	1.75	1.87	0.39	1/2	1 3/16	1 3/4	1 3/8	11/16	0.45
21	M1221A	1.75	1.87	0.39	9/16	1 3/16	1 3/4	1 3/8	11/16	0.45
21	M1221B	1.75	1.87	0.39	5/8	1 3/16	1 3/4	1 3/8	11/16	0.43
21	M1221C	1.75	1.87	0.39	3/4	1 3/16	1 3/4	1 3/8	11/16	0.38
24	M1224	2.00	2.12	0.43	1/2	1 7/32	1 7/8	1 1/2	11/16	0.62
30	M1230	2.50	2.62	0.54	5/8	1 31/64	2 5/16	1 3/4	27/32	1.10
14 Pitch										
14	M1414	1.00	1.11	0.19	3/8	47/64	1 1/16	7/8	1/2	0.10
14	M1414A	1.00	1.11	0.19	7/16	47/64	1 1/16	7/8	1/2	0.09
16 Pitch										
12	M1612	0.75	0.84	0.16	5/16	37/64	13/16	5/8	3/8	0.05
16	M1616	1.00	1.09	0.22	3/8	3/4	1 1/16	3/4	7/16	0.07
20	M1620	1.25	1.34	0.27	7/16	27/32	1 1/4	1	1/2	0.16
24	M1624	1.50	1.59	0.31	1/2	7/8	1 3/8	1	1/2	0.20
20 Pitch										
20	M2020	1.00	1.07	0.23	3/8	13/16	1 1/8	3/4	1/2	0.06
25	M2025	1.25	1.32	0.25	3/8	3/4	1 3/16	1	3/8	0.14
24 Pitch										
24	M2424	1.00	1.06	0.20	1/4	9/16	29/32	5/8	9/32	0.12

Miter Gears
20° Pressure Angle



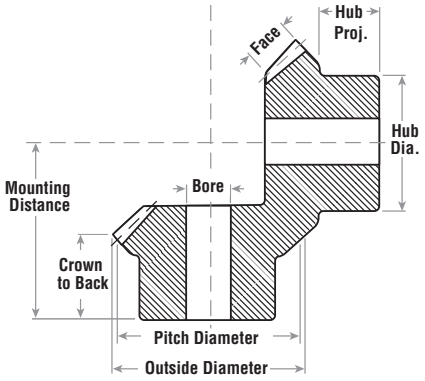


Steel - Plain Bore — Hardened Teeth

Number of Teeth	Part Number	Diameter		Face (Inches)	Bore (inches)		Mounting (Inches)	Hub (Inches)		Wt. Lb. (Approx.)
		Pitch	Outside		Diameter	Length		Diameter	Projection	
4 Pitch										
24	HM424	6.00	6.36	1.33	1 1/2	3 9/16	5 1/2	4	1 15/16	14.4
24	HM424A	6.00	6.36	1.33	1 3/4	3 9/16	5 1/2	4	1 15/16	13.7
28	HM428	7.00	7.36	1.43	2	3 5/8	6	5	1 15/16	21.1
5 Pitch										
25	HM525	5.00	5.29	1.10	1 3/8	3	4 5/8	3 1/2	1 3/4	8.5
25	HM525A	5.00	5.29	1.10	1 1/2	3	4 5/8	3 1/2	1 3/4	8.3
25	HM525B	5.00	5.29	1.10	1 3/4	3	4 5/8	3 1/2	1 3/4	7.5
6 Pitch										
24	HM624	4.00	4.24	0.86	1 1/4	2 5/16	3 5/8	3	1 5/16	4.4
24	HM624A	4.00	4.24	0.86	1 1/2	2 5/16	3 5/8	3	1 5/16	4.0
27	HM627	4.50	4.74	0.96	1 1/4	2 5/8	4 1/8	3 1/4	1 1/2	6.3
27	HM627A	4.50	4.74	0.96	1 1/2	2 5/8	4 1/8	3 1/4	1 1/2	5.9
8 Pitch										
24	HM824	3.00	3.18	0.64	3/4	1 37/64	2 9/16	1 3/4	13/16	1.5
24	HM824A	3.00	3.18	0.64	1	1 49/64	2 3/4	2 1/2	1	2.1
24	HM824B	3.00	3.18	0.64	1 1/4	1 49/64	2 3/4	2 1/2	1	2.6
28	HM828	3.50	3.68	0.75	1	2 3/32	3 1/4	2 1/2	1 1/4	3.0
28	HM828A	3.50	3.68	0.75	1 3/16	2 3/32	3 1/4	2 1/2	1 1/4	2.8
28	HM828B	3.50	3.68	0.75	1 1/4	2 3/32	3 1/4	2 1/2	1 1/4	2.6
32	HM832	4.00	4.18	0.85	1	2 9/32	3 5/8	3	1 1/8	4.7
10 Pitch										
20	HM1020A	2.00	2.14	0.44	1/2	1 23/64	2	1 5/8	13/16	0.76
20	HM1020B	2.00	2.14	0.44	5/8	1 23/64	2	1 5/8	13/16	0.70
20	HM1020	2.00	2.14	0.44	3/4	1 23/64	2	1 5/8	13/16	0.64
20	HM1020C	2.00	2.14	0.44	7/8	1 23/64	2	1 5/8	13/16	0.58
25	HM1025	2.50	2.64	0.55	3/4	1 5/8	2 7/16	2	15/16	1.30
25	HM1025A	2.50	2.64	0.55	7/8	1 5/8	2 7/16	2	15/16	1.20
25	HM1025B	2.50	2.64	0.55	1	1 5/8	2 7/16	2	15/16	1.20
30	HM1030	3.00	3.14	0.64	3/4	1 3/4	2 3/4	2	1	1.80

Miter Gears
20° Pressure Angle



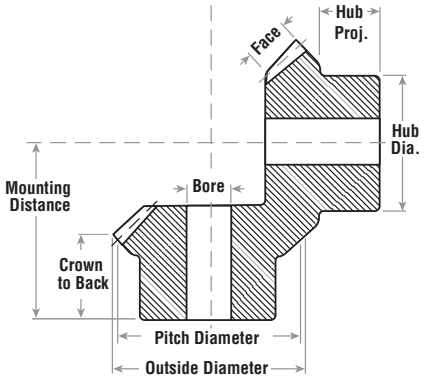


Steel - Plain Bore — Hardened Teeth

Number of Teeth	Part Number	Diameter		Face (Inches)	Bore (inches)		Mounting (Inches)	Hub (Inches)		Wt. Lb. (Approx.)
		Pitch	Outside		Diameter	Length		Diameter	Projection	
12 Pitch										
15	HM1215	1.25	1.37	0.27	3/8	55/64	1 1/4	1	1/2	0.15
15	HM1215B	1.25	1.37	0.27	1/2	55/64	1 1/4	1	1/2	0.15
18	HM1218	1.50	1.62	0.32	1/2	1 1/64	1 1/2	1 1/4	5/8	0.30
18	HM1218A	1.50	1.62	0.32	5/8	1 1/64	1 1/2	1 1/4	5/8	0.25
18	HM1218B	1.50	1.62	0.32	3/4	1 1/64	1 1/2	1 1/4	5/8	0.22
21	HM1221	1.75	1.87	0.39	1/2	1 3/16	1 3/4	1 3/8	11/16	0.22
21	HM1221B	1.75	1.87	0.39	5/8	1 3/16	1 3/4	1 3/8	11/16	0.42
24	HM1224	2.00	2.12	0.43	1/2	1 7/32	1 7/8	1 1/2	11/16	0.62
30	HM1230	2.50	2.62	0.54	5/8	1 31/64	2 5/16	1 3/4	27/32	1.10
14 Pitch										
14	HM1414	1.00	1.11	0.19	3/8	47/64	1 1/16	7/8	1/2	0.10
14	HM1414A	1.00	1.11	0.19	7/16	47/64	1 1/16	7/8	1/2	0.10
16 Pitch										
16	HM1616	1.00	1.09	0.22	3/8	3/4	1 1/16	3/4	7/16	0.07
24	HM1624	1.50	1.59	0.31	1/2	7/8	13/8	1	1/2	0.20
24 Pitch										
24	HM2424	1.00	1.06	0.20	1/4	9/16	29/32	5/8	9/32	0.06

Miter Gears
20° Pressure Angle





Steel - Furnished with Keyway and Set Screw — Hardened Teeth

Number of Teeth	Part Number	Diameter		Face (Inches)	Bore (inches)		Mounting (Inches)	Hub (Inches)		Wt. Lb. (Approx.)
		Pitch	Outside		Diameter	Length		Diameter	Projection	
4 Pitch										
24	HMK424A	6.00	6.36	1.33	1 3/4	3 9/16	5 1/2	4	1 15/16	13.7
5 Pitch										
25	HMK525	5.00	5.29	1.10	1 3/8	3	4 5/8	3 1/2	1 3/4	8.5
25	HMK525B	5.00	5.29	1.10	1 3/4	3	4 5/8	3 1/2	1 3/4	7.5
6 Pitch										
24	HMK624	4.00	4.24	0.86	1 1/4	2 5/16	3 5/8	3	1 5/16	4.4
24	HMK624A	4.00	4.24	0.86	1 1/2	2 5/16	3 5/8	3	1 5/16	4.0
27	HMK627	4.50	4.74	0.96	1 1/4	2 5/8	4 1/8	3 1/4	1 1/2	6.3
27	HMK627A	4.50	4.74	0.96	1 1/2	2 5/8	4 1/8	3 1/4	1 1/2	5.9
8 Pitch										
24	HMK824	3.00	3.18	0.64	3/4	1 37/64	2 9/16	1 3/4	13/16	1.5
24	HMK824A	3.00	3.18	0.64	1	1 49/64	2 3/4	2 1/2	1	2.1
24	HMK824B	3.00	3.18	0.64	1 1/4	1 49/64	2 3/4	2 1/2	1	1.8
28	HMK828	3.50	3.68	0.75	1	2 3/32	3 1/4	2 1/2	1 1/4	2.9
28	HMK828A	3.50	3.68	0.75	1 3/16	2 3/32	3 1/4	2 1/2	1 1/4	2.7
28	HMK828B	3.50	3.68	0.75	1 1/4	2 3/32	3 1/4	2 1/2	1 1/4	2.6
10 Pitch										
20	HMK1020A	2.00	2.14	0.44	1/2	1 23/64	2	1 5/8	13/16	0.74
20	HMK1020B	2.00	2.14	0.44	5/8	1 23/64	2	1 5/8	13/16	0.70
20	HMK1020	2.00	2.14	0.44	3/4	1 23/64	2	1 5/8	13/16	0.63
20	HMK1020C	2.00	2.14	0.44	7/8	1 23/64	2	1 5/8	13/16	0.58
25	HMK1025	2.50	2.64	0.55	3/4	1 5/8	2 7/16	2	15/16	1.30
25	HMK1025A	2.50	2.64	0.55	7/8	1 5/8	2 7/16	2	15/16	1.20
25	HMK1025B	2.50	2.64	0.55	1	1 5/8	2 7/16	2	15/16	1.10
12 Pitch										
15	HMK1215B	1.25	1.37	0.27	1/2	55/64	1 1/4	1	1/2	0.14
18	HMK1218A	1.50	1.62	0.32	5/8	1 1/64	1 1/2	11/4	5/8	0.25
21	HMK1221B	1.75	1.87	0.39	5/8	1 3/16	1 3/4	1 3/8	11/16	0.41
30	HMK1230	2.50	2.62	0.54	5/8	1 31/64	2 5/16	1 3/4	27/32	1.10
16 Pitch										
16	HMK1616	1.00	1.09	0.22	3/8	3/4	1 1/16	3/4	7/16	0.07
24	HMK1624	1.50	1.59	0.31	1/2	7/8	1 3/8	1	1/2	0.20

Miter Gear Horsepower Ratings

Steel

Part Number	Revolutions Per Minute									
	10	25	50	100	200	300	600	900	1200	1800
M424	0.80	1.90	3.60	6.40	10.60	13.5	18.8	21.5	23.0	
HM424	1.40	3.33	6.30	11.20	18.60	23.6	33.0	38.0	40.0	
M428	1.07	2.50	4.80	8.40	13.60	17.2	23.3	26.5	28.5	
HM428	1.90	4.50	8.40	14.70	23.80	30.0	40.0	46.0	50.0	
M525	0.45	1.05	2.00	3.70	6.30	8.1	11.6	13.6	15.0	
HM525	0.75	1.90	3.60	6.50	11.00	14.2	20.0	24.0	26.0	
M624	0.25	0.55	1.10	2.00	3.50	4.6	6.9	8.2	19.0	10.2
HM624	0.40	1.00	1.90	3.50	6.10	8.0	12.0	14.5	16.0	18.0
M627	0.30	0.75	1.40	2.50	4.30	5.7	8.5	9.9	11.0	12.0
HM627	0.50	1.33	2.50	4.40	7.50	10.0	1.5	17.5	19.0	21.0
M824	0.10	0.25	0.50	0.90	1.50	2.1	3.3	4.0	4.5	5.3
HM824	0.20	0.40	0.80	1.50	2.60	3.7	5.8	7.0	8.0	9.3
M828	0.15	0.33	0.70	1.20	2.20	2.9	4.4	5.3	6.0	6.8
HM828	0.25	0.60	1.20	2.10	3.90	5.0	7.7	9.3	10.5	12.0
M832	0.20	0.45	0.90	1.60	2.80	3.7	5.5	6.5	7.2	8.0
HM832	0.33	0.80	1.50	2.80	4.90	6.5	9.6	11.4	12.5	14.2
M1020	0.03	0.08	0.20	0.30	0.60	0.8	1.3	1.7	2.0	2.4
HM1020	0.05	0.15	0.30	0.50	1.00	1.4	2.3	3.0	3.5	4.2
M1025	0.06	0.15	0.30	0.50	0.90	1.3	2.0	2.5	2.9	3.5
HM1025	0.10	0.25	0.50	0.90	1.60	2.3	3.5	4.4	5.0	6.0
M1030	0.08	0.20	0.40	0.70	1.30	1.8	2.8	3.5	3.9	4.5
HM1030	0.15	0.33	0.70	1.30	2.30	3.2	4.9	6.1	6.8	8.0
M1215	0.01	0.02	0.05	0.10	0.20	0.3	0.5	0.6	0.8	0.9
HM1215	0.02	0.04	0.10	0.17	0.33	0.4	0.8	1.0	1.3	1.6
M1218	0.01	0.03	0.08	0.14	0.25	0.4	0.7	0.9	1.0	1.3
HM1218	0.02	0.05	0.15	0.25	0.47	0.7	1.1	1.5	1.8	2.2
M1221	0.02	0.05	0.11	0.20	0.40	0.5	0.9	1.2	1.4	1.7
HM1221	0.04	0.10	0.20	0.33	0.70	1.0	1.6	2.1	2.5	3.0
M1224	0.03	0.07	0.15	0.25	0.50	0.7	1.2	1.5	1.7	2.0
HM1224	0.05	0.12	0.25	0.47	0.90	1.2	2.1	2.6	3.0	3.5
M1230	0.05	0.12	0.25	0.44	0.80	1.1	1.8	2.2	2.5	3.0
HM1230	0.09	0.21	0.40	0.75	1.40	1.9	3.2	4.0	4.4	5.3
M1414		0.01	0.02	0.05	0.09	0.1	0.2	0.3	0.4	0.5
HM1414		0.02	0.04	0.09	0.16	0.2	0.4	0.6	0.7	0.9
M1616		0.01	0.02	0.05	0.09	0.1	0.2	0.3	0.4	0.5
HM1616		0.02	0.04	0.09	0.16	0.2	0.4	0.6	0.7	0.9
M1620		0.02	0.04	0.08	0.14	0.2	0.4	0.5	0.6	0.8
HM1620		0.04	0.07	0.15	0.25	0.4	0.7	0.9	1.0	1.3
M1624		0.03	0.06	0.12	0.20	0.3	0.5	0.7	0.8	1.0
HM1624		0.05	0.10	0.21	0.40	0.5	0.9	1.2	1.4	1.8
M2020		0.01	0.02	0.04	0.08	0.1	0.2	0.2	0.4	0.5
HM2020		0.02	0.04	0.07	0.14	0.2	0.4	0.5	0.6	0.8
M2025		0.02	0.03	0.06	0.12	0.2	0.3	0.4	0.5	0.6
HM2025		0.04	0.05	0.10	0.21	0.3	0.5	0.7	0.9	1.0

Ratings listed to right of dark line exceed recommended pitch line velocity.

Originally, worm gearing was used to secure, by compact means, a large reduction of speed between driving and driven shafts with a proportionate increase (except for frictional loss) in the torque of the driven shaft. Worm gearing is still used for this purpose, and frequently the wheel is driven by a single-thread worm of such low helix angle that the drive cannot be reversed; that is the wheel cannot drive the worm as the gearing automatically locks itself against backward rotation. (*See note below.)

Although a multiple-threaded worm when applied under like conditions is much more efficient than a single-threaded worm, it does not follow that the multiple-threaded worm should always be used.

A single-threaded worm might be preferable when the most important requirement is to obtain a high ratio and especially if the worm must be self-locking.

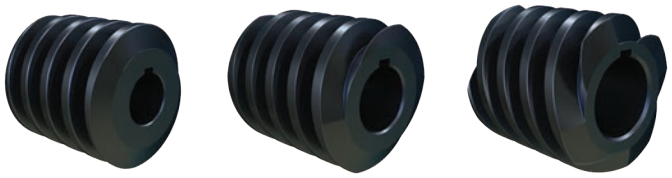
When power is the primary factor, the multiple-threaded worms should be used.

LUBRICATION is an important factor when using worm gearing. An increase in heat generated means a decrease in efficiency. The amount of power which can be transmitted at a given temperature increases as the efficiency of the gearing increases.

MATERIALS for worm and worm gears are generally confined to steel for worms and bronze or cast iron for gears. When steel worms are run with bronze gears at high speeds, the worm is usually hardened with ground threads.

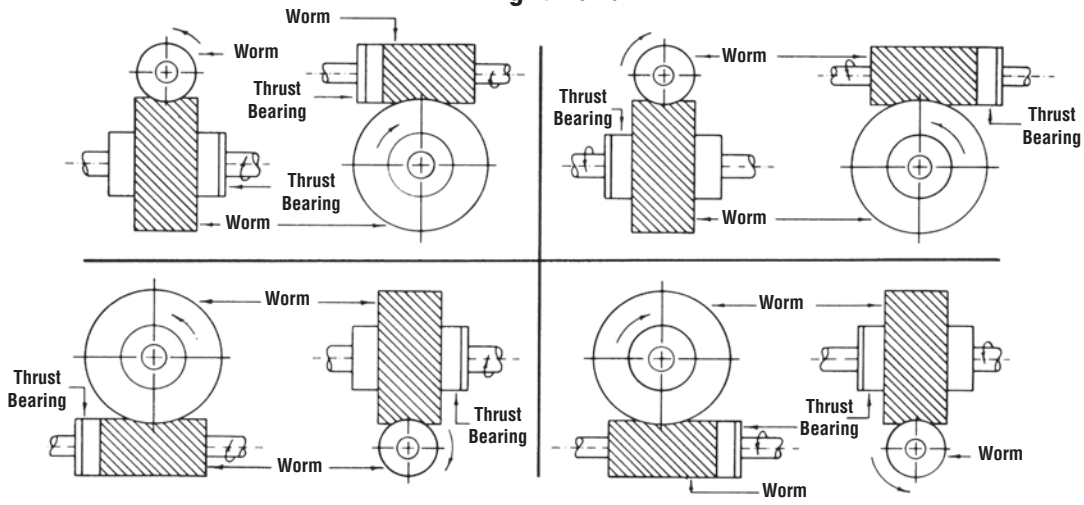


Right Hand Worm and Gear



Single, Double, Quadruple Thread Worms

Direction of Rotation and Thrust
Right Hand



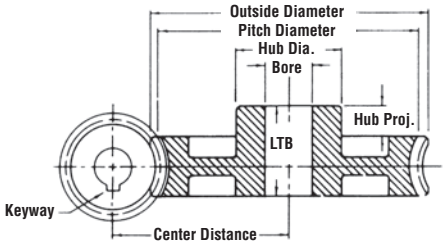
***NOTE: SELF-LOCKING ABILITY.** There is often some confusion as to the self-locking ability of a worm and gear set. Martin worm gear sets, under no condition should be considered to hold a load when at rest. The statement is made to cover the broad spectrum of variables affecting self-locking characteristics of a particular gear set in a specific application. Theoretically, a worm gear will not back drive if the friction angle is greater than the worm lead angle. However, the actual surface finish and lubrication may reduce this significantly. More important, vibration may cause motion at the point of mesh with further reduction in the friction angle.

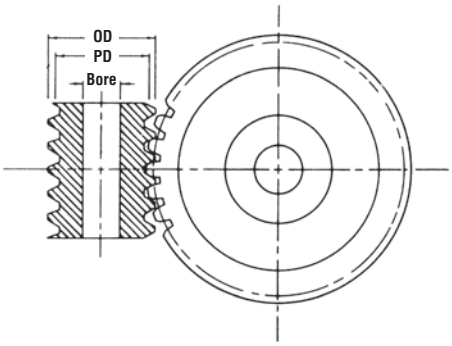
Generally speaking, if the worm lead angle is less than 5°, there is reasonable expectation of self-locking. Again, no guarantee should be made and customer should be advised. **If safety is involved, a positive brake should be used.**

Worm and Worm Gears
3 Pitch • 2" Face • 14½° Pressure Angle

Right Hand Single Thread (Stocked Right Hand Only)



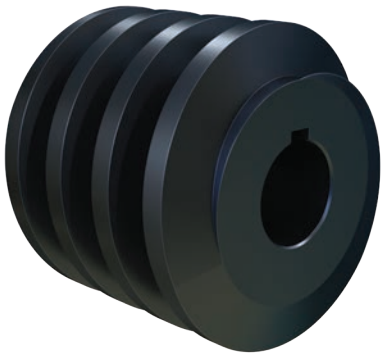




Cast Iron

Number of Teeth	Part Number Cast Iron	Wt. Lb. (Approx.)	Pitch Diameter	Bore (inches)	Hub (Inches)		Style
					Diameter	Projection	
18	W318	16.2	6.000	1	3	1 1/2	W
24	W324	22.8	8.000	1 1/2	3 1/2	1 1/2	W
30	W330	30.2	10.000	1 1/2	3 7/8	1 1/2	S
36	W336	36.4	12.000	1 1/2	3 1/2	1 1/2	S
54	W354	60.2	18.000	1 1/2	4	1 1/2	S

W = WEB S = SPOKE



Steel — 4° 46' Helix Angle Worms

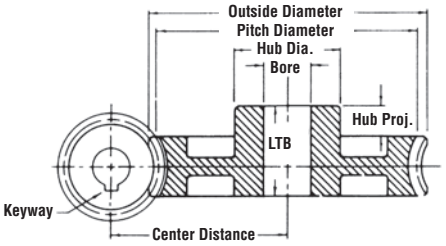
Part Number Soft	Wt. Lb. (Approx.)	Part Number Hardened	Wt. Lb. (Approx.)	Face (Inches)	Pitch Diameter	Bore (Inches)	Keyway (inches)
W3	12.2	WG3	12.0	4	4.000	1 1/2	3/8 × 3/16

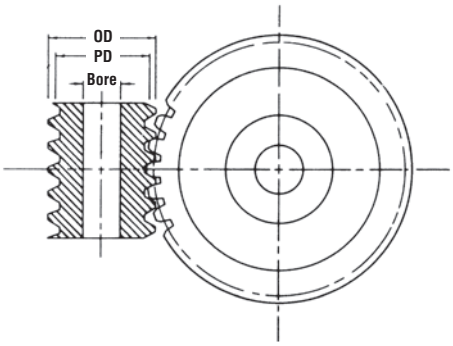
Case hardened worms have ground and polished threads (Indicated by letter “G” in Part Number).
Please note: Stock bore sizes on ground worms may be difficult to modify.

Worm and Worm Gears
4 Pitch • 1½" Face • 14½° Pressure Angle

Right Hand Single Thread (Stocked Right Hand Only)



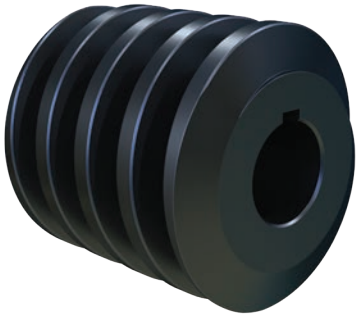




Cast Iron

Number of Teeth	Part Number Cast Iron	Wt. Lb. (Approx.)	Pitch Diameter	Bore (inches)	Hub (Inches)		Style
					Diameter	Projection	
20	W420	8.4	5.000	1	2 1/2	1 1/4	W
24	W424	12.9	6.000	1	2 1/2	1 1/4	W
32	W432	15.6	8.000	1 1/4	3	1 1/4	W
40	W440	27.5	10.000	1 1/4	3	1 1/4	W
48	W448	34.1	12.000	1 1/2	4	1 1/4	W
64	W464	43.9	16.000	1 1/2	4	1 1/4	S

W = WEB S = SPOKE



Steel — 4° 46' Helix Angle Worms

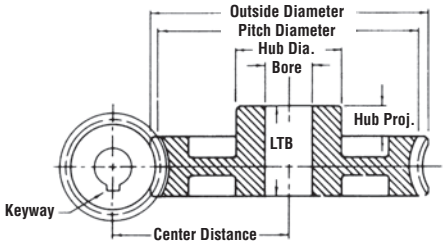
Part Number Soft	Wt. Lb. (Approx.)	Part Number Hardened	Wt. Lb. (Approx.)	Face (Inches)	Pitch Diameter	Bore (Inches)	Keyway (inches)
W4	5.6	WG4	5.5	3 1/2	3.000	1 1/4	5/16 × 5/32

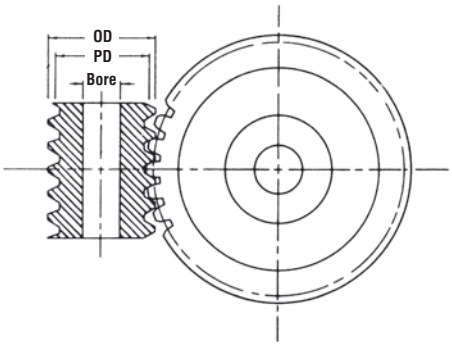
Case hardened worms have ground and polished threads (Indicated by letter “G” in Part Number).
Please note: Stock bore sizes on ground worms may be difficult to modify.

Worm and Worm Gears
6 Pitch • 1" Face • 14½° Pressure Angle

Right Hand Single Thread (Stocked Right Hand Only)



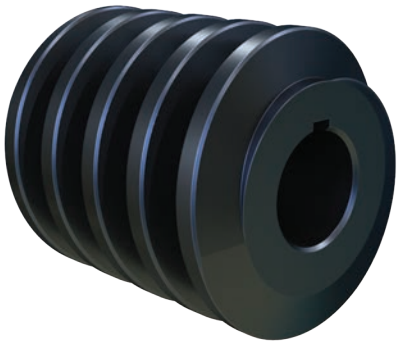




Cast Iron

Number of Teeth	Part Number Cast Iron	Wt. Lb. (Approx.)	Pitch Diameter	Bore (inches)	Hub (Inches)		Style
					Diameter	Projection	
20	W620	2.5	3.333	3/4	1 7/8	7/8	W
24	W624	3.6	4.000	3/4	1 7/8	7/8	W
30	W630	5.0	5.000	7/8	2 1/4	7/8	W
36	W636	6.0	6.000	1	2 1/2	7/8	W
40	W640	7.6	6.667	1	2 1/2	7/8	W
48	W648	9.2	8.000	1 1/4	2 3/4	1	W
60	W660	13.7	10.000	1 1/4	3	1 1/4	W
72	W672	14.9	12.000	1 1/4	3	1 1/4	W

W = WEB



Steel — 4° 46' Helix Angle Worms

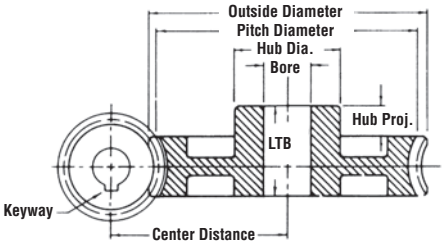
Part Number Soft	Wt. Lb. (Approx.)	Part Number Hardened	Wt. Lb. (Approx.)	Face (Inches)	Pitch Diameter	Bore (Inches)	Hub (Inches)		Keyway (inches)
							Diameter	Projection	
W6	1.8	WG6	1.7	2 1/2	2.000	7/8			3/16 × 3/32
WH6	2.7			2 1/2	2.000	7/8	1 9/16	3/4	3/16 × 3/32

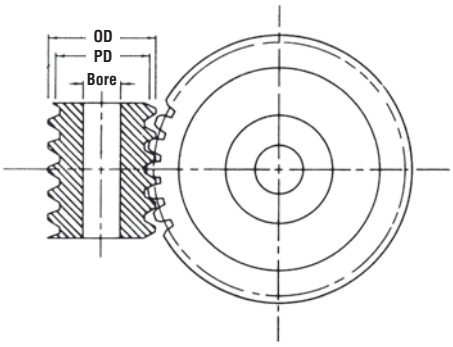
Case hardened worms have ground and polished threads (Indicated by letter “G” in Part Number).
Please note: Stock bore sizes on ground worms may be difficult to modify.

Worm and Worm Gears
6 Pitch • 1" Face • 14½° Pressure Angle

Right Hand Double Thread (Stocked Right Hand Only)



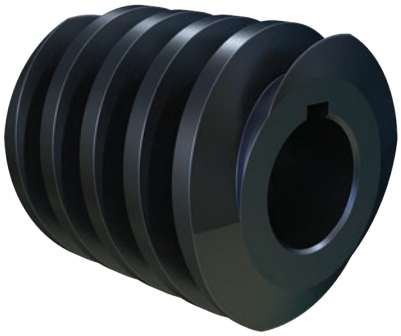




Cast Iron

Number of Teeth	Part Number Cast Iron	Wt. Lb. (Approx.)	Pitch Diameter	Bore (inches)	Hub (Inches)		Style
					Diameter	Projection	
20	W620D	3.3	3.333	1	2 3/4	1	PLAIN
24	W624D	4.1	4.000	1 1/4	2 3/4	1	PLAIN
30	W630D	5.2	5.000	1 1/4	2 3/4	1	W
40	W640D	7.6	6.667	1 1/4	2 3/4	1	W

W = WEB



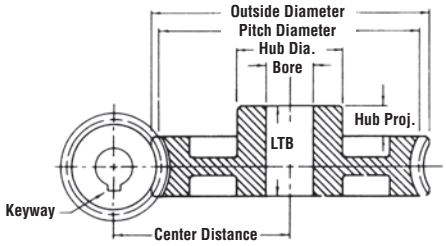
Steel — 9° 28' Helix Angle Worms

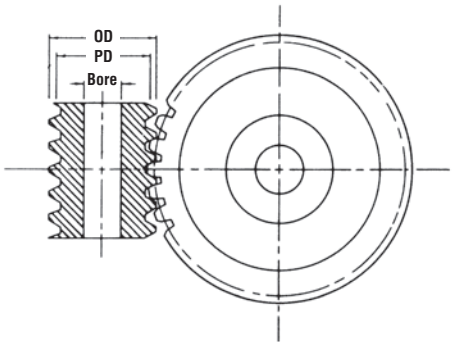
Part Number Soft	Wt. Lb. (Approx.)	Face (Inches)	Pitch Diameter	Bore (Inches)	Keyway (inches)
W6D	1.6	2 1/2	2.000	1	1/4 × 1/8

Worm and Worm Gears
6 Pitch • 1" Face • 14½° Pressure Angle

Right Hand Quadruple Thread (Stocked Right Hand Only)

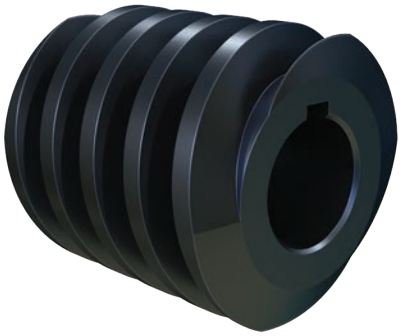






Cast Iron

Number of Teeth	Part Number Cast Iron	Wt. Lb. (Approx.)	Pitch Diameter	Bore (inches)	Hub (Inches)		Style
					Diameter	Projection	
20	W620Q	3.4	3.333	1	2 3/4	1	PLAIN
24	W624Q	4.1	4.000	1 1/4	2 3/4	1	PLAIN



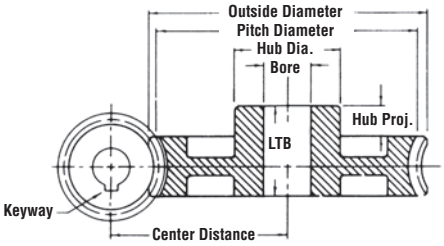
Steel — 18° 26' Helix Angle Worms

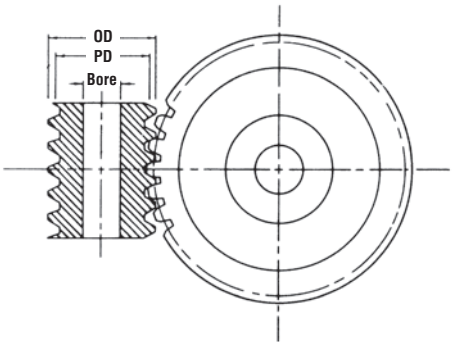
Part Number Soft	Wt. Lb. (Approx.)	Face (Inches)	Pitch Diameter	Bore (Inches)	Keyway (inches)
W6D	1.6	2 1/2	2.000	1	1/4 × 1/8

Worm and Worm Gears
8 Pitch • ¾" Face • 14½° Pressure Angle

Right Hand Single Thread (Stocked Right Hand Only)



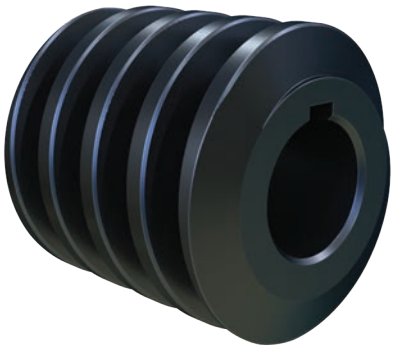




Cast Iron

Number of Teeth	Part Number Cast Iron	Wt. Lb. (Approx.)	Pitch Diameter	Bore (inches)	Hub (Inches)		Style
					Diameter	Projection	
20	W820	1.3	2.500	3/4	1 3/4	3/4	PLAIN
30	W830	2.4	3.750	3/4	1 3/4	3/4	W
40	W840	3.7	5.000	1	2 3/8	7/8	W
48	W848	4.5	6.000	1	2 3/8	7/8	W
50	W850	5.1	6.250	1	2 1/2	7/8	W
60	W860	6.1	7.500	1	2 1/2	7/8	W
80	W880	8.9	10.000	1 1/4	3	7/8	W

W = WEB



Steel — 4° 46' Helix Angle Worms

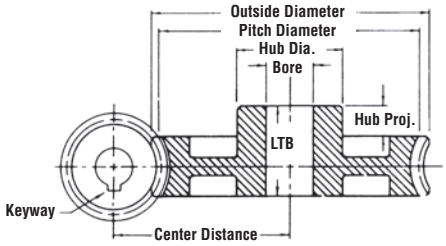
Part Number Soft	Wt. Lb. (Approx.)	Part Number Hardened	Wt. Lb. (Approx.)	Face (Inches)	Pitch Diameter	Bore (Inches)	Hub (Inches)		Keyway (inches)
							Diameter	Projection	
W8	0.64	WG8	0.62	1 3/4	1.500	3/4			3/16 × 3/32
WH8	0.74			1 3/4	1.500	3/4	1 3/16	5/8	

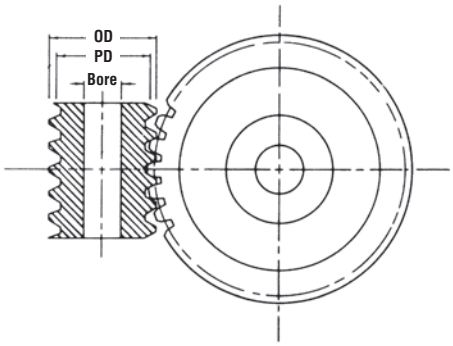
Case hardened worms have ground and polished threads (Indicated by letter “G” in Part Number).
Please note: Stock bore sizes on ground worms may be difficult to modify.

Worm and Worm Gears
8 Pitch • ¾" Face • 14½° Pressure Angle

Right Hand Double Thread (Stocked Right Hand Only)







Cast Iron

Number of Teeth	Part Number Cast Iron	Wt. Lb. (Approx.)	Pitch Diameter	Bore (inches)	Hub (Inches)		Style
					Diameter	Projection	
20	W820D	1.2	2.500	1	2	3/4	PLAIN
30	W830D	2.5	3.750	1	2 1/4	3/4	W
40	W840D	3.4	5.000	1	2 1/4	3/4	W

W = WEB



Steel — 9° 28' Helix Angle Worms

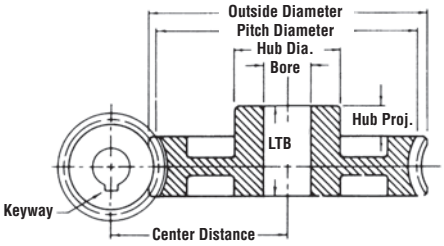
Part Number Soft	Wt. Lb. (Approx.)	Part Number Hardened	Wt. Lb. (Approx.)	Face (Inches)	Pitch Diameter	Bore (Inches)	Hub (Inches)		Keyway (inches)
							Diameter	Projection	
W8D	0.56	WG8D	0.54	1 3/4	1.500	7/8			3/16 × 3/32
WH8D	0.74			1 3/4	1.500	3/4	1 3/16	5/8	

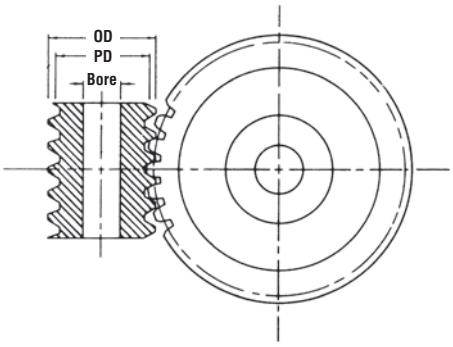
Case hardened worms have ground and polished threads (Indicated by letter “G” in Part Number).
Please note: Stock bore sizes on ground worms may be difficult to modify.

Worm and Worm Gears
8 Pitch • ¾" Face • 14½° Pressure Angle

Right Hand Quadruple Thread (Stocked Right Hand Only)



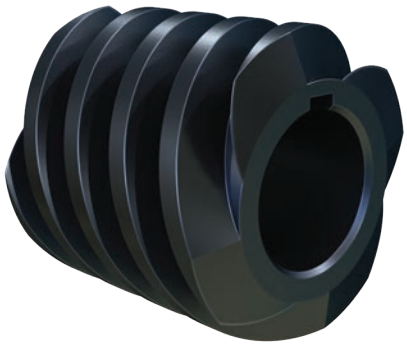




Cast Iron

Number of Teeth	Part Number Cast Iron	Wt. Lb. (Approx.)	Pitch Diameter	Bore (inches)	Hub (Inches)		Style
					Diameter	Projection	
20	W820Q	1.2	2.500	1	2	3/4	PLAIN
30	W830Q	2.5	3.750	1	2 1/4	3/4	W

W = WEB



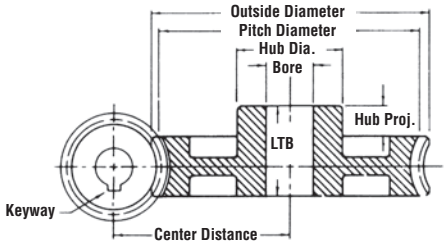
Steel — 18° 26' Helix Angle Worms

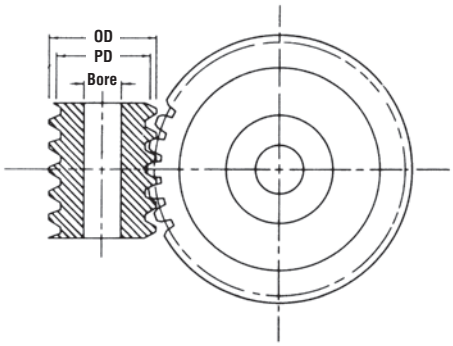
Part Number Soft	Wt. Lb. (Approx.)	Face (Inches)	Pitch Diameter	Bore (Inches)	Hub (Inches)		Keyway (inches)
					Diameter	Projection	
W8Q	0.58	1 3/4	1.500	7/8			3/16 × 3/32
WH8Q	0.76	1 3/4	1.500	3/4	13/16	5/8	

Worm and Worm Gears
10 Pitch • 5/8" Face • 14½° Pressure Angle

Right Hand Single Thread (Stocked Right Hand Only)



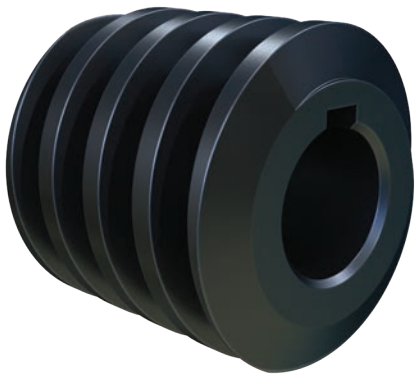




Cast Iron and Bronze

Number of Teeth	Part Number Cast Iron	Wt. Lb. (Approx.)	Pitch Diameter	Bore (Inches)	Hub (Inches)		Style	Part Number Bronze	Wt. Lb. (Approx.)
					Diameter	Projection			
20	W1020	0.7	2.000	1/2	1 1/4	3/4	PLAIN	WB1020	.8
30	W1030	1.5	3.000	5/8	1 3/4	3/4	PLAIN	WB1030	1.7
40	W1040	1.8	4.000	5/8	1 3/4	3/4	W	WB1040	2.4
50	W1050	2.8	5.000	3/4	2	3/4	W		
60	W1060	3.6	6.000	3/4	2	3/4	W		
80	W1080	4.8	8.000	3/4	2	3/4	W		
100	W10100	6.0	10.000	3/4	2 1/2	3/4	W		

W = WEB



Steel — 4° 34'Helix Angle Worms

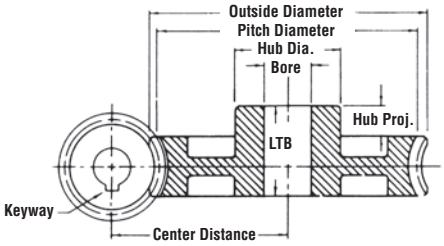
Part Number Soft	Wt. Lb. (Approx.)	Part Number Hardened	Wt. Lb. (Approx.)	Face (Inches)	Pitch Diameter	Bore (Inches)	Hub (Inches)		Keyway (inches)
							Diameter	Projection	
W10	0.36	WG10	0.32	1 3/8	1.250	5/8			3/16 × 3/32
WH10	0.42		0.38	1 3/8	1.250	5/8	1	1/2	

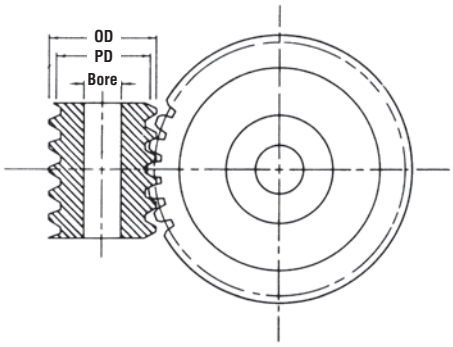
Case hardened worms have ground and polished threads (Indicated by letter "G" in Part Number).
Please note: Stock bore sizes on ground worms may be difficult to modify.

Worm and Worm Gears
10 Pitch • 5/8" Face • 14½° Pressure Angle

Right Hand Double Thread (Stocked Right Hand Only)



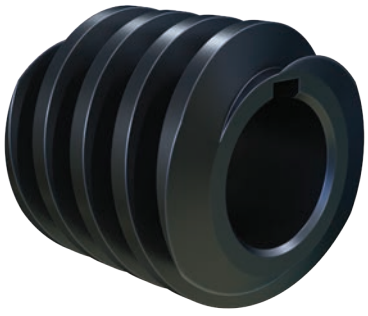




Cast Iron and Bronze

Number of Teeth	Part Number Cast Iron	Wt. Lb. (Approx.)	Pitch Diameter	Bore (Inches)	Hub (Inches)		Style	Part Number Bronze	Wt. Lb. (Approx.)
					Diameter	Projection			
20	W1020D	0.65	2.000	7/8	1 5/8	5/8	PLAIN	WB1020D	0.75
30	W1030D	1.30	3.000	7/8	1 3/4	5/8	PLAIN	WB1030D	1.30
40	W1040D	1.60	4.000	7/8	1 3/4	5/8	W		
50	W1050D	2.90	5.000	7/8	2	1	W		
60	W1060D	3.00	6.000	7/8	2	1	W		

W = WEB



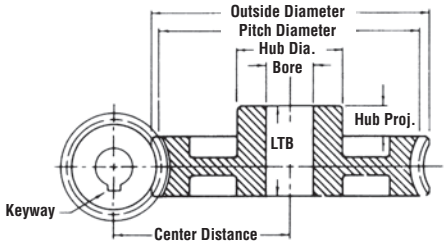
Steel — 9° 5'Helix Angle Worms

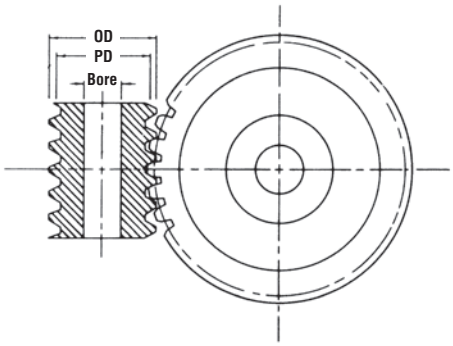
Part Number Soft	Wt. Lb. (Approx.)	Face (Inches)	Pitch Diameter	Bore (Inches)	Hub (Inches)		Keyway (inches)
					Diameter	Projection	
W10D	0.28	1 3/8	1.2500	3/4			3/16 × 3/32
WH10D	0.42	1 3/8	1.2500	5/8	1	1/2	

Worm and Worm Gears
10 Pitch • 5/8" Face • 14½° Pressure Angle

Right Hand Quadruple Thread (Stocked Right Hand Only)



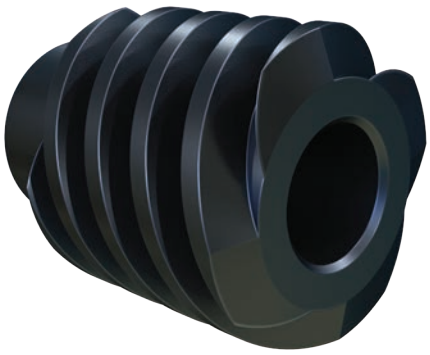




Cast Iron

Number of Teeth	Part Number Cast Iron	Wt. Lb. (Approx.)	Pitch Diameter	Bore (Inches)	Hub (Inches)		Style
					Diameter	Projection	
20	W1020Q	0.64	2.000	7/8	1 5/8	5/8	PLAIN
30	W1030Q	1.30	3.000	7/8	1 3/4	5/8	W
40	W1040Q	1.60	4.000	7/8	1 3/4	5/8	W

W = WEB



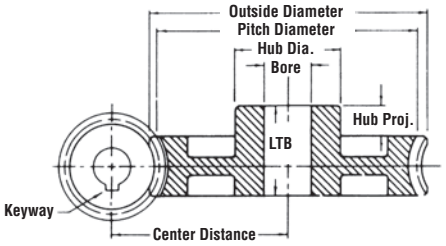
Steel — 17° 45'Helix Angle Worms

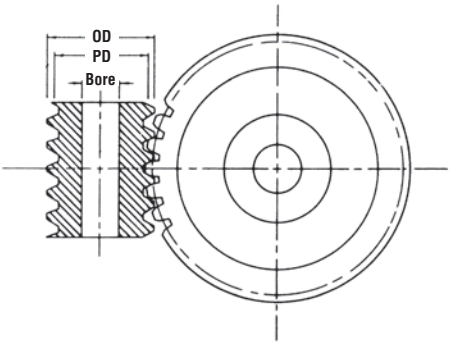
Part Number Soft	Wt. Lb. (Approx.)	Face (Inches)	Pitch Diameter	Bore (Inches)	Hub (Inches)		Keyway (inches)
					Diameter	Projection	
W10Q	0.28	1 3/8	1.250	3/4			3/16 × 3/32
WH10Q	0.40	1 3/8	1.250	5/8	1	1/2	

Worm and Worm Gears
12 Pitch • ½" Face • 14½° Pressure Angle

Right Hand Single Thread (Stocked Right Hand Only)



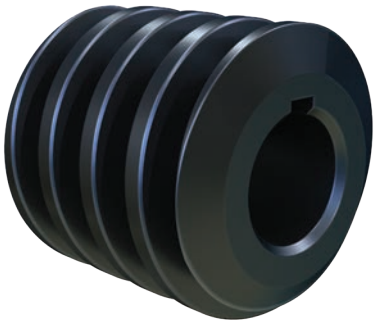




Cast Iron and Bronze

Number of Teeth	Part Number Cast Iron	Wt. Lb. (Approx.)	Pitch Diameter	Bore (Inches)	Hub (Inches)		Style	Part Number Bronze	Wt. Lb. (Approx.)
					Diameter	Projection			
18	W1218	0.28	1.500	1/2	1 1/4	5/8	PLAIN		
20	W1220	0.35	1.667	1/2	1 1/4	5/8	PLAIN	WB1220	0.45
30	W1230	0.71	2.500	1/2	1 1/4	5/8	W		
40	W1240	1.20	3.333	5/8	1 1/2	3/4	W		
50	W1250	1.50	4.166	5/8	1 1/2	3/4	W		
60	W1260	2.00	5.000	5/8	1 3/4	3/4	W		
80	W1280	3.90	6.666	5/8	2 1/2	3/4	W		
100	W12100	4.40	8.333	3/4	2	3/4	W		

W = WEB



Steel — 4° 46'Helix Angle Worms

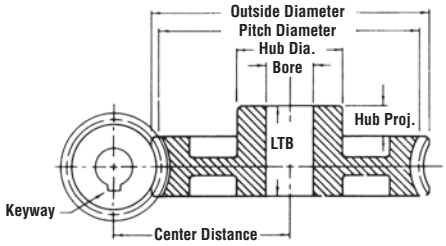
Part Number Soft	Wt. Lb. (Approx.)	Part Number Hardened	Wt. Lb. (Approx.)	Face (Inches)	Pitch Diameter	Bore (Inches)	Hub (Inches)		Keyway (inches)
							Diameter	Projection	
W12	0.17	WG12	0.14	1 1/8	1.000	1/2			1/8 × 1/16
WH12	0.20			1 1/8	1.000	1/2	3/4	3/8	

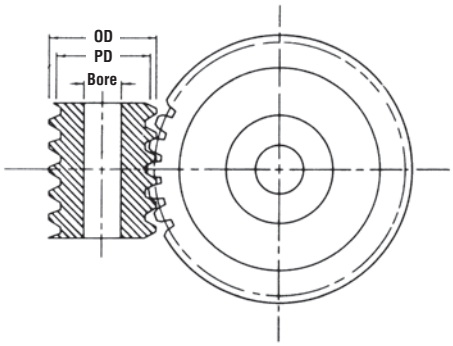
Case hardened worms have ground and polished threads (Indicated by letter "G" in Part Number).
Please note: Stock bore sizes on ground worms may be difficult to modify.

Worm and Worm Gears
12 Pitch • ½" Face • 14½° Pressure Angle

Right Hand Double Thread (Stocked Right Hand Only)



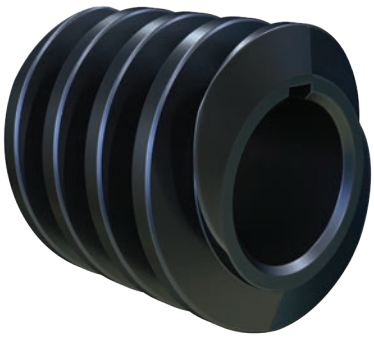




Cast Iron and Bronze

Number of Teeth	Part Number Cast Iron	Wt. Lb. (Approx.)	Pitch Diameter	Bore (Inches)	Hub (Inches)		Style	Part Number Bronze	Wt. Lb. (Approx.)
					Diameter	Projection			
20	W1220D	0.32	1.666	1/2	1 1/4	1/2	PLAIN	WB1220D	0.40
30	W1230D	0.78	2.500	3/4	1 1/2	5./8	PLAIN		
40	W1240D	1.30	3.333	3/4	1 3/4	5/8	W		

W = WEB



Steel — 9° 28' Helix Angle Worms

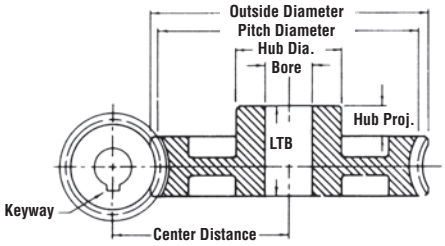
Part Number Soft	Wt. Lb. (Approx.)	Part Number Hardened	Wt. Lb. (Approx.)	Face (Inches)	Pitch Diameter	Bore (Inches)	Hub (Inches)		Keyway (inches)
							Diameter	Projection	
W12D	0.14	WG12D	0.14	1 1/8	1.000	5/8			1/8 × 1/16
WH12D			0.20	1 1/8	1.000	1/2	3/4	3/8	

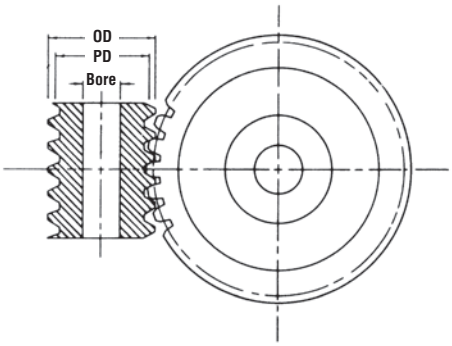
Case hardened worms have ground and polished threads (Indicated by letter “G” in Part Number).
Please note: Stock bore sizes on ground worms may be difficult to modify.

Worm and Worm Gears
12 Pitch • ½" Face • 14½° Pressure Angle

Right Hand Quadruple Thread (Stocked Right Hand Only)



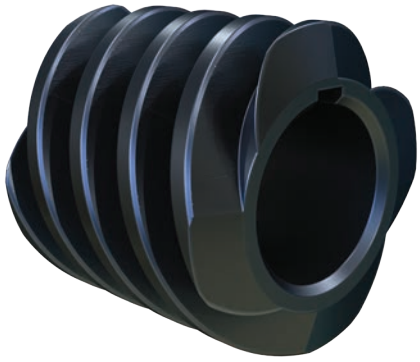




Cast Iron

Number of Teeth	Part Number Cast Iron	Wt. Lb. (Approx.)	Pitch Diameter	Bore (Inches)	Hub (Inches)		Style
					Diameter	Projection	
20	W1220Q	0.32	1.666	1/2	1 1/4	1/2	PLAIN
30	W1230Q	0.38	2.500	3/4	1 1/2	5/8	PLAIN
40	W1240Q	0.80	3.333	3/4	1 3/4	5/8	W

W = WEB



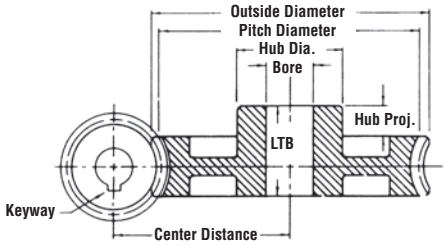
Steel — 18° 26' Helix Angle Worms

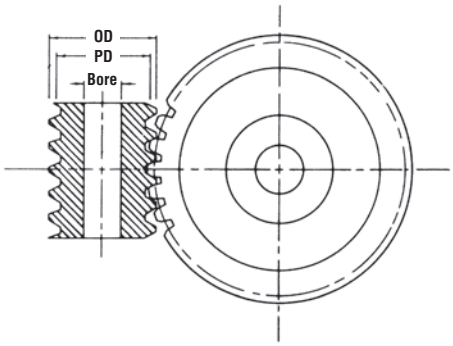
Part Number Soft	Wt. Lb. (Approx.)	Part Number Hardened	Wt. Lb. (Approx.)	Face (Inches)	Pitch Diameter	Bore (Inches)	Hub (Inches)		Keyway (inches)
							Diameter	Projection	
W12Q	0.14	WG12Q	0.14	1 1/8	1.000	5/8			1/8 × 1/16
WH12Q	0.20			1 1/8	1.000	1/2	3/4	3/8	

Worm and Worm Gears
16 Pitch • 5/16" Face • 14½° Pressure Angle

Right Hand Single Thread (Stocked Right Hand Only)







Bronze

Number of Teeth	Part Number Cast Iron	Wt. Lb. (Approx.)	Pitch Diameter	Bore (Inches)	Hub (Inches)		Style
					Diameter	Projection	
20	WB1620	0.13	1.250	1/4	5/8	5/16	PLAIN
30	WB1630	0.28	1.875	5/16	3/4	3/8	W
40	WB1640	0.42	2.500	5/16	3/4	3/8	W
50	WB1650	0.50	3.125	3/8	7/8	7/16	W

W = WEB



Steel — 5° 43'Helix Angle Worms

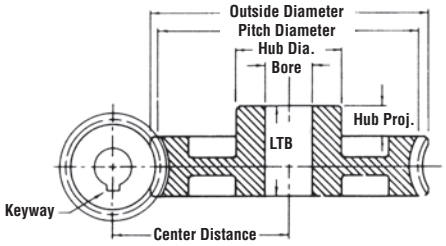
Part Number Soft	Wt. Lb. (Approx.)	Part Number Hardened	Wt. Lb. (Approx.)	Face (Inches)	Pitch Diameter	Bore (Inches)	Hub (Inches)	
							Diameter	Projection
WH16	0.08			1	0.625	1/4	0.46	1/4
		WHG16	0.07	1	0.625	5/16	0.46	1/4

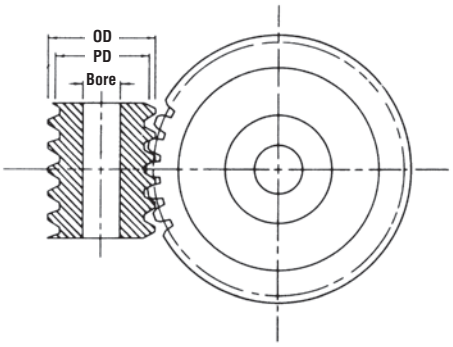
Case hardened worms have ground and polished threads (Indicated by letter “G” in Part Number).
Please note: Stock bore sizes on ground worms may be difficult to modify.

Worm and Worm Gears
16 Pitch • 5/16" Face • 14½° Pressure Angle

Right Hand Double Thread (Stocked Right Hand Only)



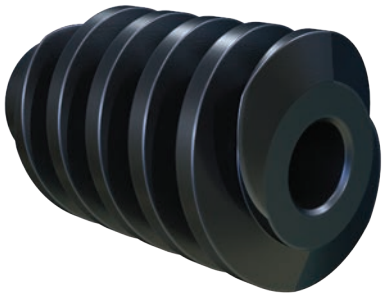




Bronze

Number of Teeth	Part Number Cast Iron	Wt. Lb. (Approx.)	Pitch Diameter	Bore (Inches)	Hub (Inches)		Style
					Diameter	Projection	
20	WB1620D	0.14	1.250	1/4	5/8	5/16	PLAIN

W = WEB



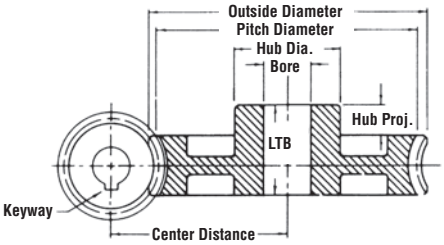
Steel — 11° 19'Helix Angle Worms

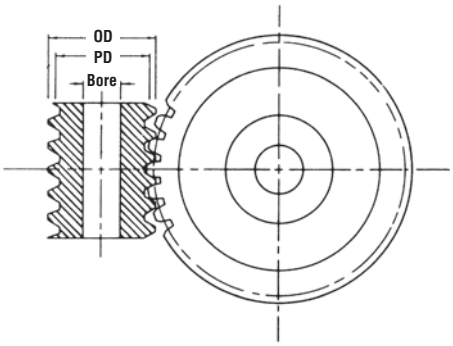
Part Number Soft	Wt. Lb. (Approx.)	Face (Inches)	Pitch Diameter	Bore (Inches)	Hub (Inches)	
					Diameter	Projection
WH16D	0.09	1	0.625	1/4	0.46	1/4

Worm and Worm Gears
16 Pitch • 5/16" Face • 20° Pressure Angle

Right Hand Quadruple Thread (Stocked Right Hand Only)



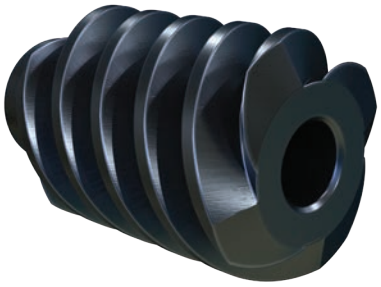




Bronze

Number of Teeth	Part Number Cast Iron	Wt. Lb. (Approx.)	Pitch Diameter	Bore (Inches)	Hub (Inches)		Style
					Diameter	Projection	
20	WB1620Q	0.14	1.250	1/4	5/8	5/16	PLAIN

W = WEB



Steel — 21° 48'Helix Angle Worms

Part Number Soft	Wt. Lb. (Approx.)	Face (Inches)	Pitch Diameter	Bore (Inches)	Hub (Inches)	
					Diameter	Projection
WH16Q	0.08	1	0.625	1/4	0.46	1/4

Ratio-Center Distance Listings With Approximate Horsepower and Torque** Ratings for Hardened and Ground Worms With Bronze Worm Gears

RPM of Worm			1800		900		300		100	
Center		*Gear	Input-Output		Input-Output		Input-Output		Input-Output	
Ratio	Distance		HP	Torque	HP	Torque	HP	Torque	HP	Torque
5.00	0.938	WB1620Q	0.37	60	0.25	70	0.09	80	0.03	80
5.00	1.333	WB1220Q	0.80	130	0.55	170	0.25	200	0.08	215
5.00	1.625	WB1020Q	1.25	200	0.90	275	0.40	350	0.15	370
5.00	2.000	WB820Q	2.00	315	1.50	460	0.80	890	0.33	965
5.00	2.667	WB620Q	3.70	600	2.75	880	1.40	1280	0.55	1430
6.00	3.000	WB624Q	4.50	880	3.40	1300	1.75	1900	0.70	2180
7.50	1.250	WB1630Q	0.50	130	0.33	160	0.14	180	0.05	185
7.50	1.750	WB1230Q	1.25	300	0.85	390	0.33	460	0.13	490
7.50	2.125	WB1030Q	1.90	450	1.33	560	0.60	790	0.25	850
7.50	2.625	WB830Q	3.00	725	2.25	1060	1.00	1400	0.40	1520
7.50	3.500	WB630Q	5.75	1400	4.33	2060	2.20	2960	0.87	3330
9.67	4.050	WB529T	8.40	2615	6.25	3785	3.33	5730	1.33	6540
10.00	0.938	WB1620D	0.25	70	0.15	85	0.06	90	0.02	95
10.00	1.333	WB1220D	0.50	155	0.33	205	0.16	240	0.60	250
10.00	1.562	WB1640Q	0.75	240	0.50	285	0.18	320	0.06	330
10.00	1.625	WB1020D	0.80	230	0.60	325	0.25	400	0.10	430
10.00	2.000	WB820D	1.25	365	0.90	525	0.45	690	0.15	750
10.00	2.167	WB1240Q	1.67	530	1.10	700	0.50	830	0.17	880
10.00	2.625	WB1040Q	2.50	805	1.75	1120	0.80	1400	0.30	1500
10.00	2.667	WB620D	2.40	735	1.80	1075	0.95	1540	0.37	1700
10.00	3.250	WB840Q	4.00	1300	3.00	1880	1.40	2500	0.50	2700
10.00	4.333	WB640Q	7.75	2500	5.75	3675	3.00	5333	1.15	5980
12.00	3.000	WB624D	2.85	1050	2.20	1550	1.15	2200	0.45	2450
12.5	1.875	WB1650Q	0.95	375	0.60	445	0.25	500	0.08	515
12.5	2.583	WB1250Q	2.00	820	1.40	1080	0.60	1300	0.20	1370
12.5	3.125	WB1050Q	3.00	1250	2.25	1740	1.00	2200	0.33	2340
12.5	3.875	WB850Q	4.90	2000	3.70	2900	1.70	3840	0.65	4170
12.5	5.167	WB650Q	9.50	3800	7.00	5600	3.60	8200	1.40	9200
13.33	5.150	WB540T	11.00	4720	8.20	6830	4.40	10360	1.75	11800
15.00	1.250	WB1630D	0.33	155	0.25	180	0.08	200	0.03	210
15.00	1.750	WB1230D	0.75	350	0.50	450	0.25	535	0.07	560
15.00	2.125	WB1030D	1.20	520	0.87	725	0.37	900	0.15	965
15.00	2.188	WB1660Q	1.10	570	0.70	680	0.25	760	0.10	790
15.00	2.625	WB830D	1.67	750	1.25	1080	0.60	1415	0.25	1530
15.00	3.000	WB1260Q	2.50	1170	1.67	1540	0.70	1800	0.25	1930
15.00	3.500	WB630D	3.50	1620	2.70	2375	1.40	3370	0.55	3770
15.00	3.625	WB1060Q	3.75	1700	2.67	2500	1.17	3100	0.50	3300
15.00	4.500	WB860Q	5.75	2820	4.33	4100	2.00	5470	0.75	6000
15.00	6.000	WB660Q	11.33	5550	8.50	8000	4.33	11700	1.70	13100
16.67	6.150	WB550T	13.50	7250	10.00	10500	5.40	16000	2.20	18000
18.00	5.000	WB318	6.00	3100	4.67	4570	3.00	8000	1.50	10000
18.00	7.000	WB672Q	13.50	7800	10.00	11400	5.00	16500	2.00	18500
20.00	0.938	WB1620	0.15	75	0.10	90	0.04	100	0.02	105
20.00	1.333	WB1220	0.33	170	0.25	220	0.10	260	0.04	275
20.00	1.562	WB1640D	0.50	270	0.30	310	0.10	350	0.04	350
20.00	1.625	WB1020	0.50	250	0.33	350	0.20	440	0.07	470

* Ratings listed are for bronze worm gears operating with hardened and ground steel worms. For ratings of cast iron worm gears with hardened steel worm, multiply listed ratings by 30%. For cast iron with hardened and ground steel worm, multiply by 50%.*

Torque ratings in inch pounds.

Ratio-Center Distance Listings With Approximate Horsepower and Torque Ratings for Hardened and Ground Worms With Bronze Worm Gears

RPM of Worm			1800		900		300		100	
Center		*Gear	Input-Output		Input-Output		Input-Output		Input-Output	
Ratio	Distance		HP	Torque	HP	Torque	HP	Torque	HP	Torque
20	2.000	WB820	0.75	400	0.60	600	0.33	775	0.12	850
20	2.167	WB1240D	1.00	600	0.67	775	0.33	920	0.10	970
20	2.625	WB1040D	1.50	900	0.85	1230	0.50	1500	0.20	1650
20	2.667	WB620	1.50	800	1.15	1170	0.75	1660	0.25	1850
20	2.812	WB1680Q	1.40	900	0.90	1075	0.33	1200	0.12	1240
20	3.250	WB840D	2.30	1400	1.75	2000	0.80	2580	0.33	2800
20	3.833	WB1280Q	3.12	2000	2.12	2600	0.90	3120	0.33	3300
20	4.000	WB420	3.50	2000	2.75	2880	1.75	4700	0.75	5600
20	4.333	WB640D	4.50	2780	3.40	4050	1.75	5800	0.70	6500
20	4.625	WB1080Q	4.75	3000	3.40	4250	1.50	5340	0.50	5700
20	5.750	WB880Q	7.50	4800	5.60	7000	2.60	9400	1.00	10200
20	7.667	WB680Q	15.00	9500	10.75	13800	5.50	20000	2.20	22500
24	3.000	WB624	1.75	1120	1.33	1630	0.75	2300	0.33	2600
24	4.500	WB424	4.00	2800	3.00	4000	2.00	6600	0.90	7800
24	6.000	WB324	7.50	5300	5.90	7750	3.90	13500	1.90	17000
25	1.875	WB1650D	0.50	370	0.33	470	0.12	520	0.05	540
25	2.583	WB1250D	1.20	890	0.80	1150	0.33	1380	0.12	1450
25	3.125	WB1050D	1.80	1340	1.33	1850	0.60	2300	0.25	2500
25	3.438	WB16100Q	1.75	1300	1.00	1575	0.40	1750	0.12	1800
25	3.875	WB850D	3.00	2200	2.25	3250	1.00	4200	0.40	4500
25	4.667	WB12100Q	3.67	2800	2.50	3660	1.00	4400	0.40	4630
25	5.167	WB650D	5.50	4000	4.00	6000	2.15	8700	0.87	9700
25	5.625	WB10100Q	5.70	4500	4.10	6380	1.75	8000	0.67	8500
25	7.000	WB8100Q	10.00	9700	7.00	11500	4.00	17500	1.25	19000
25	9.333	WB6100Q	17.50	14250	13.00	20750	6.66	30000	2.60	33000
29	4.050	WB529	3.50	2800	2.75	4200	1.50	6300	0.67	7000
30	1.250	WB1630	0.20	160	0.12	190	0.06	210	0.02	215
30	1.750	WB1230	0.50	350	0.33	450	0.15	540	0.06	570
30	2.125	WB1030	0.70	530	0.50	750	0.25	925	0.10	1000
30	2.188	WB1660	0.60	590	0.40	700	0.15	760	0.05	800
30	2.625	WB830	1.00	870	0.85	1260	0.40	1600	0.17	1750
30	3.000	WB1260D	1.33	1230	1.00	1600	0.40	1900	0.15	2000
30	3.500	WB630	2.00	1700	1.60	2430	0.87	3500	0.33	3800
30	3.625	WB1060D	2.00	1850	1.50	2500	0.70	3200	0.25	3430
30	4.500	WB860D	3.25	2900	2.50	4300	1.12	5650	0.50	6000
30	6.000	WB660D	6.30	5800	4.80	6075	2.50	12110	1.00	13510
30	7.000	WB330	9.05	7880	7.00	11570	4.60	20280	2.25	25560
32	5.500	WB432	5.15	4680	4.00	6750	2.50	11140	1.10	13200
36	4.000	WB636	2.33	2310	1.80	3380	1.00	4800	0.42	5360
36	7.000	WB672D	7.25	8010	5.50	11670	2.87	16700	1.15	18650
36	8.000	WB336	10.40	10900	8.10	15960	5.35	27950	2.60	35280
40	1.562	WB1640	0.25	266	0.12	330	0.07	350	0.02	360
40	2.167	WB1240	0.55	580	0.30	825	0.18	900	0.07	940
40	2.625	WB1040	0.87	890	0.65	1220	0.30	1520	0.12	1630
40	2.812	WB1680D	0.75	910	0.33	1140	0.20	1200	0.07	1230

* Ratings listed are for bronze worm gears operating with hardened and ground steel worms. For ratings of cast iron worm gears with hardened steel worm, multiply listed ratings by 30%. For cast iron with hardened and ground steel worm, multiply by 50%.*

Torque ratings in inch pounds.

Ratio-Center Distance Listings With Approximate Horsepower and Torque Ratings for Hardened and Ground Worms With Bronze Worm Gears

RPM of Worm			1800		900		300		100	
Center		*Gear	Input-Output		Input-Output		Input-Output		Input-Output	
Ratio	Distance		HP	Torque	HP	Torque	HP	Torque	HP	Torque
40	3.250	WB840	1.35	1440	0.85	2350	0.50	2700	0.20	2900
40	3.833	WB1280D	1.70	2040	1.15	2675	0.50	3160	0.20	3330
40	4.333	WB640	2.50	2770	2.00	4033	1.00	5760	0.45	6420
40	4.625	WB1080D	2.60	3070	1.90	4270	0.85	5315	0.33	5680
40	5.150	WB540	4.33	4930	3.40	7145	2.00	10725	0.83	12170
40	5.750	WB880D	4.00	4740	3.00	6850	1.40	8940	0.55	9680
40	6.500	WB440	6.00	5520	4.65	7950	3.00	13200	1.33	15480
40	7.667	WB680D	7.83	9600	6.00	14000	3.00	20025	1.25	22340
48	3.750	WB848	1.50	1950	1.20	2820	0.60	3650	0.25	3960
48	5.000	WB648	2.80	3730	2.25	5460	1.25	7750	0.50	8640
48	7.500	WB448	6.80	9320	5.25	13400	3.33	22200	1.50	26160
48	10.000	WB348	12.70	17640	9.87	25920	6.50	45360	3.16	57120
50	1.875	WB1650	0.30	380	0.20	450	0.08	490	0.03	515
50	2.583	WB1250	0.66	840	0.50	1090	0.20	1300	0.08	1360
50	3.125	WB1050	1.00	1280	0.75	1770	0.33	2200	0.14	2340
50	3.438	WB16100D	0.90	1290	0.50	1525	0.25	1690	0.08	1730
50	3.875	WB850	1.60	2140	1.25	3130	0.66	4090	0.25	4430
50	4.667	WB12100D	2.00	2875	1.33	3600	0.50	4460	0.22	4700
50	5.167	WB650	2.90	4000	2.25	5825	1.25	8310	0.50	9260
50	5.625	WB10100D	3.00	4440	2.16	6110	1.00	7675	0.33	8000
50	6.150	WB550	5.12	7120	4.00	10320	2.25	15480	1.00	17570
50	7.000	WB8100D	4.10	5000	2.75	7500	1.50	8000	0.60	10000
50	9.333	WB6100D	9.00	13800	6.75	20200	3.50	28930	1.40	32280
54	11.000	WB354	13.50	21230	10.50	31200	7.00	54480	3.33	68760
59	7.050	WB559	5.50	9230	4.50	13900	2.50	20075	1.00	23160
60	2.188	WB1660	0.33	550	0.20	650	0.08	720	0.03	740
60	3.000	WB1260	0.75	1100	0.50	1440	0.25	1700	0.09	1790
60	3.625	WB1060	1.00	1690	0.80	2330	0.33	2890	0.16	3080
60	4.500	WB860	1.66	2660	1.33	3900	0.66	5090	0.25	5500
60	6.000	WB660	3.20	5240	2.50	7670	1.40	1080	0.60	1225
64	9.500	WB464	7.87	14280	6.00	20640	3.80	34080	1.70	40320
72	7.000	WB672	3.33	6610	2.50	9660	1.50	13700	0.60	15360
80	2.812	WB1680	0.33	705	0.22	830	0.09	920	0.04	950
80	3.833	WB1280	0.75	1550	0.50	2030	0.25	2375	0.10	2520
80	4.625	WB1080	1.15	2375	0.87	3275	0.40	4050	0.16	4330
80	5.750	WB880	1.80	3800	1.40	5500	0.70	7140	0.30	7750
80	7.667	WB680	3.33	7380	2.66	10750	1.50	15350	0.60	17110
96	6.750	WB896	1.50	4200	1.00	6000	0.50	7000	0.20	8500
96	9.000	WB696	3.25	8490	2.50	12370	1.33	17660	0.50	19680
100	3.438	WB16100	0.33	810	0.20	960	0.09	1060	0.33	1100
100	4.667	WB12100	0.75	1790	0.50	2330	0.25	2730	0.90	2800
100	5.625	WB10100	1.00	2780	0.80	3850	0.33	4775	0.16	5100
100	7.000	WB8100	1.67	4450	1.25	6300	0.67	8000	0.24	9000
100	9.333	WB6100	3.20	8700	2.50	12675	1.33	18090	0.55	20160

* Ratings listed are for bronze worm gears operating with hardened and ground steel worms. For ratings of cast iron worm gears with hardened steel worm, multiply listed ratings by 30%. For cast iron with hardened and ground steel worm, multiply by 50%.*

Torque ratings in inch pounds.

Gear Standards

Quality is the most important factor in buying a gear. We have established standards and tolerances to insure our customers of accurate, dependable and long-lasting gears. All gears are checked with precision pins to assure correct backlash and center distances.

BACKLASH: The recommended backlash for mating gears when assembled is:

3 DP	.009 — .014	10 DP	.003 — .005
4 DP	.007 — .011	12 DP	.003 — .005
5 DP	.006 — .009	16 DP	.002 — .004
6 DP	.005 — .008	20 DP	.002 — .004
8 DP	.004 — .006	24 DP	.002 — .004

CONCENTRICITY of pitch line with bore (Total Indicator Reading) is held within:

3 DP	.006	10 DP	.0040
4 DP	.006	12 DP	.0040
5 DP	.005	16 DP	.0025
6 DP	.005	20 DP	.0025
8 DP	.005	24 DP	.0025

Stock bores are reamed, honed or ground to a smooth finish and standard commercial tolerances or closer. For rust prevention on distributor's shelf and for better appearance when received by the user, all stock gears go through a special finishing process. They present a pleasing appearance when on display or on the shelf. They are not boxed. All gears are identified by part numbers.

GEAR ENGINEERING DATA

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Stock Spur Gear Drive Selection

When designing a stock gear drive using the horsepower tables in this catalog, the following steps must be taken:

I. Find out these five necessary things:

a. Exact center distance in inches
b. Ratio and speeds
c. Service factor (from page G-84)
d. Actual horsepower
e. Bore sizes of both gears

II. Determine design horsepower using formula:

$$DHP = HP \times SF$$

Where: DHP = Design horsepower
HP = Actual horsepower
SF = Service factor (from page G-84)

III. Determine pitch diameters using the formulas:

$$PD_1 = \frac{CD \times 2}{Ratio + 1}$$

$$PD_2 = PD_1 \times Ratio$$

Where: PD_1 = Pitch diameter of pinion (small gear)
PD_2 = Pitch diameter of gear (large gear)
CD = Center distance

IV. Check the center distance:

$$CD = \frac{PD_1 + PD_2}{2}$$

V. Select pitch from horsepower tables on pages G-25 — G-27.

VI. Check selected pitch for necessary pitch diameters.

VII. Check horsepower capacity of large gear.

VIII. Check maximum bore capacity of selected gears.

Spur Gear Drive Selection II (Other Than Stock)

When designing a gear drive when horsepower and speeds exceed the stock gear tables on pages G-25 – G-27, the following steps must be taken:

I. We must obtain all of the following data:

a. Exact center distance in inches
b. Ratio and speeds
c. Service factor (from page G-84)
d. Actual horsepower
e. Bore sizes of both gears

II. We must obtain all of the following data:

$$DHP = HP \times SF$$

Where: DHP = Design horsepower
HP = Actual horsepower
SF = Service factor (from page G-84)

III. Determine pitch diameters using the formulas:

$$PD_1 = \frac{CD \times 2}{Ratio + 1}$$

$$PD_2 = PD_1 \times Ratio$$

Where: PD_1 = Pitch diameter of pinion (small gear)
PD_2 = Pitch diameter of gear (large gear)
CD = Center distance

IV. Determine velocity using the formula:

$$V = .262 \times PD \times RPM$$

Where: V = Velocity in feet per minute @ pitch line
PD = Pitch diameter
RPM = Revolutions per minute of either gear*

V. Determine approximate pitch using the formula:

$$DP = \sqrt{\frac{3.1416 \times S \times 3 \times V \times .25}{DHP \times 27.5\ (1200 + V)}}$$

Where: DP = Diametral Pitch
S = Safe Static Stress per Square Inch of material (see table one, page G-84)
V = Velocity in FPM
DHP = Design Horsepower

Note: To round off answers, go to the nearest DP (standard DP's larger than 3 DP are: 1 DP, 1 1/4 DP, 1 1/2 DP, 1 3/4 DP, 2 DP, 2 1/2 DP)

VI. Determine number of teeth on both gears:

$$N = PD \times DP$$

Where: N = Number of teeth
PD = Pitch diameter of gear
DP = Diametral pitch of gear

VII. Determine face width:

$$F = \frac{DP\left(\frac{DHP \times 33{,}000}{V}\right)}{SY\left(\frac{600}{600 + V}\right)}$$

Where: F = Face Width
DP = Diametral Pitch
V = Velocity in FPM
S = Safe Static Stress per Square Inch of material (Table 1, page G-84)
Y = Outline formula from Table 2, page G-84

Note: To round off each answer, go to the next one inch.

VIII. Check HP rating of selected pinion using the formula::

$$HP = \frac{LV}{33{,}000}$$

Where: $$L = \frac{SYF}{DP} \times \frac{600}{600 + V}$$

From horsepower formulas on page G-83.

Note: If the horsepower capacity is below the design horsepower, the following options can be taken:

a. Harden pinion (check gear HP capacity first)
b. Increase face
c. Increase pitch

* NOTE: Velocities of both gears will always be the same. When using the above formula make sure to use the proper speed (RPM) with the proper pitch diameter.

Center Distance, Pitch Diameters and Ratios of Spur Gears

I. To determine the pitch diameters of a gear set, we must find two basic things:
   a. Required ratio
   b. Required center distance

II. Knowing this, first figure out the pitch diameter of the pinion (smaller gear) using the formula:

$$PD_1 = \frac{CD \times 2}{Ratio + 1}$$

Where: PD_1 = Pitch diameter of pinion (small gear)
CD = Center distance

III. Then, find the pitch diameter of the larger gear, PD2, by using the formula:

$$PD_2 = PD_1 \times Ratio$$

Where: PD_1 = Pitch diameter of pinion (small gear)
PD_2 = Pitch diameter of gear (large gear)
CD = Center distance

IV. Then check the center distance by using the formula:

$$CD = \frac{PD_1 + PD_2}{2}$$

Where: PD_1 = Pitch diameter of pinion (small gear)
PD_2 = Pitch diameter of gear (large gear)
CD = Center distance

Horsepower Formulas

See page G-84 for tables one, two and three.

Engineering Data
Lewis formula (with Barth revision)

L = Load in pounds at pitch line

S = Safe static stress per square inch of material (see table one)

DP = Diametral Pitch

F = Face width of gear

Y = Strength factor based on Pressure Angle and Number of Teeth (See table two)

V = Velocity in feet per minute

V = .262 × PD × RPM

PD = Pitch Diameter

RPM = Revolutions Per Minute

HP = Horsepower

$$L = \frac{SYF}{DP} \times \frac{600}{600 + V}$$

Maximum allowable torque (T) that should be imposed on a gear will be the safe tooth load (L) multiplied by:

$$\frac{DP}{2} \text{ or } T = \frac{L \times PD}{2}$$

The safe Horsepower capacity of the gear (at a given RPM) can be calculated from:

$$HP = \frac{T \times RPM}{63{,}025}$$

Or directly from (L) and (V):

$$*HP = \frac{LV}{33{,}000}$$

For a known HP:

$$T = \frac{63025 \times HP}{RPM}$$

For NON-METALLIC GEARS, the modified Lewis formula shown below may be used with (S) values of 6000 PSI for phenolic laminated material.

$$L = \frac{SYF}{DP}\left(\frac{150}{200 + V} + .25\right)$$

* Apply SERVICE FACTOR (table three) for required horsepower.

Gear Standards

Table One
(S) Average values in pounds per square inch

Material	S
Steel — .40 Carbon	25000
— .20 Carbon	20000
Steel — .40 Carbon Heat Treated	35000
Cast Iron	12000
Bronze	10000
Non-Metallic	6000

Table Two
Outline factor Y for use with Diametral Pitch

Number of Teeth	14 1/2 P.A. Involute	20 P.A. Involute	Number of Teeth	14 1/2 P.A. Involute	20 P.A. Involute
10	.176	.201	26	.308	.344
11	.192	.226	28	.314	.352
12	.210	.245	30	.318	.358
13	.223	.264	35	.327	.373
14	.235	.276	40	.336	.389
15	.245	.289	45	.340	.399
16	.255	.295	50	.346	.408
17	.264	.302	60	.355	.421
18	.270	.308	70	.360	.429
19	.277	.314	80	.363	.436
20	.283	.320	90	.366	.442
21	.289	.326	100	.368	.446
22	.292	.330	150	.375	.458
23	.296	.333	200	.378	.463
24	.302	.337	RACK	.390	.484
25	.305	.340			

Table Three
Service factors
Multiply required horsepower by service factor recommended for type of service

Type of Load	Intermittent Of 3 Hours Per Day	8-10 Hours Per Day	Continuous 24 Hours Per Day
UNIFORM	0.80	1.00	1.25
LIGHT SHOCK	1.00	1.25	1.50
MEDIUM SHOCK	1.25	1.50	1.80
HEAVY SHOCK	1.50	1.80	2.00

Spur Gear Dimensional Formulas Diametral Pitch

Rules and Formulas For Spur Gear Calculations

Diametral Pitch is the number of teeth to each inch of the pitch diameter.

To Find	Having	Rule	Formula
Diametrical Pitch (DP)	Circular Pitch (CP)	Divide 3.1416 by Circular Pitch (CP)	$DP = \frac{3.1416}{CP}$
	Pitch Diameter (PD) and Number of Teeth (N)	Divide Number of Teeth (N) by Pitch Diameter (PD)	$DP = \frac{N}{PD}$
	Outside Diameter (OD) and Number of Teeth (N)	Divide Number of Teeth (N) plus 2 by Outside Diameter (OD)	$DP = \frac{N + 2}{OD}$
Pitch Diameter (PD)	Number of Teeth (N) and Diametral Pitch (DP)	Divide Number of Teeth (N) by Diametral Pitch (DP)	$PD = \frac{N}{DP}$
	Number of Teeth (N) and Outside Diameter (OD)	Divide product of Outside Diameter (OD) and Number of Teeth (N) by Number of Teeth (N) plus 2	$PD = \frac{OD \times N}{N + 2}$
	Outside Diameter (OD) and Diametral Pitch (DP)	Subtract from Outside Diameter (OD) quotient of 2 divided by Diametral Pitch (DP)	$PD = OD - (2 \div DP)$
	Addendum (a) and Number of Teeth (N)	Multiply Addendum (a) by Number of Teeth (N)	$PD = a \times N$
Outside Diameter (OD)	Number of Teeth (N) and Diametral Pitch (DP)	Divide Number of Teeth (N) plus 2 by Diametral Pitch (DP)	$OD = \frac{N + 2}{DP}$
	Pitch Diameter (PD) and Diametral Pitch (DP)	Add to Pitch Diameter (PD) quotient of 2 divided by Diametral Pitch (DP)	$OD = PD + \frac{2}{DP}$
	Pitch Diameter (PD) and Number of Teeth (N)	Divide Number of Teeth (N) plus 2 by quotient of Number of Teeth (N) divided by Pitch Diameter (PD)	$OD = \frac{N + 2}{N \div PD}$
	Number of Teeth (N) and Addendum (a)	Multiply Number of Teeth (N) plus 2 by Addendum (a)	$OD = (N + 2) \times a$
Number Of Teeth (N)	Pitch Diameter (PD) and Diametral Pitch (DP)	Multiply Pitch Diameter (PD) by Diametral Pitch (DP)	$N = PD \times DP$
	Outside Diameter (OD) and Diametral Pitch (DP)	Multiply Outside Diameter (OD) by Diametral Pitch (DP) and subtract 2	$N = (OD \times DP) - 2$
Thickness Of Tooth (t)	Diametral Pitch (DP)	Divide 1.5708 By Diametral Pitch (DP)	$t = \frac{1.5708}{DP}$
Addendum (a)	Diametral Pitch (DP)	Divide 1 by Diametral Pitch (DP)	$a = \frac{1}{DP}$
Dedendum (b)	Diametral Pitch (DP)	Divide 1.157 By Diametral Pitch (DP)	$b = \frac{1.157}{DP}$
Working Depth (hk)	Diametral Pitch (DP)	Divide 2 by Diametral Pitch (DP)	$hk = \frac{2}{DP}$
Whole Depth (ht)	Diametral Pitch (DP)	Divide 2.157 By Diametral Pitch (DP)	$ht = \frac{2.157}{DP}$
Clearance (c)	Diametral Pitch (DP)	Divide .157 By Diametral Pitch (DP)	$c = \frac{.157}{DP}$
	Thickness of Tooth (t)	Divide Thickness of Tooth (t) at Pitch Line by 10	$c = \frac{t}{10}$

Note: Rules and formulas relating to tooth depth and outside diameter apply to full-depth, equal addendum gears.

Diametral Pitch
Tooth Dimensions

Dimensions of Standard Full-depth Teeth

Diametral Pitches and Equivalent Circular Pitches

Diametral Pitch	Circular Pitch	Module	Arc thickness of Tooth on Pitch Line	Addendum	Working Depth of tooth	Dedendum of Depth of Space Below Pitch Line	Whole Depth of Tooth*
1/2	6.2832	50.8	3.1416	2.0000	4.0000	2.3142	4.3142
3/4	4.1888	33.8667	2.0944	1.3333	2.6666	1.5428	2.8761
1	3.1416	25.4	1.5708	1.0000	2.0000	1.1571	2.1571
1 1/4	2.5133	20.32	1.2566	0.8000	1.6000	0.9257	1.7257
1 1/2	2.0944	16.9333	1.0472	0.6666	1.3333	0.7714	1.4381
1 3/4	1.7952	14.5143	0.8976	0.5714	1.1429	0.6612	1.2326
2	1.5708	12.7	0.7854	0.5000	1.0000	0.5785	1.0785
2 1/4	1.3963	11.2889	0.6981	0.4444	0.8888	0.5143	0.9587
2 1/2	1.2566	10.16	0.6283	0.4000	0.8000	0.4628	0.8628
2 3/4	1.1424	9.2364	0.5712	0.3636	0.7273	0.4208	0.7844
3	1.0472	8.4667	0.5236	0.3333	0.6666	0.3857	0.7190
3 1/2	0.8976	7.2571	0.4488	0.2857	0.5714	0.3306	0.6163
4	0.7854	6.35	0.3927	0.2500	0.5000	0.2893	0.5393
5	0.6283	5.08	0.3142	0.2000	0.4000	0.2314	0.4314
6	0.5236	4.2333	0.2618	0.1666	0.3333	0.1928	0.3595
7	0.4488	3.6286	0.2244	0.1429	0.2857	0.1653	0.3081
8	0.3927	3.175	0.1963	0.1250	0.2500	0.1446	0.2696
9	0.3491	2.8222	0.1745	0.1111	0.2222	0.1286	0.2397
10	0.3142	2.54	0.1571	0.1000	0.2000	0.1157	0.2157
11	0.2856	2.3091	0.1428	0.0909	0.1818	0.1052	0.1961
12	0.2618	2.1167	0.1309	0.0833	0.1666	0.0964	0.1798
13	0.2417	1.9538	0.1208	0.0769	0.1538	0.0890	0.1659
14	0.2244	1.8143	0.1122	0.0714	0.1429	0.0826	0.1541
15	0.2094	1.6933	0.1047	0.0666	0.1333	0.0771	0.1438
16	0.1963	1.5875	0.0982	0.0625	0.1250	0.0723	0.1348
17	0.1848	1.4941	0.0924	0.0588	0.1176	0.0681	0.1269
18	0.1745	1.4111	0.0873	0.0555	0.1111	0.0643	0.1198
19	0.1653	1.3368	0.0827	0.0526	0.1053	0.0609	0.1135
20	0.1571	1.27	0.0785	0.0500	0.1000	0.0579	0.1079
22	0.1428	1.1545	0.0714	0.0455	0.0909	0.0526	0.0980
24	0.1309	1.0583	0.0654	0.0417	0.0833	0.0482	0.0898
26	0.1208	0.9769	0.0604	0.0385	0.0769	0.0445	0.0829
28	0.1122	0.9071	0.0561	0.0357	0.0714	0.0413	0.0770
30	0.1047	0.8467	0.0524	0.0333	0.0666	0.0386	0.0719
32	0.0982	0.7938	0.0491	0.0312	0.0625	0.0362	0.0674
34	0.0924	0.7471	0.0462	0.0294	0.0588	0.0340	0.0634
36	0.0873	0.7056	0.0436	0.0278	0.0555	0.0321	0.0599
38	0.0827	0.6684	0.0413	0.0263	0.0526	0.0304	0.0568
40	0.0785	0.635	0.0393	0.0250	0.0500	0.0289	0.0539

*NOTE: Dimensions listed are for HOB CUT TEETH ONLY. Shaper cut teeth may be slightly larger. Consult factory for exact measurement.

All Gears In Stock Are Diametral Pitch

Spur Gear Dimensional Formulas Circular Pitch

Rules and Formulas For Spur Gear Calculations

Circular Pitch is the distance from the center of one tooth to the center of the next tooth, measured along the pitch circle.

To Find	Having	Rule	Formula
Circular Pitch (CP)	Diametral Pitch (DP)	Divide 3.1416 by Diametral Pitch (DP)	$CP = \frac{3.1416}{DP}$
	Pitch Diameter (PD) and Number of Teeth (N)	Divide Pitch Diameter (PD) by product of .3183 and Number of Teeth (N)	$CP = \frac{PD}{.3183 \times N}$
	Outside Diameter (OD) and Number of Teeth (N)	Divide Outside Diameter (OD) by product of .3183 and Number of Teeth (N) plus 2	$CP = \frac{OD}{.3183 (N + 2)}$
Pitch Diameter (PD)	Number of Teeth (N) and Circular Pitch (CP)	The continued product of Number of Teeth (N), Circular Pitch (CP) and .3183	PD = N x CP x .3183
	Number of Teeth (N) and Outside Diameter (OD)	Divide product of Number of Teeth (N) and Outside Diameter (OD) by Number of Teeth (N) plus 2	$PD = \frac{N \times OD}{N + 2}$
	Outside Diameter (OD) and Circular Pitch (CP)	Subtract from Outside Diameter (OD) product of Circular Pitch (CP) and .6366	PD = OD – (CP x .6366)
	Addendum (a) and Number of Teeth (N)	Multiply Number of Teeth (N) by Addendum (a)	PD = N x a
Outside Diameter (OD)	Number of Teeth (N) and Circular Pitch (CP)	The continued product of Number of Teeth (N) plus 2, Circular Pitch (CP) and .3183	OD = (N + 2) CP x .3183
	Pitch Diameter (PD) and Circular Pitch (CP)	Add to Pitch Diameter (PD) product of Circular Pitch (CP) and .6366	OD = PD+ (CP x .3183)
	Number of Teeth (N) and Addendum (a)	Multiply Addendum (a) by Number of Teeth (N) plus 2	D = a x (N + 2)
Number of Teeth (N)	Pitch Diameter (PD) and Circular Pitch (CP)	Divide product of Pitch Diameter (PD) and 3.1416 by Circular Pitch (CP)	$N = \frac{PD \times 3.1416}{CP}$
Thickness of Tooth (t)	Circular Pitch (CP)	One-half Circular Pitch (CP)	$t = \frac{CP}{2}$
Addendum (a)	Circular Pitch (CP)	Multiply Circular Pitch (CP) by .3183	a = CP × .3183
Dedendum (b)	Circular Pitch (CP)	Multiply Circular Pitch (CP) by .3683	b = CP × .3683
Working Depth (hk)	Circular Pitch (CP)	Multiply Circular Pitch (CP) by .6366	hk = CP × .6366
Whole Depth (ht)	Circular Pitch (CP)	Multiply Circular Pitch (CP) by .6866	ht = CP × .6366
Clearance (c)	Circular Pitch (CP)	Multiply Circular Pitch (CP) by .05	c = CP × .05
	Thickness of Tooth (t)	One-Tenth the Thickness of Tooth (t) at Pitch Line	$c = \frac{t}{10}$

Note: Rules and formulas relating to tooth depth and outside diameter apply to full-depth, equal addendum gears.

Circular Pitch Gears Made-To-Order Only

Circular Pitch
Tooth Dimensions

Dimensions of Standard Full-depth Teeth

Circular Pitches and Equivalent Diametral Pitches

Diametral Pitch	Diametral Pitch	Module	Arc thickness of Tooth on Pitch Line	Addendum	Working Depth of tooth	Dedendum of Depth of Space Below Pitch Line	Whole Depth of Tooth*
4	0.7854	32.3402	2.0000	1.2732	2.5464	1.4732	2.7464
3 1/2	0.8976	28.2581	1.7500	1.1140	2.2281	1.2890	2.4031
3	1.0472	24.2552	1.5000	0.9549	1.9098	1.1049	2.0598
23/4	1.1424	22.2339	1.3750	0.8753	1.7506	1.0128	1.8881
2 1/2	1.2566	20.2117	1.2500	0.7957	1.5915	0.9207	1.7165
2 1/4	1.3963	18.1913	1.1250	0.7162	1.4323	0.8287	1.5448
2	1.5708	16.1701	1.0000	0.6366	1.2732	0.7366	1.3732
1 7/8	1.6755	15.1595	0.9375	0.5968	1.1937	0.6906	1.2874
1 3/4	1.7952	14.1488	0.8750	0.5570	1.1141	0.6445	1.2016
1 5/8	1.9333	13.1382	0.8125	0.5173	1.0345	0.5985	1.1158
1 1/2	2.0944	12.1276	0.7500	0.4775	0.9549	0.5525	1.0299
1 7/16	2.1855	11.6223	0.7187	0.4576	0.9151	0.5294	0.9870
1 3/8	2.2848	11.1169	0.6875	0.4377	0.8754	0.5064	0.9441
1 5/16	2.3936	10.6116	0.6562	0.4178	0.8356	0.4834	0.9012
1 1/4	2.5133	10.1062	0.6250	0.3979	0.7958	0.4604	0.8583
1 3/16	2.6456	9.6010	0.5937	0.3780	0.7560	0.4374	0.8154
1 1/8	2.7925	9.0958	0.5625	0.3581	0.7162	0.4143	0.7724
1 1/16	2.9568	8.5904	0.5312	0.3382	0.6764	0.3913	0.7295
1	3.1416	8.0851	0.5000	0.3183	0.6366	0.3683	0.6866
15/16	3.3510	7.5798	0.4687	0.2984	0.5968	0.3453	0.6437
7/8	3.5904	7.0744	0.4375	0.2785	0.5570	0.3223	0.6007
13/16	3.8666	6.5692	0.4062	0.2586	0.5173	0.2993	0.5579
3/4	4.1888	6.0639	0.3750	0.2387	0.4775	0.2762	0.5150
11/16	4.5696	5.5586	0.3437	0.2189	0.4377	0.2532	0.4720
2/3	4.7124	5.3903	0.3333	0.2122	0.4244	0.2455	0.4577
5/8	5.0265	5.0532	0.3125	0.1989	0.3979	0.2301	0.4291
9/16	5.5851	4.5479	0.2812	0.1790	0.3581	0.2071	0.3862
1/2	6.2832	4.0426	0.2500	0.1592	0.3183	0.1842	0.3433
7/16	7.1808	3.5373	0.2187	0.1393	0.2785	0.1611	0.3003
2/5	7.8540	3.2340	0.2000	0.1273	0.2546	0.1473	0.2746
3/8	8.3776	3.0319	0.1875	0.1194	0.2387	0.1381	0.2575
1/3	9.4248	2.6947	0.1666	0.1061	0.2122	0.1228	0.2289
5/16	10.0531	2.5266	0.1562	0.0995	0.1989	0.1151	0.2146
2/7	10.9956	2.3100	0.1429	0.0909	0.1819	0.1052	0.1962
1/4	12.5664	2.0213	0.1250	0.0796	0.1591	0.0921	0.1716
2/9	14.1372	1.7967	0.1111	0.0707	0.1415	0.0818	0.1526
1/5	15.7080	1.6170	0.1000	0.0637	0.1273	0.0737	0.1373
3/16	16.7552	1.5160	0.0937	0.0597	0.1194	0.0690	0.1287
1/6	18.8496	0.5053	0.0833	0.0531	0.1061	0.0614	0.1144

*NOTE: Dimensions listed are for HOB CUT TEETH ONLY. Shaper cut teeth may be slightly larger. Consult factory for exact measurement.

All Circular Pitch Gears Are Made-To-Order

Rules and Formulas For Module (Metric) Spur Gear Calculations

(Module Represents the Amount of Pitch Diameter per Tooth)

To Find	Having	Rule	Formula
Metric Module (m)	Pitch Diameter (PD) and Number of Teeth (N)	Divide Pitch Diameter (PD) in millimeters (*mm*) by Number of Teeth (N)	$m = \frac{PD\ mm}{N}$
	Circular Pitch (DP) in millimeter	Divide Circular Pitch (DP) in millimeters (*mm*) by Pi (3.1416)	$m = \frac{CP\ mm}{3.1416}$
	Diametral Pitch (DP)	Divide 25.4 by Diametral Pitch (DP)	$m = \frac{25.4}{DP}$
	Outside Diameter (OD) and Number of Teeth (N)	Divide Outside Diameter (OD) in millimeters (*mm*) by Number of Teeth (N) plus 2	$m = \frac{OD}{N + 2}$
Pitch Diameter (PD)	Module (m) and Number of Teeth (N)	Multiply Module (m) by Number of Teeth (N)	$PD\ mm = m \times N$
	Number of Teeth (N) and Outside Diameter (OD)	Divide the product of Outside Diameter (OD) and Number of Teeth (N) by Number of Teeth (N) plus 2	$PD = \frac{OD \times N}{N + 2}$
	Outside Diameter (OD) and Module (m)	Multiply Module (m) by 2 and subtract from Outside Diameter (OD)	$PD = OD - (m \times 2)$
Outside Diameter (OD)	Module (m) and Number of Teeth (N)	Number of Teeth (N) plus 2 multiplied by Module (m)	$OD\ mm = (N + 2) \times m$
Diametral Pitch (DP)	Module (m)	Divide 25.4 by Module (m)	$DP = \frac{25.4}{m}$
Circular Pitch (DP)	Module (m)	Multiply Module (m) by Pi (3.1416)	$CP\ mm = m \times 3.1416$
Addendum (a)	Module (m)	Addendum (a) equals Module (m)	$a = m$
Whole Depth (ht)	Module (m)	Multiply 2.157 by Module (m)	$ht\ mm = 2.157 \times m$
Thickness of Tooth (t)	Module (m) and Outside Diameter (OD)	Multiply Pitch Diameter (PD) in millimeters (*mm*) by sine of angle of 90 divided by Number of Teeth (N)	$t\ mm = PD\ mm \times \text{Sine}\ \frac{90}{N}$
ANSI Module (m)	Pitch Diameter (PD) in inches and Number of Teeth (N)	Divide Pitch Diameter (PD) in inches by Number of Teeth (N)	$m'' = \frac{PD''}{N}$ (Answer in fraction)

Note: Rules and formulas relating to tooth depth and outside diameter apply to full-depth, equal addendum gears.

Module Pitch
Tooth Dimensions

Tooth Dimensions Based Upon Module System
(One millimeter equals 0.03937 inch)

Module (DIN Standard Series)	Equivalent Diametrical Pitch	Circular Pitch		Addendum (mm)	Dedendum * (mm)	Whole Depth * (mm)	Whole Depth ** (mm)
		Millimeters	Inches				
0.30	84.667	0.943	0.0371	0.30	0.350	0.650	0.647
0.40	63.500	1.257	0.0495	0.40	0.467	0.867	0.863
0.50	50.800	1.571	0.0618	0.50	0.583	1.083	1.079
0.60	42.333	1.885	0.0742	0.60	0.700	1.300	1.294
0.70	36.286	2.199	0.0865	0.70	0.817	1.517	1.510
0.80	31.750	2.513	0.0989	0.80	0.933	1.733	1.726
0.90	28.222	2.827	0.1113	0.90	1.050	1.950	1.941
1.00	25.400	3.142	0.1237	1.00	1.167	2.167	2.157
1.25	20.320	3.927	0.1546	1.25	1.458	2.708	2.697
1.50	16.933	4.712	0.1855	1.50	1.750	3.250	3.236
1.75	14.514	5.498	0.2164	1.75	2.042	3.792	3.774
2.00	12.700	6.283	0.2474	2.00	2.333	4.333	4.314
2.25	11.289	7.069	0.2783	2.25	2.625	4.875	4.853
2.50	10.160	7.854	0.3092	2.50	2.917	5.417	5.392
2.75	9.236	8.639	0.3401	2.75	3.208	5.958	5.932
3.00	8.466	9.425	0.3711	3.00	3.500	6.500	6.471
3.25	7.815	10.210	0.4020	3.25	3.791	7.041	7.010
3.50	7.257	10.996	0.4329	3.50	4.083	7.583	7.550
3.75	6.773	11.781	0.4638	3.75	4.375	8.125	8.089
4.00	6.350	12.566	0.4947	4.00	4.666	8.666	8.628
4.50	5.644	14.137	0.5566	4.50	5.250	9.750	9.707
5.00	5.080	15.708	0.6184	5.00	5.833	10.833	10.785
5.50	4.618	17.279	0.6803	5.50	6.416	11.916	11.864
6.00	4.233	18.850	0.7421	6.00	7.000	13.000	12.942
6.50	3.908	20.420	0.8035	6.50	7.583	14.083	14.021
7.00	3.628	21.991	0.8658	7.00	8.166	15.166	15.099
8.00	3.175	25.132	0.9895	8.00	9.333	17.333	17.256
9.00	2.822	28.274	1.1132	9.00	10.499	19.499	19.413
10.00	2.540	31.416	1.2368	10.00	11.666	21.666	21.571
11.00	2.309	34.558	1.3606	11.00	12.833	23.833	23.728
12.00	2.117	37.699	1.4843	12.00	14.000	26.000	25.884
13.00	1.954	40.841	1.6079	13.00	15.166	28.166	28.041
14.00	1.814	43.982	1.7317	14.00	16.332	30.332	30.198
15.00	1.693	47.124	1.8541	15.00	17.499	32.499	32.355
16.00	1.587	50.266	1.9790	16.00	18.666	34.666	34.512
18.00	1.411	56.549	2.2263	18.00	21.000	39.000	38.826
20.00	1.270	62.832	2.4737	20.00	23.332	43.332	43.142
22.00	1.155	69.115	2.7210	22.00	25.665	47.665	47.454
24.00	1.058	75.398	2.9685	24.00	28.000	52.000	51.768
27.00	0.941	84.823	3.339	27.00	31.498	58.498	58.239
30.00	0.847	94.248	3.711	30.00	35.000	65.000	64.713
33.00	0.770	103.673	4.082	33.00	38.498	71.498	71.181
36.00	0.706	113.097	4.453	36.00	41.998	77.998	77.652
39.00	0.651	122.522	4.824	39.00	45.497	84.497	84.123
42.00	0.605	131.947	5.195	42.00	48.997	90.997	90.594
45.00	0.564	141.372	5.566	45.00	52.497	97.497	97.065
50.00	0.508	157.080	6.184	50.00	58.330	108.330	107.855
55.00	0.462	172.788	6.803	55.00	64.163	119.163	118.635
60.00	0.423	188.496	7.421	60.00	69.996	129.996	129.426
65.00	0.391	204.204	8.040	65.00	75.829	140.829	140.205
70.00	0.363	219.911	8.658	70.00	81.662	151.662	150.997
75.00	0.339	235.619	9.276	75.00	87.495	162.495	161.775

* Dedendum and total depth when clearance = 0.1666 x module, or one-sixth module.

** Total Depth equivalent to American standard full-depth teeth. (Clearance = 0.157 x Module.).

Bevel & Miter Gear Formulas

To Find	Rule	Formula
Pitch Diameter (PD)	Divide Number of Teeth (N) by Diametral Pitch (DP)	$PD = \frac{N}{DP}$
Tangent of Pitch Angle (Pα) of Driven	Divide Number of Teeth (N) in Driven by Number of Teeth (N) in Driver	$\tan(P\alpha\ Driven) = \frac{N\ Driven}{N\ Driver} = Ratio$
Pitch Angle (Pα) of Driver	Subtract Pitch Angle (Pα) of Driven from 90°	$P\alpha\ \Gamma\ Driver = 90° - \alpha\ Driven$
Pitch Cone Radius (Pr)	Divide Pitch Diameter (PD) by Twice the Sine of Pitch Angle (Pα)	$Pr = \frac{PD}{2\sin(P\alpha)}$
Tangent of Addendum Angle (α)	Divide Addendum (a) by Pitch Cone Radius (Cr)	$\tan(\alpha) = \frac{a}{Cr}$
Face Angle (Fα)	Add Addendum Angle (α) to Pitch Angle (Pα)	$F\alpha = \alpha + P\alpha$
Tangent of Dedendum Angle (dα)	Divide Dedendum (d) by Pitch Cone Radius (Cr)	$\tan(d\alpha) = \frac{d}{Cr}$
Root Angle (Rα)	Subtract Dedendum Angle (dα) from Pitch Angle (Pα)	$R\alpha = P\alpha - d\alpha$
Angular Addendum (aΦ)	Multiply Addendum (a) by cosine of Pitch Angle (Pα)	$a\Phi = a \times \cos(P\alpha)$
Outside Diameter (OD)	Add 2 Angular Addendum (aΦ) to Pitch Diameter (PD)	$OD = 2\ a\Phi \times PD$
Mounting Distance (MD)	Add one-half the Pitch Diameter of Mating (PDg) plus Backing to Pitch Line (BL)	$MD = \frac{PDg}{2} + BL$
Distance From Cone Center to Crown (Cc)	Multiply one-half Outside Diameter (OD) by cotangent of Face Angle (Fα)	$Cc = \frac{OD}{2} \times \cot(F\alpha)$
Backing to Crown (Bc)	Subtract Cone Center to Crown (Cc) from Mounting Distance (MD)	$Bc = MD - Cc$
Ratio	Divide Number of Teeth (N) in Driven by Number of Teeth (N) in Driver	$Ratio = \frac{N\ Driven}{N\ Driver}$

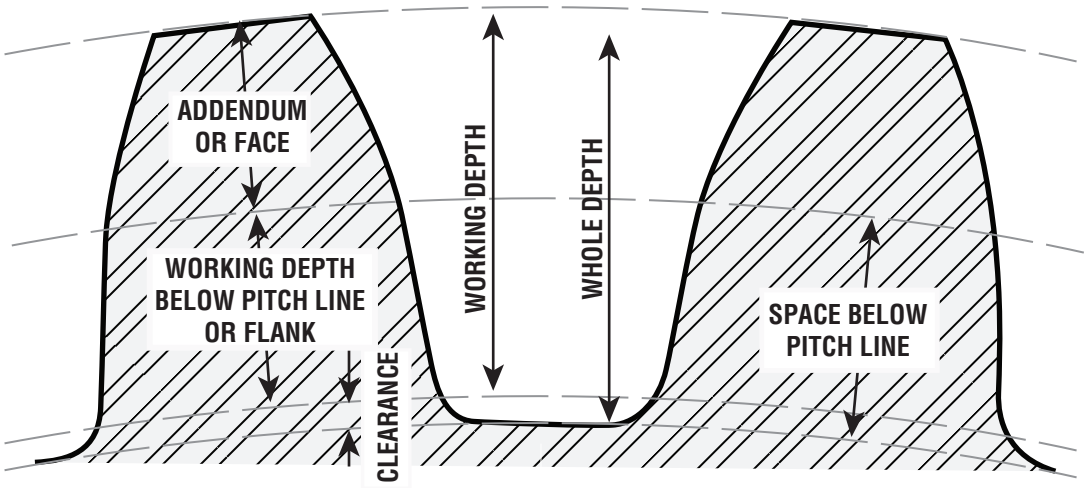
Formula For Worm Gears

(Based on Diametral Pitch)

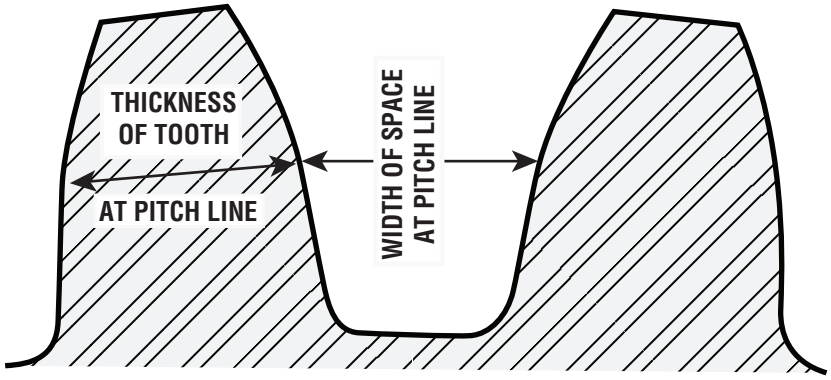
To Find	Rule	Formula
Worm Gear Pitch Diameter (PDg)	Divide Number of Teeth(N) by Diametral Pitch (DP)	$PDg = \frac{N}{DP}$
Worm Gear Throat Diameter (TDg)	Add 2 Addendum (a) to Pitch Diameter (PD)	TDg = 2 a + PD
Worm Gear Outside Diameter (ODg)	Add 3 Addendum (a) to Pitch Diameter (PD)	ODg = 3 a + PD
Worm Pitch Diameter (PDw)	Subtract the Worm Gear Pitch Diameter (PDg) from twice the Center Distance (CD)	PDw = 2 CD - PDg
Worm Outside Diameter (ODw)	Add 2 Addendum (a) to Worm Pitch Diameter (PDw)	ODw = PDw + 2 a
Worm Lead (Lw)	Divide 3.1416 by Diametral Pitch (DP) and multiply by Number of Threads (NT) in Worm	$Lw = \frac{3.1416}{DP} \times NT$
Cotangent of Worm Helix Angle (Hα)	Multiply Worm Pitch Diameter (PDw) by Diametral Pitch (DP) and divide by Number of Worm Threads (T)	$\cot(H\alpha) = \frac{PDw \times DP}{T}$
Center Distance (CD)	Add Worm Pitch Diameter to Worm Gear Pitch Diameter and divide sum by 2	$CD = \frac{PDw + PDg}{2}$
Ratio	Divide Number of Teeth in Worm Gear (N) by Number of Worm Threads (T)	$Ratio = \frac{N}{T}$

NOTE: Tooth data (Addendum, Full Depth, Etc.) is same as for spur gears.

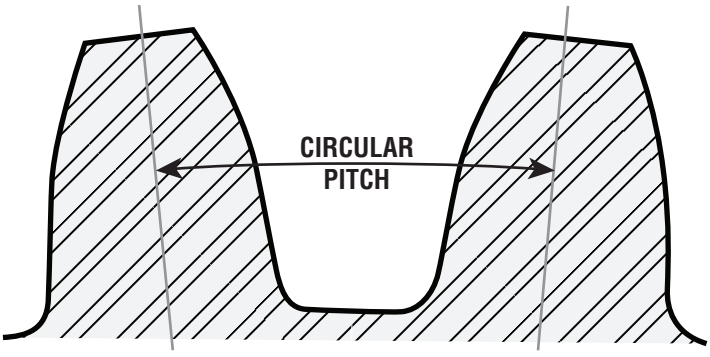
Comparative Sizes of Involute Gear Teeth



1 Diametral Pitch
3.1416" Circular Pitch



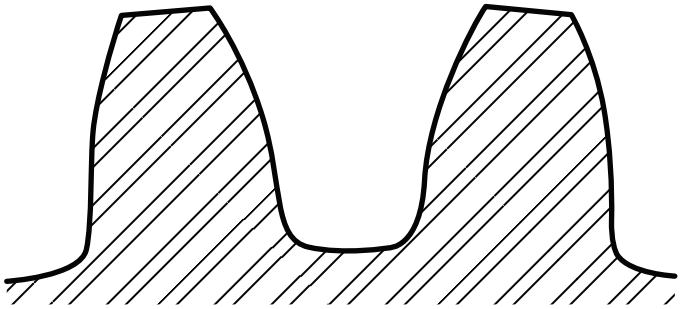
1 1/4 Diametral Pitch
2.5133" Circular Pitch



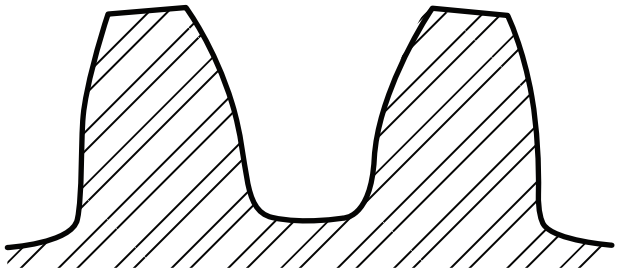
1 1/2 Diametral Pitch
2.0944" Circular Pitch

Formula For Worm Gears

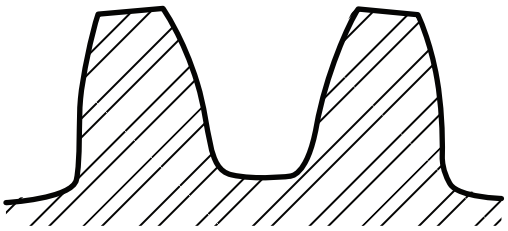
Comparative Sizes of Involute Gear Teeth



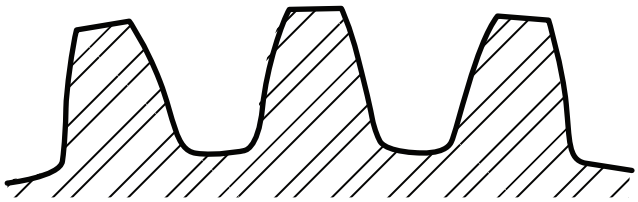
1 3/4 Diametral Pitch
1.7952" Circular Pitch



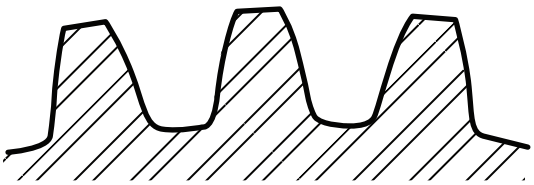
2 Diametral Pitch
1.5708" Circular Pitch



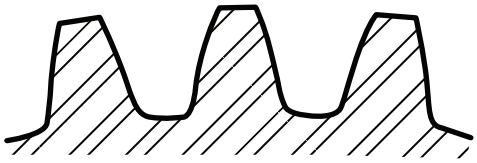
2 1/2 Diametral Pitch
1.2566" Circular Pitch



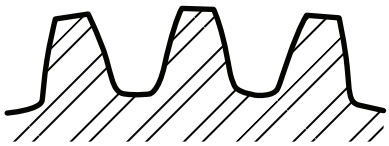
3 Diametral Pitch
1.0472" Circular Pitch



3 1/2 Diametral Pitch
.8976" Circular Pitch



4 Diametral Pitch
.7854" Circular Pitch



5 Diametral Pitch
.6283" Circular Pitch



6 Diametral Pitch
.5236" Circular Pitch

Comparative Sizes of Involute Gear Teeth



7 Diametral Pitch
.4488" Circular Pitch



8 Diametral Pitch
.3927" Circular Pitch



10 Diametral Pitch
.3142" Circular Pitch



12 Diametral Pitch
.2618" Circular Pitch



14 Diametral Pitch
.2244" Circular Pitch



16 Diametral Pitch
.1963" Circular Pitch

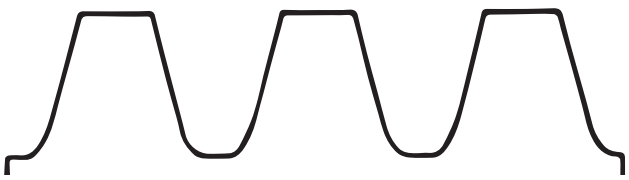


18 Diametral Pitch
.1745" Circular Pitch

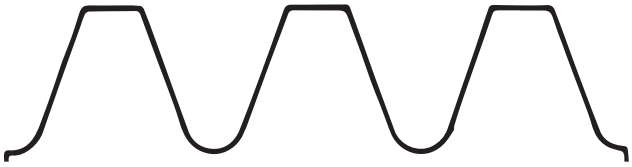


20 Diametral Pitch
.1571" Circular Pitch

Gear Rack Comparison — 14½° and 20°



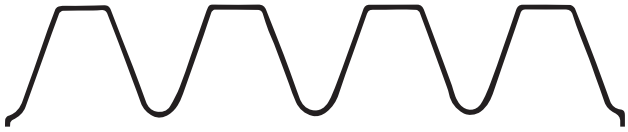
3 DP — 14½°



3 DP — 20°



4 DP — 14½°



4 DP — 20°



5 DP — 14½°



5 DP — 20°



6 DP — 14½°



6 DP — 20°

Formula For Worm Gears

Stock Steel Gears

Martin steel gears are manufactured from high quality carbon steel material. This material is used for strength and good hardening characteristics. These gears may be hardened by any method acceptable to good practice such as flame or induction hardening. Flame hardening is preferred so that only the teeth are hardened. Distortion is virtually eliminated and the bore is left soft for subsequent work.

Cast Gears

Martin cast iron gears are manufactured from high quality close grained controlled specification irons.

Reboring of Stock Gears

Most of Martin's Stock Gears may be rebored. The maximum recommended bore size is given for each gear. In reboring gears, care must be taken to hold the bore concentric with the pitch diameter. In most cases this would require a great amount of time. To cut costly set-up time when reboring, Martin holds the outside diameter of its gears concentric with the bore which in turn is concentric with the pitch diameter. The outside diameter is held to a closer total indicator reading than the pitch diameter. In the finer pitches, care should be taken not to distort the outside diameter when chucking.

Martin's steel gears are machined all over.

Rebore or rework may be accomplished by chucking on the hub. Concentricity must be controlled in order for gears to run at maximum efficiency.

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SYNCHRONOUS DRIVES

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STOCK TIMING PULLEYS
1/5" - 7/8" PITCH
QD, TAPER BUSHED AND STOCK BORE



Stock Bore



Taper Bushed



QD

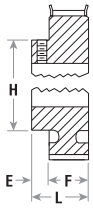
Pitch (Inches)	Pulley Designation
1/5"	XL (Extra Light)
3/8"	L (Light)
1/2"	H (Heavy)
7/8"	XH (Extra Heavy)

Martin timing pulleys are manufactured to extremely close specifications and are stocked in minimum plain bore, taper bushed and QD bushed styles depending on size and pitch.

See tables for stock pulley types. Bushings are priced separately and must be added to pulley price.

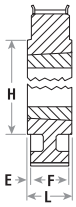
Illustrations below indicate stock pulley construction type listed in tables.

Type DF

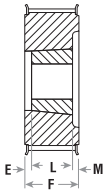


Type D

Type CF

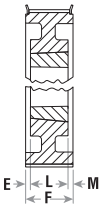


Type C

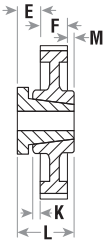


Type KF

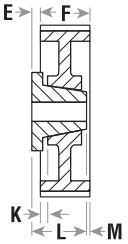
Type AF



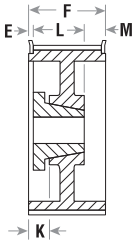
Type A



Type G



Type H



Type J

"F" designation in pulley type means pulley is flanged. When drive center distance is eight times the diameter of the smaller pulley or when drive is operating on vertical shafts, both pulleys should be flanged.

DEFINITION OF CATALOG NUMBERS

EX: TB 20L100
- TB — Requires taper bushing
- 20 — Number of teeth
- L — 3/8" pitch (light)
- 100 — Belt width 1"

EX: 72L100SD
- 72 — Number of Teeth
- L — 3/8" pitch (light)
- 100 — Belt width 1"
- SD — requires QD bushing

EX: 16L100
Min. plain bore

Pulley sizes shown stocked as stock bore only: max. bore listed is without keyway. If keyway is used reduce max. bore by twice keyway depth.

Pulley Style Designation As Shown in Tables

Dash 1 = Block body style
Dash 2 = web style
Dash 3 = arm/spoke style

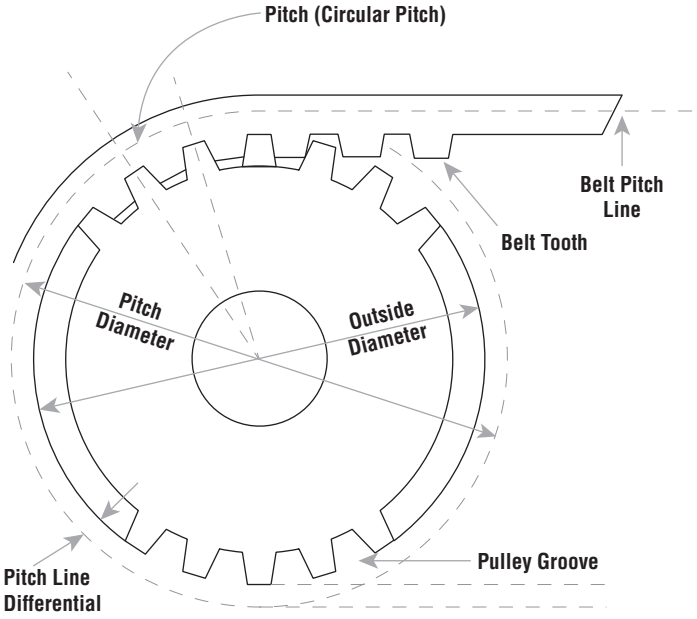
Size XXH (1-1/4" Pitch).
Available as made-to-order.
Call your nearest Martin facility.

Let us quote your made-to-order and large quantity requirements.

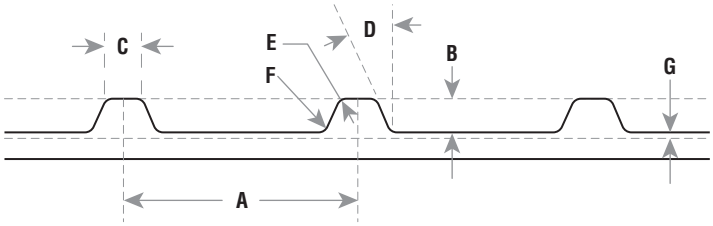
Timing Pulley Terminology

Timing belts and pulleys — in order to handle a wide range of loads, speeds and applications at highest possible efficiencies — are made in five stock pitches. Circular pitch (usually referred to as pitch) is a basic consideration in the selection of timing pulleys as with gear and chain drives. Pitch is the distance between groove centers and is measured on the pulley pitch circle. On the belt, pitch is the distance between tooth centers and is measured on the pitch line of the belt.

The pitch line of the belt is located within the tension member and coincides with the pitch circle of the pulley mating with it. Any timing belt must be run with pulleys of the same pitch. A belt of one pitch cannot be used successfully with pulleys of a different pitch.



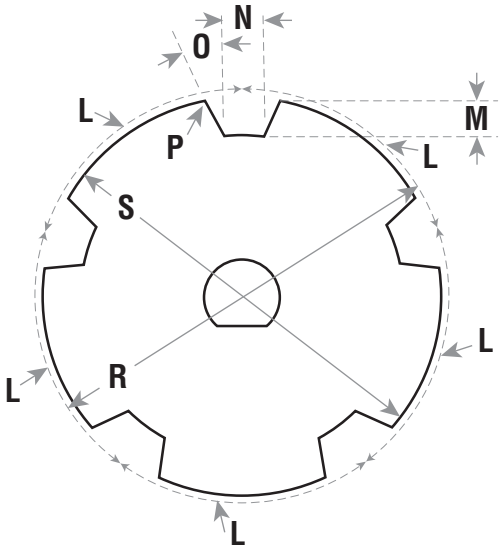
TIMING BELT TERMINOLOGY



- **A** Pitch of teeth
- **B** Depth of teeth
- **C** Width at bottom of teeth
- **D** Pressure angle
- **E** Radius at bottom of teeth
- **F** Radius at top of teeth
- **G** Pitch line differential

Belt P.L. = “A” X total no. of teeth in belt

TIMING PULLEY TERMINOLOGY



- **L** Circular pitch of groove
- **M** Minimum depth of groove, including clearance
- **N** Width of groove at minimum depth, including clearance
- **O** Pressure angle
- **P** Top radius of groove
- **R** Pitch diameter (always > S)
- **S** Outside diameter

Timing Pulley Terminology

Timing Pulleys

Timing pulleys have evenly spaced axial grooves cut in their periphery to make correct, positive engagement with the mating teeth of the belt. These pulleys are designed so that the teeth of the belt enter and leave the grooves with negligible friction. All pulleys, stock and made-to-order, have minimum tooth-to-groove clearance (backlash). The pulley's pitch diameter will always be greater than its outside diameter. Pulleys are available in a wide range of stock widths and diameters.

Minimum Pulley Diameters

Pitch	Speed RPM	Recommended minimum* Pitch (diam. in)	No. of grooves
1/5 in (XL)	3500	.764	12 XL
	1750	.637	10 XL
	1160	.637	10 XL
3/8 in (L)	3500	1.910	16 L
	1750	1.671	14 L
	1160	1.432	12 L
1/2 in (H)	3500	3.183	20 H
	1750	2.865	18 H
	1160	2.546	16 H
7/8 in (XH)	1750	7.242	26 XH
	1160	6.685	24 XH
	870	6.127	22 XH
1-1/4 in (XXH)	1750	10.345	26 XXH
	1160	9.549	24 XXH
	870	8.754	22 XXH

*Smaller diameter pulleys can be used if a corresponding reduction in belt service life is satisfactory.

Flanged Pulleys

Because timing belts have an inherent, gentle side thrust, it is necessary to use at least one flanged pulley to prevent the belt from riding off. Generally, for economy, the smaller pulley in each drive is flanged. However, when the center distance is greater than eight times the diameter of the smaller pulley on drive ratios less than 3 to 1, or when the drive is operated on other than horizontal shafts — both pulleys should be flanged. When a drive has three pulleys, at least two should be flanged. If the drive has more than three pulleys, every other pulley should be flanged.

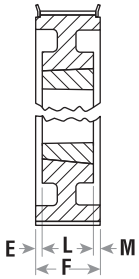
Pulley Diameters

Stock timing belts should not be used over pulley diameters less than those recommended above without expecting some reduction in belt life. This reduced belt life is the result of flex fatigue of the steel tension members in the belt. If pulleys smaller than recommended must be used, the use of special timing belts should be considered.

Stock Timing Pulleys

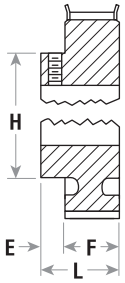
XL
1/5" Pitch

Type AF



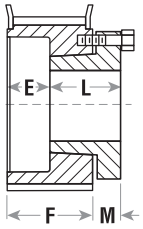
Type A

Type DF



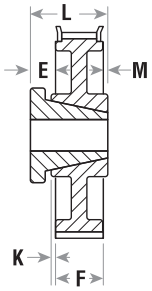
Type D

Type EF



Type E

Type GF



Type G

Dash 1 = Solid Style

Dash 2 = Web Style

Dash 3 = Arm/Spoke Style

"F" type description indicates flanged.

XL - 1/5" Pitch

XL 037 For Belts 1/4" and 3/8" Wide

Minimum Plain Bore **F = 9/16**

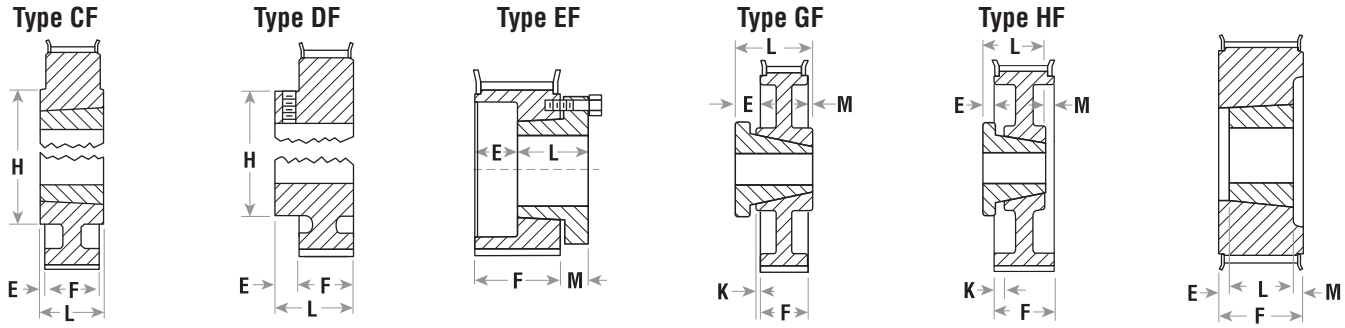
No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bore		E	H	L	Wt.
					Stock	Max.				
10	10XL037	0.637	0.929	DF-1	0.1875	0.25	0.2188	0.4375	0.7813	0.03
11	11XL037	0.700	0.929	DF-1	0.1875	0.25	0.2188	0.4375	0.7813	0.04
12	12XL037	0.764	0.993	DF-1	0.1875	0.3125	0.2188	0.5	0.7813	0.06
14	14XL037	0.891	1.120	DF-1	0.25	0.375	0.2188	0.5625	0.7813	0.08
15	15XL037	0.955	1.184	DF-1	0.25	0.4375	0.2188	0.6250	0.7813	0.09
16	16XL037	1.019	1.248	DF-1	0.25	0.5	0.2188	0.6875	0.7813	0.10
18	18XL037	1.146	1.375	DF-1	0.25	0.5625	0.2188	0.8125	0.7813	0.13
20	20XL037	1.273	1.502	DF-1	0.25	0.6875	0.3125	0.9375	0.875	0.18
21	21XL037	1.337	1.566	DF-1	0.25	0.6875	0.3125	0.9375	0.875	0.19
22	22XL037	1.401	1.630	DF-1	0.25	0.75	0.3125	1	0.875	0.22
24	24XL037	1.528	1.756	DF-1	0.25	0.8125	0.3125	1.0625	0.875	0.25
28	28XL037	1.783	2.011	DF-1	0.25	0.9375	0.3125	1.1875	0.875	0.34
30	30XL037	1.910	2.138	DF-1	0.3125	1.0625	0.3125	1.375	0.875	0.41
32	32XL037	2.037	—	D-1	0.3125	1.1875	0.4375	1.5	1	0.25
36	36XL037	2.292	—	D-1	0.3125	1.1875	0.4375	1.5	1	0.29
40	40XL037	2.546	—	D-1	0.3125	1.1875	0.4375	1.5	1	0.35
42	42XL037	2.674	—	D-1	0.3125	1.1875	0.4375	1.5	1	0.31
44	44XL037	2.801	—	D-1	0.3125	1.1875	0.4375	1.5	1	0.34
48	48XL037	3.056	—	D-1	0.3125	1.1875	0.4375	1.5	1	0.63
60	60XL037	3.820	—	D-1	0.375	1.1875	0.4375	1.5	1	0.90
72	72XL037	4.584	—	D-1	0.375	1.1875	0.4375	1.5	1	0.50

Note: XL Pulleys stocked min. plain bore with 2 setscrews @ 90°. If keyway is used, reduce max. bore by twice keyway depth.
Pulley O.D. = P.D. – .02".

L
3/8" Pitch

Stock Timing Pulleys

Martin



Dash 1 = Solid Style **Dash 2 = Web Style** **Dash 3 = Arm/Spoke Style**

L - 3/8" Pitch

L050 For Belts 1/2" Wide **Minimum Plain Bore** **F = 3/4**

No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bore		Dimensions			Wt.
					Stock	Max.	E	H	L	
10	10L050	1.194	1.4375	DF-1	0.375	0.5625	0.375	0.8125	1.125	0.28
12	12L050	1.432	1.6719	DF-1	0.375	0.8125	0.5	1.0625	1.25	0.30
13	13L050	1.552	1.75	DF-1	0.375	0.8125	0.5	1.125	1.25	0.35
14	14L050	1.671	1.9219	DF-1	0.375	0.875	0.5	1.125	1.25	0.40
15	15L050	1.790	2	DF-1	0.5	0.9375	0.5	1.125	1.25	0.50
16	16L050	1.910	2.1563	DF-1	0.5	1.125	0.625	1.4375	1.375	0.60
17	17L050	2.029	2.2813	DF-1	0.5	1.125	0.625	1.5	1.375	0.65
18	18L050	2.149	2.3906	DF-1	0.5	1.1875	0.625	1.625	1.375	0.75
19	19L050	2.268	2.375	DF-1	0.5	1.1875	0.625	1.625	1.375	0.80
20	20L050	2.387	2.625	DF-1	0.5	1.25	0.625	1.6875	1.375	0.94
21	21L050	2.507	2.75	DF-1	0.5	1.3125	0.6875	1.875	1.4375	1.00
22	22L050	2.626	2.875	DF-1	0.5	1.5	0.75	2	1.5	1.10
24	24L050	2.865	3.1094	DF-1	0.5	1.625	0.75	2.25	1.5	1.60
26	26L050	3.104	3.3438	DF-1	0.5	1.625	0.75	2.50	1.5	2.30
28	28L050	3.342	3.5781	DF-1	0.5	1.625	0.75	2.75	1.5	2.50
30	30L050	3.581	3.8281	DF-1	0.5	1.625	0.75	2.375	1.5	2.70
32	32L050	3.820	4.0625	DF-1	0.5	1.875	0.875	3.0625	1.625	3.00

L Pulleys 10 - 16 teeth min. plain bore stocked with 1 set screw. If keyway is used, reduced max. bore by twice keyway depth.

Dimensions in inches. Weight in pounds
Pulley O.D. = P.D. – .03"

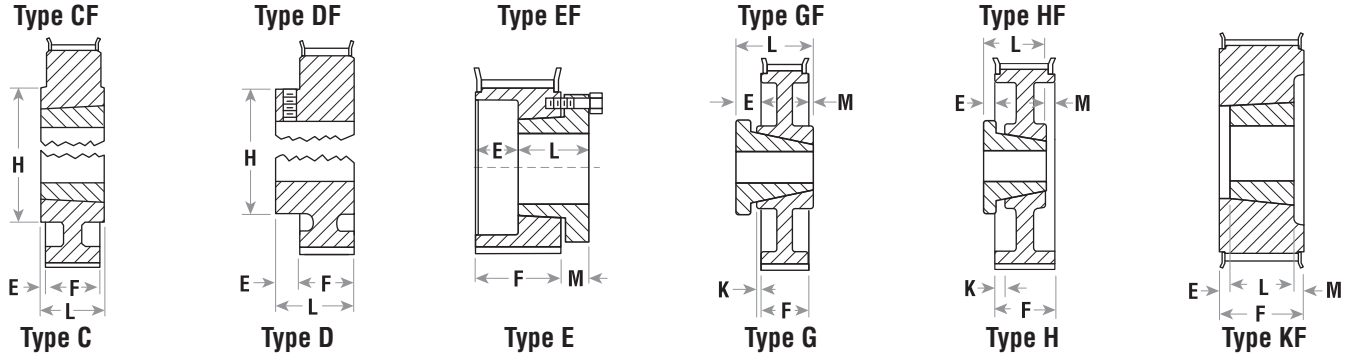
L - 3/8" Pitch

L050 For Belts 1/2" Wide (3/8" Pitch) **QD Type** **F = 3/4**

No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bush	Bore Range		Dimensions				Wt. Less Bush
						Min.	Max.	E	K	L	M	
18	18L050JA	2.149	2.3906	EF-1*	JA	0.5	1.25	0.1875	—	1.0625	0.5	0.40
20	20L050JA	2.387	2.625	EF-1*	JA	0.5	1.25	0.1875	—	1.0625	0.5	0.50
22	22L050JA	2.626	2.875	EF-1*	JA	0.5	1.25	0.1875	—	1.0625	0.5	0.70
24	24L050SH	2.865	3.1094	GF-1+	SH	0.5	1.6875	0.5625	—	1.3125	—	0.70
26	26L050SH	3.104	3.3438	GF-1+	SH	0.5	1.6875	0.5625	—	1.3125	—	1.00
28	28L050SH	3.342	3.5781	GF-1+	SH	0.5	1.6875	0.5625	—	1.3125	—	1.10
30	30L050SDS	3.581	3.8281	GF-1	SDS	0.5	2	0.625	—	1.375	—	1.10
32	32L050SDS	3.820	4.0625	GF-1	SDS	0.5	2	0.625	—	1.375	—	1.40
36	36L050SDS	4.297	4.5313	GF-1	SDS	0.5	2	0.625	—	1.375	—	2.00
40	40L050SDS	4.775	5.0156	GF-1	SDS	0.5	2	0.625	—	1.375	—	2.80
44	44L050SDS	5.252	5.4844	GF-1	SDS	0.5	2	0.625	—	1.375	—	3.60
48	48L050SDS	5.730	6.0156	GF-1	SDS	0.5	2	0.625	—	1.375	—	4.40
60	60L050SD	7.162	—	G-3	SD	0.5	2	0.875	0.25	1.8125	0.25	4.20
72	72L050SD	8.594	—	G-3	SD	0.5	2	0.875	0.25	1.8125	0.25	6.60
84	84L050SD	10.027	—	G-3	SD	0.5	2	0.875	0.25	1.8125	0.25	5.80

Dimensions in inches. Weight in pounds
Pulley O.D. = P.D. – .03"
*Reverse mount drilled only
+Bushing Projects 1/16 on Small End.

L050 Taper Bushed on Page K7



Dash 1 = Solid Style **Dash 2 = Web Style** **Dash 3 = Arm/Spoke Style**

L - 3/8" Pitch

L050 For Belts 1/2" Wide (3/8" Pitch) **Taper Bushed Type** **F = 3/4**

No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bush	Bore Range		Dimensions				Wt. Less Bush
						Min.	Max.	E	K	L	M	
18	TB18L050	2.149	2.3906	CF-1	1008	0.5	1	0.125	1.875	0.875	—	0.45
20	TB20L050	2.387	2.625	CF-1	1008	0.5	1	0.125	1.6875	0.875	—	0.68
22	TB22L050	2.626	2.875	CF-1	1008	0.5	1	0.125	2	0.875	—	0.90
24	TB24L050	2.865	3.1094	CF-1	1210	0.5	1.25	0.25	2.25	1	—	1.00
26	TB26L050	3.104	3.3438	CF-1	1210	0.5	1.25	0.25	2.5	1	—	1.20
28	TB28L050	3.342	3.5781	CF-1	1610	0.5	1.25	0.25	2.75	1	—	1.40
30	TB30L050	3.581	3.8281	CF-1	1610	0.5	1.625	0.25	2.875	1	—	1.50
32	TB32L050	3.820	4.0625	CF-1	1610	0.5	1.625	0.25	3.0625	1	—	1.90
40	TB40L050	4.775	5.0156	CF-1	2012	0.5	2	0.50	3.6875	1.25	—	2.40
48	TB48L050	5.730	6.0156	CF-1	2012	0.5	2	0.50	3.6875	1.25	—	3.20
60	TB60L050	7.162	—	C-2	2012	0.5	2	0.25	4.375	1.25	0.25	4.90

Dimensions in inches. Weight in pounds
Pulley O.D. = P.D. – .03"

L - 3/8" Pitch

L075 For Belts 3/4" Wide (3/8" Pitch) **Minimum Plain Bore** **F = 1**

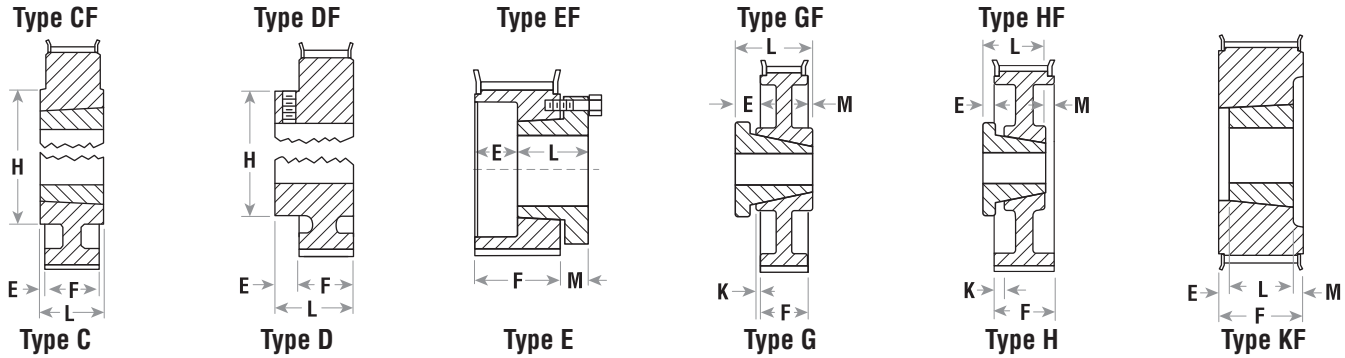
No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bore		Dimensions			Wt.
					Stock	Max.	E	H	L	
12	12L075	1.432	1.6719	DF-1	0.375	0.8125	0.5	1.0625	1.5	0.40
14	14L075	1.671	1.9219	DF-1	0.375	0.875	0.5	1.125	1.5	0.50
16	16L075	1.910	2.1563	DF-1	0.5	1.125	0.625	1.4375	1.625	0.70
18	18L075	2.149	2.3906	DF-1	0.5	1.1875	0.625	1.625	1.625	0.90
20	20L075	2.387	2.625	DF-1	0.5	1.25	0.625	1.6875	1.625	1.50
22	22L075	2.626	2.875	DF-1	0.625	1.5	0.75	2	1.75	1.80
24	24L075	2.865	3.1094	DF-1	0.625	1.625	0.75	2.25	1.75	2.10
26	26L075	3.104	3.3438	DF-1	0.625	1.625	0.875	2.5	1.875	2.80
28	28L075	3.342	3.5781	DF-1	0.625	1.875	1	2.75	2	3.10
30	30L075	3.581	3.8281	DF-1	0.625	1.875	1	2.875	2	3.40
32	32L075	3.820	4.0625	DF-1	0.625	1.875	1	3.0625	2	3.70

Dimensions in inches. Weight in pounds.
Pulley O.D. = P.D. – .03"
L Pulleys 12 - 16 teeth min. plain bore stocked with 1-SS. If keyway is used, reduce max. bore by twice keyway depth.

L
3/8" Pitch

Stock Timing Pulleys

Martin



Dash 1 = Solid Style **Dash 2 = Web Style** **Dash 3 = Arm/Spoke Style**

L - 3/8" Pitch

L075 For Belts 3/4" Wide (3/8" Pitch) **QD Type** **F = 1**

No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bush	Bore Range		Dimensions				Wt. Less Bush
						Min.	Max.	E	K	L	M	
18	18L075JA	2.149	2.3906	EF-1*	JA	0.5	1.25	0.4375	—	1.0625	0.5	0.50
20	20L075JA	2.387	2.625	EF-1*	JA	0.5	1.25	0.4375	—	1.0625	0.5	0.70
22	22L075JA	2.626	2.875	EF-1*	JA	0.5	1.25	0.4375	—	1.0625	0.5	0.80
24	24L075SH	2.865	3.1094	EF-1*	SH	0.5	1.6875	0.1875	—	1.3125	0.5625	0.80
26	26L075SH	3.104	3.3438	EF-1*	SH	0.5	1.6875	0.1875	—	1.3125	0.5625	1.10
28	28L075SH	3.342	3.5781	EF-1*	SH	0.5	1.6875	0.1875	—	1.3125	0.5625	1.30
30	30L075SDS	3.581	3.8281	EF-1*	SDS	0.5	2	0.25	—	1.375	0.625	1.50
32	32L075SDS	3.82	4.0625	EF-1*	SDS	0.5	2	0.25	—	1.375	0.625	1.70
36	36L075SDS	4.297	4.5313	HF-1	SDS	0.5	2	0.375	0.25	1.375	0	2.30
40	40L075SDS	4.775	5.0156	HF-1	SDS	0.5	2	0.375	0.25	1.375	0	3.10
44	44L075SDS	5.252	5.4844	HF-1	SDS	0.5	2	0.375	0.25	1.375	0	4.00
48	48L075SDS	5.730	6.0156	HF-1	SDS	0.5	2	0.375	0.25	1.375	0	4.60
60	60L075SD	7.162	—	G-3	SD	0.5	2	0.6875	0.125	1.8125	0.125	4.70
72	72L075SD	8.594	—	G-3	SD	0.5	2	0.6875	0.125	1.8125	0.125	6.50
84	84L075SD	10.027	—	G-3	SD	0.5	2	0.6875	0.125	1.8125	0.125	6.30

Dimensions in inches. Weight in pounds
Pulley O.D. = P.D. – .03"
*Reverse mount only

L - 3/8" Pitch

L075 For Belts 3/4" Wide (3/8" Pitch) **Taper Bushed Type** **F = 1**

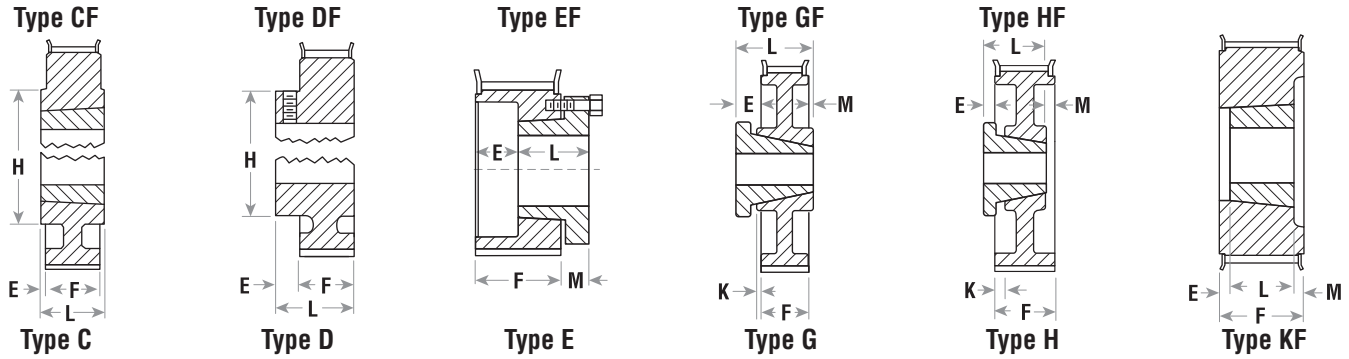
No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bush	Bore Range		Dimensions				Wt. Less Bush
						Min.	Max.	E	H	L	M	
18	TB18L075	2.149	2.3906	KF-1	1008	0.5	1	0.125	—	0.875	—	0.50
20	TB20L075	2.387	2.625	KF-1	1008	0.5	1	0.125	—	0.875	—	0.70
22	TB22L075	2.626	2.875	KF-1	1008	0.5	1	0.125	—	0.875	—	1.10
24	TB24L075	2.865	3.1094	KF-1	1210	0.5	1.25	—	—	1	—	0.90
26	TB26L075	3.104	3.3438	KF-1	1210	0.5	1.25	—	—	1	—	1.30
28	TB28L075	3.342	3.5781	KF-1	1610	0.5	1.625	—	—	1	—	1.30
30	TB30L075	3.581	3.8281	KF-1	1610	0.5	1.625	—	—	1	—	1.60
32	TB32L075	3.820	4.0625	KF-1	1610	0.5	1.625	—	—	1	—	1.80
40	TB40L075	4.775	5.0156	CF-1	2012	0.5	2	0.25	3.9375	1.25	—	3.60
48	TB48L075	5.730	6.0156	CF-1	2012	0.5	2	0.25	3.9375	1.25	—	5.40
60	TB60L075	7.162	—	C-2	2012	0.5	2	0.125	4.375	1.25	0.125	7.90

Dimensions in inches. Weight in pounds
Pulley O.D. = P.D. – .03"

Stock Timing Pulleys

L

3/8" Pitch



Dash 1 = Solid Style **Dash 2 = Web Style** **Dash 3 = Arm/Spoke Style**

L - 3/8" Pitch

L100 For Belts 1" Wide (3/8" Pitch) **Minimum Plain Bore** **F = 1-1/4**

No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bore Range		Dimensions			Wt. Less Bush
					Min.	Max.	E	H	L	
14	14L100	1.671	1.9219	DF-1	0.375	0.875	0.500	1.1250	1.75	0.60
16	16L100	1.910	2.1563	DF-1	0.5	1.125	0.625	1.4375	1.875	0.80
17	17L100	2.029	2.2813	DF-1	0.5	1.125	0.625	1.5	1.875	1.00
18	18L100	2.149	2.3906	DF-1	0.5	1.1875	0.625	1.625	1.875	1.10
19	19L100	2.268	2.375	DF-1	0.5	1.1875	0.625	1.625	1.875	1.40
20	20L100	2.387	2.625	DF-1	0.5	1.1875	0.625	1.6875	1.875	1.75
21	21L100	2.507	2.75	DF-1	0.625	1.3125	0.6875	1.875	1.875	1.80
22	22L100	2.626	2.875	DF-1	0.625	1.5	0.75	2	2	2.00
24	24L100	2.865	3.1094	DF-1	0.625	1.625	0.75	2.25	2	2.50
26	26L100	3.104	3.3438	DF-1	0.625	1.625	0.875	2.5	2.125	3.30
28	28L100	3.342	3.5781	DF-1	0.625	1.875	1	2.75	2.25	3.60
30	30L100	3.581	3.8281	DF-1	0.625	1.875	1	2.875	2.25	4.00
32	32L100	3.820	4.0625	DF-1	0.625	1.875	1	3.0625	2.25	4.40

Dimensions in inches. Weight in pounds
Pulley O.D. = P.D. – .03"
L Pulleys 14 - 16 teeth min. plain bore stocked with 1-S.S. If keyway is used, reduce max. bore by twice keyway depth.

L - 3/8" Pitch

L100 For Belts 1" Wide (3/8" Pitch) **QD Type** **F = 1-1/4**

No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bush	Bore Range		Dimensions				Wt. Less Bush
						Min.	Max.	E	K	L	M	
18	18L100JA	2.149	2.3906	EF-1*	JA	0.5	1.25	0.6875	—	1.0625	0.5	0.70
20	20L100JA	2.387	2.625	EF-1*	JA	0.5	1.25	0.6875	—	1.0625	0.5	0.90
22	22L100JA	2.626	2.875	EF-1*	JA	0.5	1.25	0.6875	—	1.0625	0.5	1.00
24	24L100SH	2.865	3.1094	EF-1*	SH	0.5	1.6875	0.4375	—	1.3125	0.5625	1.00
26	26L100SH	3.104	3.3438	EF-1*	SH	0.5	1.6875	0.4375	—	1.3125	0.5625	1.30
28	28L100SH	3.342	3.5781	EF-1*	SH	0.5	1.6875	0.4375	—	1.3125	0.5625	1.70
30	30L100SDS	3.581	3.8281	EF-1*	SDS	0.5	2	0.5	—	1.375	0.625	2.00
32	32L100SDS	3.820	4.0625	EF-1*	SDS	0.5	2	0.5	—	1.375	0.625	2.10
36	36L100SDS	4.297	4.5313	HF-1	SDS	0.5	2	0.125	0.5	1.375	0	2.60
40	40L100SDS	4.775	5.0156	HF-1	SDS	0.5	2	0.125	0.5	1.375	0	3.40
44	44L100SDS	5.252	5.4844	HF-1	SDS	0.5	2	0.125	0.5	1.375	0	4.20
48	48L100SDS	5.730	6.0156	HF-1	SDS	0.5	2	0.125	0.5	1.375	0	5.10
60	60L100SD	7.162	—	G-3	SD	0.5	2	0.625	0	1.8125	0	6.00
72	72L100SD	8.594	—	G-3	SD	0.5	2	0.625	0	1.8125	0	8.00
84	84L100SD	10.027	—	G-3	SD	0.5	2	0.625	0	1.8125	0	9.20

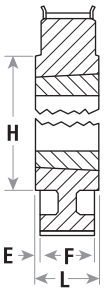
Dimensions in inches. Weight in pounds
Pulley O.D. = P.D. – .03"
*Reverse mount only

L
3/8" Pitch

Stock Timing Pulleys

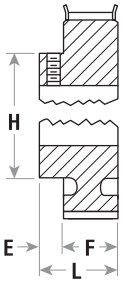
Martin

Type CF



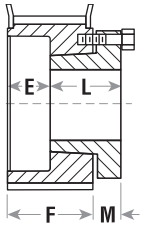
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Type DF



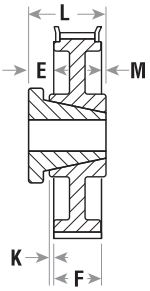
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Type EF



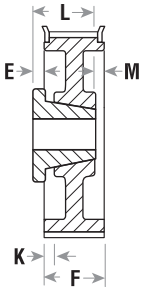
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Type GF

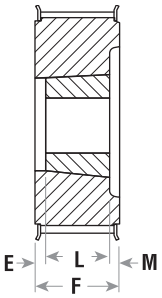


Type G

Type HF



Type H



Type KF

Dash 1 = Solid Style

Dash 2 = Web Style
"F" type description indicates flanged.

Dash 3 = Arm/Spoke Style

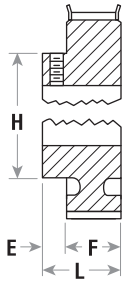
L - 3/8" Pitch

L100 For Belts 1" Wide (3/8" Pitch) **Taper Bushed Type** **F = 1-1/4**

No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bush	Bore Range		Dimensions				Wt. Less Bush
						Min.	Max.	E	K	L	M	
18	TB18L100	2.149	2.3906	KF-1	1008	0.5	1	3/8	—	0.875	—	0.70
20	TB20L100	2.387	2.625	KF-1	1008	0.5	1	3/8	—	0.875	—	1.00
22	TB22L100	2.626	2.875	KF-1	1008	0.5	1	3/8	—	0.875	—	1.30
24	TB24L100	2.865	3.1094	KF-1	1210	0.5	1.25	1/4	—	1	—	1.30
26	TB26L100	3.104	3.3438	KF-1	1210	0.5	1.25	1/4	—	1	—	1.70
28	TB28L100	3.342	3.5781	KF-1	1610	0.5	1.625	1/4	—	1	—	1.70
30	TB30L100	3.581	3.8281	KF-1	1610	0.5	1.625	1/4	—	1	—	2.20
32	TB32L100	3.820	4.0625	KF-1	1610	0.5	1.625	1/4	—	1	—	2.70
40	TB40L100	4.775	5.0156	KF-1	2012	0.5	2	1/16	—	1.25	—	3.60
48	TB48L100	5.730	6.0156	KF-1	2012	0.5	2	1/16	—	1.25	—	5.10
60	TB60L100	7.162	—	C-2	2012	0.5	2	—	—	1.25	—	6.00

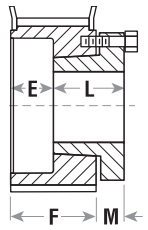
Dimensions in inches. Weight in pounds
Pulley O.D. = P.D. – .03"

Type DF



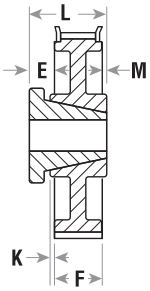
Type D

Type EF



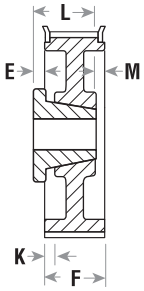
Type E

Type GF



Type G

Type HF



Type H

H - 1/2" Pitch

H100 For Belts 3/4" and 1" Wide (1/2" Pitch) **Minimum Plain Bore** **F = 1-5/16**

No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bore Range		Dimensions			Wt. Less Bush
					Min.	Max.	E	H	L	
14	14H100	2.228	2.4844	DF-1	0.625	1	0.625	1.5	1.9375	1.4
16	16H100	2.546	2.7969	DF-1	0.625	1.25	0.6875	2	2	2.0
18	18H100	2.865	3.1094	DF-1	0.625	1.5	0.6875	2.25	2	2.8
20	20H100	3.183	3.4375	DF-1	0.625	1.625	0.875	2.5	2.1875	3.4
21	21H100	3.342	3.5625	DF-1	0.75	1.6875	1	2.625	2.25	3.8
22	22H100	3.501	3.75	DF-1	0.75	1.875	1	2.875	2.3125	4.3
24	24H100	3.820	4.0156	DF-1	0.75	2.125	1	3.125	2.3125	5.3
26	26H100	4.138	4.3906	DF-1	0.75	2.5	1.125	3.5	2.4375	6.7
28	28H100	4.456	4.7031	DF-1	0.75	2.625	1.125	3.625	2.4375	8.0

Dimensions in inches. Weight in pounds
Pulley O.D. = P.D. – .054"

H - 1/2" Pitch

H100 For Belts 3/4" and 1" Wide (1/2" Pitch) **QD Type** **F = 1-5/16**

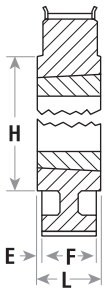
No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bush	Bore Range	Dimensions					Wt. Less Bush
							E	H	K	L	M	
14	14H100JA	2.228	2.4844	EF-1*	JA	1/2 - 1.25	0.75	—	—	1.0625	0.5	1.0
16	16H100JA	2.546	2.7969	EF-1*	JA	1/2 - 1.25	0.75	—	—	1.0625	0.5	1.5
18	18H100SH	2.865	3.1094	EF-1*	SH	1/2 - 1.6875	0.5625	—	—	1.3125	0.5625	1.2
20	20H100SH	3.183	3.4375	EF-1*	SH	1/2 - 1.6875	0.5625	—	—	1.3125	0.5625	1.2
22	22H100SDS	3.501	3.75	EF-1*	SDS	1/2 - 2	0.5625	—	—	1.375	0.625	1.4
24	24H100SDS	3.820	4.0156	EF-1*	SDS	1/2 - 2	0.5625	—	—	1.375	0.625	1.7
26	26H100SDS	4.138	4.3906	HF-1	SDS	1/2 - 2	0.0625	—	0.5625	1.375	—	2.0
28	28H100SDS	4.456	4.7031	HF-1	SDS	1/2 - 2	0.0625	—	0.5625	1.375	—	2.6
30	30H100SD	4.775	5.0156	GF-1	SD	1/2 - 2	0.6250	—	—	1.8125	—	3.0
32	32H100SK	5.093	5.3281	GF-1	SK	1/2 - 2.625	0.6875	—	—	1.9375	—	4.9
36	36H100SK	5.730	5.9531	GF-1	SK	1/2 - 2.625	0.6875	—	—	1.9375	—	5.6
40	40H100SK	6.366	6.5781	GF-1	SK	1/2 - 2.625	0.6875	—	—	1.9375	—	8.2
44	44H100SK	7.003	7.25	GF-1	SK	1/2 - 2.625	0.6875	—	—	1.9375	—	10.0
48	48H100SK	7.639	8.0156	GF-2	SK	1/2 - 2.625	0.6875	—	—	1.9375	—	12.5
60	60H100SF	9.549	—	H-2	SF	1/2 - 2.9375	0.6875	—	—	2.0625	—	10.9
72	72H100SF	11.459	—	H-3	SF	1/2 - 2.9375	0.6875	—	—	2.0625	—	14.0
84	84H100SF	13.369	—	H-2	SF	1/2 - 2.9375	0.6875	5.125	—	2.0625	—	20.0
96	96H100SF	15.279	—	H-3	SF	1/2 - 2.9375	0.6875	5.125	—	2.0625	—	27.0
120	120H100SF	19.099	—	H-3	SF	1/2 - 2.9375	0.6875	5.125	—	2.0625	—	38.0

Dimensions in inches. Weight in pounds
Pulley O.D. = P.D. – .054"
*Reverse mount only

H
1/2" Pitch

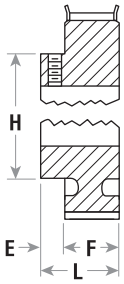
Stock Timing Pulleys

Type CF



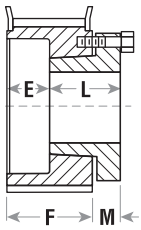
Type C

Type DF



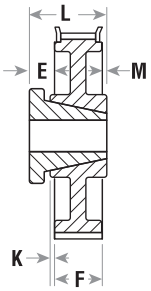
Type D

Type EF



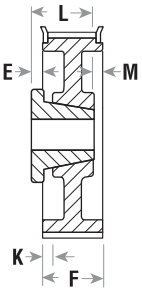
Type E

Type GF



Type G

Type HF



Type H

Dash 1 = Solid Style

Dash 2 = Web Style
"F" type description indicates flanged.

Dash 3 = Arm/Spoke Style

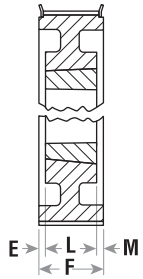
H - 1/2" Pitch

H100 For Belts 3/4" and 1" Wide (1/2" Pitch) **Taper Bushed Type** **F = 1-5/16**

No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bush	Bore Range	Dimensions				Wt. Less Bush
							E	H	L	M	
14	TB14H100	2.228	2.4844	KF-1	1008	0.5 - 1	0.4375	—	0.875	—	0.80
16	TB16H100	2.546	2.7969	KF-1	1008	0.5 - 1	0.4375	—	0.875	—	1.30
18	TB18H100	2.865	3.1094	KF-1	1210	0.5 - 1.25	0.3125	—	1	—	1.20
20	TB20H100	3.183	3.4375	KF-1	1210	0.5 - 1.25	0.3125	—	1	—	1.70
22	TB22H100	3.501	3.7500	KF-1	1610	0.5 - 1.625	0.3125	—	1	—	1.80
24	TB24H100	3.820	4.0156	KF-1	1610	0.5 - 1.625	0.3125	—	1	—	2.30
26	TB26H100	4.138	4.3906	KF-1	2012	0.5 - 2	0.0625	—	1.25	—	2.60
28	TB28H100	4.456	4.7031	KF-1	2012	0.5 - 2	0.0625	—	1.25	—	2.80
30	TB30H100	4.775	5.0156	KF-1	2012	0.5 - 2	0.0625	—	1.25	—	4.20
32	TB32H100	5.093	5.3281	CF-1	2517	0.5 - 2.5	0.4375	4.4375	1.75	—	4.30
40	TB40H100	6.366	6.5781	CF-1	2517	0.5 - 2.5	0.4375	4.4375	1.75	—	7.80
48	TB48H100	7.639	8.0156	CF-1	2517	0.5 - 2.5	0.4375	4.4375	1.75	—	12.10
60	TB60H100	9.549	—	C-2	3020	0.875 - 3	0.3438	6.25	2	0.3438	10.30

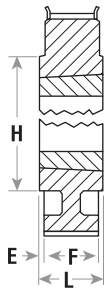
Dimensions in inches. Weight in pounds
Pulley O.D. = P.D. – .054"

Type AF



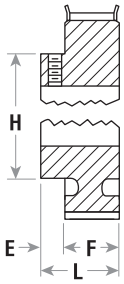
Type A

Type CF



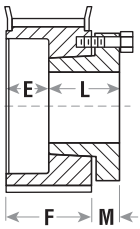
Type C

Type DF



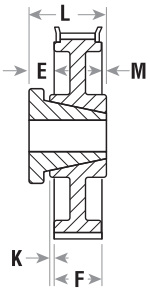
Type D

Type EF



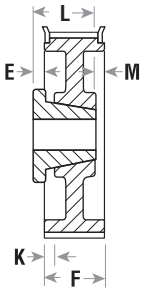
Type E

Type GF

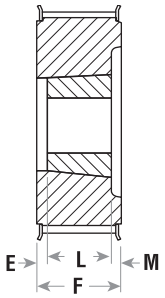


Type G

Type HF



Type H



Type KF

Dash 1 = Solid Style

Dash 2 = Web Style
"F" type description indicates flanged.

Dash 3 = Arm/Spoke Style

H - 1/2" Pitch

H150 For Belts 1-1/2" Wide (1/2" Pitch) **Minimum Plain Bore** **F = 1-13/16**

No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bore		Dimensions			Wt. Less Bush
					Min.	Max.	E	H	L	
14	14H150	2.228	2.4844	DF-1	0.75	1	0.625	1.5	2.4375	1.8
16	16H150	2.546	2.7969	DF-1	0.75	1.25	0.75	2	2.5625	2.5
18	18H150	2.865	3.1094	DF-1	0.75	1.5	0.75	2.25	2.5625	3.3
19	19H150	3.024	3.25	DF-1	0.75	1.5625	0.875	2.25	2.625	3.9
20	20H150	3.183	3.4375	DF-1	0.75	1.625	0.875	2.5	2.6875	4.3
21	21H150	3.342	3.5625	DF-1	0.75	1.6875	0.9375	2.5	2.75	5.3
22	22H150	3.501	3.75	DF-1	0.75	1.875	1	2.875	2.8125	5.4
24	24H150	3.820	4.0625	DF-1	0.75	2.125	1	3.125	2.8125	6.5
26	26H150	4.138	4.7813	DF-1	0.75	2.5	1	3.5	2.8125	8.4

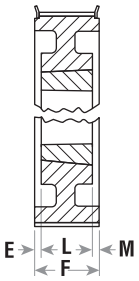
Dimensions in inches. Weight in pounds
Pulley O.D. = P.D. – .054"

H
1/2" Pitch

Stock Timing Pulleys

Martin

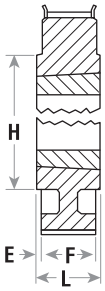
Type AF



Type A

Dash 1 = Solid Style

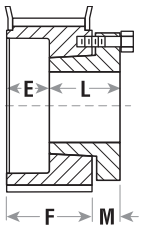
Type CF



Type C

Dash 2 = Web Style

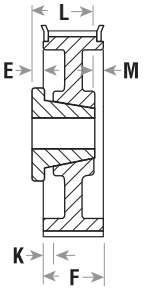
Type EF



Type E

Dash 3 = Arm/Spoke Style

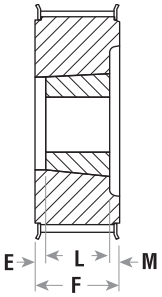
Type HF



Type H

"F" type description indicates flanged.

Type KF



Type KF

H - 1/2" Pitch

H150 For Belts 1-1/2" Wide (1/2" Pitch) **QD Type** **F = 1-13/16**

No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bush	Bore Range	Dimensions				Wt. Less Bush
							E	K	L	M	
14	14H150JA	2.228	2.4844	EF-1*	JA	0.5 - 1.25	1.25	—	1.0625	0.5	1.5
16	16H150JA	2.546	2.7969	EF-1*	JA	0.5 - 1.25	1.25	—	1.0625	0.5	2.0
18	18H150SH	2.865	3.1094	EF-1*	SH	0.5 - 1.6875	1	—	1.3125	0.5625	1.3
20	20H150SH	3.183	3.4375	EF-1*	SH	0.5 - 1.6875	1	—	1.3125	0.5625	1.8
22	22H150SD	3.501	3.75	EF-1*	SD	0.5 - 2	0.5625	—	1.8125	0.625	2.0
24	24H150SD	3.820	4.0625	EF-1*	SD	0.5 - 2	0.5625	—	1.8125	0.625	2.6
26	26H150SD	4.138	4.7813	HF-1	SD	0.5 - 2	0.0625	0.5625	1.8125	0.0625	3.0
28	28H150SD	4.456	4.7031	HF-1	SD	0.5 - 2	0.0625	0.5625	1.8125	0.0625	4.0
30	30H150SD	4.775	5.0156	HF-1	SD	0.5 - 2	0.0625	0.5625	1.8125	0.0625	4.9
32	32H150SK	5.093	5.3281	HF-1	SK	0.5 - 2.625	0.125	0.5625	1.9375	—	5.8
36	36H150SK	5.730	5.9531	HF-1	SK	0.5 - 2.625	0.125	0.5625	1.9375	—	7.0
40	40H150SK	6.366	6.5781	HF-1	SK	0.5 - 2.625	0.125	0.5625	1.9375	—	9.2
44	44H150SK	7.003	7.25	HF-1	SK	0.5 - 2.625	0.125	0.5625	1.9375	—	11.0
48	48H150SK	7.639	8.0156	HF-2	SK	0.5 - 2.625	0.125	0.5625	1.9375	—	13.7
60	60H150SF	9.549	—	H-2	SF	0.5 - 2.9375	0.4063	0.2813	2.0625	0.2813	12.5
72	72H150SF	11.459	—	H-3	SF	0.5 - 2.9375	0.4063	0.2813	2.0625	0.2813	17.0
84	84H150SF	13.369	—	H-3	SF	0.5 - 2.9375	0.4063	0.2813	2.0625	0.2813	21.5
96	96H150SF	15.279	—	H-3	SF	0.5 - 2.9375	0.4063	0.2813	2.0625	0.2813	31.0
120	120H150SF	19.099	—	H-3	SF	0.5 - 2.9375	0.4063	0.2813	2.0625	0.2813	40.0

Dimensions in inches. Weight in pounds. Pulley O.D. = P.D. – .054"

*Reverse mount only

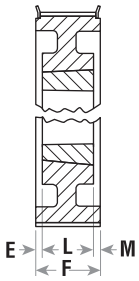
H - 1/2" Pitch

H150 For Belts 1-1/2" Wide (1/2" Pitch) **Taper Bushed Type** **F = 1-13/16**

No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bush	Bore Range	Dimensions					Wt. Less Bush
							E	H	K	L	M	
14	TB14H150	2.228	2.4844	KF-1	1008	0.5 - 1	0.4688	—	—	0.875	0.4688	1.0
16	TB16H150	2.546	2.7969	KF-1	1008	0.5 - 1	0.4688	—	—	0.875	0.4688	1.5
18	TB18H150	2.865	3.1094	KF-1	1215	0.5 - 1.25	0.3125	—	—	1.5	—	1.6
20	TB20H150	3.183	3.4375	KF-1	1215	0.5 - 1.25	0.3125	—	—	1.5	—	2.2
22	TB22H150	3.501	3.75	KF-1	1615	0.5 - 1.625	0.3125	—	—	1.5	—	2.5
24	TB24H150	3.820	4.0625	KF-1	2012	0.5 - 2	0.5625	—	—	1.25	—	2.7
26	TB26H150	4.138	4.7813	KF-1	2012	0.5 - 2	0.5625	—	—	1.25	—	3.2
28	TB28H150	4.456	4.7031	KF-1	2012	0.5 - 2	0.5625	—	—	1.25	—	4.1
30	TB30H150	4.775	5.0156	KF-1	2012	0.5 - 2	0.5625	—	—	1.25	—	5.1
32	TB32H150	5.093	5.3281	KF-1	2517	0.5 - 2.5	0.0625	—	—	1.75	—	5.6
40	TB40H150	6.366	6.5781	KF-1	2517	0.5 - 2.5	0.0625	—	—	1.75	—	8.6
48	TB48H150	7.639	8.0156	AF-2	2517	0.5 - 2.5	—	—	—	1.75	0.0625	13.6
60	TB60H150	9.549	—	C-2	3020	0.88 - 3	0.0938	6.25	—	2	0.0938	12.3

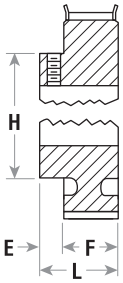
Dimensions in inches. Weight in pounds. Pulley O.D. = P.D. – .054"

Type AF



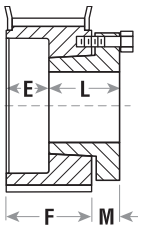
Type A

Type DF



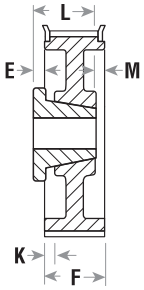
Type D

Type EF



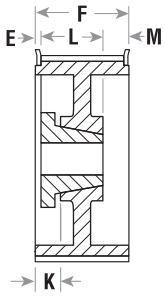
Type E

Type HF

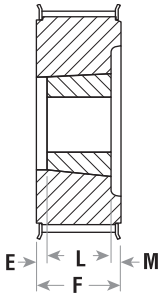


Type H

Type JF



Type J



Type KF

Dash 1 = Solid Style **Dash 2 = Web Style** **Dash 3 = Arm/Spoke Style**

"F" type description indicates flanged.

H - 1/2" Pitch

H200 For Belts 2" Wide (1/2" Pitch) **Minimum Plain Bore** **F = 2-11/32**

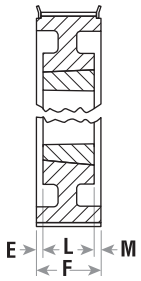
No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bush		Dimensions			Wt. Less Bush
					Stk.	Max.	E	H	L	
14	14H200	2.228	2.375	DF-1	0.75	1	0.625	1.5	2.9688	2.2
16	16H200	2.546	2.7969	DF-1	0.75	1.25	0.75	2	3.0938	3.1
18	18H200	2.865	3.1094	DF-1	0.75	1.5	0.75	2	3.0938	3.7
19	19H200	3.024	3.2500	DF-1	0.75	1.5625	0.875	2.25	3.2188	3.9
20	20H200	3.183	3.4375	DF-1	0.75	1.625	0.875	2.5	3.2188	4.9
22	22H200	3.501	3.75	DF-1	1	1.875	1	2.875	3.3438	6.3
24	24H200	3.820	4.0625	DF-1	1	2.125	1	3.125	3.3438	7.5
26	26H200	4.138	4.7813	DF-1	1	2.5	1.125	3.5	3.4688	9.5

Dimensions in inches. Weight in pounds. Pulley O.D. = P.D. – .054"

H
1/2" Pitch

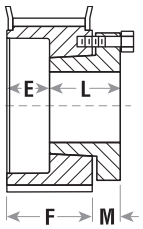
Stock Timing Pulleys

Type AF



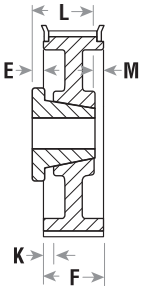
Type A

Type EF

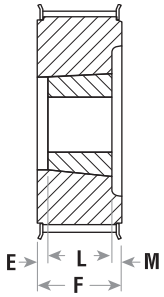


Type E

Type HF



Type H



Type KF

Dash 1 = Solid Style **Dash 2 = Web Style** **Dash 3 = Arm/Spoke Style** **"F" type description indicates flanged.**

H - 1/2" Pitch

H200 For Belts 2" Wide (1/2" Pitch) **QD Type** **F = 2-11/16**

No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bush	Bore Range	Dimensions				Wt. Less Bush
							E	K	L	M	
16	16H200JA	2.546	2.7969	EF-1*	JA	0.5 - 1.25	1.7813	—	1.0625	0.5	2.6
18	18H200SH	2.865	3.1094	EF-1*	SH	0.5 - 1.6875	1.5313	—	1.3125	0.5625	1.6
20	20H200SH	3.183	3.4375	EF-1*	SH	0.5 - 1.6875	1.5313	—	1.3125	0.5625	2.2
22	22H200SD	3.501	3.75	EF-1*	SD	0.5 - 2	1.0938	—	1.8125	0.6250	2.5
24	24H200SD	3.820	4.0625	EF-1*	SD	0.5 - 2	1.0938	—	1.8125	0.6250	3.0
26	26H200SD	4.138	4.7813	HF-1	SD	0.5 - 2	0.0781	0.5469	1.8125	0.5469	3.9
28	28H200SD	4.456	4.7031	HF-1	SD	0.5 - 2	0.0781	0.5469	1.8125	0.5469	4.7
30	30H200SD	4.775	5.0156	HF-1	SD	0.5 - 2	0.0781	0.5469	1.8125	0.5469	5.7
32	32H200SK	5.093	5.3281	HF-1	SK	0.5 - 2.625	0.1406	0.5469	1.9375	0.5469	6.7
36	36H200SK	5.730	5.9531	HF-1	SK	0.5 - 2.625	0.1406	0.5469	1.9375	0.5469	8.0
40	40H200SK	6.366	6.5781	HF-1	SK	0.5 - 2.625	0.1406	0.5469	1.9375	0.5469	10.2
44	44H200SK	7.003	7.25	HF-1	SK	0.5 - 2.625	0.1406	0.5469	1.9375	0.5469	12.5
48	48H200SF	7.639	8.0156	HF-2	SF	0.5 - 2.9375	0.1406	0.5469	2.0625	0.5469	14.1
60	60H200SF	9.549	—	H-2	SF	0.5 - 2.9375	0.1406	0.5469	2.0625	0.5469	14.6
72	72H200SF	11.459	—	H-2	SF	0.5 - 2.9375	0.1406	0.5469	2.0625	0.5469	21.0
84	84H200SF	13.369	—	H-3	SF	0.5 - 2.9375	0.1406	0.5469	2.3125	0.5469	23.0
96	96H200E	15.279	—	H-3	E	0.875 - 3.5	0.5156	0.3594	2.625	0.3594	34.0
120	120H200E	19.099	—	H-3	E	0.875 - 3.5	0.5156	0.3594	2.625	0.3594	42.0

Dimensions in inches. Weight in pounds. Pulley O.D. = P.D. – .054" *Reverse mount only

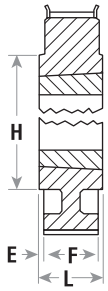
H - 1/2" Pitch

H200 For Belts 1-1/2" Wide (1/2" Pitch) **Taper Bushed Type** **F = 2-11/16**

No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bush	Bore Range	Dimensions			Wt. Less Bush
							E	L	M	
16	TB16H200	2.546	2.7969	KF-1	1008	1/2 - 1	0.75	0.875	0.7188	1.9
18	TB18H200	2.865	3.1094	KF-1	1215	1/2 - 1.25	0.4375	1.5	0.4063	1.8
20	TB20H200	3.183	3.4375	KF-1	1215	1/2 - 1.25	0.4219	1.5	0.4219	2.6
22	TB22H200	3.501	3.75	KF-1	1615	1/2 - 1.625	0.4219	1.5	0.4219	2.8
24	TB24H200	3.820	4.0625	KF-1	2012	1/2 - 2	0.5469	1.25	0.5469	2.8
26	TB26H200	4.138	4.7813	KF-1	2012	1/2 - 2	0.5469	1.25	0.5469	3.6
28	TB28H200	4.456	4.7031	KF-1	2012	1/2 - 2	0.5469	1.25	0.5469	5.1
30	TB30H200	4.775	5.0156	KF-1	2012	1/2 - 2	0.4063	1.25	—	7.0
32	TB32H200	5.093	5.3281	KF-1	2517	1/2 - 2.5	0.5938	1.75	—	8.5
40	TB40H200	6.366	6.5781	KF-1	2517	1/2 - 2.5	0.5938	1.75	—	9.9
48	TB48H200	7.639	8.0156	KF-1	3020	7/8 - 3	0.3438	2	—	14.3
60	TB60H200	9.549	—	A-2	3020	7/8 - 3	0.1719	2	0.1719	15.3

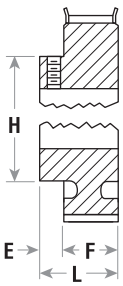
Dimensions in inches. Weight in pounds. Pulley O.D. = P.D. – .054"

Type CF



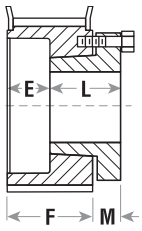
Type C

Type DF



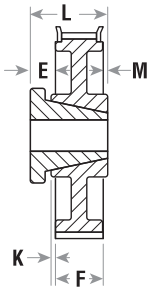
Type D

Type EF



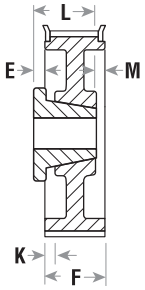
Type E

Type GF

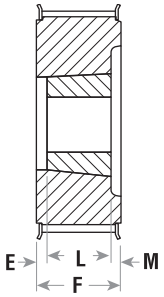


Type G

Type HF



Type H



Type KF

Dash 1 = Solid Style

Dash 2 = Web Style

Dash 3 = Arm/Spoke Style

H - 1/2" Pitch

H300 For Belts 3" Wide (1/2" Pitch) **Minimum Plain bore** **F = 3-3/8**

No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bore		Dimensions			Wt. Less Bush
					Stk.	Max.	E	H	L	
16	16H300	2.546	2.80	DF-1	0.75	1.25	0.75	2	4.125	4.2

Dimensions in inches. Weight in pounds. Pulley O.D. = P.D. – .054"

H - 1/2" Pitch

H300 For Belts 3" Wide (1/2" Pitch) **QD Type** **F = 3-3/8**

No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bush	Bore Range	Dimensions				Wt. Less Bush
							E	K	L	M	
22	22H300SD	3.501	3.75	EF-1*	SD	0.5 - 2	2.125	—	1.8125	0.625	4.1
24	24H300SD	3.820	4.0625	EF-1*	SD	0.5 - 2	2.125	—	1.8125	0.625	4.1
26	26H300SD	4.138	4.3906	JF-1	SD	0.5 - 2	0.4375	1.0625	1.8125	1.0625	5.0
28	28H300SD	4.456	4.7031	JF-1	SD	0.5 - 2	0.4375	1.0625	1.8125	1.0625	6.0
30	30H300SD	4.775	5.0156	JF-1	SD	0.5 - 2	0.4375	1.0625	1.8125	1.0625	7.2
32	32H300SK	5.093	5.3281	JF-1	SK	0.5 - 2.625	0.375	1.0625	1.9375	1.0625	8.4
36	36H300SK	5.730	5.9531	JF-1	SK	0.5 - 2.625	0.375	1.0625	1.9375	1.0625	10.0
40	40H300SK	6.366	6.5781	JF-1	SK	0.5 - 2.625	0.375	1.0625	1.9375	1.0625	12.2
44	44H300SK	7.003	7.25	JF-1	SK	0.5 - 2.625	0.375	1.0625	1.9375	1.0625	15.5
48	48H300SF	7.639	8.0156	JF-2	SF	0.5 - 2.9375	0.375	1.0625	2.0625	1.0625	16.6
60	60H300SF	9.549	—	J-2	SF	0.5 - 2.9375	0.375	1.0625	2.0625	1.0625	17.9
72	72H300SF	11.459	—	J-2	SF	0.5 - 2.9375	0.1875	1.0625	2.0625	1.0625	23.0
84	84H300SF	13.369	—	J-2	SF	0.5 - 2.9375	0.1875	1.0625	2.0625	1.0625	30.0
96	96H300E	15.2790	—	H-3	E	0.875 - 3.5	-	0.875	2.625	0.875	38.0
120	120H300E	19.099	—	H-3	E	0.875 - 3.5	-	0.875	2.625	0.875	51.0

Dimensions in inches. Weight in pounds. Pulley O.D. = P.D. – .054" *Reverse mount only

H - 1/2" Pitch

H300 For Belts 3" Wide (1/2" Pitch) **Taper Bushed Type** **F = 3-3/8**

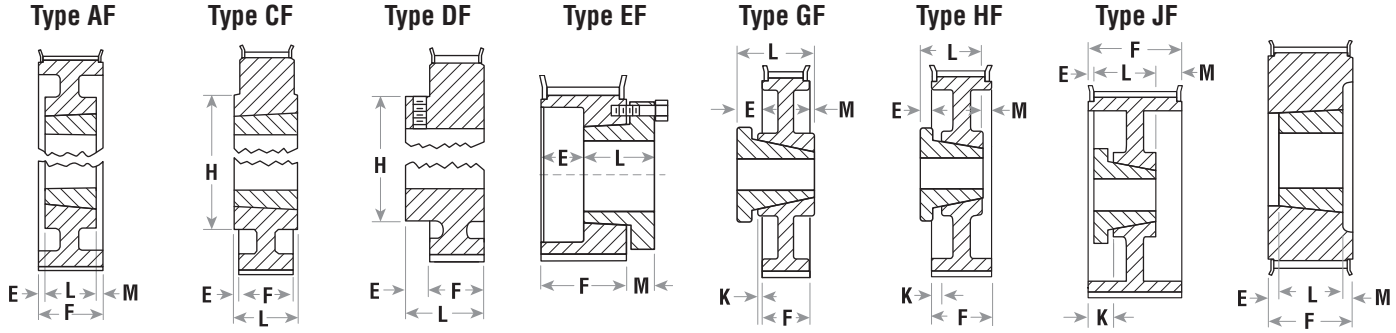
No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bush	Bore Range	Dimensions			Wt. Less Bush
							E	L	M	
18	TB18H300	2.865	3.1094	KF-1	1215	0.5 - 1.25	0.9375	1.5	0.9375	2.6
20	TB20H300	3.183	3.4375	KF-1	1215	0.5 - 1.25	0.9375	1.5	0.9375	3.9
22	TB22H300	3.501	3.75	KF-1	1615	0.5 - 1.625	0.9375	1.5	0.9375	4.0
24	TB24H300	3.820	4.0625	KF-1	2012	0.5 - 2	1.0625	1.25	1.0625	4.3
26	TB26H300	4.138	4.3906	KF-1	2012	0.5 - 2	1.0625	1.25	1.0625	5.4
28	TB28H300	4.456	4.7031	KF-1	2012	0.5 - 2	1.0625	1.25	1.0625	6.8
30	TB30H300	4.775	5.0156	KF-1	2012	0.5 - 2	1.0625	1.25	1.0625	7.5
32	TB32H300	5.093	5.3281	KF-1	2517	0.5 - 2.5	0.8125	1.75	0.8125	7.4
40	TB40H300	6.366	6.5781	KF-1	2517	0.5 - 2.5	0.8125	1.75	0.8125	12.1
48	TB48H300	7.639	8.0156	KF-1	3020	0.875 - 3	0.6875	2	0.6875	16.3
60	TB60H300	9.549	—	A-2	3020	0.875 - 3	0.5625	2	0.5625	17.3

Dimensions in inches. Weight in pounds. Pulley O.D. = P.D. – .054" *Reverse mount only

XH
7/8" Pitch

Stock Timing Pulleys

Martin



Dash 1 = Solid Style **Dash 2 = Web Style** **Dash 3 = Arm/Spoke Style** **"F" type description indicates flanged.**

XH - 7/8" Pitch

XH200 For Belts 2" Wide (7/8" Pitch) **Minimum Plain Bore** **F = 2-9/16**

No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bore		Dimensions			Wt. Less Bush
					Stk.	Max.	E	H	L	
18	18XH200	5.013	5.5781	DF-1	1	2.625	0.875	3.6875	3.4375	12.0
20	20XH200	5.570	6.1094	DF-1	1	3.25	1	4.125	3.5625	16.0

Dimensions in inches. Weight in pounds. Pulley O.D. = P.D. – .11"

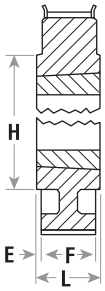
XH - 7/8" Pitch

XH200 For Belts 2" Wide (7/8" Pitch) **Taper Bushed Type** **F = 2-9/16**

No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bush	Bore Range	Dimensions				Wt. Less Bush
							E	H	L	M	
22	TB22XH200	6.127	6.5938	KF-1	2517	0.5 - 2.5	0.8125	—	1.75	—	10.6
24	TB24XH200	6.685	7.2813	KF-1	3020	0.875 - 3	0.5625	—	2	—	11.3
26	TB26XH200	7.241	7.7813	KF-1	3020	0.875 - 3	0.5625	—	2	—	13.3
28	TB28XH200	7.799	8.2656	CF-1	3535	1.1875 - 3.5	0.9375	6.5	3.5	—	13.5
30	TB30XH200	8.356	9.0313	CF-1	3535	1.1875 - 3.5	0.9375	6.5	3.5	—	18.5
32	TB32XH200	8.913	9.5156	CF-1	3535	1.1875 - 3.5	0.9375	6.5	3.5	—	21.5
40	TB40XH200	11.141	11.7969	CF-1	4040	1.4375 - 4	1.4375	8.5	4	—	37.5
48	TB48XH200	13.369	—	C-2	4040	1.4375 - 4	0.4063	8.5	4	0.7188	44.5
60	TB60XH200	16.711	—	C-3	4040	1.4375 - 4	0.7188	8.5	4	0.7188	47.0

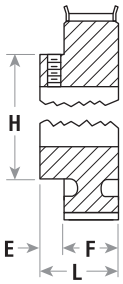
Dimensions in inches. Weight in pounds. Pulley O.D. = P.D. – .11"

Type CF



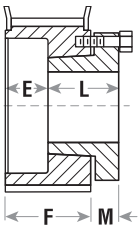
Type C

Type DF



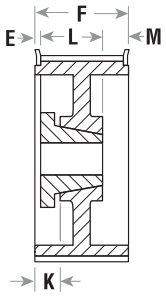
Type D

Type EF

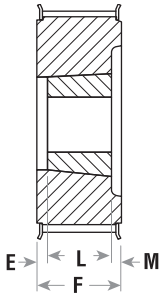


Type E

Type JF



Type J



Type KF

XH - 7/8" Pitch

XH300 For Belts 3" Wide (7/8" Pitch) **Minimum Plain Bore** **F = 3-5/8**

No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bore		Dimensions				Wt. Less Bush
					Stk.	Max.	E	H	L	M	
18	18XH300	5.013	5.5781	DF-1	1	2.625	0.875	3.6875	4.5	1*	15.0
20	20XH300	5.570	6.1094	DF-1	1	3.25	1	4.125	4.625	0.75*	19.0

*Counterbore "M" depth on flush side.

XH - 7/8" Pitch

XH300 For Belts 3" Wide (7/8" Pitch) **Taper Bushed Type** **F = 3-5/8**

No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bush	Bore Range	Dimensions				Wt. Less Bush
							E	H	L	M	
22	TB22XH300	6.127	6.6563	KF-1	2517	0.5 - 2.5	0.9375	—	1.75	0.9375	13.6
24	TB24XH300	6.685	7.2813	KF-1	3020	0.875 - 3	0.8125	—	2	0.8125	15.3
26	TB26XH300	7.241	7.7813	KF-1	3020	0.875 - 3	0.8125	—	2	0.8125	17.3
28	TB28XH300	7.799	8.2656	KF-1	3535	1.1875 - 3.5	0.125	—	3.5	—	17.5
30	TB30XH300	8.356	9.0313	KF-1	3535	1.1875 - 3.5	0.125	—	3.5	—	22.5
32	TB32XH300	8.913	9.5156	KF-1	3535	1.1875 - 3.5	0.125	—	3.5	—	26.5
40	TB40XH300	11.141	11.7969	CF-1	4040	1.4375 - 4	0.375	7.75	4	—	43.5
48	TB48XH300	13.369	—	C-2	4040	1.4375 - 4	0.1875	8.5	4	0.1875	51.5
60	TB60XH300	16.711	—	C-3	4040	1.4375 - 4	0.1875	8.5	4	0.1875	55.5

XH - 1/2" Pitch

XH400 For Belts 4" Wide (7/8" Pitch) **QD Type** **F = 4-11/16**

No. Teeth	Part Number	Pitch Diameter	Max FL O.D.	Type	Bush	Bore Range	Dimensions				Wt. Less Bush
							E	K	L	M	
20	20XH400SK	5.570	6.0938	JF-1	SK	0.5 - 2.5	0.5	1.1875	1.9375	2.25	12.4
22	22XH400SK	6.127	6.6563	JF-1	SK	0.5 - 2.5	0.5	1.1875	1.9375	2.25	16.7
24	24XH400SF	6.685	7.2188	JF-1	SF	0.5 - 2.875	0.5	1.1875	2.0625	2.1875	19.2
26	26XH400SF	7.242	7.7813	JF-1	SF	0.5 - 2.875	0.5	1.1875	2.0625	2.1875	23.0
28	28XH400E	7.799	8.3438	JF-1	E	0.875 - 3.5	0.6563	1.5313	2.625	1.4063	24.0
30	30XH400E	8.356	8.9063	JF-1	E	0.875 - 3.5	0.6563	1.5313	2.625	1.4063	30.7
32	32XH400E	8.913	9.4375	JF-1	E	0.875 - 3.5	0.6563	1.5313	2.625	1.4063	34.0
40	40XH400F	11.141	11.6875	HF-2	F	1 - 3.9375	0.0938	1.0938	3.625	1.0313	49.0
48	48XH400J	13.369	—	H-3	J	1.4375 - 4.5	0.1875	1	4.5	0.875	67.3
60	60XH400J	16.711	—	H-3	J	1.4375 - 4.5	0.4375	0.75	4.5	0.625	85.0
72	72XH400J	20.054	—	H-3	J	1.4375 - 4.5	0.4375	0.75	4.5	0.625	108.0
84	84XH400J	23.396	—	H-3	J	1.4375 - 4.5	0.4375	0.75	4.5	0.625	119.0
96	96XH400J	26.738	—	H-3	J	1.4375 - 4.5	0.4375	0.75	4.5	0.625	187.5
120	120XH400J	33.423	—	H-3	J	1.4375 - 4.5	0.4375	0.75	4.5	0.625	187.5

Dimensions in inches. Weight in pounds. Pulley O.D. = P.D. – .11"

Timing Pulley Diameters

XL - 1/5" Pitch

No. Teeth	Diameter		No. Teeth	Diameter		No. Teeth	Diameter		No. Teeth	Diameter		No. Teeth	Diameter	
	P.D.	O.D.		P.D.	O.D.		P.D.	O.D.		P.D.	O.D.		P.D.	O.D.
10XL	0.637	0.617	33XL	2.101	2.081	55XL	3.501	3.481	77XL	4.902	4.882	99XL	6.303	6.283
11XL	0.700	0.680	34XL	2.165	2.145	56XL	3.565	3.545	78XL	4.966	4.946	100XL	6.346	6.326
12XL	0.764	0.744	35XL	2.228	2.208	57XL	3.629	3.609	79XL	5.029	5.009	101XL	6.430	6.410
13XL	0.828	0.808	36XL	2.292	2.272	58XL	3.692	3.672	80XL	5.093	5.073	102XL	6.494	6.474
14XL	0.891	0.871	37XL	2.355	2.335	59XL	3.756	3.736	81XL	5.157	5.137	103XL	6.557	6.537
15XL	0.955	0.935	38XL	2.419	2.399	60XL	3.820	3.800	82XL	5.220	5.200	104XL	6.621	6.601
16XL	1.019	0.999	39XL	2.483	2.463	61XL	3.883	3.863	83XL	5.284	5.264	105XL	6.685	6.665
17XL	1.082	1.062	40XL	2.546	2.526	62XL	3.947	3.927	84XL	5.348	5.328	106XL	6.748	6.728
18XL	1.146	1.126	41XL	2.610	2.590	63XL	4.011	3.991	85XL	5.411	5.391	107XL	6.812	6.792
19XL	1.210	1.190	42XL	2.674	2.654	64XL	4.074	4.054	86XL	5.475	5.455	108XL	6.875	6.855
20XL	1.273	1.253	43XL	2.737	2.717	65XL	4.138	4.118	87XL	5.539	5.519	109XL	6.939	6.919
21XL	1.337	1.317	44XL	2.801	2.781	66XL	4.202	4.182	88XL	5.602	5.582	110XL	7.003	6.983
22XL	1.401	1.381	45XL	2.865	2.845	67XL	4.265	4.245	89XL	5.666	5.646	111XL	7.066	7.046
23XL	1.464	1.444	46XL	2.928	2.908	68XL	4.329	4.309	90XL	5.730	5.710	112XL	7.130	7.110
24XL	1.528	1.508	47XL	2.992	2.972	69XL	4.393	4.373	91XL	5.793	5.773	113XL	7.194	7.174
25XL	1.592	1.572	48XL	3.056	3.036	70XL	4.456	4.436	92XL	5.857	5.837	114XL	7.257	7.237
26XL	1.655	1.635	49XL	3.119	3.099	71XL	4.520	4.500	93XL	5.921	5.901	115XL	7.321	7.301
27XL	1.719	1.699	50XL	3.183	3.163	72XL	4.584	4.564	94XL	5.984	5.964	116XL	7.385	7.365
28XL	1.783	1.763	51XL	3.247	3.227	73XL	4.647	4.627	95XL	6.048	6.028	117XL	7.448	7.428
29XL	1.846	1.826	52XL	3.310	3.290	74XL	4.711	4.691	96XL	6.112	6.092	118XL	7.512	7.492
30XL	1.910	1.890	53XL	3.374	3.354	75XL	4.775	4.755	97XL	6.175	6.155	119XL	7.576	7.556
31XL	1.974	1.954	54XL	3.438	3.418	76XL	4.838	4.818	98XL	6.239	6.219	120XL	7.639	7.619
32XL	2.037	2.017												

L - 3/8" Pitch

No. Teeth	Diameter		No. Teeth	Diameter		No. Teeth	Diameter		No. Teeth	Diameter		No. Teeth	Diameter	
	P.D.	O.D.		P.D.	O.D.		P.D.	O.D.		P.D.	O.D.		P.D.	O.D.
10L	1.194	1.164	33L	3.939	3.909	56L	6.685	6.655	79L	9.430	9.400	102L	12.175	12.145
11L	1.313	1.283	34L	4.058	4.028	57L	6.804	6.774	80L	9.549	9.519	103L	12.295	12.265
12L	1.432	1.402	35L	4.178	4.148	58L	6.923	6.893	81L	9.669	9.639	104L	12.414	12.384
13L	1.552	1.522	36L	4.297	4.267	59L	7.043	7.013	82L	9.788	9.758	105L	12.533	12.503
14L	1.671	1.641	37L	4.417	4.387	60L	7.162	7.132	83L	9.907	9.877	106L	12.653	12.623
15L	1.790	1.760	38L	4.536	4.506	61L	7.281	7.251	84L	10.027	9.997	107L	12.772	12.742
16L	1.910	1.880	39L	4.655	4.625	62L	7.401	7.371	85L	10.147	10.117	108L	12.892	12.862
17L	2.029	1.999	40L	4.775	4.745	63L	7.520	7.490	86L	10.265	10.235	109L	13.011	12.981
18L	2.149	2.119	41L	4.894	4.864	64L	7.639	7.609	87L	10.385	10.355	110L	13.130	13.100
19L	2.268	2.238	42L	5.013	4.983	65L	7.759	7.729	88L	10.504	10.474	111L	13.250	13.220
20L	2.387	2.357	43L	5.133	5.103	66L	7.878	7.848	89L	10.624	10.594	112L	13.369	13.339
21L	2.507	2.477	44L	5.252	5.222	67L	7.998	7.968	90L	10.743	10.713	113L	13.488	13.458
22L	2.626	2.596	45L	5.371	5.341	68L	8.117	8.087	91L	10.862	10.832	114L	13.608	13.578
23L	2.745	2.715	46L	5.491	5.461	69L	8.236	8.206	92L	10.982	10.952	115L	13.727	13.697
24L	2.865	2.835	47L	5.610	5.580	70L	8.356	8.326	93L	11.101	11.071	116L	13.846	13.816
25L	2.984	2.954	48L	5.730	5.700	71L	8.475	8.445	94L	11.220	11.190	117L	13.966	13.936
26L	3.104	3.074	49L	5.849	5.819	72L	8.594	8.564	95L	11.340	11.310	118L	14.085	14.055
27L	3.223	3.193	50L	5.968	5.938	73L	8.714	8.684	96L	11.459	11.429	119L	14.205	14.175
28L	3.342	3.312	51L	6.088	6.058	74L	8.833	8.803	97L	11.579	11.549	120L	14.324	14.294
29L	3.462	3.432	52L	6.207	6.177	75L	8.952	8.922	98L	11.698	11.668	130L	15.518	15.488
30L	3.581	3.551	53L	6.326	6.296	76L	9.072	9.042	99L	11.817	11.787	140L	16.711	16.681
31L	3.700	3.670	54L	6.446	6.416	77L	9.191	9.161	100L	11.937	11.907	150L	17.905	17.875
32L	3.820	3.790	55L	6.565	6.535	78L	9.311	9.261	101L	12.056	12.026			

Timing Pulley Diameters

H - 1/2" Pitch

No. Teeth	Diameter		No. Teeth	Diameter		No. Teeth	Diameter		No. Teeth	Diameter		No. Teeth	Diameter	
	P.D.	O.D.		P.D.	O.D.		P.D.	O.D.		P.D.	O.D.		P.D.	O.D.
15H	2.387	2.333	35H	5.570	5.516	55H	8.754	8.700	75H	11.937	11.883	95H	15.120	15.066
16H	2.546	2.492	36H	5.730	5.676	56H	8.913	8.859	76H	12.096	12.042	96H	15.225	15.171
17H	2.706	2.652	37H	5.889	5.835	57H	9.072	9.018	77H	12.255	12.201	97H	15.438	15.384
18H	2.865	2.811	38H	6.048	5.994	58H	9.231	9.177	78H	12.414	12.360	98H	15.597	15.543
19H	3.024	2.970	39H	6.207	6.153	59H	9.390	9.336	79H	12.573	12.519	99H	15.756	15.702
20H	3.183	3.129	40H	6.366	6.312	60H	9.549	9.495	80H	12.732	12.678	100H	15.915	15.861
21H	3.342	3.288	41H	6.525	6.471	61H	9.708	9.654	81H	12.892	12.848	102H	16.234	16.180
22H	3.501	3.447	42H	6.685	6.631	62H	9.868	9.814	82H	13.051	12.997	104H	16.552	16.498
23H	3.661	3.607	43H	6.844	6.790	63H	10.027	9.973	83H	13.210	13.156	106H	16.870	16.816
24H	3.820	3.766	44H	7.003	6.949	64H	10.186	10.132	84H	13.369	13.315	108H	17.189	17.135
25H	3.979	3.925	45H	7.162	7.108	65H	10.345	10.291	85H	13.528	13.474	110H	17.507	17.453
26H	4.138	4.084	46H	7.321	7.267	66H	10.504	10.450	86H	13.687	13.633	115H	18.303	18.249
27H	4.297	4.243	47H	7.480	7.426	67H	10.663	10.609	87H	13.846	13.792	120H	19.099	19.045
28H	4.456	4.402	48H	7.639	7.585	68H	10.823	10.769	88H	14.005	13.952	125H	19.894	19.840
29H	4.615	4.561	49H	7.799	7.745	69H	10.982	10.928	89H	14.165	14.111	130H	20.690	20.636
30H	4.775	4.721	50H	7.958	7.904	70H	11.141	11.087	90H	14.324	14.270	135H	21.486	21.432
31H	4.934	4.880	51H	8.117	8.063	71H	11.300	11.246	91H	14.483	14.429	140H	22.282	22.228
32H	5.093	5.039	52H	8.276	8.222	72H	11.459	11.405	92H	14.642	14.588	145H	23.077	23.023
33H	5.252	5.198	53H	8.435	8.381	73H	11.618	11.564	93H	14.801	14.747	150H	23.873	23.819
34H	5.411	5.357	54H	8.594	8.540	74H	11.777	11.723	94H	14.961	14.907	156H	24.828	24.774

XH - 7/8" Pitch

No. Teeth	Diameter		No. Teeth	Diameter		No. Teeth	Diameter		No. Teeth	Diameter		No. Teeth	Diameter	
	P.D.	O.D.		P.D.	O.D.		P.D.	O.D.		P.D.	O.D.		P.D.	O.D.
18XH	5.013	4.903	45XH	12.533	12.423	70XH	19.496	19.386	95XH	26.460	26.350	120XH	33.423	33.313
20XH	5.570	5.460	46XH	12.812	12.702	71XH	19.776	19.666	96XH	26.738	26.628	122XH	33.980	33.870
22XH	6.127	6.017	47XH	13.091	12.981	72XH	20.054	19.944	97XH	27.017	26.907	124XH	34.537	34.427
23XH	6.406	6.296	48XH	13.369	13.259	73XH	20.332	20.222	98XH	27.295	27.185	126XH	35.094	34.984
24XH	6.685	6.575	49XH	13.648	13.538	74XH	20.611	20.501	99XH	27.574	27.464	128XH	35.651	35.541
25XH	6.963	6.853	50XH	13.926	13.816	75XH	20.889	20.779	100XH	27.852	27.742	130XH	36.208	36.098
26XH	7.242	7.132	51XH	14.205	14.095	76XH	21.168	21.058	101XH	28.131	28.021	132XH	36.765	36.655
27XH	7.520	7.410	52XH	14.483	14.373	77XH	21.446	21.336	102XH	28.409	28.299	134XH	37.322	37.212
28XH	7.799	7.689	53XH	14.762	14.652	78XH	21.725	21.615	103XH	28.688	28.578	136XH	37.879	37.769
29XH	8.077	7.967	54XH	15.140	14.930	79XH	21.003	21.893	104XH	28.966	28.856	138XH	38.436	38.326
30XH	8.356	8.246	55XH	15.319	15.209	80XH	22.282	22.172	105XH	29.245	29.135	140XH	38.993	38.883
31XH	8.634	8.524	56XH	15.597	15.487	81XH	22.560	22.450	106XH	29.523	29.413	142XH	39.550	39.440
32XH	8.913	8.803	57XH	15.876	15.766	82XH	22.839	22.729	107XH	29.802	29.682	144XH	40.107	39.997
33XH	9.191	9.081	58XH	16.154	16.044	83XH	23.118	23.008	108XH	30.080	29.970	146XH	40.664	40.554
34XH	9.470	9.360	59XH	16.433	16.323	84XH	23.396	23.286	109XH	30.359	30.249	150XH	41.778	41.668
35XH	9.748	9.638	60XH	16.711	16.601	85XH	23.674	23.564	110XH	30.637	30.527			
36XH	10.027	9.917	61XH	16.990	16.880	86XH	23.953	23.843	111XH	30.916	30.806			
37XH	10.305	10.195	62XH	17.268	17.158	87XH	24.231	24.121	112XH	31.194	31.084			
38XH	10.584	10.474	63XH	17.547	17.437	88XH	24.510	24.400	113XH	31.473	31.363			
39XH	10.862	10.752	64XH	17.825	17.715	89XH	24.788	24.678	114XH	31.751	31.641			
40XH	11.141	11.031	65XH	18.104	17.994	90XH	25.067	24.957	115XH	32.030	31.920			
41XH	11.419	11.309	66XH	18.382	18.272	91XH	25.345	25.235	116XH	32.308	32.198			
42XH	11.698	11.588	67XH	18.661	18.551	92XH	25.624	25.514	117XH	32.587	32.477			
43XH	11.976	11.866	68XH	18.939	18.829	93XH	25.902	25.792	118XH	32.665	32.755			
44XH	12.255	12.145	69XH	19.218	19.108	94XH	26.181	26.071	119XH	33.145	33.035			

Outside Diameter Tolerances

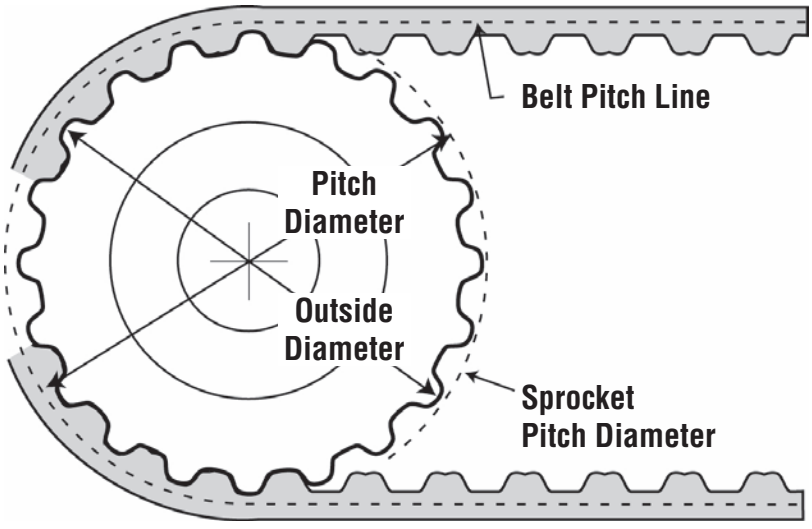
Pulley Dia.	O.D. Tolerance	Pulley Dia.	O.D. Tolerance	Pulley Dia.	O.D. Tolerance	Pulley Dia.	O.D. Tolerance
0 - 1"	+.002 -	2.001" - 4"	+.004 -	7.001" - 12"	+.006 -	20.001 UP	+.008 -
1" - 2"	+.003 -	4.001" - 7"	+.005 -	12.001" - 20"	+.007 -		

Stock HTS® Sprockets

Features of HTS® Drives

- Positive slip proof engagement
- Wide speed range
- Constant driven speeds
- Wide range of load capabilities
- No lubrication
- High tension eliminated
- High mechanical efficiency
- Economical operation





HTS® High Torque Sprockets

- RPP® tooth profile
- Available in 5mm, 8mm, 14mm & 20mm pitch
- Stocked in QD and taper bush interchangeable bushing styles, as well as stock bore.

RPP® is a registered trademark of Carlisle Power Transmission.

HTS®
Drive Specification

Martin HTS sprockets are manufactured in various sizes, dimensions and capacities to meet industry requirements. This includes a wide range of loads, speeds, and demanding applications.

The following is an explanation of dimensional nomenclature for Martin HTS sprockets as well as belts currently available that will operate efficiently with the Martin tooth form.

The HTS sprocket has three primary dimensions:

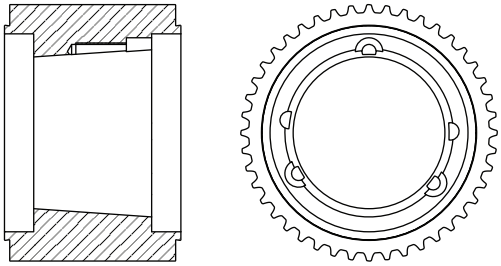
- Number of teeth
- Pitch
- Width

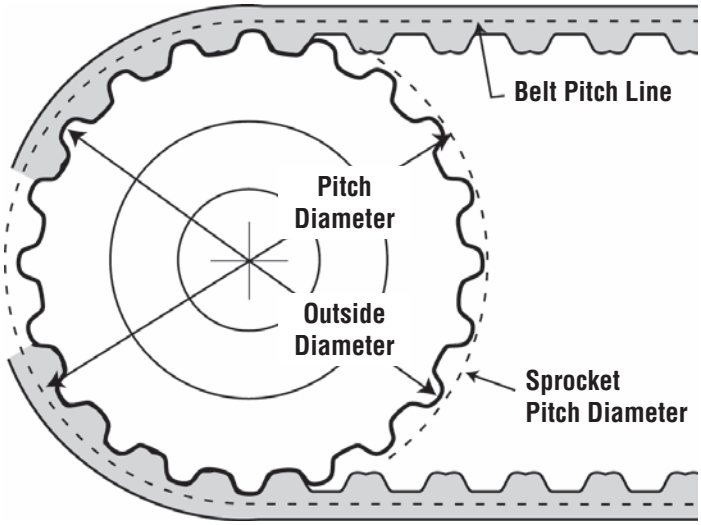
The pitch is the distance in millimeters from the center of one tooth groove to the other and is measured on the sprocket's pitch circle. The pitch circle of the sprocket matches with the pitch line of the belt when in mesh. The sprocket pitch diameter is always greater than its outer diameter.

Note: Belts must be run with sprockets of the same pitch.

As with the sprocket specifications, belt pitch is the measure between two adjacent tooth centers which is measured on the pitch line of the belt.

Note: The theoretical pitch line is within the tensile member. Belt length is the total length (circumference) in millimeters as could be measured along the pitch line.

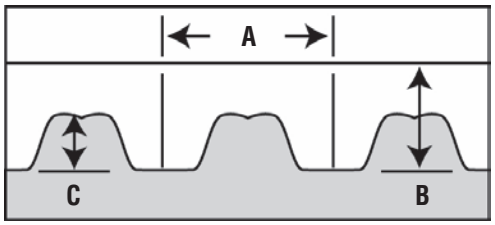




P 30 14M 55 - SK

- **HTS®**
- **Number of Teeth**
- **Belt Pitch**
- **Belt Width (mm)**
- **Bushing or MPB**

5mm	15, 25
8mm	20, 30, 50, 85
14mm	40, 55, 85, 115, 170
20mm	115, 170, 230, 290, 340



Belt Pitch	A	B	C
5 mm	5 mm **.197 in**	3.81 mm **.150 in**	2.08 mm **.082 in**
8 mm	8 mm **.315 in**	6 mm **.236 in**	3.4 mm **.133 in**
14 mm	14 mm **.552 in**	10 mm **.394 in**	6.0 mm **.237 in**
20 mm	20 mm **.784 in**	13.2 mm **.520 in**	8.4 mm **.330 in**

"P" HTS sprockets (RPP® tooth profile) - run with RPP®, RPP® Plus®, Hawk Pd®, & HTD® belts.

"P" HTS sprockets are designed to run with fiberglass corded belts.

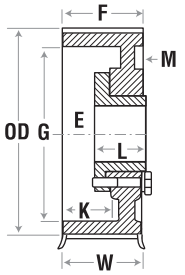
- Available in 5mm, 8mm, 14mm, 20mm pitches
- Belt widths:

15mm, 25mm (5mm pitch)
20mm, 30mm, 50mm, 85mm (8mm pitch)
40mm, 55mm, 85mm, 115mm, 170mm (14mm pitch)
115mm, 170mm, 230mm, 290mm, 340mm (20mm pitch)

Hawk Pd® is a registered trademarks of Goodyear.
RPP® and RPP® Plus® are registered trademarks of Carlisle Power Transmission. HTS® is a registered trademark of Gates Corporation.

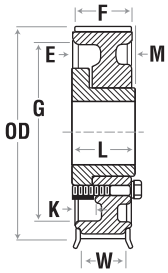
High Torque Sprockets
5mm

Type B



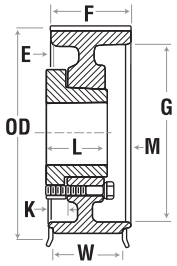
Type BF

Type C



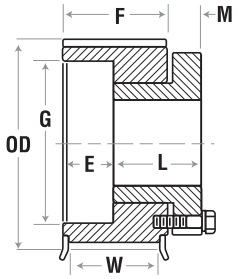
Type CF

Type D



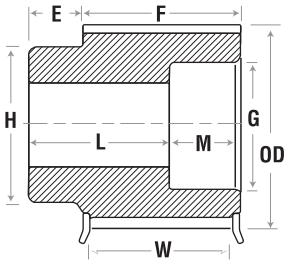
Type DF

Type E •



Type EF •

Type D
(MPB Only)



Type DF
(MPB Only)

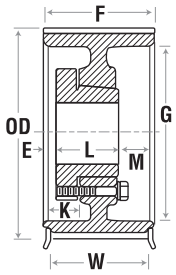
No. of Teeth	Catalog Number	Bore	Pitch	Diameter		Type +	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Flange			E	L	M	K	H	F	G	W	
MPB 15mm (.591 in.) Wide Belts (5M-15)																
32	P325M15-MPB	0.5	2.005	1.960	2.16	DF-1	0.88	0.50	1.73	—	—	1.55	0.84	—	0.65	1.12
34	P345M15-MPB	0.5	2.130	2.085	2.29	DF-1	1.00	0.50	1.73	—	—	1.68	0.84	—	0.65	1.25
36	P365M15-MPB	0.5	2.256	2.211	2.41	DF-1	1.12	0.50	1.73	—	—	1.80	0.84	—	0.65	1.39
QD 15mm (.591in.) Wide Belts (5M-15)																
38	P385M15-JA	JA	2.381	2.336	2.54	• EF-1	1.25	0.67	1.00	0.44	—	—	0.84	1.34	0.65	0.80
40	P405M15-JA	JA	2.506	2.461	2.66	• EF-1	1.25	0.67	1.00	0.44	—	—	0.84	1.34	0.65	1.06
44	P445M15-JA	JA	2.757	2.712	2.91	• EF-1	1.25	0.67	1.00	0.44	—	—	0.84	1.34	0.65	1.40
48	P485M15-JA	JA	3.008	2.963	3.16	BF-1	1.25	0.23	1.00	0.00	0.67	—	0.84	2.36	0.65	1.20
52	P525M15-JA	JA	3.258	3.213	3.41	BF-1	1.25	0.23	1.00	0.00	0.67	—	0.84	2.62	0.65	1.43
56	P565M15-SH	SH	3.509	3.464	3.66	DF-1	1.68	0.08	1.25	0.06	0.42	—	0.84	2.86	0.65	1.64
60	P605M15-SH	SH	3.760	3.715	3.92	DF-1	1.68	0.08	1.25	0.06	0.42	—	0.84	3.12	0.65	1.83
64	P645M15-SH	SH	4.010	3.965	4.16	DF-1	1.68	0.08	1.25	0.06	0.42	—	0.84	3.37	0.65	2.16
68	P685M15-SDS	SDS	4.261	4.216	4.41	CF-1	2.00	0.08	1.31	0.00	0.48	—	0.84	3.50	0.65	2.48
72	P725M15-SDS	SDS	4.511	4.466	4.66	CF-1	2.00	0.08	1.31	0.00	0.48	—	0.84	3.75	0.65	2.84
80	P805M15-SDS	SDS	5.013	4.968	—	C-1	2.00	0.08	1.31	0.00	0.48	—	0.84	4.25	0.65	3.61
90	P905M15-SDS	SDS	5.639	5.594	—	C-1	2.00	0.08	1.31	0.00	0.48	—	0.84	4.88	0.65	4.69
112	P1125M15-SDS	SDS	7.018	6.973	—	C-2	2.00	0.08	1.31	0.00	0.48	—	0.84	6.05	0.65	6.02
MPB 25mm (.984in.) Wide Belts (5M-25)																
32	P325M25-MPB	0.5	2.005	1.960	2.16	DF-1	0.88	0.50	1.34	—	—	1.55	1.23	—	1.04	0.84
34	P345M25-MPB	0.5	2.130	2.085	2.29	DF-1	1.00	0.50	1.34	—	—	1.68	1.23	—	1.04	0.93
36	P365M25-MPB	0.5	2.256	2.211	2.41	DF-1	1.12	0.50	1.34	—	—	1.80	1.23	—	1.04	1.03
QD 25mm (.984in.) Wide Belts (5M-25)																
38	P385M25-JA	JA	2.381	2.336	2.54	• EF-1	1.25	0.28	1.00	0.44	—	—	1.23	1.34	1.04	0.61
40	P405M25-JA	JA	2.506	2.461	2.66	• EF-1	1.25	0.28	1.00	0.44	—	—	1.23	1.34	1.04	0.72
44	P445M25-JA	JA	2.757	2.712	2.91	• EF-1	1.25	0.28	1.00	0.44	—	—	1.23	1.34	1.04	0.95
48	P485M25-JA	JA	3.008	2.963	3.16	CF-1	1.25	0.16	1.00	0.00	0.28	—	1.23	2.36	1.04	0.97
52	P525M25-JA	JA	3.258	3.213	3.41	CF-1	1.25	0.16	1.00	0.00	0.28	—	1.23	2.62	1.04	1.17
56	P565M25-SH	SH	3.509	3.464	3.66	DF-1	1.68	0.50	1.25	0.09	0.00	—	1.23	—	1.04	1.37
60	P605M25-SH	SH	3.760	3.715	3.92	DF-1	1.68	0.50	1.25	0.09	0.00	—	1.23	—	1.04	1.68
64	P645M25-SH	SH	4.010	3.965	4.16	DF-1	1.68	0.50	1.25	0.09	0.00	—	1.23	—	1.04	1.80
68	P685M25-SDS	SDS	4.261	4.216	4.41	CF-1	2.00	0.47	1.31	0.00	0.09	—	1.23	3.50	1.04	2.10
72	P725M25-SDS	SDS	4.511	4.466	4.66	CF-1	2.00	0.47	1.31	0.00	0.09	—	1.23	3.75	1.04	2.43
80	P805M25-SDS	SDS	5.013	4.968	—	C-1	2.00	0.47	1.31	0.00	0.09	—	1.23	4.25	1.04	3.15
90	P905M25-SDS	SDS	5.639	5.594	—	C-1	2.00	0.47	1.31	0.00	0.09	—	1.23	4.88	1.04	4.17
112	P1125M25-SDS	SDS	7.018	6.973	—	C-1	2.00	0.47	1.31	0.00	0.09	—	1.23	6.05	1.04	5.16

* Weight Shown is for Sprocket Less Bushing.
• Reverse Mount Only

+ The numbers (1=Solid, 2=Web, 3=Arms) within the "Type" indicates construction, and the letter F indicates the sprocket has flanges.

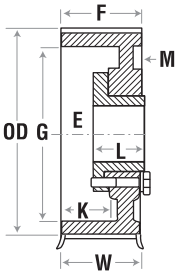
High Torque Sprockets
8mm

Type A



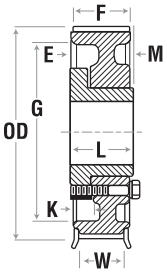
Type AF

Type B



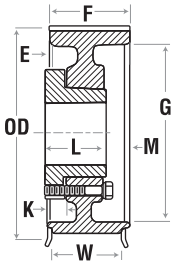
Type BF

Type C



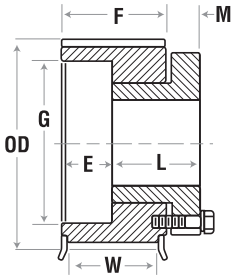
Type CF

Type D



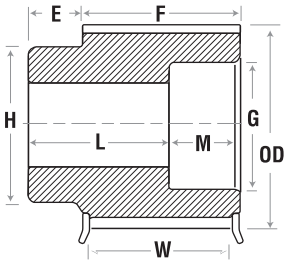
Type DF

Type E •



Type EF •

Type D (MPB Only)



Type DF (MPB Only)

No. of Teeth	Catalog Number	Bore	Pitch	Diameter		Type +	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Flange			E	L	M	K	H	F	G	W	
MPB 20mm (.787 in.) Wide Belts (8M-20)																
20	P208M20-MPB	1/2	2.005	1.951	2.375	DF-1	0.875	0.625	1.75	—	—	1.375	1.125	—	0.875	.90
21	P218M20-MPB	1/2	2.105	2.051	2.468	DF-1	1	0.625	1.75	—	—	1.5	1.125	—	0.875	1.00
22	P228M20-MPB	1/2	2.206	2.152	2.562	DF-1	1.1875	0.625	1.75	—	—	1.625	1.125	—	0.875	1.60
QD 20mm (.787 in.) Wide Belts (8M-20)																
24	P248M20-JA	JA	2.406	2.352	2.750	• EF-1	1.25	0.5625	1.0625	0.44	—	—	1.125	1.34	0.875	1.50
26	P268M20-JA	JA	2.607	2.553	2.937	• EF-1	1.250	0.5625	1.0625	0.4375	—	—	1.125	1.34	0.875	1.80
28	P288M20-H	H	2.807	2.753	3.156	• EF-1	1.375	0.25	1.25	0.375	—	—	1.125	1.57	0.875	1.40
30	P308M20-H	H	3.008	2.954	3.344	• EF-1	1.375	0.25	1.25	0.375	—	—	1.125	1.57	0.875	1.90
32	P328M20-H	H	3.208	3.154	3.562	CF-1	1.375	0.125	1.25	—	0.25	—	1.125	2.56	0.875	2.00
34	P348M20-SH	SH	3.409	3.355	3.750	DF-1	1.6875	0.1875	1.25	0.0625	0.3125	—	1.125	2.75	0.875	2.20
36	P368M20-SH	SH	3.609	3.555	3.937	DF-1	1.6875	0.1875	1.25	0.0625	0.3125	—	1.125	2.82	0.875	2.50
38	P388M20-SH	SH	3.810	3.756	4.156	DF-1	1.6875	0.1875	1.25	0.0625	0.3125	—	1.125	3	0.875	2.80
40	P408M20-SH	SH	4.010	3.956	4.344	DF-1	1.6875	0.1875	1.25	0.0625	0.3125	—	1.125	3	0.875	3.00
44	P448M20-SDS	SDS	4.411	4.357	4.750	CF-1	2	0.1875	1.25	—	0.375	—	1.125	3.5	0.875	3.20
48	P488M20-SDS	SDS	4.812	4.758	5.157	CF-1	2	0.1875	1.3125	—	0.375	—	1.125	3.8	0.875	3.40
56	P568M20-SDS	SDS	5.614	5.560	5.937	CF-1	2	0.1875	1.3125	—	0.375	—	1.125	4.6	0.875	4.50
64	P648M20-SDS	SDS	6.416	6.362	6.750	CF-1	2	0.1875	1.3125	—	0.375	—	1.125	5.4	0.875	5.50
72	P728M20-SDS	SDS	7.218	7.164	7.562	CF-1	2	0.1875	1.3125	—	0.375	—	1.125	6.2	0.875	6.00
80	P808M20-SDS	SDS	8.020	7.966	8.375	CF-2	2	0.1875	1.3125	—	0.375	—	1.125	6.9	0.875	6.50
90	P908M20-SDS	SDS	9.023	8.969	—	C-2	2	0.1875	1.3125	—	0.375	—	1.125	7.62	—	7.00
112	P1128M20-SK	SK	11.229	11.175	—	C-3	2.625	0.75	1.9375	0.0625	0.0625	—	1.125	9.87	—	10.50
144	P1448M20-SF	SF	14.447	14.388	—	C-3	2.9375	0.75	2.0625	0.0625	0.0625	—	1.125	12.88	—	14.50
Taper Bushed 20mm (.787 in.) Wide Belts (8M-20)																
24	P248M20-1108	1108	2.406	2.352	2.75	KF-1	1	0.0625	0.875	0.1875	—	—	1.125	1.783	0.875	.7
26	P268M20-1108	1108	2.607	2.553	2.94	KF-1	1	0.0625	0.875	0.1875	—	—	1.125	1.971	0.875	.9
28	P288M20-1108	1108	2.807	2.753	3.16	KF-1	1	0.0625	0.875	0.1875	—	—	1.125	2	0.875	1.2
30	P308M20-1210	1210	3.008	2.954	3.34	KF-1	1.25	0.125	1	—	—	—	1.125	—	0.875	1.2
32	P328M20-1210	1210	3.208	3.154	3.56	KF-1	1.25	0.125	1	—	—	—	1.125	—	0.875	1.4
34	P348M20-1610	1610	3.409	3.355	3.75	KF-1	1.6875	0.125	1	—	—	—	1.125	—	0.875	1.4
36	P368M20-1610	1610	3.609	3.555	3.94	KF-1	1.6875	0.125	1	—	—	—	1.125	—	0.875	1.7
38	P388M20-1610	1610	3.810	3.756	4.16	KF-1	1.6875	0.125	1	—	—	—	1.125	—	0.875	2.0
40	P408M20-1610	1610	4.010	3.956	4.34	KF-1	1.6875	0.125	1	—	—	—	1.125	—	0.875	2.4
44	P448M20-2012	2012	4.411	4.357	4.75	CF-1	2.125	—	1.25	0.125	—	3.8438	1.125	—	0.875	2.6
48	P488M20-2012	2012	4.812	4.758	5.16	CF-1	2.125	—	1.25	0.125	—	3.875	1.125	—	0.875	3.4
56	P568M20-2012	2012	5.614	5.560	5.94	CF-1	2.125	—	1.25	0.125	—	3.875	1.125	—	0.875	5.3
64	P648M20-2012	2012	6.416	6.362	6.75	CF-1	2.125	—	1.25	0.125	—	4.375	1.125	—	0.875	7.5
72	P728M20-2012	2012	7.218	7.164	7.56	CF-1	2.125	—	1.25	0.125	—	4.375	1.125	—	0.875	9.9
80	P808M20-2517	2517	8.020	7.966	8.38	CF-2	2.6875	—	1.75	0.625	—	4.875	1.125	6.9	0.875	11.9
90	P908M20-2517	2517	9.023	8.969	—	C-2	2.6875	—	1.75	0.625	—	—	1.125	7.63	—	12.9

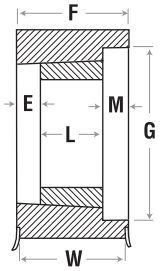
* Weight Shown is for Sprocket Less Bushing.

• Reverse Mount Only

+ The numbers (1=Solid, 2=Web, 3=Arms) within the "Type" indicates construction, and the letter F indicates the sprocket has flanges.

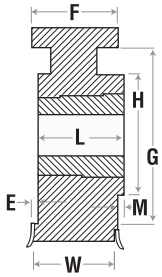
High Torque Sprockets
8mm

Type K



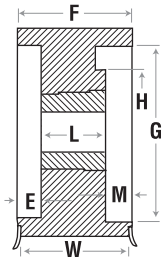
Type KF

Type B



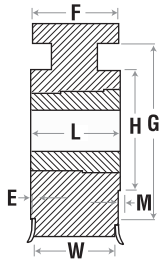
Type BF

Type W



Type WF

Type C



Type CF

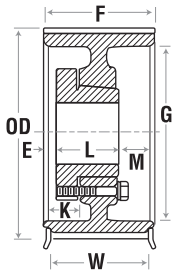
No. of Teeth	Catalog Number	Bore	Pitch	Diameter		Type +	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Flange			E	L	M	K	H	F	G	W	
MPB 30mm (1.18in.) Wide Belts (8M-30)																
20	P208M30-MPB	0.5	2.005	1.951	2.375	DF-1	0.875	0.625	2.125	—	—	1.375	1.5	—	1.125	1.10
21	P218M30-MPB	0.5	2.105	2.051	2.468	DF-1	1	0.625	2.125	—	—	1.5	1.5	—	1.125	1.30
22	P228M30-MPB	0.5	2.206	2.152	2.562	DF-1	1.1875	0.625	2.125	—	—	1.625	1.5	—	1.25	1.40
24	P248M30-MPB	0.5	2.406	2.352	2.750	DF-1	1.25	0.625	2.125	—	—	1.8125	1.5	—	1.25	1.80
26	P268M30-MPB	0.5	2.607	2.553	2.937	DF-1	1.25	0.75	2.25	—	—	2	1.5	—	1.25	2.20
QD 30mm (1.18in.) Wide Belts (8M-30)																
28	P288M30-H	H	2.807	2.753	3.156	• EF-1	1.25	0.625	1.2500	0.3750	—	—	1.5	1.57	1.250	1.70
30	P308M30-H	H	3.008	2.954	3.344	• EF-1	1.38	0.625	1.25	.375	—	—	1.5	1.57	1.25	1.90
32	P328M30-H	H	3.208	3.154	3.562	BF-1	1.375	0.25	1.25	—	.625	—	1.5	2.56	1.25	2.10
34	P348M30-SH	SH	3.409	3.355	3.750	AF-1	1.375	0.19	1.25	.625	.688	—	1.5	2.75	1.25	2.40
36	P368M30-SH	SH	3.609	3.555	3.937	AF-1	1.688	0.1875	1.25	.625	.6875	—	1.5	2.82	1.25	2.80
38	P388M30-SH	SH	3.810	3.756	4.156	AF-1	1.6875	0.1875	1.25	.625	.6875	—	1.5	3	1.25	3.20
40	P408M30-SH	SH	4.010	3.956	4.344	AF-1	1.6875	0.1875	1.25	.625	.6875	—	1.5	3	1.25	3.60
44	P448M30-SDS	SDS	4.411	4.357	4.750	BF-1	1.6875	0.1875	1.31	—	.75	—	1.5	3.5	1.25	3.80
48	P488M30-SDS	SDS	4.812	4.758	5.157	BF-1	2	0.1875	1.3125	—	.75	—	1.5	3.8	1.25	4.20
56	P568M30-SDS	SDS	5.614	5.560	5.937	BF-1	2	0.1875	1.3125	—	.75	—	1.5	4.6	1.25	4.80
64	P648M30-SK	SK	6.416	6.362	6.750	CF-1	2	0.375	1.875	—	.25	—	1.5	5.4	1.25	6.10
72	P728M30-SK	SK	7.218	7.164	7.562	CF-1	3	0.375	1.875	—	.25	—	1.5	6.2	1.25	6.80
80	P808M30-SK	SK	8.020	7.966	8.375	CF-2	2.625	0.375	1.875	—	.25	—	1.5	6.9	1.25	7.50
90	P908M30-SK	SK	9.023	8.969	—	C-2	2.625	0.375	1.875	—	.25	—	1.5	7.6	—	11.00
112	P1128M30-SK	SK	11.229	11.175	—	C-3	2.625	0.375	1.875	—	.25	—	1.5	9.87	—	13.00
144	P1448M30-SF	SF	14.447	14.383	—	C-3	2.938	0.563	2.063	—	.25	—	1.5	12.88	—	25.50
192	P1928M30-E	E	19.249	19.195	—	C-3	—	1.3125	2.625	.625	.6	—	1.5	17.63	—	30.00
Taper Bushed 30mm (1.18in.) Wide Belts (8M-30)																
24	P248M30-1108	1108	2.406	2.352	2.75	KF-1	1	0.125	0.875	.5	—	—	1.5	1.783	1.250	.9
26	P268M30-1108	1108	2.607	2.553	2.94	KF-1	1	0.125	0.875	.5	—	—	1.5	1.971	1.250	1.2
28	P288M30-1108	1108	2.807	2.753	3.16	KF-1	1	0.125	0.875	.5	—	—	1.5	2	1.250	1.6
30	P308M30-1210	1210	3.008	2.954	3.34	KF-1	1.25	0.125	1	0.4	—	—	1.5	2.345	1.25	1.5
32	P328M30-1210	1210	3.208	3.154	3.56	KF-1	1.25	0.125	1	0.4	—	—	1.5	2.56	1.25	1.9
34	P348M30-1610	1610	3.409	3.355	3.75	KF-1	1.6875	0.125	1	0.4	—	—	1.5	3	1.25	2.3
36	P368M30-1610	1610	3.609	3.555	3.94	KF-1	1.69	0.125	1	0.375	—	—	1.5	2.82	1.25	2.2
38	P388M30-1610	1610	3.810	3.756	4.16	KF-1	1.69	0.125	1	0.375	—	—	1.5	3	1.25	2.7
40	P408M30-2012	2012	4.010	3.956	4.34	KF-1	2.125	—	1	0.25	—	—	1.5	3.25	1.25	2.4
44	P448M30-2012	2012	4.411	4.357	4.75	KF-1	2.125	—	1	—	0.25	—	1.5	3.5	1.25	3.4
48	P488M30-2012	2012	4.812	4.758	5.16	KF-1	2.125	—	1	—	0.25	—	1.5	4	1.25	4.5
56	P568M30-2012	2012	5.614	5.560	5.94	KF-1	2.125	—	1.25	—	0.25	—	1.5	4.6	1.25	7.0
64	P648M30-2517	2517	6.416	6.362	6.75	CF-1	2.6875	—	1.75	—	0.25	4.875	1.5	—	1.25	8.9
72	P728M30-2517	2517	7.218	7.164	7.56	CF-1	2.6875	—	1.75	—	0.25	4.875	1.5	—	1.25	12.1
80	P808M30-2517	2517	8.020	7.966	8.38	CF-2	2.6875	—	1.75	—	0.25	4.875	1.5	—	1.25	15.8
90	P908M30-2517	2517	9.023	8.969	—	C-2	2.6875	0.125	1.75	—	0.125	4.875	1.5	7.63	—	13.8
112	P1128M30-2517	2517	11.229	11.175	—	C-3	2.6875	0.125	1.75	—	0.125	4.875	1.5	9.88	—	23.5
144	P1448M30-2517	2517	14.437	14.383	—	C-3	2.6875	0.25	1.75	—	—	4.875	1.5	12.88	—	21.3

* Weight Shown is for Sprocket Less Bushing.
• Reverse Mount Only

+ The numbers (1=Solid, 2=Web, 3=Arms) within the "Type" indicates construction, and the letter F indicates the sprocket has flanges.

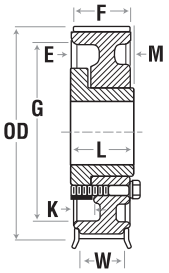
High Torque Sprockets
8mm

Type A



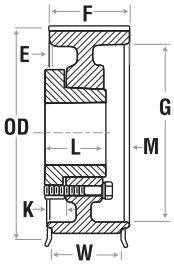
Type AF

Type C



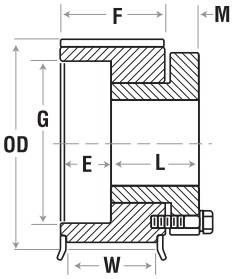
Type CF

Type D



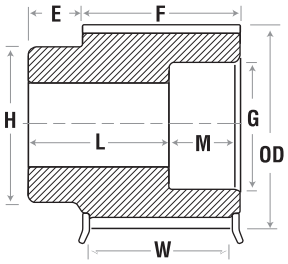
Type DF

Type E •



Type EF •

Type D (MPB Only)



Type DF (MPB Only)

No. of Teeth	Catalog Number	Bore	Pitch	Diameter		Type +	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Flange			E	L	M	K	H	F	G	W	
MPB 50mm (1.97 in.) Wide Belts (8M-50)																
28	P288M50-MPB	0.5	2.807	2.753	3.156	DF-1	1.25	0.75	3.125	—	—	0.9062	2.375	—	2.125	4.2
30	P308M50-MPB	0.5	3.008	2.954	3.344	DF-1	1.25	0.75	3.125	—	—	2.4687	2.375	—	2.125	4.9
32	P328M50-MPB	0.5	3.208	3.154	3.562	DF-1	1.625	0.75	3.125	—	—	2.5937	2.375	—	2.125	5.4
QD 50mm (1.97 in.) Wide Belts (8M-50)																
32	P328M50-H	H	3.208	3.154	3.562	AF-1	1.375	0.5	1.25	0.625	0.75	—	2.375	2.56	2.125	2.9
34	P348M50-SH	SH	3.409	3.355	3.750	AF-1	1.6875	—	1.25	1.125	0.5	—	2.375	2.75	2.125	3.2
36	P368M50-SH	SH	3.609	3.555	3.937	AF-1	1.6875	—	1.25	1.125	0.5	—	2.375	2.82	2.125	3.8
38	P388M50-SH	SH	3.810	3.756	4.156	AF-1	1.6875	—	1.25	1.125	0.5	—	2.375	3.00	2.125	4.2
40	P408M50-SH	SH	4.010	3.956	4.344	AF-1	1.6875	—	1.25	1.125	0.5	—	2.375	3.00	2.125	4.6
44	P448M50-SD	SD	4.411	4.357	4.750	AF-1	2	—	1.8125	0.5625	0.5625	—	2.375	3.50	2.125	5.2
48	P488M50-SD	SD	4.812	4.758	5.157	AF-1	2	—	1.8125	0.5625	0.5625	—	2.375	3.80	2.125	6.0
56	P568M50-SK	SK	5.614	5.560	5.937	DF-1	2.625	0.0625	1.875	0.5625	0.5625	—	2.375	4.60	2.125	7.6
64	P648M50-SK	SK	6.416	6.362	6.750	DF-1	2.625	0.0625	1.875	0.5625	0.5625	—	2.375	5.40	2.125	10.3
72	P728M50-SK	SK	7.218	7.164	7.562	DF-1	2.625	0.0625	1.875	0.5625	0.5625	—	2.375	6.20	2.125	13.3
80	P808M50-SF	SF	8.020	7.966	8.326	DF-1	2.875	0.0625	2	0.4375	0.5625	—	2.375	6.90	2.125	12.7
90	P908M50-SF	SF	9.023	8.969	—	D-2	2.875	0.0625	2	0.4375	0.5625	—	2.375	7.62	2.125	16.0
112	P1128M50-SF	SF	11.229	11.175	—	D-3	2.875	0.0625	2	0.4375	0.5625	—	2.375	9.88	2.125	21.0
144	P1448M50-E	E	14.437	14.383	—	D-3	3.5	0.5	2.625	2	0.375	—	2.375	12.88	2.125	35.0
192	P1928M50-E	E	19.249	19.195	—	D-3	3.5	0.5	2.625	2	0.375	—	2.375	17.63	2.125	45.0
144	P1448M30-SF	SF	14.447	14.383	—	C-3	2.938	0.563	2.063	—	.25	—	1.5	12.88	—	25.50
192	P1928M30-E	E	19.249	19.195	—	C-3	—	1.3125	2.625	.625	.6	—	1.5	17.63	—	30.00
Taper Bushed 50mm (1.97 in.) Wide Belts (8M-50)																
28	P288M50-1108	1108	2.807	2.753	3.16	KF-1	1	—	0.875	1.5	—	—	2.375	2.000	2.125	2.1
30	P308M50-1210	1210	3.008	2.954	3.34	KF-1	1.25	—	1	1.375	—	—	2.375	2.345	2.125	2.2
32	P328M50-1210	1210	3.208	3.154	3.56	KF-1	1.25	—	1	1.375	—	—	2.375	2.560	2.125	2.1
34	P348M50-1610	1610	3.409	3.355	3.75	KF-1	1.6875	—	1	1.375	—	—	2.375	2.750	2.125	2.1
36	P368M50-1610	1610	3.609	3.555	3.94	KF-1	1.6875	—	1	1.375	—	—	2.375	2.820	2.125	2.7
38	P388M50-1610	1610	3.810	3.756	4.16	KF-1	1.6875	—	1	1.375	—	—	2.375	3.000	2.125	3.1
40	P408M50-2012	2012	4.010	3.956	4.34	KF-1	2.125	—	1.25	1.125	—	—	2.375	3.250	2.125	3.4
44	P448M50-2012	2012	4.411	4.357	4.75	KF-1	2.125	—	1.25	1.125	—	—	2.375	3.500	2.125	4.3
48	P488M50-2012	2012	4.812	4.758	5.16	KF-1	2.125	—	1.25	1.125	—	—	2.375	3.800	2.125	5.5
56	P568M50-2517	2517	5.614	5.560	5.94	KF-1	2.6875	—	1.75	0.625	—	—	2.375	4.600	2.125	8.1
64	P648M50-2517	2517	6.416	6.362	6.75	KF-1	2.6875	—	1.75	0.625	—	—	2.375	5.400	2.125	11.7
72	P728M50-2517	2517	7.218	7.164	7.56	KF-1	2.6875	—	1.75	0.625	—	—	2.375	6.200	2.125	15.7
80	P808M50-2517	2517	8.020	7.966	8.38	KF-1	2.6875	—	1.75	0.625	—	—	2.375	6.900	2.125	20.3
90	P908M50-3020	3020	9.023	8.969	—	W-1	3.25	—	2	0.375	—	—	2.375	7.630	2.125	31.7
112	P1128M50-3020	3020	11.229	11.175	—	W-3	3.25	—	2	0.375	—	6.25	2.375	9.880	2.125	34.7
144	P1448M50-3020	3020	14.437	14.383	—	W-3	3.25	—	2	0.375	—	7.5	2.375	12.880	2.125	36.0
192	P1928M50-3020	3020	19.249	19.195	—	W-3	3.25	—	2	0.375	—	7.5	2.375	17.630	2.125	67.2

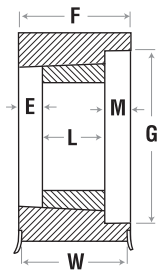
* Weight Shown is for Sprocket Less Bushing.

• Reverse Mount Only

+ The numbers (1=Solid, 2=Web, 3=Arms) within the "Type" indicates construction, and the letter F indicates the sprocket has flanges.

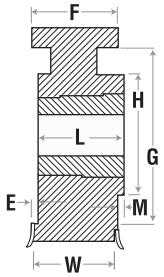
High Torque Sprockets
8mm

Type K



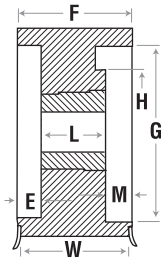
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Type B



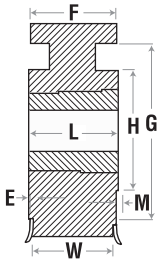
Type BF

Type W



Type WF

Type C



Type CF

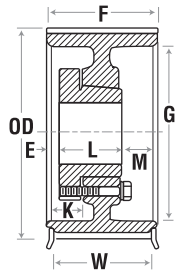
No. of Teeth	Catalog Number	Bore	Pitch	Diameter		Type +	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Flange			E	L	M	K	H	F	G	W	
MPB 85mm (3.35 in.) Wide Belts (8M-85)																
34	P348M85-MPB	0.75	3.409	3.355	3.750	DF-1	1.6875	0.75	4.5	—	—	2.7968	3.75	—	3.5	10.00
36	P368M85-MPB	0.75	3.609	3.555	3.937	DF-1	1.75	0.75	4.5	—	—	3	3.75	—	3.5	11.30
38	P388M85-MPB	0.75	3.810	3.756	4.156	DF-1	1.9375	0.75	4.5	—	—	3.1875	3.75	—	3.5	12.60
40	P408M85-MPB	0.75	4.010	3.956	4.344	DF-1	2.125	0.75	4.5	—	—	3.4062	3.75	—	3.5	14.90
44	P448M85-MPB	0.75	4.411	4.357	4.750	DF-1	2.25	0.75	4.5	—	—	3.7968	3.75	—	3.5	17.20
48	P488M85-MPB	0.75	4.812	4.758	5.157	DF-1	2.5	0.75	4.5	—	—	4.1875	3.75	—	3.5	20.60
56	P568M85-MPB	0.875	5.614	5.560	5.937	DF-1	3	0.75	4.5	—	—	5	3.75	—	3.5	28.00
QD 85mm (3.35 in.) Wide Belts (8M-85)																
34	P348M85-SH	SH	3.409	3.355	3.819	AF-1	1.6875	1	1.25	1.5	1.5	—	3.75	2.75	3.5	4.6
36	P368M85-SH	SH	3.609	3.555	3.937	AF-1	1.6875	1	1.25	1.5	1.5	—	3.75	2.82	3.5	5.2
38	P388M85-SH	SH	3.810	3.756	4.134	AF-1	1.6875	1	1.25	1.5	1.5	—	3.75	3.00	3.5	5.8
40	P408M85-SD	SD	4.010	3.956	4.344	AF-1	2	0.6875	1.8125	1.25	1.25	—	3.75	3.25	3.5	5.6
44	P448M85-SD	SD	4.411	4.357	4.750	AF-1	2	0.6875	1.8125	1.25	1.25	—	3.75	3.50	3.5	6.2
48	P488M85-SD	SD	4.812	4.758	5.157	AF-1	2	0.6875	1.8125	1.25	1.25	—	3.75	3.80	3.5	7.8
56	P568M85-SK	SK	5.614	5.560	5.937	AF-1	2.625	0.625	1.875	1.25	1.25	—	3.75	4.60	3.5	9.8
64	P648M85-SF	SF	6.416	6.362	6.750	AF-1	2.625	0.625	1.875	1.25	1.25	—	3.75	5.40	3.5	13.0
72	P728M85-E	E	7.218	7.164	7.562	AF-1	2.9375	0.625	2	1.125	1.25	—	3.75	6.20	3.5	16.0
80	P808M85-E	E	8.020	7.966	8.375	AF-1	2.9375	0.625	2	1.125	1.25	—	3.75	6.90	3.5	17.0
90	P908M85-E	E	9.023	8.969	—	A-2	2.9375	0.625	2	1.125	1.25	—	3.75	7.62	—	20.0
112	P1128M85-F	F	11.229	11.175	—	A-3	2.9375	0.625	2	1.125	1.25	—	3.75	9.88	—	28.0
144	P1448M85-F	F	14.447	14.383	—	A-3	4	0.375	3.625	14	0.25	—	3.75	12.88	3.5	79.0
192	P1928M85-F	F	19.249	19.195	—	A-3	4	0.375	3.625	0.5	0.625	—	3.75	17.65	3.5	101.4
Taper Bushed 85mm (3.35 in.) Wide Belts (8M-85)																
34	P348M85-1615	1615	3.409	3.355	3.75	WF-1	1.6875	0.75	1.5	1.5	—	—	3.75	2.750	3.5	3.3
36	P368M85-1615	1615	3.609	3.555	3.94	WF-1	1.6875	0.75	1.5	1.5	—	—	3.75	2.820	3.5	4.2
38	P388M85-1615	1615	3.810	3.756	4.16	WF-1	1.6875	0.75	1.5	1.5	—	—	3.75	3.000	3.5	4.7
40	P408M85-2012	2012	4.010	3.956	4.34	WF-1	2.125	1.25	1.25	1.25	—	—	3.75	3.250	3.5	4.7
44	P448M85-2012	2012	4.411	4.357	4.75	WF-1	2.125	1.25	1.25	1.25	—	—	3.75	3.500	3.5	6.4
48	P488M85-2012	2012	4.812	4.758	5.16	WF-1	2.125	1.25	1.25	1.25	—	—	3.75	3.800	3.5	8.0
56	P568M85-2517	2517	5.614	5.560	5.94	WF-1	2.6875	1	1.75	1	—	—	3.75	4.500	3.5	11.0
64	P648M85-2517	2517	6.416	6.362	6.75	WF-1	2.6875	1	1.75	1	—	—	3.75	5.400	3.5	15.0
72	P728M85-3020	3020	7.218	7.164	7.56	WF-1	3.25	0.875	2	0.875	—	—	3.75	6.200	3.5	18.2
80	P808M85-3020	3020	8.020	7.966	8.38	WF-1	3.25	0.875	2	0.875	—	—	3.75	6.900	3.5	24.2
90	P908M85-3020	3020	9.023	8.969	—	W-1	3.25	0.875	2	0.875	—	—	3.75	7.630	—	31.9
112	P1128M85-3020	3020	11.229	11.175	—	W-3	3.25	0.875	2	0.875	—	6.25	3.75	9.880	—	34.6
144	P1448M85-3535	3535	14.437	14.383	—	W-3	3.9375	0.125	3.5	0.125	—	7	3.75	12.880	—	49.6
192	P1928M85-3535	3535	19.249	19.195	—	W-3	3.9375	0.125	3.5	0.125	—	7	3.75	17.630	—	81.4

* Weight Shown is for Sprocket Less Bushing.
• Reverse Mount Only

+ The numbers (1=Solid, 2=Web, 3=Arms) within the "Type" indicates construction, and the letter F indicates the sprocket has flanges.

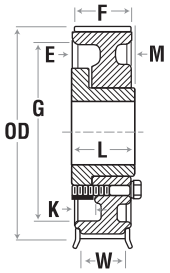
High Torque Sprockets
14mm

Type A



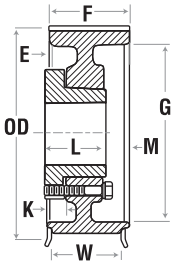
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Type C



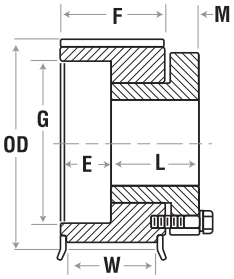
Type CF

Type D



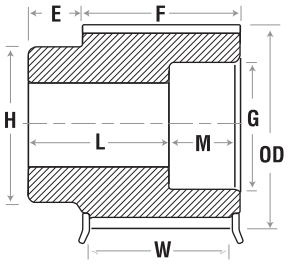
Type DF

Type E •



Type EF •

Type D (MPB Only)



Type DF (MPB Only)

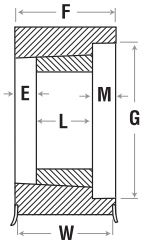
No. of Teeth	Catalog Number	Bore	Pitch	Diameter		Type +	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Flange			E	L	M	K	H	F	G	W	
QD 40mm (1.570 in.) Wide Belts (140M-40																
28	P2814M40-SK	SK	4.912	4.802	5.56	• EF-1	2.625	0.875	1.875	0.625	—	—	2.125	3.13	1.8125	5.5
29	P2914M40-SK	SK	5.088	4.978	5.56	• EF-1	2.625	0.875	1.875	0.625	—	—	2.125	3.13	1.8125	6.5
30	P3014M40-SK	SK	5.263	5.153	6.13	DF-1	2.625	0.1875	1.875	0.4375	—	—	2.125	3.92	1.8125	6.0
32	P3214M40-SK	SK	5.614	5.504	6.13	DF-1	2.625	0.1875	1.875	0.4375	0.4375	—	2.125	3.92	1.8125	8.0
34	P3414M40-SK	SK	5.965	5.855	6.50	DF-1	2.625	0.1875	1.875	0.4375	0.4375	—	2.125	4.06	1.8125	8.5
36	P3614M40-SF	SF	6.316	6.206	6.81	DF-1	2.875	0.1875	2	0.3125	0.4375	—	2.125	4.69	1.8125	9.5
38	P3814M40-SF	SF	6.667	6.557	7.16	DF-1	2.875	0.1875	2	0.3125	0.4375	—	2.125	4.94	1.8125	11.5
40	P4014M40-SF	SF	7.018	6.909	7.50	DF-1	2.875	0.1875	2	0.3125	0.4375	—	2.125	5.06	1.8125	13.0
44	P4414M40-E	E	7.720	7.610	8.22	DF-1	3.5	0.625	2.625	0.125	0.25	—	2.125	6.12	1.8125	16.5
48	P4814M40-E	E	8.421	8.311	8.94	DF-1	3.5	0.625	2.625	0.125	0.25	—	2.125	6.50	1.8125	20.0
52	P5214M40-E	E	9.123	9.013	9.69	DF-1	3.5	0.625	2.625	0.125	0.25	—	2.125	7.18	1.8125	24.0
56	P5614M40-E	E	9.825	9.715	10.38	DF-1	3.5	0.625	2.625	0.125	0.25	—	2.125	7.88	1.8125	28.0
60	P6014M40-E	E	10.527	10.417	11.06	DF-1	3.5	0.625	2.625	0.125	0.25	—	2.125	8.50	1.8125	32.0
64	P6414M40-E	E	11.229	11.119	11.75	DF-2	3.5	0.625	2.625	0.125	0.25	—	2.125	9.25	1.8125	29.0
68	P6814M40-E	E	11.930	11.820	12.50	DF-2	3.5	0.625	2.625	0.125	0.25	—	2.125	10.00	1.8125	31.0
72	P7214M40-E	E	12.632	12.522	13.19	DF-2	3.5	0.625	2.625	0.125	0.25	—	2.125	10.69	1.8125	33.0
80	P8014M40-E	E	14.036	13.926	14.63	DF-2	3.5	0.625	2.625	0.125	0.25	—	2.125	12.13	1.8125	38.0
90	P9014M40-E	E	15.790	15.680	—	D-3	3.5	0.625	2.625	0.125	0.25	—	2.125	14.00	—	39.0
112	P11214M40-E	E	19.650	19.540	—	D-3	3.5	0.625	2.625	0.125	0.25	—	2.125	17.80	—	51.0
144	P14414M40-E	E	25.264	25.154	—	D-3	3.5	0.625	2.625	0.125	0.25	—	2.125	23.38	—	80.0
Taper Bushed 40mm (1.570 in.) Wide Belts (140M-40)																
28	P2814M40-2012	2012	4.912	4.802	5.56	KF-1	2.125	—	1.25	0.875	—	—	2.125	3.375	1.8125	3.5
29	P2914M40-2012	2012	5.088	4.978	5.56	KF-1	2.125	—	1.25	0.875	—	—	2.125	3.375	1.8125	3.9
30	P3014M40-2012	2012	5.263	5.153	6.13	KF-1	2.125	—	1.25	0.875	—	—	2.125	3.928	1.8125	6.4
32	P3214M40-2012	2012	5.614	5.504	6.13	KF-1	2.125	—	1.25	0.875	—	—	2.125	3.928	1.8125	8.0
34	P3414M40-2012	2012	5.965	5.855	6.50	KF-1	2.125	—	1.25	0.875	—	—	2.125	4.063	1.8125	9.4
36	P3614M40-2517	2517	6.316	6.206	6.81	KF-1	2.6875	—	1.75	0.375	—	—	2.125	4.688	1.8125	10.5
38	P3814M40-2517	2517	6.667	6.557	7.16	KF-1	2.6875	—	1.75	0.375	—	—	2.125	4.813	1.8125	12.2
40	P4014M40-2517	2517	7.018	6.908	7.50	KF-1	2.6875	—	1.75	0.375	—	—	2.125	5.188	1.8125	14.2
44	P4414M40-2517	2517	7.720	7.610	8.22	KF-1	2.6875	—	1.75	0.375	—	—	2.125	6.125	1.8125	17.6
48	P4814M40-2517	2517	8.421	8.311	8.94	KF-1	2.6875	—	1.75	0.375	—	—	2.125	6.500	1.8125	22.0
52	P5214M40-2517	2517	9.123	9.013	9.69	KF-1	2.6875	—	1.75	0.375	—	—	2.125	7.188	1.8125	26.5
56	P5614M40-2517	2517	9.825	9.715	10.38	WF-2	2.6875	—	1.75	0.375	4.875	—	2.125	7.875	1.8125	21.5
60	P6014M40-3020	3020	10.527	10.417	11.06	WF-2	3.25	—	2	0.125	6.25	—	2.125	8.500	1.8125	33.7
64	P6414M40-3020	3020	11.229	11.119	11.75	WF-2	3.25	—	2	0.125	6.25	—	2.125	9.250	1.8125	36.5
68	P6814M40-3020	3020	11.930	11.820	12.50	WF-2	3.25	—	2	0.125	6.25	—	2.125	10.000	1.8125	39.3
72	P7214M40-3020	3020	12.632	12.522	13.19	WF-2	3.25	—	2	0.125	6.25	—	2.125	10.688	1.8125	42.6
80	P8014M40-3020	3020	14.036	13.926	14.63	WF-3	3.25	—	2	0.125	6.25	—	2.125	12.125	1.8125	38.8
90	P9014M40-3020	3020	15.790	15.680	—	W-3	3.25	—	2	0.125	6.25	—	2.125	13.563	—	44.5
112	P11214M40-3020	3020	19.650	19.540	—	W-3	3.25	—	2	0.125	6.25	—	2.125	17.375	—	64.9
144	P14414M40-3020	3020	25.264	25.154	—	W-3	3.25	—	2	0.125	6.25	—	2.125	23.000	—	97.4

* Weight Shown is for Sprocket Less Bushing.
• Reverse Mount Only

+ The numbers (1=Solid, 2=Web, 3=Arms) within the "Type" indicates construction, and the letter F indicates the sprocket has flanges.

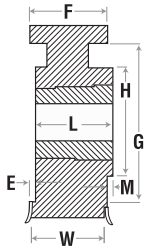
High Torque Sprockets
14mm

Type K



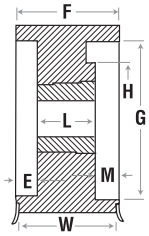
Type KF

Type B



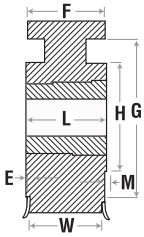
Type BF

Type W



Type WF

Type C



Type CF

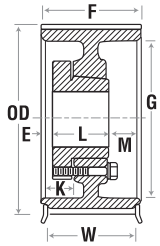
No. of Teeth	Catalog Number	Bore	Pitch	Diameter		Type +	Max Bore	Dimensions								Weight Approx (lbs.)
				O.D.	Flange			E	L	M	K	H	F	G	W	
QD 55mm (2.17 in.) Wide Belts (14M-55)																
28	P2814M55-SK	SK	4.912	4.808	5.56	• EF-1	2.625	1.5	1.875	0.625	—	—	2.75	3.13	2.4375	7.0
29	P2914M55-SK	SK	5.088	4.983	5.56	• EF-1	2.625	1.5	1.875	0.625	—	—	2.75	3.13	2.4375	8.0
30	P3014M55-SK	SK	5.263	5.157	6.13	AF-1	2.625	0.125	1.875	0.75	0.75	—	2.75	3.92	2.4375	7.5
32	P3214M55-SK	SK	5.614	5.507	6.13	AF-1	2.625	0.125	1.875	0.75	0.75	—	2.75	3.92	2.4375	9.0
34	P3414M55-SK	SK	5.965	5.858	6.50	AF-1	2.625	0.125	1.875	0.75	0.75	—	2.75	4.06	2.4375	10.0
36	P3614M55-SF	SF	6.316	6.208	6.81	AF-1	2.875	0.125	2	0.625	0.75	—	2.75	4.69	2.4375	11.0
38	P3814M55-SF	SF	6.667	6.559	7.16	AF-1	2.875	0.125	2	0.625	0.75	—	2.75	4.94	2.4375	13.0
40	P4014M55-SF	SF	7.018	6.909	7.50	AF-1	2.875	0.125	2	0.625	0.75	—	2.75	5.06	2.4375	15.0
44	P4414M55-E	E	7.720	7.610	8.22	DF-1	3.5	0.3125	2.625	0.4375	0.5625	—	2.75	6.12	2.4375	19.0
48	P4814M55-E	E	8.421	8.311	8.94	DF-1	3.5	0.3125	2.625	0.4375	0.5625	—	2.75	6.50	2.4375	23.0
52	P5214M55-E	E	9.123	9.013	9.69	DF-1	3.5	0.3125	2.625	0.4375	0.5625	—	2.75	7.18	2.4375	27.0
56	P5614M55-E	E	9.825	9.715	10.38	DF-1	3.5	0.3125	2.625	0.4375	0.5625	—	2.75	7.88	2.4375	32.0
60	P6014M55-E	E	10.527	10.417	11.06	DF-1	3.5	0.3125	2.625	0.4375	0.5625	—	2.75	8.50	2.4375	36.0
64	P6414M55-F	F	11.229	11.119	11.75	CF-1	4	0.875	3.625	—	0.125	—	2.75	9.25	2.4375	53.0
68	P6814M55-F	F	11.930	11.820	12.50	DF-2	4	0.875	3.625	—	0.125	—	2.75	10.00	2.4375	43.0
72	P7214M55-F	F	12.632	12.522	13.19	CF-2	4	0.875	3.625	—	0.125	—	2.75	10.69	2.4375	49.0
80	P8014M55-F	F	14.036	13.926	14.63	CF-2	4	0.875	3.625	—	0.125	—	2.75	12.13	2.4375	54.0
90	P9014M55-F	F	15.790	15.680	—	C-3	4	0.875	3.625	—	0.125	—	2.75	14.00	—	55.0
112	P11214M55-F	F	19.650	19.540	—	C-3	4	0.875	3.625	—	0.125	—	2.75	17.88	—	71.0
144	P14414M55-F	F	25.264	25.154	—	C-3	4	0.875	3.625	—	0.125	—	2.75	23.38	—	106.0
168	P16814M55-F	F	29.475	29.365	—	C-3	4	0.875	3.625	—	0.125	—	2.75	27.56	—	124.0
192	P19214M55-F	F	33.686	33.576	—	C-3	4	0.875	3.625	—	0.125	—	2.75	31.81	—	146.0
216	P21614M55-F	F	37.896	37.786	—	C-3	4	0.875	3.625	—	0.125	—	2.75	35.75	—	205.0
Taper Bushed 55mm (2.17 in.) Wide Belts (14M-55)																
28	P2814M55-2012	2012	4.912	4.802	5.56	KF-1	2.125	—	1.25	1.5	—	—	2.75	3.375	2.4375	7.4
29	P2914M55-2012	2012	5.088	4.978	5.56	KF-1	2.125	—	1.25	1.5	—	—	2.75	3.375	2.4375	8.4
30	P3014M55-2517	2517	5.263	5.153	6.13	KF-1	2.6875	—	1.75	1	—	—	2.75	3.928	2.4375	7.2
32	P3214M55-2517	2517	5.614	5.504	6.13	KF-1	2.6875	—	1.75	1	—	—	2.75	3.928	2.4375	9.3
34	P3414M55-2517	2517	5.965	5.855	6.50	KF-1	2.6875	—	1.75	1	—	—	2.75	4.063	2.4375	11.2
36	P3614M55-2517	2517	6.316	6.206	6.81	KF-1	2.6875	—	1.75	1	—	—	2.75	4.688	2.4375	12.4
38	P3814M55-2517	2517	6.667	6.557	7.16	KF-1	2.6875	—	1.75	1	—	—	2.75	4.813	2.4375	14.4
40	P4014M55-2517	2517	7.018	6.908	7.50	KF-1	2.6875	—	1.75	1	—	—	2.75	5.188	2.4375	16.7
44	P4414M55-2517	2517	7.720	7.610	8.22	KF-1	2.6875	—	1.75	1	—	—	2.75	6.125	2.4375	19.9
48	P4814M55-3020	3020	8.421	8.311	8.94	KF-1	3.25	—	2	0.75	—	—	2.75	6.500	2.4375	29.2
52	P5214M55-3020	3020	9.123	9.013	9.69	KF-1	3.25	—	2	0.75	—	—	2.75	7.188	2.4375	34.5
56	P5614M55-3020	3020	9.825	9.715	10.38	KF-1	3.25	—	2	0.75	—	—	2.75	7.875	2.4375	40.1
60	P6014M55-3020	3020	10.527	10.417	11.06	WF-2	3.25	—	2	0.75	—	6.25	2.75	8.500	2.4375	46.4
64	P6414M55-3020	3020	11.229	11.119	11.75	WF-2	3.25	—	2	0.75	—	6.25	2.75	9.250	2.4375	52.7
68	P6814M55-3020	3020	11.930	11.820	12.50	WF-2	3.25	—	2	0.75	—	6.25	2.75	10.000	2.4375	45.5
72	P7214M55-3020	3020	12.632	12.522	13.19	WF-2	3.25	—	2	0.75	—	6.25	2.75	10.688	2.4375	49.5
80	P8014M55-3020	3020	14.036	13.926	14.63	WF-3	3.25	—	2	0.75	—	6.25	2.75	12.125	2.4375	45.2
90	P9014M55-3020	3020	15.790	15.680	—	W-3	3.25	—	2	0.75	—	6.25	2.75	13.563	—	46.1
112	P11214M55-3020	3020	19.650	19.540	—	W-3	3.25	—	2	0.75	—	6.25	2.75	17.375	—	69.8
144	P14414M55-3020	3020	25.264	25.154	—	W-3	3.25	—	2	0.75	—	6.25	2.75	23.000	—	104.4
192	P19214M55-3535	3535	33.686	33.576	—	C-3	3.9375	0.38	3.5	0.375	—	7	2.75	31.375	—	104.2

* Weight Shown is for Sprocket Less Bushing.
• Reverse Mount Only

+ The numbers (1=Solid, 2=Web, 3=Arms) within the "Type" indicates construction, and the letter F indicates the sprocket has flanges.

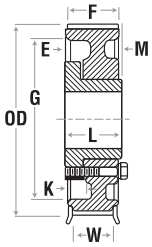
High Torque Sprockets
14mm

Type A



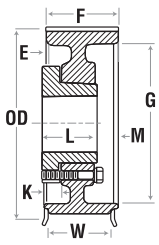
Type AF

Type C



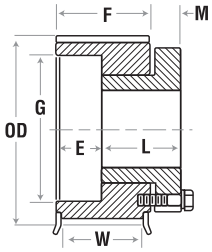
Type CF

Type D



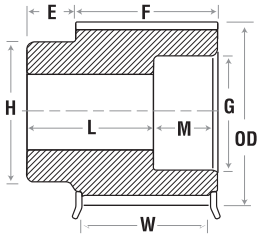
Type DF

Type E •



Type EF •

Type D (MPB Only)



Type DF (MPB Only)

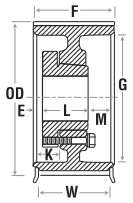
No. of Teeth	Catalog Number	Bore	Pitch	Diameter		Type +	Max Bore	Dimensions								Weight Approx (lbs.)
				O.D.	Flange			E	L	M	K	H	F	G	W	
MPB 85mm (3.35in.) Wide Belts (14M-85)																
28	P2814M85-MPB	1.25	4.912	4.802	5.56	DF-1	2.3125	1	4	1	—	3.6875	4	3.13	3.6875	18.0
29	P2914M85-MPB	1.25	5.088	4.983	5.56	DF-1	2.3125	1	4	1	—	3.6875	4	3.13	3.6875	19.4
30	P3014M85-MPB	1.25	5.263	5.157	6.13	DF-1	2.5	1	4	1	—	0.7656	4	3.72	3.6875	20.6
32	P3214M85-MPB	1.25	5.614	5.507	6.13	DF-1	2.5	1	4	1	—	0.7656	4	3.72	3.6875	23.4
34	P3414M85-MPB	1.25	5.965	5.858	6.50	DF-1	2.6875	1	4	1	—	4.4843	4	4.06	3.6875	27.4
QD 85mm (3.35in.) Wide Belts (14M-85)																
30	P3014M85-SK	SK	5.293	5.157	6.13	AF-1	2.625	0.75	1.875	1.375	1.375	—	4	3.92	3.6875	10.0
32	P3214M85-SK	SK	5.614	5.507	6.13	AF-1	2.875	0.75	1.875	1.375	1.375	—	4	3.92	3.6875	13.0
34	P3414M85-SK	SK	5.965	5.853	6.13	AF-1	2.875	0.75	1.875	1.375	1.375	—	4	4.06	3.6875	14.0
36	P3614M85-SF	SF	6.316	6.206	6.81	AF-1	2.875	0.75	2	1.25	1.375	—	4	4.69	3.6875	15.0
38	P3814M85-SF	SF	6.667	6.557	7.16	AF-1	2.875	0.75	2	1.25	1.375	—	4	4.94	3.6875	18.0
40	P4014M85-SF	SF	7.018	6.909	7.50	AF-1	2.875	0.75	2	1.25	1.375	—	4	5.06	3.6875	20.0
44	P4414M85-E	E	7.720	7.610	8.22	AF-1	3.5	0.3125	2.625	0.6875	0.8125	—	4	6.12	3.6875	25.0
48	P4814M85-E	E	8.421	8.311	8.94	AF-1	3.5	0.3125	2.625	0.6875	0.8125	—	4	6.50	3.6875	29.0
52	P5214M85-E	E	9.123	9.013	9.69	AF-1	3.5	0.3125	2.625	0.6875	0.8125	—	4	7.18	3.6875	32.0
56	P5614M85-F	F	9.825	9.715	10.38	DF-1	4	0.25	3.625	0.625	0.75	—	4	7.88	3.6875	46.0
60	P6014M85-F	F	10.527	10.417	11.06	DF-1	4	0.25	3.625	0.625	0.75	—	4	8.50	3.6875	51.0
64	P6414M85-F	F	11.229	11.119	11.75	DF-1	4	0.25	3.625	0.625	0.75	—	4	9.25	3.6875	62.0
68	P6814M85-F	F	11.930	11.820	12.50	DF-2	4	0.25	3.625	0.625	0.75	—	4	10.00	3.6875	51.0
72	P7214M85-F	F	12.632	12.522	13.19	DF-2	4	0.25	3.625	0.625	0.75	—	4	10.69	3.6875	60.0
80	P8014M85-F	F	14.036	13.926	14.63	DF-2	4	0.25	3.625	0.625	0.75	—	4	12.13	3.6875	66.0
90	P9014M85-F	F	15.790	15.680	—	D-3	4	0.25	3.625	0.625	0.75	—	4	14.00	—	69.0
112	P11214M85-F	F	19.650	19.540	—	D-3	4	0.25	3.625	0.625	0.75	—	4	17.88	—	89.0
144	P14414M85-F	F	25.264	25.154	—	D-3	4	0.25	3.625	0.625	0.75	—	4	23.38	—	127.0
168	P16814M85-J	J	29.475	29.365	—	D-3	4.5	0.25	3.625	0.625	0.75	—	4	27.56	—	148.0
192	P19214M85-J	J	33.686	33.576	—	D-3	4.5	0.25	3.625	0.625	0.75	—	4	31.81	—	177.0
216	P21614M85-J	J	37.896	37.786	—	D-3	4.5	0.25	3.625	0.625	0.75	—	4	35.75	—	251.0
Taper Bushed 85mm (3.35in.) Wide Belts (14M-85)																
30	P3014M85-2517	2517	5.263	5.153	6.13	WF-1	2.5	0.5	1.75	1.75	—	—	4	3.928	3.6875	9.7
32	P3214M85-2517	2517	5.614	5.504	6.13	WF-1	2.6875	0.875	1.75	1.375	—	—	4	3.928	3.6875	12.7
34	P3414M85-2517	2517	5.965	5.855	6.50	WF-1	2.6875	0.875	1.75	1.375	—	—	4	4.063	3.6875	15.3
36	P3614M85-3020	3020	6.316	6.206	6.81	WF-1	3.25	0.5312	2	1.4687	—	—	4	4.688	3.6875	19.3
38	P3814M85-3020	3020	6.667	6.557	7.16	WF-1	3.25	0.5312	2	1.4687	—	—	4	4.813	3.6875	21.9
40	P4014M85-3020	3020	7.018	6.908	7.50	WF-1	3.25	0.5312	2	1.4687	—	—	4	5.063	3.6875	25.1
44	P4414M85-3020	3020	7.720	7.610	8.22	WF-1	3.25	0.5312	2	1.4687	—	—	4	6.125	3.6875	28.4
48	P4814M85-3020	3020	8.421	8.311	8.94	WF-1	3.25	0.5312	2	1.4687	—	—	4	6.500	3.6875	35.4
52	P5214M85-3535	3535	9.123	9.013	9.69	KF-1	3.9375	—	3.5	0.5	—	—	4	7.188	3.6875	42.9
56	P5614M85-3535	3535	9.825	9.715	10.38	KF-1	3.9375	—	3.5	0.5	—	—	4	7.875	3.6875	52.4
60	P6014M85-3535	3535	10.527	10.417	11.06	KF-1	3.9375	—	3.5	0.5	—	—	4	8.500	3.6875	62.7
64	P6414M85-3535	3535	11.229	11.119	11.75	KF-1	3.9375	—	3.5	0.5	—	—	4	9.250	3.6875	73.6
68	P6814M85-3535	3535	11.930	11.820	12.50	KF-1	3.9375	—	3.5	0.5	—	—	4	10.000	3.6875	64.2
72	P7214M85-3535	3535	12.632	12.522	13.19	KF-1	3.9375	—	3.5	0.5	—	—	4	10.688	3.6875	97.4
80	P8014M85-3535	3535	14.036	13.926	14.63	WF-2	3.9375	—	3.5	0.5	—	—	4	12.125	3.6875	68.4
90	P9014M85-3535	3535	15.790	15.680	—	W-3	3.9375	—	3.5	0.5	—	7	4	13.563	—	69.1
112	P11214M85-3535	3535	19.650	19.540	—	W-3	3.9375	—	3.5	0.5	—	7	4	17.375	—	85.7
144	P14414M85-4040	4040	25.264	25.154	—	W-3	4.4375	—	4	—	—	8.5	4	23.000	—	131.6
168	P16814M85-4040	4040	29.475	29.365	—	W-3	4.4375	—	4	—	—	8.5	4	27.250	—	146.1
192	P19214M85-4040	4040	33.686	33.576	—	W-3	4.4375	—	4	—	—	8.5	4	31.375	—	161.4

* Weight Shown is for Sprocket Less Bushing.
• Reverse Mount Only

+ The numbers (1=Solid, 2=Web, 3=Arms) within the "Type" indicates construction, and the letter F indicates the sprocket has flanges.

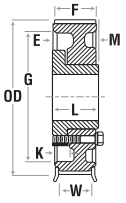
High Torque Sprockets
14mm

Type A



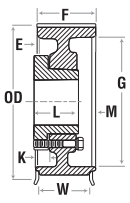
Type AF

Type C



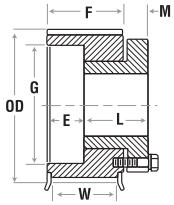
Type CF

Type D



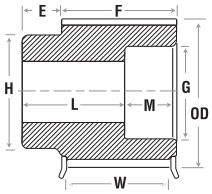
Type DF

Type E •



Type EF •

Type D (MPB Only)



Type DF (MPB Only)

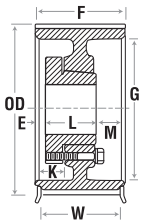
No. of Teeth	Catalog Number	Bore	Pitch	Diameter		Type +	Max Bore	Dimensions								Weight (lbs.)
				O.D.	Flange			E	L	M	K	H	F	G	W	
MPB 115mm (4.53 in.) Wide Belts (14M-115)																
28	P2814M115-MPB	1.25	4.912	4.808	5.56	DF-1	2.3125	1.25	5	1.5	—	3.6875	5.25	3.13	4.9375	23.2
29	P2914M115-MPB	1.25	5.088	4.983	5.56	DF-1	2.3125	1.25	5	1.5	—	3.6875	5.25	3.13	4.9375	24.8
30	P3014M115-MPB	1.25	5.263	5.157	6.13	DF-1	2.5	1.25	5	1.5	—	0.7656	5.25	3.90	4.9375	26.4
32	P3214M115-MPB	1.25	5.614	5.507	6.13	DF-1	2.5	1.25	5	1.5	—	0.7656	5.25	3.90	4.9375	30.8
34	P3414M115-MPB	1.25	5.965	5.858	6.50	DF-1	2.6875	1.25	5	1.5	—	4.4843	5.25	4.06	4.9375	35.2
36	P3614M115-MPB	1.25	6.316	6.208	6.81	DF-1	3	1.25	5	1.5	—	4.875	5.25	4.69	4.9375	38.8
38	P3814M115-MPB	1.25	6.667	6.559	7.16	DF-1	3.25	1.25	5	1.5	—	5.1718	5.25	4.94	4.9375	44.4
40	P4014M115-MPB	1.25	7.018	6.909	7.50	DF-1	3.4375	1.25	5	1.5	—	5.5625	5.25	5.06	4.9375	50.0
QD 115mm (4.53 in.) Wide Belts (14M-115)																
30	P3014M115-SK	1.25	5.263	5.157	6.13	AF-1	2.875	1.375	1.875	2	2	—	5.25	3.92	4.9375	12.0
32	P3214M115-SK	1.25	5.614	5.507	6.13	AF-1	2.875	1.375	1.875	2	2	—	5.25	3.92	4.9375	16.0
34	P3414M115-SK	1.25	5.965	5.858	6.50	AF-1	2.875	1.375	1.875	2	2	—	5.25	4.06	4.9375	17.0
36	P3614M115-SF	1.25	6.316	6.208	6.81	AF-1	3	1.375	2	1.875	2	—	5.25	4.69	4.9375	18.0
38	P3814M115-SF	1.25	6.667	6.559	7.16	AF-1	3	1.375	2	1.875	2	—	5.25	4.94	4.9375	22.0
40	P4014M115-SF	1.25	7.018	6.909	7.50	AF-1	3	1.375	2	1.875	2	—	5.25	5.06	4.9375	25.0
44	P4414M115-E	E	7.720	7.610	8.22	AF-1	3.5	0.9375	2.625	1.6875	1.8125	—	5.25	6.12	4.9375	30.0
48	P4814M115-E	E	8.421	8.311	8.94	AF-1	3.5	0.9375	2.625	1.6875	1.8125	—	5.25	6.50	4.9375	35.0
52	P5214M115-F	F	9.123	9.013	9.69	AF-1	4	0.375	3.625	1.25	1.375	—	5.25	7.18	4.9375	42.0
56	P5614M115-F	F	9.825	9.715	10.38	AF-1	4	0.375	3.625	1.25	1.375	—	5.25	7.88	4.9375	53.0
60	P6014M115-F	F	10.527	10.417	11.06	AF-1	4.5	0.375	3.625	1.25	1.375	—	5.25	8.50	4.9375	60.0
64	P6414M115-J	J	11.229	11.119	11.75	DF-1	4.5	0.1875	4.5	0.9375	1	—	5.25	9.25	4.9375	76.0
68	P6814M115-J	J	11.930	11.820	12.50	DF-1	4.5	0.1875	4.5	0.9375	1	—	5.25	10.00	4.9375	83.0
72	P7214M115-J	J	12.632	12.522	13.19	DF-1	4.5	0.1875	4.5	0.9375	1	—	5.25	10.69	4.9375	99.0
80	P8014M115-J	J	14.036	13.926	14.63	DF-2	4.5	0.1875	4.5	0.9375	1	—	5.25	12.13	4.9375	87.0
90	P9014M115-J	J	15.790	15.680	—	D-2	4.5	0.1875	4.5	0.9375	1	—	5.25	14.00	—	95.0
112	P11214M115-J	J	19.650	19.540	—	D-3	4.5	0.1875	4.5	0.9375	1	—	5.25	17.88	—	114.0
144	P14414M115-J	J	25.264	25.154	—	D-3	4.5	0.1875	4.5	0.9375	1	—	5.25	23.38	—	166.0
168	P16814M115-M	M	29.475	29.365	—	D-3	5.5	0.1875	4.5	0.9375	1	—	5.25	27.56	—	198.0
192	P19214M115-M	M	33.686	33.576	—	D-3	5.5	0.1875	4.5	0.9375	1	—	5.25	31.81	—	232.0
216	P21614M115-M	M	37.896	37.786	—	D-3	5.5	0.1875	4.5	0.9375	1	—	5.25	35.75	—	307.0
Taper Bushed 115mm (4.53 in.) Wide Belts (14M-115)																
30	P3014M115-2517	2517	5.263	5.153	6.13	WF-1	2.6875	1.75	1.75	1.75	—	—	5.25	3.928	4.9375	13.5
32	P3214M115-2517	2517	5.614	5.504	6.13	WF-1	2.6875	1.75	1.75	1.75	—	—	5.25	3.928	4.6875	17.3
34	P3414M115-2517	2517	5.965	5.855	6.50	WF-1	2.6875	1.75	1.75	1.75	—	—	5.25	4.063	4.6875	20.9
36	P3614M115-3020	3020	6.316	6.206	6.81	WF-1	3.25	1.625	2	1.625	—	—	5.25	4.688	4.6875	18.6
38	P3814M115-3020	3020	6.667	6.557	7.16	WF-1	3.25	1.625	2	1.625	—	—	5.25	4.813	4.6875	22.5
40	P4014M115-3020	3020	7.018	6.908	7.50	WF-1	3.25	1.625	2	1.625	—	—	5.25	5.063	4.6875	26.8
44	P4414M115-3535	3535	7.720	7.610	8.22	WF-1	3.9375	0.875	3.5	0.875	—	—	5.25	6.125	4.6875	30.8
48	P4814M115-3535	3535	8.421	8.311	8.94	WF-1	3.9375	0.875	3.5	0.875	—	—	5.25	6.500	4.6875	41.1
52	P5214M115-4040	4040	9.123	9.013	9.69	WF-1	4.4375	0.625	4	0.625	—	—	5.25	7.188	4.6875	46.9
56	P5614M115-4040	4040	9.825	9.715	10.38	WF-1	4.4375	0.625	4	0.625	—	—	5.25	7.875	4.6875	58.3
60	P6014M115-4040	4040	10.527	10.417	11.06	WF-1	4.4375	0.625	4	0.625	—	—	5.25	8.500	4.6875	70.9
64	P6414M115-4545	4545	11.229	11.119	11.75	WF-1	4.9375	0.375	4.5	0.375	—	—	5.25	9.250	4.6875	82.1
68	P6814M115-4545	4545	11.930	11.820	12.50	WF-1	4.9375	0.375	4.5	0.375	—	—	5.25	10.000	4.6875	97.1
72	P7214M115-4545	4545	12.632	12.522	13.19	WF-1	4.9375	0.375	4.5	0.375	—	—	5.25	10.688	4.6875	113.3
80	P8014M115-4545	4545	14.036	13.926	14.63	WF-2	4.9375	0.375	4.5	0.375	9.5	—	5.25	12.125	4.6875	108.9
90	P9014M115-4545	4545	15.790	15.680	—	W-2	4.9375	0.375	4.5	0.375	9.5	—	5.25	13.563	—	112.9
112	P11214M115-4545	4545	19.650	19.540	—	W-3	4.9375	0.375	4.5	0.375	9.5	—	5.25	17.375	—	122.4
144	P14414M115-4545	4545	25.264	25.154	—	W-3	4.9375	0.375	4.5	0.375	9.5	—	5.25	23.000	—	155.0
168	P16814M115-4545	4545	29.475	29.365	—	W-3	4.9375	0.375	4.5	0.375	9.5	—	5.25	27.250	—	188.0
192	P19214M115-4545	4545	33.686	33.576	—	W-3	4.9375	0.375	4.5	0.375	9.5	—	5.25	31.375	—	318.8
216	P21614M115-6050	6050	37.896	37.786	—	W-3	6	—	5	0.25	15.5	—	5.25	35.625	—	350.3

* Weight Shown is for Sprocket Less Bushing.
• Reverse Mount Only

+ The numbers (1=Solid, 2=Web, 3=Arms) within the "Type" indicates construction, and the letter F indicates the sprocket has flanges.

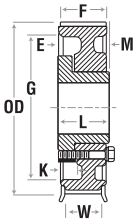
High Torque Sprockets
14mm

Type A



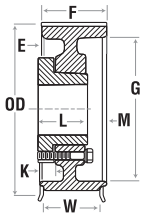
Type AF

Type C



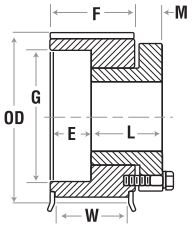
Type CF

Type D



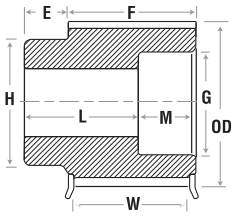
Type DF

Type E •



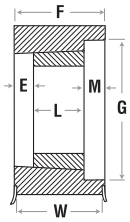
Type EF •

Type D (MPB Only)



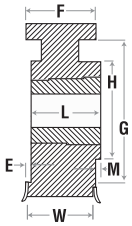
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Type K



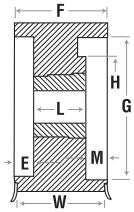
Type KF

Type B



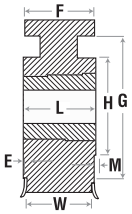
Type BF

Type W



Type WF

Type C



Type CF

No. of Teeth	Catalog Number	Bore	Pitch	Diameter		Type +	Max Bore	Dimensions								Weight Approx (lbs.)
				O.D.	Flange			E	L	M	K	H	F	G	W	
MPB 170mm (6.69 in.) Wide Belts (14M-170)																
36	P3614M170-MPB	1.5	6.316	6.208	6.81	DF-1	3	1.125	6	2.625	—	4.875	7.375	4.69	7.0625	47.0
38	P3814M170-MPB	1.5	6.667	6.559	7.16	DF-1	3.125	1.125	6	2.625	—	5.1718	7.375	4.94	7.0625	55.7
40	P4014M170-MPB	1.5	7.018	6.909	7.50	DF-1	3.4375	1.125	6	2.625	—	5.5625	7.375	5.06	7.0625	63.7
44	P4414M170-MPB	1.5	7.720	7.610	8.22	DF-1	4.375	1.125	6	2.625	—	6.25	7.375	6.13	7.0625	75.7
48	P4814M170-MPB	1.5	8.421	8.311	8.94	DF-1	4.5	1.125	6	2.625	—	6.9375	7.375	6.50	7.0625	94.0
QD 170mm (6.69 in.) Wide Belts (14M-170)																
44	P4414M170-E	E	7.720	7.610	8.22	AF-1	3.625	2	2.625	2.75	2.875	—	7.375	6.12	7.0625	38.0
48	P4814M170-E	E	8.421	8.311	8.94	AF-1	3.625	2	2.625	2.75	2.4375	—	7.375	6.50	7.0625	45.0
52	P5214M170-F	F	9.123	9.013	9.69	AF-1	4	1.4375	3.625	2.3125	2.4375	—	7.375	7.18	7.0625	52.0
56	P5614M170-F	F	9.825	9.715	10.38	AF-1	4	1.4375	3.625	2.3125	2.125	—	7.375	7.88	7.0625	65.0
60	P6014M170-J	J	10.527	10.417	11.06	AF-1	4.5	0.9375	4.5	1.9375	2.125	—	7.375	8.50	7.0625	75.0
64	P6414M170-J	J	11.229	11.119	11.75	AF-1	4.5	0.9375	4.5	1.9375	2.125	—	7.375	9.25	7.0625	91.0
68	P6814M170-J	J	11.930	11.820	12.50	AF-1	4.5	0.9375	4.5	1.9375	2.125	—	7.375	10.00	7.0625	96.0
72	P7214M170-J	J	12.632	12.522	13.19	AF-1	4.5	0.9375	4.5	1.9375	2.125	—	7.375	10.69	7.0625	115.0
80	P8014M170-J	J	14.036	13.926	14.63	AF-2	4.5	0.9375	4.5	1.9375	2.125	—	7.375	12.13	7.0625	107.0
90	P9014M170-J	J	15.790	15.680	—	A-2	4.5	0.9375	4.5	1.9375	2.125	—	7.375	14.00	—	116.0
112	P11214M170-M	M	19.650	19.540	—	A-3	5.5	—	6.75	0.625	1.4375	—	7.375	17.88	—	175.0
144	P14414M170-M	M	25.264	25.154	—	A-3	5.5	—	6.75	0.625	1.4375	—	7.375	23.38	—	240.0
168	P16814M170-M	M	29.475	29.365	—	A-3	5.5	—	6.75	0.625	1.4375	—	7.375	27.56	—	278.0
192	P19214M170-M	M	33.686	33.576	—	A-3	5.5	—	6.75	0.625	1.4375	—	7.375	31.81	—	322.0
216	P21614M170-M	M	37.896	37.786	—	A-3	5.5	—	6.75	0.625	1.4375	—	7.375	35.75		399.0
Taper Bushed 170mm (6.69 in.) Wide Belts (14M-170)																
44	P4414M170-3535	3535	7.720	7.610	8.22	WF-1	3.9375	1.9375	3.5	1.9375	—	—	7.375	6.13	7.0625	39.7
48	P4814M170-3535	3535	8.421	8.311	8.94	WF-1	3.9375	1.9375	3.5	1.9375	—	—	7.375	6.50	7.0625	52.8
52	P5214M170-4040	4040	9.123	9.013	9.69	WF-1	4.4375	1.6875	4	1.6875	—	—	7.375	7.19	7.0625	59.8
56	P5614M170-4040	4040	9.825	9.715	10.38	WF-1	4.4375	1.6875	4	1.6875	—	—	7.375	7.88	7.0625	72.4
60	P6014M170-4545	4545	10.527	10.417	11.06	WF-1	4.9375	1.4375	4.5	1.4375	—	—	7.375	8.50	7.0625	83.7
64	P6414M170-4545	4545	11.229	11.119	11.75	WF-1	4.9375	1.4375	4.5	1.4375	—	—	7.375	9.25	7.0625	98.6
68	P6814M170-4545	4545	11.930	11.820	12.50	WF-1	4.9375	1.4375	4.5	1.4375	—	—	7.375	10.00	7.0625	114.4
72	P7214M170-4545	4545	12.632	12.522	13.19	WF-1	4.9375	1.4375	4.5	1.4375	—	—	7.375	10.69	7.0625	131.8
80	P8014M170-4545	4545	14.036	13.926	14.63	WF-2	4.9375	1.4375	4.5	1.4375	—	9.5	7.375	12.13	7.0625	129.3
90	P9014M170-4545	4545	15.790	15.680	—	W-2	4.9375	1.4375	4.5	1.4375	—	9.5	7.375	13.56	—	126.8
112	P11214M170-4545	4545	19.650	19.540	—	W-3	4.9375	1.4375	4.5	1.1875	—	9.5	7.375	17.38	—	148.0
144	P14414M170-6050	6050	25.264	25.154	—	W-3	6	1.1875	5	1.1875	—	15.5	7.375	23.00	—	208.0
168	P16814M170-6050	6050	29.475	29.365	—	W-3	6	1.1875	5	1.1875	—	15.5	7.375	27.25	—	227.0
192	P19214M170-6050	6050	33.686	33.576	—	W-3	6	1.1875	5	1.1875	—	15.5	7.375	31.38	—	340.0
216	P21614M170-6050	6050	37.896	37.786	—	W-3	6	1.1875	5	1.1875	—	15.5	7.375	35.63	—	390.0

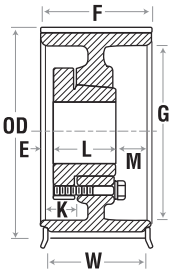
* Weight Shown is for Sprocket Less Bushing.

• Reverse Mount Only

+ The numbers (1=Solid, 2=Web, 3=Arms) within the "Type" indicates construction, and the letter F indicates the sprocket has flanges.

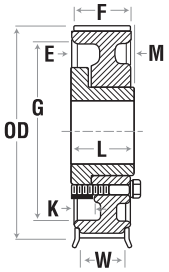
High Torque Sprockets
20mm

Type A



Type AF

Type C



Type CF

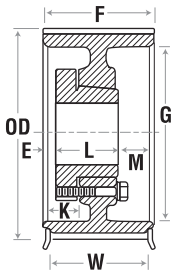
No. of Teeth	Catalog Number	Bore	Pitch	Diameter		Type +	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Flange			E	L	M	K	H	F	G	W	
QD 115mm (4.53 in.) Wide Belts (20M-115)																
34	P3420M115-F	F	8.522	8.352	9.449	AF-1	4.00	0.44	3.63	1.31	1.44	—	5.38	6.88	5.0	32.0
36	P3620M115-F	F	9.023	8.853	9.843	AF-1	4.00	0.44	3.63	1.31	1.44	—	5.38	7.00	5.0	40.0
38	P3820M115-F	F	9.524	9.354	10.433	AF-1	4.00	0.44	3.63	1.31	1.44	—	5.38	7.56	5.0	45.0
40	P4020M115-F	F	10.026	9.856	10.827	AF-1	4.00	0.44	3.63	1.31	1.44	—	5.38	8.00	5.0	51.0
44	P4420M115-F	F	11.028	10.858	11.811	AF-1	4.00	0.44	3.63	1.31	1.44	—	5.38	8.93	5.0	63.0
48	P4820M115-J	J	12.031	11.861	12.795	AF-1	4.50	—	4.50	0.88	1.18	—	5.38	9.93	5.0	84.0
52	P5220M115-J	J	13.033	12.863	13.764	AF-2	4.50	—	4.50	0.88	1.18	—	5.38	10.88	5.0	80.0
56	P5620M115-J	J	14.036	13.866	14.764	AF-2	4.50	—	4.50	0.88	1.18	—	5.38	11.88	5.0	87.0
60	P6020M115-J	J	15.038	14.868	15.927	AF-2	4.50	—	4.50	0.88	1.18	—	5.38	13.06	5.0	94.0
64	P6420M115-J	J	16.041	15.871	16.929	AF-2	4.50	—	4.50	0.88	1.18	—	5.38	14.06	5.0	104.0
68	P6820M115-J	J	17.044	16.874	17.927	AF-2	4.50	—	4.50	0.88	1.18	—	5.38	15.00	5.0	110.0
72	P7220M115-J	J	18.046	17.876	18.898	AF-2	4.50	—	4.50	0.88	1.18	—	5.38	16.00	5.0	119.0
80	P8020M115-M	M	20.051	19.881	20.866	CF-2	5.50	1.25	6.75	0.12	0.18	—	5.38	18.00	5.0	182.0
90	P9020M115-M	M	22.558	22.388	23.425	CF-2	5.50	1.25	6.75	0.12	0.18	—	5.38	20.56	5.0	212.0
112	P11220M115-M	M	28.072	27.902	—	C-3	5.50	1.25	6.75	0.12	0.18	—	5.38	26.38	—	239.0
144	P14420M115-N	N	36.092	35.922	—	C-3	5.87	1.75	8.12	1.00	—	—	5.38	34.38	—	341.0
168	P16820M115-N	N	42.108	41.938	—	C-3	5.87	1.75	8.12	1.00	—	—	5.38	40.38	—	417.0
192	P19220M115-N	N	48.123	47.953	—	C-3	5.87	1.75	8.12	1.00	—	—	5.38	46.25	—	500.0
216	P21620M115-N	N	54.138	53.968	—	C-3	5.77	1.75	8.12	1.00	—	—	5.38	52.25	—	566.0

* Weight Shown is for Sprocket Less Bushing.
• Reverse Mount Only

+ The numbers (1=Solid, 2=Web, 3=Arms) within the "Type" indicates construction, and the letter F indicates the sprocket has flanges.

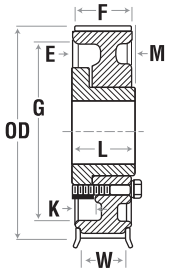
High Torque Sprockets
20mm

Type A



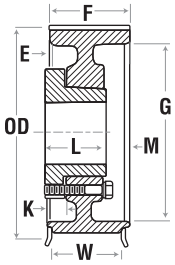
Type AF

Type C



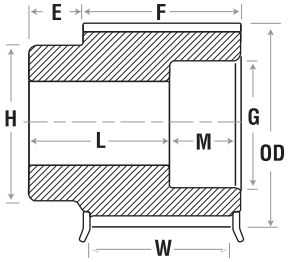
Type CF

Type D



Type DF

Type D (MPB Only)



Type DF (MPB Only)

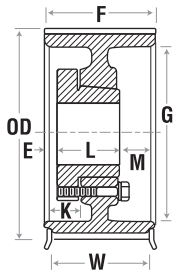
No. of Teeth	Catalog Number	Bore	Pitch	Diameter		Type +	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Flange			E	L	M	K	H	F	G	W	
QD 170mm (6.69 in.) Wide Belts (20M-170)																
34	P3420M170-MPB	2.125	8.522	8.352	9.449	DF-1	4.38	1.25	6.50	2.25	—	6.50	7.50	6.50	7.12	82.0
36	P3620M170-MPB	2.125	9.023	8.853	9.843	DF-1	4.50	1.25	6.50	2.25	—	7.00	7.50	7.00	7.12	93.0
MPB 170mm (6.69 in.) Wide Belts (20M-170)																
38	P3820M170-J	J	9.524	9.354	10.433	AF-1	4.50	1.00	4.50	2.00	2.18	—	7.50	7.56	7.12	56.0
40	P4020M170-J	J	10.026	9.856	10.827	AF-1	4.50	1.00	4.50	2.00	2.18	—	7.50	8.00	7.12	64.0
44	P4420M170-J	J	11.028	10.858	11.811	AF-1	4.50	1.00	4.50	2.00	2.18	—	7.50	8.93	7.12	81.0
48	P4820M170-M	M	12.031	11.861	12.795	AF-1	5.50	0.06	6.75	0.68	1.50	—	7.50	9.93	7.12	113.0
52	P5220M170-M	M	13.033	12.863	13.764	AF-1	5.50	0.06	6.75	0.68	1.50	—	7.50	10.88	7.12	141.0
56	P5620M170-M	M	14.036	13.866	14.764	AF-1	5.50	0.06	6.75	0.68	1.50	—	7.50	11.88	7.12	170.0
60	P6020M170-M	M	15.038	14.868	15.927	AF-1	5.50	0.06	6.75	0.68	1.50	—	7.50	13.06	7.12	199.0
64	P6420M170-M	M	16.041	15.871	16.929	AF-2	5.50	0.06	6.75	0.68	1.50	—	7.50	14.06	7.12	175.0
68	P6820M170-M	M	17.044	16.874	17.927	AF-2	5.50	0.06	6.75	0.68	1.50	—	7.50	15.00	7.12	187.0
72	P7220M170-M	M	18.046	17.876	18.898	AF-2	5.50	0.06	6.75	0.68	1.50	—	7.50	16.00	7.12	196.0
80	P8020M170-M	M	20.051	19.881	20.866	AF-2	5.50	0.06	6.75	0.68	1.50	—	7.50	18.00	7.12	214.0
90	P9020M170-M	M	22.558	22.388	23.425	AF-2	5.50	0.06	6.75	0.68	1.50	—	7.50	20.56	7.12	250.0
112	P11220M170-N	N	28.072	27.902	—	C-3	5.87	0.50	8.12	0.12	1.25	—	7.50	26.25	7.12	309.0
144	P14420M170-N	N	36.092	35.922	—	C-3	5.87	0.50	8.12	0.12	1.25	—	7.50	34.25	—	426.0
168	P16820M170-P	P	42.108	41.938	—	C-3	7.00	0.90	9.38	0.94	1.06	—	7.50	40.25	—	571.0
192	P19220M170-P	P	48.123	47.953	—	C-3	7.00	0.94	9.38	0.94	1.06	—	7.50	46.25	—	652.0
216	P21620M170-P	P	54.138	53.968	—	C-3	7.00	0.94	9.38	0.94	1.06	—	7.50	52.12	—	813.0

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• Reverse Mount Only

+ The numbers (1=Solid, 2=Web, 3=Arms) within the "Type" indicates construction, and the letter F indicates the sprocket has flanges.

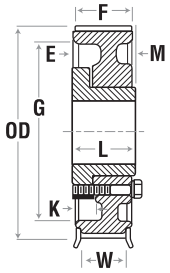
High Torque Sprockets
20mm

Type A



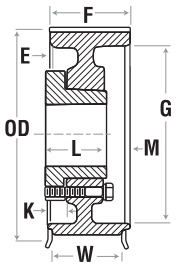
Type AF

Type C



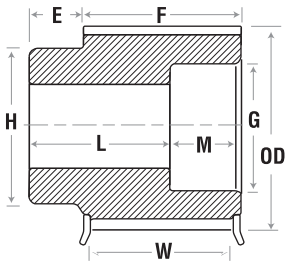
Type CF

Type D



Type DF

Type D (MPB Only)



Type DF (MPB Only)

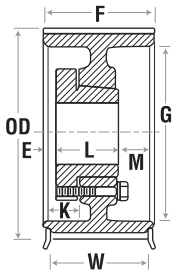
No. of Teeth	Catalog Number	Bore	Pitch	Diameter		Type +	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Flange			E	L	M	K	H	F	G	W	
MPB 230mm (9.06 in.) Wide Belts (20M-230)																
38	P3820M230-MPB	2.875	9.524	9.354	10.433	DF-1	4.75	1.25	7.50	3.63	—	7.50	9.88	7.56	9.50	120.0
40	P4020M230-MPB	2.875	10.026	9.856	10.827	DF-1	5.25	1.25	8.50	2.63	—	8.00	9.88	8.00	9.50	147.0
44	P4420M230-MPB	2.875	11.028	10.858	11.811	DF-1	5.25	1.25	8.50	2.63	—	8.25	9.88	8.93	9.50	180.0
QD 230mm (9.06 in.) Wide Belts (20M-230)																
48	P4820M230-M	M	12.031	11.861	12.795	AF-1	5.50	0.56	6.75	2.56	2.00	—	9.88	9.93	9.50	129.0
52	P5220M230-M	M	13.033	12.863	13.764	AF-1	5.50	0.56	6.75	2.56	2.00	—	9.88	10.88	9.50	158.0
56	P5620M230-M	M	14.036	13.866	14.764	AF-1	5.50	0.56	6.75	2.56	2.00	—	9.88	11.88	9.50	189.0
60	P6020M230-M	M	15.038	14.868	15.927	AF-1	5.50	0.56	6.75	2.56	2.00	—	9.88	13.06	9.50	217.0
64	P6420M230-M	M	16.041	15.871	16.929	AF-2	5.50	0.56	6.75	2.56	2.00	—	9.88	14.06	9.50	198.0
68	P6820M230-N	N	17.044	16.874	17.927	AF-1	5.87	0.06	8.12	1.69	1.81	—	9.88	15.00	9.50	324.0
72	P7220M230-N	N	18.046	17.876	18.898	AF-2	5.87	0.06	8.12	1.69	1.81	—	9.88	16.00	9.50	287.0
80	P8020M230-N	N	20.051	19.881	20.866	AF-2	5.87	0.06	8.12	1.69	1.81	—	9.88	18.00	9.50	280.0
90	P9020M230-N	N	22.558	22.388	23.425	AF-2	5.87	0.06	8.12	1.69	1.81	—	9.88	20.56	9.50	319.0
112	P11220M230-N	N	28.072	27.902	—	A-3	5.87	0.06	8.12	1.69	1.81	—	9.88	26.25	—	357.0
144	P14420M230-P	P	36.092	35.922	—	D-3	7.00	0.69	9.38	1.19	1.31	—	9.88	34.25	—	535.0
168	P16820M230-P	P	42.108	41.938	—	D-3	7.00	0.69	9.38	1.19	1.31	—	9.88	40.25	—	654.0
192	P19220M230-W	W	48.123	47.953	—	C-3	8.50	0.75	11.38	0.75	1.50	—	9.88	46.00	—	935.0
216	P21620M230-W	W	54.138	53.968	—	C-3	8.50	0.75	11.38	0.75	1.50	—	9.88	52.00	—	1062.0

* Weight Shown is for Sprocket Less Bushing.
• Reverse Mount Only

+ The numbers (1=Solid, 2=Web, 3=Arms) within the "Type" indicates construction, and the letter F indicates the sprocket has flanges.

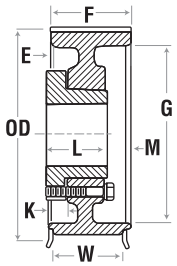
High Torque Sprockets
20mm

Type A



Type AF

Type D



Type DF

No. of Teeth	Catalog Number	Bore	Pitch	Diameter		Type +	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Flange			E	L	M	K	H	F	G	W	
QD 290mm (11.42 in.) Wide Belts (20M-290)																
52	P5220M290-N	N	13.033	12.863	13.764	AF-1	5.87	0.75	8.12	2.38	2.50	—	12.25	10.88	11.88	187.0
56	P5620M290-N	N	14.036	13.866	14.764	AF-1	5.87	0.75	8.12	2.38	2.50	—	12.25	11.88	11.88	223.0
60	P6020M290-N	N	15.038	14.868	15.927	AF-1	5.87	0.75	8.12	2.38	2.50	—	12.25	13.06	11.88	257.0
64	P6420M290-N	N	16.041	15.871	16.929	AF-1	5.87	0.75	8.12	2.38	2.50	—	12.25	14.06	11.88	299.0
68	P6820M290-N	N	17.044	16.874	17.927	AF-1	5.87	0.75	8.12	2.38	2.50	—	12.25	15.00	11.88	346.0
72	P7220M290-N	N	18.046	17.876	18.898	AF-2	5.87	0.75	8.12	2.38	2.50	—	12.25	16.00	11.88	311.0
80	P8020M290-N	N	20.051	19.881	20.866	AF-2	5.87	0.75	8.12	2.38	2.50	—	12.25	18.00	11.88	314.0
90	P9020M290-N	N	22.558	22.388	23.425	AF-2	5.87	0.75	8.12	2.38	2.50	—	12.25	20.56	11.88	359.0
112	P11220M290-P	P	28.072	27.902	—	A-2	7.00	0.50	9.38	2.38	2.50	—	12.25	26.12	—	513.0
144	P14420M290-P	P	36.092	35.922	—	A-3	7.00	0.50	9.38	2.38	2.50	—	12.25	34.00	—	637.0
168	P16820M290-W	W	42.108	41.938	—	A-3	8.50	0.44	11.38	0.44	2.68	—	12.25	40.00	—	891.0
192	P19220M290-W	W	48.123	47.953	—	A-3	8.50	0.44	11.38	0.44	2.68	—	12.25	46.00	—	1061.0
216	P21620M290-W	W	54.138	53.968	—	A-3	8.50	0.44	11.38	0.44	2.68	—	12.25	52.00	—	1239.0
QD 340 mm (13.39 in.) Wide Belts (20M-340)																
52	P5220M340-N	N	13.033	12.863	13.764	AF-1	5.87	0.75	8.12	5.38	2.50	—	14.25	10.88	13.88	201.0
56	P5620M340-N	N	14.036	13.866	14.764	AF-1	5.87	0.75	8.12	5.38	2.50	—	14.25	11.88	13.88	239.0
60	P6020M340-N	N	15.038	14.868	15.927	AF-1	5.87	0.75	8.12	5.38	2.50	—	14.25	13.06	13.88	273.0
64	P6420M340-N	N	16.041	15.871	16.929	AF-1	5.87	0.75	8.12	5.38	2.50	—	14.25	14.06	13.88	316.0
68	P6820M340-N	N	17.044	16.874	17.927	AF-1	5.87	0.75	8.12	5.38	2.50	—	14.25	15.00	13.88	364.0
72	P7220M340-N	N	18.046	17.876	18.898	AF-2	5.87	0.75	8.12	5.38	2.50	—	14.25	16.00	13.88	330.0
80	P8020M340-P	P	20.051	19.881	20.866	AF-2	7.00	1.50	9.38	3.38	3.50	—	14.25	18.00	13.88	406.0
90	P9020M340-P	P	22.558	22.388	23.425	AF-2	7.00	1.50	9.38	3.38	3.50	—	14.25	20.56	13.88	426.0
112	P11220M340-P	P	28.072	27.902	—	A-2	7.00	1.50	9.38	3.38	3.50	—	14.25	26.12	—	543.0
144	P14420M340-W	W	36.092	35.922	—	A-3	8.50	0.38	11.38	2.50	2.63	—	14.25	34.00	—	814.0
168	P16820M340-W	W	42.108	41.938	—	A-3	8.50	0.38	11.38	2.50	2.63	—	14.25	40.00	—	947.0
192	P19220M340-S	S	48.123	47.953	—	D-3	10.00	2.50	15.75	1.00	1.12	—	14.25	46.00	—	1368.0
216	P21620M340-S	S	54.138	53.968	—	D-3	10.00	2.50	15.75	1.00	1.12	—	14.25	51.88	—	1555.0

* Weight Shown is for Sprocket Less Bushing.
• Reverse Mount Only

+ The numbers (1=Solid, 2=Web, 3=Arms) within the "Type" indicates construction, and the letter F indicates the sprocket has flanges.

HTS® 5mm
Sprocket Diameters

No. of Teeth	Diameters mm PD	Diameters mm OD	No. of Teeth	Diameters mm PD	Diameters mm OD	No. of Teeth	Diameters mm PD	Diameters mm OD	No. of Teeth	Diameters mm PD	Diameters mm OD	No. of Teeth	Diameters mm PD	Diameters mm OD
	in PD	in OD		in PD	in OD		in PD	in OD		in PD	in OD		in PD	in OD
13	20.69	19.55	43	68.44	67.30	73	116.18	115.04	103	163.93	162.79	133	211.68	210.54
	0.815	0.770		2.694	2.649		4.574	4.529		6.454	6.409		8.334	8.289
14	22.28	21.14	44	70.03	68.89	74	117.77	116.63	104	165.52	164.38	134	213.27	212.13
	0.877	0.832		2.757	2.712		4.637	4.592		6.517	6.472		8.396	8.351
15	23.87	22.73	45	71.62	70.48	75	119.37	118.23	105	167.11	165.97	135	214.86	213.72
	0.940	0.895		2.820	2.775		4.699	4.654		6.579	6.534		8.459	8.414
16	25.46	24.32	46	73.21	72.07	76	120.96	119.82	106	168.70	167.56	136	216.45	215.31
	1.003	0.958		2.882	2.837		4.762	4.717		6.642	6.597		8.522	8.477
17	27.06	25.92	47	74.80	73.66	77	122.55	121.41	107	170.3	169.16	137	218.04	216.90
	1.065	1.020		2.945	2.900		4.825	4.780		6.705	6.660		8.584	8.539
18	28.65	27.51	48	76.39	75.25	78	124.14	123.00	108	171.89	170.75	138	219.63	218.49
	1.128	1.083		3.008	2.963		4.887	4.842		6.767	6.722		8.647	8.602
19	30.24	29.10	49	77.99	76.85	79	125.73	124.59	109	173.48	172.34	139	221.23	220.09
	1.191	1.146		3.070	3.025		4.950	4.905		6.830	6.785		8.710	8.665
20	31.83	30.69	50	79.58	78.94	80	127.32	126.18	110	175.07	173.93	140	222.82	221.68
	1.253	1.208		3.133	3.088		5.013	4.968		6.893	6.848		8.772	8.727
21	33.42	32.28	51	81.17	80.03	81	128.92	127.78	111	176.66	175.52	141	224.41	223.27
	1.316	1.271		3.196	3.151		5.075	5.030		6.955	6.910		8.835	8.790
22	35.01	33.87	52	82.76	81.62	82	130.51	129.37	112	178.25	177.11	142	226.00	224.86
	1.379	1.334		3.258	3.213		5.138	5.093		7.018	6.973		8.898	8.853
23	36.61	35.47	53	84.35	83.21	83	132.10	130.96	113	179.85	178.71	143	227.59	226.45
	1.441	1.396		3.321	3.276		5.201	5.156		7.081	7.036		8.960	8.915
24	38.20	37.06	54	85.94	84.80	84	133.69	132.55	114	181.44	180.30	144	229.18	228.04
	1.504	1.459		3.384	3.339		5.263	5.218		7.143	7.098		9.023	8.978
25	39.79	38.65	55	87.54	86.40	85	135.28	134.14	115	183.03	181.89	145	230.77	229.63
	1.566	1.521		3.446	3.401		5.326	5.281		7.206	7.161		9.086	9.041
26	41.38	40.24	56	89.13	87.99	86	136.87	135.73	116	184.62	183.48	146	232.37	231.23
	1.629	1.584		3.509	3.464		5.389	5.344		7.268	7.223		9.148	9.103
27	42.97	41.83	57	90.72	89.58	87	138.46	137.32	117	186.21	185.07	147	233.96	232.82
	1.692	1.647		3.572	3.527		5.451	5.406		7.331	7.286		9.211	9.166
28	44.56	43.42	58	92.31	91.17	88	140.06	138.92	118	187.80	186.66	148	235.55	234.41
	1.754	1.709		3.634	3.589		5.514	5.469		7.394	7.349		9.274	9.229
29	46.15	45.01	59	93.90	92.76	89	141.65	140.51	119	189.39	188.25	149	237.14	236.00
	1.817	1.772		3.697	3.652		5.577	5.532		7.456	7.411		9.336	9.291
30	47.75	46.61	60	95.49	94.35	90	143.24	142.10	120	190.99	189.85	150	238.73	237.59
	1.880	1.835		3.760	3.715		5.639	5.594		7.519	7.474		9.399	9.354
31	49.34	48.20	61	97.08	95.94	91	144.83	143.69	121	192.58	191.44	151	240.32	239.18
	1.942	1.897		3.822	3.777		5.702	5.657		7.582	7.537		9.462	9.417
32	50.93	49.79	62	98.68	97.54	92	146.42	145.28	122	194.17	193.03	152	241.92	240.78
	2.005	1.960		3.885	3.840		5.765	5.720		7.644	7.599		9.524	9.479
33	52.52	51.38	63	100.27	99.13	93	148.01	146.87	123	195.76	194.62	153	243.51	242.37
	2.068	2.023		3.948	3.903		5.827	5.782		7.707	7.662		9.587	9.542
34	54.11	52.97	64	101.86	100.72	94	149.61	148.47	124	197.35	196.21	154	245.10	243.96
	2.130	2.085		4.010	3.965		5.890	5.845		7.770	7.725		9.650	9.605
35	55.70	54.56	65	103.45	102.31	95	151.20	150.06	125	198.94	197.80	155	246.69	245.55
	2.193	2.148		4.073	4.028		5.953	5.908		7.832	7.787		9.712	9.667
36	57.30	56.16	66	105.04	103.90	96	152.79	151.65	126	200.54	199.40	156	248.28	247.14
	2.256	2.211		4.136	4.091		6.015	5.970		7.895	7.850		9.775	9.730
37	58.89	57.75	67	106.63	105.49	97	154.38	153.24	127	202.13	200.99	157	249.87	248.73
	2.318	2.273		4.198	4.153		6.078	6.033		7.958	7.913		9.838	9.793
38	60.48	59.34	68	108.23	107.09	98	155.97	154.83	128	203.72	202.58	158	251.46	250.32
	2.381	2.336		4.261	4.216		6.141	6.096		8.020	7.975		9.900	9.855
39	62.07	60.93	69	109.82	108.68	99	157.56	156.42	129	205.31	204.17	159	253.06	251.92
	2.444	2.399		4.324	4.279		6.203	6.158		8.083	8.038		9.963	9.918
40	63.66	62.52	70	111.41	110.27	100	159.15	158.01	130	206.90	205.76	160	254.65	253.51
	2.506	2.461		4.386	4.341		6.266	6.221		8.146	8.101		10.026	9.981
41	62.25	64.11	71	113.00	111.86	101	160.75	159.61	131	208.49	207.35			
	2.569	2.524		4.449	4.404		6.329	6.284		8.208	8.163			
42	66.85	65.71	72	114.59	113.45	102	162.34	161.20	132	210.08	208.94			
	2.632	2.587		4.511	4.466		6.391	6.346		8.271	8.226			

HTS® 8mm Sprocket Diameters

No. of Teeth	Diameters mm PD	Diameters mm OD	No. of Teeth	Diameters mm PD	Diameters mm OD	No. of Teeth	Diameters mm PD	Diameters mm OD	No. of Teeth	Diameters mm PD	Diameters mm OD	No. of Teeth	Diameters mm PD	Diameters mm OD
	in PD	in OD		in PD	in OD		in PD	in OD		in PD	in OD		in PD	in OD
22	56.02 2.206	54.66 2.152	57	145.15 5.715	143.78 5.660	92	234.28 9.223	232.90 9.169	127	323.41 12.733	322.03 12.678	162	412.53 16.241	411.16 16.187
23	58.57 2.306	57.20 2.252	58	147.70 5.815	146.32 5.761	93	236.82 9.324	235.45 9.270	128	325.95 12.833	324.58 12.779	163	415.08 16.342	413.70 16.288
24	61.12 2.406	59.74 2.352	59	150.24 5.915	148.87 5.861	94	239.37 9.424	238.00 9.370	129	328.50 12.933	327.12 12.879	164	417.62 16.442	416.25 16.388
25	63.66 2.506	62.28 2.452	60	152.79 6.015	151.42 5.961	95	241.92 9.524	240.54 9.470	130	331.04 13.033	329.67 12.979	165	420.17 16.542	418.8 16.488
26	66.21 2.607	64.85 2.553	61	155.34 6.116	153.96 6.062	96	244.46 9.624	243.09 9.570	131	333.59 13.133	332.22 13.079	166	422.72 16.642	421.34 16.588
27	68.75 2.707	67.39 2.653	62	157.88 6.216	156.51 6.162	97	247.01 9.725	245.64 9.671	132	336.14 13.234	334.76 13.180	167	425.26 16.743	423.89 16.689
28	71.30 2.807	70.08 2.759	63	160.43 6.316	159.06 6.262	98	249.55 9.825	248.18 9.771	133	338.68 13.334	337.31 13.280	168	427.81 16.843	426.44 16.789
29	73.85 2.907	72.62 2.859	64	162.97 6.416	161.60 6.362	99	252.10 9.925	250.73 9.871	134	341.23 13.434	339.86 13.380	169	430.35 16.943	428.98 16.889
30	76.39 3.008	75.13 2.958	65	165.52 6.517	164.15 6.463	100	254.65 10.025	253.28 9.971	135	343.77 13.534	342.40 13.480	170	432.90 17.043	431.53 16.989
31	78.94 3.108	77.65 3.057	66	168.07 6.617	166.70 6.563	101	257.19 10.126	255.82 10.072	136	346.32 13.635	344.95 13.581	171	435.45 17.144	434.08 17.090
32	81.49 3.208	80.16 3.156	67	170.61 6.717	169.24 6.663	102	259.74 10.226	258.37 10.172	137	348.87 13.735	347.50 13.681	172	437.99 17.244	436.62 17.190
33	84.03 3.308	82.68 3.255	68	173.16 6.817	171.79 6.763	103	262.29 10.326	260.92 10.272	138	351.41 13.835	350.04 13.781	173	440.54 17.344	439.17 17.290
34	86.58 3.409	85.22 3.355	69	175.71 6.918	174.34 6.864	104	264.83 10.427	263.46 10.372	139	353.96 13.935	352.59 13.881	174	443.09 17.444	441.72 17.390
35	89.13 3.509	87.76 3.455	70	178.25 7.018	176.88 6.964	105	267.38 10.527	266.01 10.473	140	356.51 14.036	355.14 13.982	175	445.63 17.544	444.26 17.491
36	91.67 3.609	90.30 3.555	71	180.80 7.118	179.43 7.064	106	269.93 10.628	268.56 10.573	141	359.05 14.136	357.68 14.082	176	448.18 17.645	446.81 17.591
37	94.22 3.709	92.85 3.655	72	183.35 7.218	181.97 7.164	107	272.47 10.728	271.10 10.673	142	361.60 14.236	360.23 14.182	177	450.73 17.745	449.36 17.691
38	96.77 3.810	95.39 3.756	73	185.89 7.319	184.52 7.265	108	275.02 10.828	273.65 10.771	143	364.15 14.336	362.77 14.282	178	453.27 17.845	451.90 17.791
39	99.31 3.910	97.94 3.856	74	188.44 7.419	187.07 7.365	109	277.57 10.928	276.19 10.874	144	366.69 14.437	365.32 14.383	179	455.82 17.946	454.45 17.892
40	101.86 4.010	100.49 3.956	75	190.99 7.519	189.61 7.465	110	280.11 11.028	278.74 10.974	145	369.24 14.537	367.87 14.483	180	458.37 18.046	456.99 17.992
41	104.41 4.110	103.03 4.056	76	193.53 7.619	192.16 7.565	111	282.66 11.128	281.29 11.074	146	371.79 14.637	370.41 14.583	181	460.91 18.146	459.54 18.092
42	106.95 4.211	105.58 4.157	77	196.08 7.720	194.71 7.666	112	285.21 11.229	283.83 11.175	147	374.33 14.737	372.96 14.683	182	463.46 18.246	462.09 18.192
43	109.50 4.311	108.13 4.257	78	198.63 7.820	197.25 7.766	113	287.75 11.329	286.38 11.275	148	376.88 14.838	375.51 14.784	183	466.01 18.347	464.63 18.293
44	112.05 4.411	110.67 4.357	79	201.17 7.920	199.81 7.866	114	290.30 11.429	288.93 11.375	149	379.43 14.938	378.05 14.884	184	468.55 18.447	467.18 18.393
45	114.59 4.511	113.22 4.457	80	203.72 8.020	202.35 7.966	115	292.85 11.529	291.47 11.475	150	381.96 15.038	380.60 14.984	185	471.10 18.547	469.73 18.493
46	117.14 4.612	115.77 4.558	81	206.26 8.121	204.89 8.067	116	295.39 11.630	294.02 11.576	151	384.52 15.138	353.15 15.084	186	473.65 18.647	472.27 18.593
47	119.68 4.712	118.31 4.658	82	208.81 8.221	207.44 8.167	117	297.94 11.730	296.57 11.676	152	387.06 15.239	385.70 15.185	187	476.19 18.748	474.82 18.694
48	122.23 4.812	120.86 4.758	83	211.36 8.321	209.99 8.267	118	300.48 11.830	299.11 11.776	153	389.61 15.339	388.24 15.285	188	478.74 18.848	477.37 18.794
49	124.78 4.912	123.41 4.858	84	213.90 8.421	212.53 8.367	119	303.03 11.930	301.66 11.876	154	392.16 15.439	390.79 15.385	189	481.28 18.948	479.91 18.894
50	127.32 5.013	125.95 4.959	85	216.45 8.522	215.08 8.468	120	305.58 12.031	304.21 11.977	155	394.70 15.540	393.33 15.486	190	483.83 19.048	482.46 18.994
51	129.87 5.113	128.50 5.059	86	219.00 8.622	217.63 8.568	121	308.12 12.131	306.75 12.077	156	397.25 15.640	395.88 15.586	191	486.38 19.149	485.01 19.095
52	132.42 5.213	131.05 5.159	87	221.54 8.722	220.17 8.668	122	310.67 12.231	309.30 12.177	157	399.80 15.740	398.43 15.686	192	488.92 19.249	487.55 19.195
53	134.96 5.314	133.59 5.259	88	224.09 8.822	222.72 8.768	123	313.22 12.331	311.85 12.227	158	402.34 15.840	400.97 15.786			
54	137.51 5.414	136.14 5.360	89	226.64 8.923	225.27 8.869	124	315.76 12.432	314.39 12.378	159	404.89 15.941	403.52 15.887			
55	140.06 5.514	138.68 5.460	90	229.18 9.023	227.81 8.969	125	318.31 12.532	316.94 12.478	160	407.44 16.041	406.07 15.987			
56	142.60 5.614	141.23 5.560	91	231.73 9.123	230.36 9.069	126	320.86 12.632	319.48 12.578	161	409.98 16.141	408.61 16.087			

HTS® 14mm
Sprocket Diameters

No. of Teeth	Diameters mm	Diameters in	No. of Teeth	Diameters mm	Diameters in	No. of Teeth	Diameters mm	Diameters in	No. of Teeth	Diameters mm	Diameters in	No. of Teeth	Diameters mm	Diameters in
	PD	OD		PD	OD		PD	OD		PD	OD		PD	OD
28	124.78 4.912	122.12 4.808	66	294.12 11.579	291.32 11.469	104	463.46 18.246	460.66 18.136	142	632.80 24.913	630.01 24.803	180	802.14 31.580	799.35 31.47
29	129.23 5.088	126.57 4.983	67	298.57 11.755	295.78 11.645	105	467.92 18.422	465.12 18.312	143	637.26 25.089	634.46 24.979	181	806.60 31.756	803.80 31.646
30	133.69 5.263	130.99 5.157	68	303.03 11.930	300.24 11.820	106	472.37 18.597	469.58 18.487	144	641.71 25.264	638.92 25.154	182	811.05 31.931	808.26 31.821
31	138.15 5.439	135.46 5.333	69	307.49 12.106	304.69 11.996	107	476.83 18.773	474.03 18.663	145	646.17 25.440	643.37 25.330	183	815.51 32.107	812.72 31.997
32	142.60 5.614	139.88 5.507	70	311.94 12.281	309.15 12.171	108	481.28 18.948	478.49 18.838	146	650.63 25.615	647.83 25.505	184	819.97 32.252	817.17 32.172
33	147.06 5.790	144.35 5.683	71	316.40 12.457	313.61 12.347	109	485.74 19.124	482.95 19.014	147	655.08 25.791	652.29 25.681	185	824.42 32.458	821.63 32.348
34	151.52 5.965	148.79 5.858	72	320.86 12.632	318.06 12.522	110	490.20 19.299	487.40 19.189	148	659.54 25.966	656.74 25.856	186	828.88 32.633	826.08 32.523
35	155.98 6.141	153.24 6.033	73	325.31 12.808	322.52 12.698	111	494.65 19.475	491.86 19.365	149	663.99 26.141	661.20 26.031	187	833.33 32.808	830.54 32.698
36	160.43 6.316	157.68 6.208	74	329.77 12.983	326.97 12.873	112	499.11 19.650	496.32 19.540	150	668.45 26.317	665.66 26.207	188	837.79 32.954	835.00 32.874
37	164.88 6.491	162.13 6.383	75	334.22 13.158	331.43 13.048	113	503.57 19.825	500.77 19.715	151	672.91 26.492	670.11 26.382	189	842.25 33.159	839.45 33.049
38	169.34 6.667	166.60 6.559	76	338.68 13.334	335.89 13.224	114	508.20 20.001	505.23 19.891	152	677.36 26.668	674.57 26.558	190	846.70 33.335	843.91 33.225
39	173.80 6.842	171.02 6.733	77	343.14 13.509	340.34 13.399	115	512.48 20.176	509.68 20.056	153	681.82 26.843	679.03 26.733	191	851.16 33.510	848.37 33.400
40	178.25 7.018	175.49 6.909	78	347.59 13.685	344.80 13.575	116	516.93 20.352	514.14 20.242	154	690.73 27.194	687.94 27.084	192	855.62 33.686	852.82 33.576
41	182.71 7.193	179.92 7.083	79	352.05 13.860	349.26 13.750	117	521.39 20.527	518.60 20.417	155	690.73 27.194	687.94 27.084	193	860.07 33.861	857.28 33.751
42	187.17 7.369	184.37 7.259	80	356.51 14.036	353.71 13.926	118	525.85 20.703	523.05 20.593	156	695.19 27.370	692.39 27.260	194	864.53 34.037	861.75 33.927
43	191.62 7.544	188.83 7.434	81	360.96 14.211	358.17 14.101	119	530.30 20.878	527.51 20.768	157	699.64 27.545	696.85 27.435	195	868.98 34.212	866.44 34.112
44	196.08 7.720	193.28 7.610	82	365.42 14.387	362.63 14.277	120	534.76 21.054	531.97 20.944	158	704.10 27.720	701.31 27.610	196	873.44 34.387	870.64 34.277
45	200.53 7.895	197.74 7.785	83	369.88 14.562	367.08 14.452	121	539.22 21.229	536.42 21.119	159	708.56 27.896	705.76 27.786	197	877.90 34.553	875.11 34.453
46	204.99 8.071	202.20 7.961	84	374.33 14.737	371.54 14.627	122	543.67 21.404	540.88 21.294	160	713.01 28.071	710.22 27.961	198	882.35 34.738	879.55 34.628
47	209.45 8.246	206.65 8.136	85	378.79 14.913	375.99 14.803	123	548.13 21.580	545.34 21.470	161	717.47 28.247	714.68 28.137	199	886.81 34.914	884.02 34.804
48	213.90 8.421	211.11 8.311	86	383.24 15.068	380.45 14.978	124	552.59 21.755	549.79 21.645	162	721.93 28.422	719.13 28.312	200	891.27 35.089	888.47 34.979
49	218.36 8.597	215.57 8.487	87	387.70 15.264	384.91 15.154	125	557.04 21.931	554.25 21.821	163	726.38 28.598	723.59 28.488	201	895.72 35.265	892.94 35.155
50	222.82 8.772	220.02 8.662	88	392.16 15.439	389.36 15.329	126	561.50 22.106	558.70 21.996	164	730.84 28.773	728.05 28.663	202	900.18 35.440	897.38 35.330
51	227.27 8.948	224.48 8.838	89	396.61 15.615	393.82 15.505	127	565.95 22.282	563.16 22.172	165	735.30 28.949	782.50 28.839	203	906.64 35.616	901.85 35.506
52	231.73 9.123	228.94 9.013	90	401.07 15.790	398.28 15.680	128	570.41 22.457	567.62 22.347	166	739.75 29.124	736.96 29.014	204	909.09 35.791	906.30 35.681
53	236.19 9.229	233.39 9.189	91	405.53 15.966	402.73 15.856	129	574.87 22.633	572.07 22.523	167	744.21 29.299	741.41 29.189	205	913.55 35.966	910.74 35.856
54	240.64 9.474	237.85 9.354	92	409.98 16.141	407.19 16.031	130	579.32 22.808	576.53 22.689	168	748.66 29.475	745.87 29.365	206	918.00 36.142	915.21 36.032
55	245.10 9.650	242.30 9.540	93	414.44 16.316	411.64 16.206	131	583.78 22.983	580.99 22.873	169	753.12 29.650	750.33 29.540	207	922.46 36.317	919.66 36.207
56	249.55 9.825	246.76 9.715	94	418.90 16.492	416.10 16.382	132	588.24 23.159	585.44 23.049	170	757.58 29.826	754.78 29.716	208	926.92 36.493	924.13 36.383
57	254.01 10.000	251.22 9.890	95	423.35 16.667	420.56 16.557	133	592.69 23.334	589.90 23.224	171	762.03 30.001	759.24 29.891	209	931.97 36.668	928.57 36.558
58	258.47 10.176	255.67 10.066	96	427.81 16.843	425.01 16.733	134	597.15 23.510	594.35 23.400	172	766.49 30.177	763.70 30.067	210	935.83 36.844	933.04 36.734
59	262.92 10.351	260.13 10.241	97	432.26 17.018	429.47 16.908	135	601.61 23.685	598.81 23.575	173	770.95 30.352	768.15 3.242	211	940.29 37.019	937.49 36.909
60	267.38 10.527	264.59 10.417	98	436.72 17.194	433.93 17.084	136	606.06 23.861	603.27 23.751	174	775.40 30.528	772.61 30.418	212	944.74 37.195	941.96 37.085
61	271.84 10.702	269.04 10.592	99	441.18 17.369	438.38 17.259	137	610.52 24.036	607.72 23.926	175	779.86 30.703	777.06 30.593	213	949.20 37.370	946.40 37.260
62	276.29 10.878	273.50 10.768	100	445.63 17.545	442.84 17.435	138	614.97 24.212	612.18 24.102	176	784.32 30.878	781.52 30.768	214	953.65 37.545	950.85 37.435
63	280.75 11.053	277.95 10.943	101	450.09 17.720	447.30 17.610	139	619.43 24.387	616.64 24.277	177	788.77 31.054	785.98 30.944	215	958.11 37.721	955.32 37.611
64	285.21 11.229	282.41 11.119	102	454.55 17.895	451.75 17.785	140	623.89 24.562	621.09 24.452	178	793.23 31.228	790.43 31.119	216	962.57 37.896	959.76 37.786
65	289.66 11.404	286.87 11.294	103	459.00 18.071	456.21 17.961	141	628.34 24.738	625.55 24.628	179	797.68 31.405	794.89 31.295			

HTS® 20mm Sprocket Diameters

No. of Teeth	Diameters mm PD	Diameters mm OD	No. of Teeth	Diameters mm PD	Diameters mm OD	No. of Teeth	Diameters mm PD	Diameters mm OD	No. of Teeth	Diameters mm PD	Diameters mm OD	No. of Teeth	Diameters mm PD	Diameters mm OD
	in PD	in OD		in PD	in OD		in PD	in OD		in PD	in OD		in PD	in OD
34	216.45 8.522	212.13 8.352	71	452.00 17.795	447.68 17.625	108	687.55 27.069	683.23 26.899	145	923.10 36.342	918.78 36.172	182	1158.65 45.616	1154.33 45.446
35	222.82 8.772	218.50 8.602	72	458.37 18.046	454.05 17.876	109	693.92 27.320	689.60 27.150	146	929.46 36.593	925.15 36.423	183	1165.01 45.867	1160.70 45.697
36	229.18 9.023	224.87 8.853	73	464.73 18.297	460.41 18.127	110	700.28 27.570	695.96 27.400	147	935.83 36.840	931.51 36.674	184	1171.38 46.117	1167.06 45.947
37	235.55 9.274	231.23 9.104	74	471.10 18.547	466.78 18.377	111	706.65 27.821	702.33 27.651	148	942.20 37.094	937.88 36.924	185	1177.75 46.368	1173.43 46.198
38	241.92 9.524	237.60 9.354	75	477.46 18.798	473.15 18.628	112	713.01 28.071	708.70 27.901	149	948.56 37.345	944.25 37.175	186	1184.11 46.619	1179.79 46.449
39	248.28 9.775	243.96 9.605	76	483.83 19.048	479.51 18.878	113	719.38 28.322	715.06 28.152	150	954.93 37.596	950.61 37.426	187	1190.48 46.859	1186.16 46.699
40	254.65 10.026	250.33 9.855	77	490.20 19.299	485.88 19.129	114	725.75 28.573	721.43 28.403	151	961.30 37.846	956.98 37.676	188	1196.85 47.120	1192.53 46.950
41	261.01 10.276	256.70 10.106	78	496.56 19.550	492.25 19.380	115	732.11 28.823	727.79 28.653	152	967.66 38.097	963.34 37.927	189	1203.21 47.371	1198.89 47.201
42	267.38 10.527	263.06 10.357	79	502.93 19.800	498.61 19.630	116	738.48 29.074	734.16 28.904	153	974.03 38.348	969.71 38.178	190	1209.58 47.621	1205.26 47.451
43	273.75 10.777	269.43 10.607	80	509.30 20.051	504.98 19.881	117	744.85 29.325	740.53 29.155	154	980.39 38.598	976.08 38.428	191	1215.94 47.672	1211.63 47.702
44	280.11 11.028	275.79 10.858	81	515.66 20.302	511.34 20.132	118	751.21 29.575	746.89 29.405	155	986.76 38.849	982.44 38.679	192	1222.31 48.122	1217.99 47.952
45	286.48 11.279	282.16 11.109	82	522.03 20.552	517.71 20.382	119	757.58 29.826	753.26 29.656	156	993.13 39.099	988.81 38.929	193	1228.68 48.373	1224.36 48.203
46	292.85 11.529	288.53 11.469	83	528.39 20.803	524.08 20.633	120	763.94 30.077	759.63 29.907	157	999.49 39.350	995.18 39.180	194	1235.04 48.624	1230.72 48.454
47	299.21 11.780	294.89 11.610	84	534.76 21.054	530.44 20.884	121	770.31 30.327	765.99 30.157	158	1005.86 39.601	1001.54 39.431	195	1241.41 48.874	1237.09 48.704
48	305.58 12.031	301.26 11.861	85	541.13 21.304	536.81 21.134	122	776.68 30.578	772.36 30.408	159	1012.23 39.851	1007.91 39.681	196	1247.77 49.125	1243.46 48.955
49	311.94 12.281	307.63 12.111	86	547.49 21.555	543.18 21.385	123	783.04 30.828	778.72 30.658	160	1018.59 40.102	1014.27 39.932	197	1254.14 49.376	1249.82 49.206
50	318.31 12.532	313.99 12.362	87	553.86 21.805	549.54 21.635	124	789.41 31.079	785.09 30.909	161	1024.96 40.353	1020.64 40.183	198	1260.51 49.626	1256.19 49.456
51	324.68 12.763	320.36 12.613	88	560.23 22.056	555.91 21.886	125	795.77 31.330	791.46 31.160	162	1031.32 40.603	1027.01 40.433	199	1266.87 49.577	1262.56 49.707
52	331.04 13.033	326.72 12.863	89	566.59 22.307	562.27 22.137	126	805.14 31.580	797.82 31.410	163	1037.69 40.854	1033.37 40.684	200	1273.24 50.128	1268.92 49.958
53	337.41 13.284	333.09 13.114	90	572.96 22.557	568.64 22.387	127	808.51 31.831	804.19 31.661	164	1044.06 41.105	1039.74 40.935	201	1279.61 50.378	1275.29 50.208
54	343.77 13.534	339.46 13.364	91	579.32 22.808	575.01 22.638	128	814.87 32.082	810.56 31.912	165	1050.42 41.355	1046.10 41.185	202	1285.97 50.629	1281.65 50.459
55	350.14 13.785	345.82 13.615	92	585.69 23.059	581.37 22.889	129	821.24 32.332	816.92 32.162	166	1056.79 41.606	1052.47 41.436	203	1292.34 50.679	1288.02 50.709
56	356.51 14.036	352.19 13.856	93	592.06 23.309	587.74 23.139	130	827.61 32.583	823.29 32.413	167	1063.16 41.856	1058.34 41.686	204	1298.70 51.130	1294.39 50.960
57	362.87 14.286	358.56 14.116	94	598.42 23.560	594.10 23.390	131	833.97 32.834	829.65 32.664	168	1069.52 42.107	1065.20 41.937	205	1305.07 51.381	1300.75 51.211
58	369.24 14.537	364.92 14.367	95	604.72 23.811	600.47 43.641	132	840.34 33.084	836.02 32.914	169	1075.89 42.358	1071.57 42.188	206	1311.44 51.631	1307.12 51.461
59	375.61 14.788	371.29 14.618	96	611.15 24.061	606.84 23.891	133	846.70 33.335	842.39 33.165	170	1082.25 42.608	1077.94 42.438	207	1317.80 51.882	1313.48 51.712
60	381.97 15.038	377.65 14.868	97	617.52 24.312	613.20 24.142	134	853.07 33.585	848.75 33.415	171	1088.62 42.859	1084.30 42.689	208	1324.17 52.133	1319.85 51.963
61	388.34 15.289	384.02 15.119	98	623.89 24.562	619.57 24.392	135	859.44 33.836	855.12 33.666	172	1094.99 43.110	1090.67 42.940	209	1330.54 52.383	1326.22 52.213
62	394.70 15.540	390.39 15.370	99	630.25 24.813	625.94 24.643	136	865.80 34.087	861.48 33.917	173	1101.35 43.350	1097.03 43.190	210	1336.90 52.634	1332.58 52.464
63	401.07 15.790	396.75 15.620	100	636.62 25.064	632.30 24.894	137	872.17 34.337	867.85 34.167	174	1107.72 43.611	1103.40 43.441	211	1343.27 52.885	1338.95 52.715
64	407.44 16.041	403.12 15.871	101	642.99 25.314	638.67 25.144	138	878.54 34.588	874.22 34.418	175	1114.08 43.862	1109.77 43.692	212	1349.63 53.135	1345.32 52.965
65	413.80 16.291	409.48 16.121	102	649.35 25.565	645.03 25.395	139	884.90 34.839	880.58 34.669	176	1120.45 44.112	1116.13 43.942	213	1356.00 53.386	1351.68 53.216
66	420.17 16.542	415.85 16.372	103	655.72 25.816	651.40 25.646	140	891.27 35.089	886.95 34.919	177	1126.82 44.363	1122.50 44.193	214	1362.37 53.635	1358.05 53.456
67	426.54 16.793	422.22 16.623	104	662.08 26.066	657.77 25.896	141	897.63 35.340	893.32 35.170	178	1133.18 44.614	1128.87 44.444	215	1368.73 53.887	1364.41 53.717
68	432.90 17.043	428.58 16.873	105	668.45 26.317	664.13 26.147	142	904.00 35.591	899.68 35.421	179	1139.55 44.854	1135.23 44.694	216	1375.10 54.136	1370.79 53.958
69	439.27 17.299	434.95 17.124	106	674.82 26.568	670.50 26.398	143	910.37 35.841	906.05 35.671	180	1145.92 45.115	1141.60 44.945			
70	445.63 17.545	441.32 17.375	107	681.18 26.818	676.87 26.648	144	916.73 36.092	912.41 35.922	181	1152.28 45.365	1147.96 45.195			

DRIVE ALIGNMENT

To assure proper drive alignment, you should refer to the information in this section for center distance alignment. The alternative is to change the idler position, so that the belt can be slipped onto the drive easily. When you install the belt, never force it over the flange. This may cause belt tensile damage.

Positive belts are most sensitive to misalignment, so never use this kind of drive in applications where misalignment is prevalent. Inconsistent belt wear and premature tensile failure may result.

The two most common types of misalignment can be seen in the drawings below. Parallel misalignment is caused when the driver and driven shafts are parallel, but the two sprockets lie in different planes. When the two shafts are not parallel, the drive is angularly misaligned.

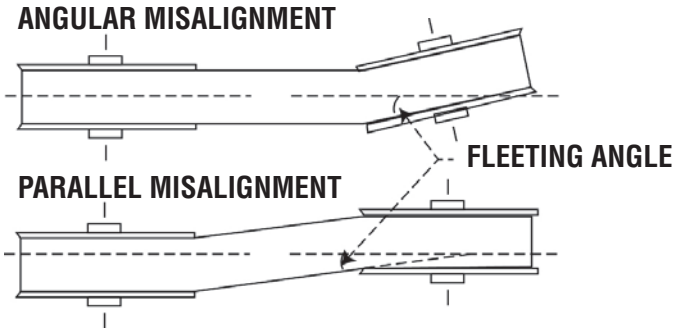
A fleeting angle (shown here) shows where the belt enters and exits the sprocket, and equals the sum of the parallel and angular misalignments.

Any degree of sprocket misalignment will result in some belt life reduction. Misalignment of all positive belt drives should not exceed 1/4" or 1/16" per foot of center distance. Alignment should be checked with a good straight-edge tool applied to their machined side surfaces from driver to driven and from driven to driver shafts. This way the effect of parallel and angular misalignment can be observed.

Drive misalignment can also cause problems of belt tracking. Some tracking is normal and will not affect performance. However, where center distance is greater than eight times the small sprocket diameter, tracking can be a problem. Special adjustment may be needed. You have to correct the parallel position of the two sprockets until one flange guides the belt in the system and the belt tracks fully on all sprockets. Regardless of the drive's center distance, the best operation will be with the belt contacting only one flange in the system.

You will find the real application problem when the belt contacts flanges on opposite sides of the sprockets. This traps the belt into undesirable parallel misalignment.

Improper bushing installation can result in the entire bushing/sprocket assembly to be "cocked" on the shaft. This leads to angular misalignment. Be sure to follow 's bushing installation instructions.



INSTALLATION AND TENSIONING ALLOWANCES

We do not recommend fixed center drives. To avoid belt damage and excessive wear, refer to the Distance Allowance Charts. The standard installation allowance is the minimum decrease in the center distance required to install a belt when flanged sprockets are removed from their shafts for belt installation. The charts first column spells this out with more comprehensive information needed for the minimum increase in center distance required for a belt's tension during it's normal life.

If a belt is to be installed over flanged sprockets without removing them, the additional installation center distance allowances shown in the second table must be added to the first table data.

Distance Allowance Chart

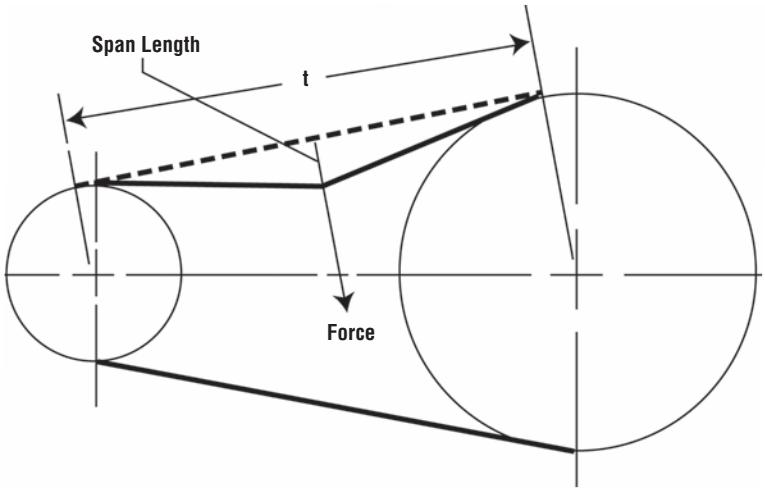
Belt Length (in)	* Standard Installation Allowance	Tensioning Allowance (Any Drive)
20 and under	0.04"	0.03"
Over 20 to 40	0.05"	0.03"
Over 40 to 60	0.07"	0.04"
Over 60 to 90	0.09"	0.05"
Over 90 to 120	0.11"	0.05"
Over 120 to 160	0.14"	0.05"
Over 160 to 190	0.17"	0.05"
Over 190 to 260	0.21"	0.05"

* Flanged Sprockets Removed for Installation.

HTS BELT TENSIONING AND DEFLECTION FORCE

Lay the belt on the sprockets, adjusting the takeup, so that the belt teeth mesh securely with sprocket grooves. Measure the belt span "t." Then tighten the belt, so that it deflects 1/64" for each inch of belt span when a force is applied. (See Table below.)

Example: A 14mm pitch belt, 85mm wide, with a span of 30" and a maximum force of 28 lbs. applied, should deflect 30/64 inch. Deflection 1/64 per inch of span. (Measure the span length "t" as shown in the sketch below).



$$t = \sqrt{C^2 - \frac{(D - d)^2}{2}}$$

These ranges of deflection forces are applicable for drive installation. Actual operation tension depends on the number of teeth mesh, system rigidity, peak loads, etc.

Belt Pitch	Belt Width	Force*
5mm	9mm	9 to 18 oz.
	15mm	1 to 2 lbs.
	25mm	1-1/2 to 3 lbs.
8mm	20mm	3 to 4 lbs.
	30mm	5 to 6-1/2 lbs.
	50mm	9 to 12 lbs.
	85mm	16 to 20 lbs.
14mm	40 mm	10 to 13 lbs.
	55mm	15 to 18 lbs.
	85 mm	23 to 28 lbs.
	115mm	32 to 39 lbs.
	170mm	48 to 57 lbs.
20mm	115mm	45 to 55 lbs.
	170mm	70 to 85 lbs.
	230mm	95 to 120 lbs.
	290mm	120 to 150 lbs.
	340mm	145 to 180 lbs.

*Force applies to speeds exceeding 600 rpm.

Note: For belts wider than 2", you can avoid belt distortion by placing a 3/4" or 1" metal strip across the belt between belt and tension tester.

High HP HTS Synchronous Sprockets



"W" High HP HTS® sprockets (RPP® Tooth Profile) – run with Hawk Pd®, Panther®, QT Power Chain® belts.

"W" High HP HTS® sprockets are designed to run with latest design, higher horsepower belts.

Martin's high HP HTS® sprockets are designed to run with today's highest horsepower RPP® profile belts.

High HP HTS® synchronous sprockets allow you more flexibility in your selection criteria. The expanded line allows you to fit the application with the most cost effective sprockets.

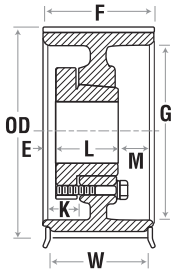
W 24 8M 22 - JA

- **W** — Hight HP HTS®
- **24** — Number of Teeth
- **8M** — Belt Pitch
  - 8mm
  - 14mm
- **22** — Belt Width (mm)
  - 8mm: 12, 22, 35, 60
  - 14mm: 20, 42, 65, 90, 120
- **JA** — Bushing or MPB

- Available in 8mm and 14mm pitches
- Belt widths: 12mm, 22mm, 35mm, 60mm (8mm pitch)
  20mm, 42mm, 65mm, 90mm, 120mm (14mm pitch)
- Available in QD, TB or MPB styles from stock.
- **Typical Part Number: W248M22-JA**

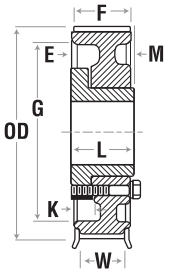
High HP HTS® Sprockets
8mm

Type A



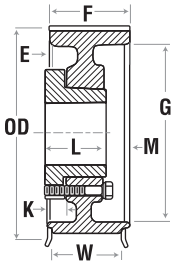
Type AF

Type C



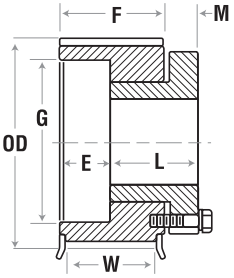
Type CF

Type D



Type DF

Type E •



Type EF •

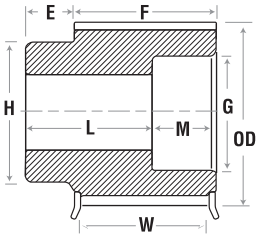
No. of Teeth	Catalog Number	Bore	Pitch	Diameter		Type +	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Flange			E	L	M	K	H	F	G	W	
8mm Pitch, 12 mm (.47 in.) Wide Belts (8M-12)																
22	W228M12-MPB	MPB	2.206	2.154	2.562	MPB	1.188	0.623	1.452	—	—	1.620	0.827	—	0.577	1.0
24	W248M12-JA	JA	2.406	2.354	2.75	EF-1 •	1.25	0.265	1.063	0.5	—	—	0.827	1.34	0.577	0.5
26	W268M12-JA	JA	2.607	2.554	2.937	EF-1 •	1.25	0.265	1.063	0.5	—	—	0.827	1.34	0.577	0.6
28	W288M12-H	H	2.807	2.755	3.156	EF-1 •	1.5	-0.048	1.25	0.375	—	—	0.827	1.57	0.577	0.7
30	W308M12-H	H	3.008	2.955	3.344	EF-1 •	1.5	-0.048	1.25	0.375	—	—	0.827	1.57	0.577	0.9
32	W328M12-H	H	3.208	3.155	3.562	EF-1 •	1.5	-0.048	1.25	0.375	—	—	0.827	1.57	0.577	1.1
34	W348M12-SH	SH	3.409	3.355	3.75	DF-1	1.688	0.5	1.313	0.014	—	—	0.827	2.75	0.577	1.1
36	W368M12-SH	SH	3.609	3.556	3.937	DF-1	1.688	0.5	1.313	0.014	—	—	0.827	2.82	0.577	1.3
38	W388M12-SH	SH	3.810	3.756	4.156	DF-1	1.688	0.5	1.313	0.014	—	—	0.827	3	0.577	1.6
40	W408M12-SH	SH	4.010	3.956	4.344	DF-1	1.688	0.5	1.313	0.014	—	—	0.827	3	0.577	1.9
44	W448M12-SDS	SDS	4.411	4.357	4.75	CF-1	2	0.548	1.375	—	0.077	—	0.827	3.5	0.577	2.1
48	W488M12-SDS	SDS	4.812	4.757	5.157	CF-1	2	0.548	1.375	—	0.077	—	0.827	3.800	0.577	2.7
56	W568M12-SDS	SDS	5.614	5.558	5.937	CF-1	2	0.548	1.375	—	0.077	—	0.827	4.600	0.577	4.0
64	W648M12-SDS	SDS	6.416	6.359	6.75	CF-1	2	0.548	1.375	—	0.077	—	0.827	5.400	0.577	5.5
72	W728M12-SDS	SDS	7.218	7.16	7.562	CF-1	2	0.548	1.375	—	0.077	—	0.827	6.200	0.577	7.3
80	W808M12-SDS	SDS	8.020	7.961	8.375	CF-2	2	0.548	1.375	—	0.077	—	0.827	6.900	0.577	9.2
90	W908M12-SDS	SDS	9.023	8.963	—	C-2	2	0.548	1.375	—	0.077	—	0.827	7.625	—	9.5
112	W1128M12-SK	SK	11.229	11.166	—	C-3	2.625	0.688	1.938	0.423	—	—	0.827	9.875	—	13.3
144	W1448M12-SK	SK	14.447	14.37	—	C-3	2.625	0.688	1.938	0.423	—	—	0.827	12.875	—	19.1
192	W1928M12-SF	SF	19.249	19.176	—	C-3	2.938	0.813	2.063	0.423	—	—	0.827	17.625	—	23.0
8mm Pitch, 22 mm (.86 in.) Wide Belts (8M-22)																
22	W228M22-MPB	MPB	2.206	2.154	2.562	MPBF-1	1.188	0.619	1.84	—	—	1.625	1.22	—	0.97	1.3
24	W248M22-JA	JA	2.406	2.354	2.750	EF-1 •	1.25	0.658	1.063	0.5	—	—	1.22	1.34	0.97	0.7
26	W268M22-JA	JA	2.607	2.554	2.937	EF-1 •	1.25	0.658	1.063	0.5	—	—	1.22	1.34	0.97	1.0
28	W288M22-H	H	2.807	2.755	3.156	EF-1 •	1.5	0.345	1.25	0.375	—	—	1.22	1.57	0.97	1.1
30	W308M22-H	H	3.008	2.955	3.344	EF-1 •	1.5	0.345	1.25	0.375	—	—	1.22	1.57	0.97	1.3
32	W328M22-H	H	3.208	3.155	3.562	CF-1 •	1.5	0.030	1.25	—	0.345	—	1.22	1.57	0.97	1.7
34	W348M22-SH	SH	3.409	3.355	3.75	DF-1	1.688	0.092	1.313	—	0.408	—	1.22	2.75	0.97	1.3
36	W368M22-SH	SH	3.609	3.556	3.937	DF-1	1.688	0.092	1.313	—	0.408	—	1.22	2.82	0.97	1.6
38	W388M22-SH	SH	3.810	3.756	4.156	DF-1	1.688	0.092	1.313	—	0.408	—	1.22	3	0.97	1.9
40	W408M22-SH	SH	4.010	3.956	4.344	DF-1	1.688	0.092	1.313	—	0.408	—	1.22	3	0.97	2.3
44	W448M22-SDS	SDS	4.411	4.357	4.75	DF-1	2	0.155	1.375	—	0.47	—	1.22	3.5	0.97	2.5
48	W488M22-SDS	SDS	4.812	4.757	5.157	DF-1	2	0.155	1.375	—	0.47	—	1.22	3.8	0.97	3.2
56	W568M22-SDS	SDS	5.614	5.558	5.937	DF-1	2	0.155	1.375	—	0.47	—	1.22	4.6	0.97	4.6
64	W648M22-SK	SK	6.416	6.359	6.75	DF-1	2.625	0.438	1.938	-0.28	0.25	—	1.22	5.4	0.97	7.7
72	W728M22-SK	SK	7.218	7.16	7.562	DF-1	2.625	0.438	1.938	-0.28	0.25	—	1.22	6.2	0.97	9.1
80	W808M22-SK	SK	8.020	7.961	8.375	DF-2	2.625	0.438	1.938	-0.28	0.25	—	1.22	6.9	0.97	9.1
90	W908M22-SK	SK	9.023	8.963	—	D-2	2.625	0.438	1.938	-0.28	0.25	—	1.22	7.63	—	12.0
112	W1128M22-SK	SK	11.229	11.166	—	D-3	2.625	0.438	1.938	-0.28	0.25	—	1.22	9.88	—	15.3
144	W1448M22-SF	SF	14.447	14.37	—	D-3	2.938	0.563	2.063	-0.28	0.25	—	1.22	12.88	—	19.1
192	W1928M22-E	E	19.249	19.176	—	C-3	3.5	1.202	2.625	0.202	-0.202	—	1.22	17.63	—	38.4

* Weight Shown is for Sprocket Less Bushing.
• Reverse Mount Only

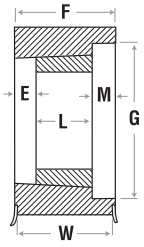
+ The numbers (1=Solid, 2=Web, 3=Arms) within the "Type" indicates construction, and the letter F indicates the sprocket has flanges.

High HP HTS® Sprockets
8mm

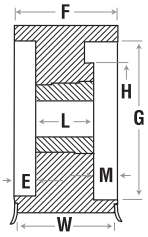
Type MPB



Type K



Type W



Type MPBF | Type KF | Type WF

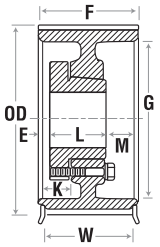
No. of Teeth	Catalog Number	Bore	Pitch	Diameter		Type +	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Flange			E	L	M	K	H	F	G	W	
8mm Pitch, 35 mm (1.38in.) Wide Belts (8M - 35)																
22	W228M35-MPB	MPB	2.206	2.154	2.56	MBPF-1	1.188	0.618	2.35	—	—	1.625	1.73	—	1.428	1.6
24	W248M35-MPB	MPB	2.406	2.354	2.75	MBPF-1	1.250	0.618	2.35	—	—	1.8125	1.73	—	1.428	2.0
26	W268M35-MPB	MPB	2.607	2.554	2.94	MBPF-1	1.375	0.618	2.35	—	—	2	1.73	—	1.428	2.4
28	W288M35-H	H	2.807	2.755	3.16	EF-1 •	1.5	0.855	1.25	0.375	—	—	1.73	1.57	1.428	1.5
30	W308M35-H	H	3.008	2.955	3.34	EF-1 •	1.5	0.855	1.25	0.375	—	—	1.73	1.57	1.428	1.9
32	W328M35-H	H	3.208	3.155	3.56	AF-1 •	1.5	0.245	1.25	0.235	0.62	—	1.73	1.57	1.428	2.4
34	W348M35-SH	SH	3.409	3.355	3.75	AF-1	1.688	0.12	1.3125	0.298	0.62	—	1.73	2.75	1.428	2.4
36	W368M35-SH	SH	3.609	3.556	3.94	AF-1	1.688	0.12	1.3125	0.298	0.62	—	1.73	2.82	1.428	2.8
38	W388M35-SH	SH	3.81	3.756	4.16	AF-1	1.688	0.12	1.3125	0.298	0.62	—	1.73	3	1.428	3.0
40	W408M35-SH	SH	4.01	3.956	4.34	AF-1	1.688	0.12	1.3125	0.298	0.62	—	1.73	3	1.428	2.8
44	W448M35-SD	SD	4.411	4.357	4.75	DF-1	2	0.313	1.8125	0.232	0.25	—	1.73	3.5	1.428	3.1
48	W488M35-SD	SD	4.812	4.757	5.16	DF-1	2	0.313	1.8125	0.232	0.25	—	1.73	3.8	1.428	3.5
56	W568M35-SK	SK	5.614	5.558	5.94	DF-1	2.625	0.438	1.9375	0.23	0.25	—	1.73	4.6	1.428	5.3
64	W648M35-SK	SK	6.416	6.359	6.75	DF-1	2.625	0.438	1.9375	0.23	0.25	—	1.73	5.4	1.428	8.4
72	W728M35-SK	SK	7.218	7.16	7.56	DF-1	2.625	0.438	1.9375	0.23	0.25	—	1.73	6.2	1.428	9.1
80	W808M35-SF	SF	8.02	7.961	8.38	DF-1	2.938	0.563	2.0625	0.23	0.25	—	1.73	6.9	1.428	15.1
90	W908M35-SF	SF	9.023	8.963	—	D-2	2.938	0.563	2.0625	0.23	0.25	—	1.73	7.625	—	20.7
112	W1128M35-SF	SF	11.229	11.166	—	A-3	2.938	0.563	2.0625	0.23	0.25	—	1.73	9.875	—	18.0
144	W1448M35-E	E	14.447	14.37	—	C-3	3.5	0.893	2.6250	—	0.107	—	1.73	12.875	—	38.0
192	W1928M35-E	E	19.249	19.176	—	C-3	3.5	0.893	2.6250	—	0.107	—	1.73	17.625	—	53.0
8mm Pitch, 60 mm (2.36 in.) Wide Belts (8M-60)																
22	W228M60-MPB	MPB	2.206	2.154	2.562	MPBF-1	1.188	0.619	3.375	—	—	1.625	2.756	—	2.506	2.2
24	W248M60-MPB	MPB	2.406	2.354	2.75	MPBF-1	1.25	0.619	3.375	—	—	1.813	2.756	—	2.506	2.7
26	W268M60-MPB	MPB	2.607	2.554	2.937	MPBF-1	1.375	0.619	3.375	—	—	2	2.756	—	2.506	3.3
28	W288M60-MPB	MPB	2.807	2.755	3.156	MPBF-1	1.5	0.619	3.375	—	—	2.281	2.756	—	2.506	4.4
30	W308M60-MPB	MPB	3.008	2.955	3.344	MPBF-1	1.563	0.619	3.375	—	—	2.468	2.756	—	2.506	5.1
32	W328M60-MPB	MPB	3.208	3.155	3.562	MPBF-1	1.625	0.619	3.375	—	—	2.593	2.756	—	2.506	5.9
34	W348M60-MPB	MPB	3.409	3.355	3.750	MPBF-1	1.688	0.619	3.375	—	—	2.796	2.756	—	2.506	6.6
36	W368M60-MPB	MPB	3.609	3.556	3.937	MPBF-1	1.75	0.619	3.375	—	—	3	2.756	—	2.506	7.8
36	W368M60-2012	2012*	3.609	3.556	3.937	KF-1	2	1.506	1.25	—	—	—	2.756	2.82	2.506	2.3
38	W388M60-MPB	MPB	3.810	3.756	4.156	MPBF-1	1.938	0.619	3.375	—	—	3.188	2.756	—	2.506	8.8
38	W388M60-2012	2012*	3.810	3.756	4.156	KF-1	2	1.506	1.25	—	—	—	2.756	3	2.506	2.8
40	W408M60-MPB	MPB	4.010	3.956	4.344	MPBF-1	2.125	0.619	3.375	—	—	3.813	2.756	—	2.506	9.8
40	W408M60-2012	2012*	4.010	3.956	4.344	WF-1	2	1.506	1.25	—	—	—	2.756	3	2.506	2.3
44	W448M60-2517	2517	4.411	4.357	4.75	WF-1	2.5	0.503	1.75	0.503	—	—	2.756	3.5	2.506	5.4
48	W488M60-2517	2517	4.812	4.757	5.157	WF-1	2.5	0.503	1.75	0.503	—	—	2.756	3.8	2.506	3.2
56	W568M60-3020	3020	5.614	5.558	5.937	WF-1	3	0.378	2	0.378	—	—	2.756	4.6	2.506	6.3
64	W648M60-SF	SF	6.416	6.359	6.750	AF-1	2.938	-0.061	2.063	0.754	0.752	—	2.756	5.4	2.506	9.8
72	W728M60-E	E	7.218	7.160	7.562	AF-1	3.5	—	2.625	0.131	1	—	2.756	6.2	2.506	12.8
80	W808M60-E	E	8.020	7.961	8.375	AF-1	3.5	—	2.625	0.131	1	—	2.756	6.9	2.506	19.3
90	W908M60-E	E	9.023	8.963	—	A-1	3.5	—	2.625	0.131	1	—	2.756	7.625	—	20.7
112	W1128M60-F	F	11.229	11.166	—	C-3	4	0.869	3.625	—	0.256	—	2.756	9.875	—	50.3
144	W1448M60-F	F	14.447	14.37	—	C-3	4	0.869	3.625	—	0.256	—	2.756	12.875	—	73.2
192	W1928M60-F	F	19.249	19.176	—	C-3	4	0.869	3.625	—	0.256	—	2.756	17.625	—	81.3

* Weight Shown is for Sprocket Less Bushing.
• Reverse Mount Only

+ The numbers (1=Solid, 2=Web, 3=Arms) within the "Type" indicates construction, and the letter F indicates the sprocket has flanges.

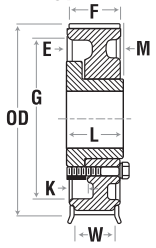
High HP HTS® Sprockets
14mm

Type A



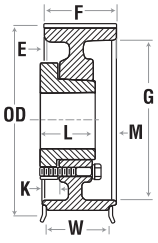
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Type C



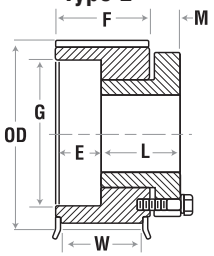
Type CF

Type D



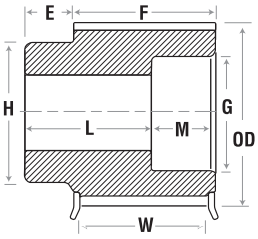
Type DF

Type E •



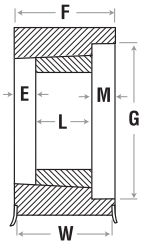
Type EF •

Type MPB



Type MPBF

Type K



Type KF

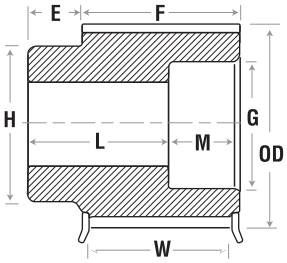
No. of Teeth	Catalog Number	Bore	Pitch	Diameter		Type +	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Flange			E	L	M	K	H	F	G	W	
14mm Pitch, 20 mm (.79in.) Wide Belts (14M - 20)																
28	W2814M20-SK	SK	4.912	4.805	5.56	DF-1	2.625	0.688	1.938	-0.03	—	—	1.22	2.74	0.908	3.6
29	W2914M20-SK	SK	5.088	4.981	5.56	DF-1	2.625	0.688	1.938	-0.03	—	—	1.22	2.74	0.908	4.0
30	W3014M20-SK	SK	5.263	5.156	6.13	DF-1	2.625	0.688	1.938	-0.03	—	—	1.22	2.74	0.908	4.4
32	W3214M20-SK	SK	5.614	5.507	6.13	DF-1	2.625	0.688	1.938	-0.03	—	—	1.22	2.74	0.908	5.3
34	W3414M20-SK	SK	5.965	5.857	6.5	DF-1	2.625	0.688	1.938	-0.03	—	—	1.22	2.74	0.908	6.2
36	W3614M20-SF	SF	6.316	6.208	6.81	CF-1	2.938	0.813	2.063	-0.03	—	—	1.22	3.05	0.908	5.7
38	W3814M20-SF	SF	6.667	6.559	7.16	CF-1	2.938	0.813	2.063	-0.03	—	—	1.22	3.05	0.908	6.5
40	W4014M20-SF	SF	7.018	6.91	7.5	CF-1	2.938	0.813	2.063	-0.03	—	—	1.22	3.05	0.908	7.6
44	W4414M20-E	E	7.72	7.611	8.22	CF-1	3.5	1	2.625	0.405	—	—	1.22	—	0.908	10.2
48	W4814M20-E	E	8.421	8.312	8.94	CF-1	3.5	1	2.625	0.405	—	—	1.22	—	0.908	13.0
52	W5214M20-E	E	9.123	9.014	9.69	CF-1	3.5	1	2.625	0.405	—	—	1.22	—	0.908	16.7
56	W5614M20-E	E	9.825	9.715	10.38	CF-1	3.5	1	2.625	0.405	—	—	1.22	—	0.908	20.4
60	W6014M20-E	E	10.527	10.417	11.06	CF-1	3.5	1	2.625	0.405	—	—	1.22	—	0.908	23.6
64	W6414M20-E	E	11.229	11.118	11.75	CF-1	3.5	1	2.625	0.405	—	—	1.22	—	0.908	27.1
68	W6814M20-E	E	11.93	11.82	12.5	CF-2	3.5	1	2.625	0.405	—	—	1.22	—	0.908	26.8
72	W7214M20-E	E	12.632	12.521	13.19	CF-2	3.5	1	2.625	0.405	—	—	1.22	—	0.908	29.6
80	W8014M20-E	E	14.036	13.924	14.63	CF-2	3.5	1	2.625	0.405	—	—	1.22	—	0.908	35.3
90	W9014M20-E	E	15.79	15.677	—	C-3	3.5	1.188	2.625	0.218	-0.188	—	1.22	13.563	—	36.6
112	W11214M20-E	E	19.65	19.535	—	C-3	3.5	1.188	2.625	0.218	-0.188	—	1.22	17.375	—	48.0
144	W14414M20-E	E	25.264	25.147	—	C-3	3.5	1.188	2.625	0.218	-0.188	—	1.22	23	—	59.4
168	W16814M20-F	F	29.475	29.355	—	C-3	4	1.563	3.625	0.842	-0.438	—	1.22	27.25	—	98.4
192	W19214M20-J	J	33.686	33.564	—	C-3	4.5	1.938	4.5	1.342	-0.626	—	1.22	31.375	—	147.4
216	W21614M20-J	J	37.896	37.772	—	C-3	4.5	1.938	4.5	1.342	-0.626	—	1.22	35.625	—	155.6
14mm Pitch, 42 mm (1.65 in.) Wide Belts (14M-42)																
28	W2814M42-SK	SK	4.912	4.805	5.56	EF-1 •	2.625	0.837	1.938	0.688	—	—	2.087	2.74	1.774	5.5
29	W2914M42-SK	SK	5.088	4.981	5.56	EF-1 •	2.625	0.837	1.938	0.688	—	—	2.087	2.74	1.774	6.2
30	W3014M42-SK	SK	5.263	5.156	6.13	DF-1	2.625	0.267	1.938	0.416	0.421	—	2.087	3.92	1.774	5.9
32	W3214M42-SK	SK	5.614	5.507	6.13	DF-1	2.625	0.267	1.938	0.416	0.42	—	2.087	3.92	1.774	7.4
34	W3414M42-SF	SF	5.965	5.857	6.5	DF-1	2.938	0.391	2.063	0.415	0.421	—	2.087	3.92	1.774	8.8
36	W3614M42-SF	SF	6.316	6.208	6.81	DF-1	2.938	0.391	2.063	0.415	0.421	—	2.087	4.688	1.774	7.8
38	W3814M42-SF	SF	6.667	6.559	7.16	DF-1	2.938	0.391	2.063	0.415	0.421	—	2.087	4.938	1.774	9.2
40	W4014M42-SF	SF	7.018	6.91	7.5	DF-1	2.938	0.391	2.063	0.415	0.421	—	2.087	5.063	1.774	10.8
44	W4414M42-E	E	7.72	7.611	8.22	DF-1	3.5	0.772	2.625	0.234	0.228	—	2.087	6.125	1.774	13.1
48	W4814M42-E	E	8.421	8.312	8.94	DF-1	3.5	0.772	2.625	0.234	0.228	—	2.087	6.5	1.774	17.2
52	W5214M42-E	E	9.123	9.014	9.69	DF-1	3.5	0.772	2.625	0.234	0.228	—	2.087	7.188	1.774	21.2
56	W5614M42-E	E	9.825	9.715	10.38	DF-1	3.5	0.772	2.625	0.234	0.228	—	2.087	7.875	1.774	25.6
60	W6014M42-E	E	10.527	10.417	11.06	DF-1	3.5	0.772	2.625	0.234	0.228	—	2.087	8.5	1.774	30.3
64	W6414M42-E	E	11.229	11.118	11.75	DF-1	3.5	0.772	2.625	0.234	0.228	—	2.087	9.25	1.774	35.1
68	W6814M42-E	E	11.93	11.82	12.5	DF-2	3.5	0.772	2.625	0.234	0.228	—	2.087	10	1.774	33.7
72	W7214M42-E	E	12.632	12.521	13.19	DF-2	3.5	0.772	2.625	0.234	0.228	—	2.087	10.688	1.774	37.3
80	W8014M42-E	E	14.036	13.924	14.63	DF-2	3.5	0.772	2.625	0.234	0.228	—	2.087	12.125	1.774	44.5
90	W9014M42-F	F	15.79	15.677	—	C-3	4	1.125	3.625	0.413	—	—	2.087	13.563	—	50.8
112	W11214M42-F	F	19.65	19.535	—	C-3	4	1.125	3.625	0.413	—	—	2.087	17.375	—	77.3
144	W14414M42-F	F	25.264	25.147	—	C-3	4	1.125	3.625	0.413	—	—	2.087	23	—	97.4
168	W16814M42-F	F	29.475	29.355	—	C-3	4	1.125	3.625	0.413	—	—	2.087	27.25	—	119.3
192	W19214M42-J	J	33.686	33.564	—	C-3	4.5	1.505	4.5	0.908	—	-0.192	2.087	31.375	—	173.5
216	W21614M42-J	J	37.896	37.772	—	C-3	4.5	1.505	4.5	0.908	—	-0.192	2.087	35.625	—	206.0

* Weight Shown is for Sprocket Less Bushing.
• Reverse Mount Only

+ The numbers (1=Solid, 2=Web, 3=Arms) within the "Type" indicates construction, and the letter F indicates the sprocket has flanges.

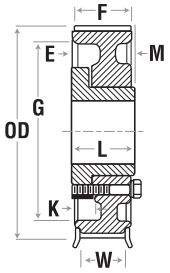
High HP HTS® Sprockets
14mm

Type MPB



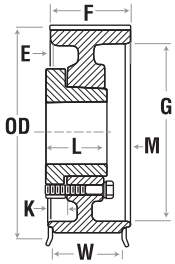
Type MPBF

Type C



Type CF

Type D



Type DF

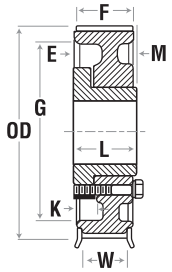
No. of Teeth	Catalog Number	Bore	Pitch	Diameter		Type +	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Flange			E	L	M	K	H	F	G	W	
14mm Pitch, 65 mm (2.56in.) Wide Belts (14M - 65)																
28	W2814M65-MPB	MPB	4.912	4.805	5.56	MPBF-1	2.313	1	4.032	—	-	3.688	3.032	—	2.719	15.0
29	W2914M65-MPB	MPB	5.088	4.981	5.56	MPBF-1	2.313	1	4.032	—	-	3.688	3.032	—	2.719	16.0
30	W3014M65-MPB	MPB	5.263	5.156	6.13	MPBF-1	2.5	1	4.032	—	-	4.141	3.032	—	2.719	18.0
32	W3214M65-MPB	MPB	5.614	5.507	6.13	MPBF-1	2.5	1	4.032	—	-	4.141	3.032	—	2.719	20.2
34	W3414M65-MPB	MPB	5.965	5.857	6.5	MPBF-1	2.688	1	4.032	—	-	4.484	3.032	—	2.719	23.4
36	W3614M65-MPB	MPB	6.316	6.208	6.81	MPBF-1	3	1	4.032	—	-	4.875	3.032	—	2.719	24.5
36	W3614M65-3030	3030*	6.316	6.208	6.81	MPBF-1	3	0.032	3	—	-	—	3.032	—	2.719	10.8
38	W3814M65-MPB	MPB	6.667	6.559	7.16	MPBF-1	3.250	1	4.032	—	-	5.172	3.032	—	2.719	27.6
38	W3814M65-3030	3030*	6.667	6.559	7.16	MPBF-1	3	0.032	3	—	-	—	3.032	—	2.719	13.4
40	W4014M65-MPB	MPB	7.018	6.910	7.5	MPBF-1	3.438	1	4.032	—	-	5.563	3.032	—	2.719	31.5
40	W4014M65-3535	3535*	7.018	6.910	7.5	CF-1	3.5	0.468	3.5	—	-	6.125	3.032	3.875	2.719	13.2
44	W4414M65-E	E	7.720	7.611	8.22	DF-1	3.5	0.125	2.625	0.532	0.875	—	3.032	6.125	2.719	16.2
48	W4814M65-E	E	8.421	8.312	8.94	DF-1	3.5	0.125	2.625	0.532	0.875	—	3.032	6.5	2.719	21.4
52	W5214M65-E	E	9.123	9.014	9.69	DF-1	3.5	0.125	2.625	0.532	0.875	—	3.032	7.188	2.719	25.9
56	W5614M65-F	F	9.825	9.715	10.38	CF-1	4	0.594	3.625	—	0.531	—	3.032	7.875	2.719	36.3
60	W6014M65-F	F	10.527	10.417	11.06	CF-1	4	0.594	3.625	—	0.531	—	3.032	8.5	2.719	43.5
64	W6414M65-F	F	11.229	11.118	11.75	CF-1	4	0.594	3.625	—	0.531	—	3.032	9.25	2.719	51.0
68	W6814M65-F	F	11.930	11.820	12.5	CF-2	4	0.594	3.625	—	0.531	7.75	3.032	10	2.719	47.9
72	W7214M65-F	F	12.632	12.521	13.19	CF-2	4	0.594	3.625	—	0.531	7.75	3.032	10.688	2.719	52.7
80	W8014M65-F	F	14.036	13.924	14.63	CF-2	4	0.594	3.625	—	0.531	7.75	3.032	12.125	2.719	61.2
90	W9014M65-F	F	15.790	15.677	—	C-3	4	0.594	3.625	—	0.531	7.75	3.032	13.563	—	59.8
112	W11214M65-J	J	19.650	19.535	—	C-3	4.5	1.250	4.5	0.219	0.063	9	3.032	17.375	—	104.2
144	W14414M65-M	M	25.264	25.147	—	C-3	5.5	2.063	6.75	1.657	-0.5	11.375	3.032	23	—	197.3
168	W16814M65-M	M	29.475	29.355	—	C-3	5.5	2.063	6.75	1.657	-0.5	11.375	3.032	27.25	—	207.0
192	W19214M65-M	M	33.686	33.564	—	C-3	5.5	2.063	6.75	1.657	-0.5	11.375	3.032	31.375	—	173.5
216	W21614M65-M	M	37.896	37.772	—	C-3	5.5	2.063	6.75	1.657	-0.5	11.375	3.032	35.625	—	253.0

* Weight Shown is for Sprocket Less Bushing.
• Reverse Mount Only

+ The numbers (1=Solid, 2=Web, 3=Arms) within the "Type" indicates construction, and the letter F indicates the sprocket has flanges.

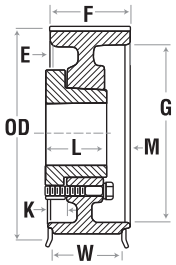
High HP HTS® Sprockets
14mm

Type C



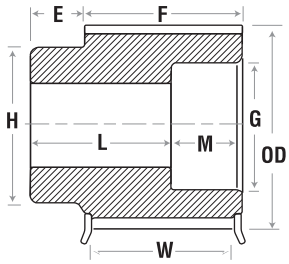
Type CF

Type D



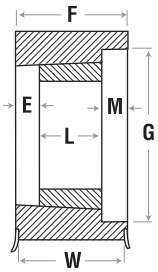
Type DF

Type MPB



Type MPBF

Type K



Type KF

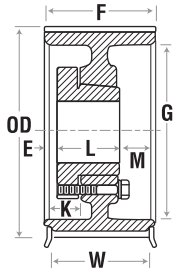
No. of Teeth	Catalog Number	Bore	Pitch	Diameter		Type +	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Flange			E	L	M	K	H	F	G	W	
14mm Pitch, 90 mm (3.54 in.) Wide Belts (14M-90)																
28	W2814M90-MPB	MPB	4.912	4.805	5.56	MPBF-1	2.313	1	5.055	—	—	3.688	4.055	—	3.743	18.9
29	W2914M90-MPB	MPB	5.088	4.981	5.56	MPBF-1	2.313	1	5.055	—	—	3.688	4.055	—	3.743	20.2
30	W3014M90-MPB	MPB	5.263	5.156	6.13	MPBF-1	2.5	1	5.055	—	—	4.141	4.055	—	3.743	10.9
32	W3214M90-MPB	MPB	5.614	5.507	6.13	MPBF-1	2.5	1	5.055	—	—	4.141	4.055	—	3.743	13.9
34	W3414M90-MPB	MPB	5.965	5.857	6.5	MPBF-1	2.688	1	5.055	—	—	4.484	4.055	—	3.743	16.7
36	W3614M90-MPB	MPB	6.316	6.208	6.81	MPBF-1	3	1	5.055	—	—	4.875	4.055	—	3.743	31.4
38	W3814M90-MPB	MPB	6.667	6.559	7.16	MPBF-1	3.25	1	5.055	—	—	5.172	4.055	4.938	3.743	35.5
40	W4014M90-3535	3535	7.018	6.91	7.5	KF-1	3.5	0.555	3.5	—	—	—	4.055	—	3.743	17.1
44	W4414M90-3535	3535	7.72	7.611	8.22	KF-1	4	0.555	3.5	—	—	—	4.055	—	3.743	24.8
48	W4814M90-4040	4040	8.421	8.312	8.94	KF-1	4	0.055	4	—	—	—	4.055	—	3.743	27.0
52	W5214M90-F	F	9.123	9.014	9.69	DF-1	4	0.347	3.625	0.778	0.778	—	4.055	7.188	3.743	34.7
56	W5614M90-F	F	9.825	9.715	10.38	DF-1	4	0.347	3.625	0.778	0.778	—	4.055	7.875	3.743	36.3
60	W6014M90-F	F	10.527	10.417	11.06	DF-1	4	0.347	3.625	0.778	0.778	—	4.055	8.5	3.743	49.8
64	W6414M90-F	F	11.229	11.118	11.75	DF-1	4	0.347	3.625	0.778	0.778	—	4.055	9.25	3.743	57.6
68	W6814M90-F	F	11.93	11.82	12.5	DF-2	4	0.347	3.625	0.778	0.778	—	4.055	10	3.743	54.8
72	W7214M90-F	F	12.632	12.521	13.19	DF-2	4	0.347	3.625	0.778	0.778	—	4.055	10.688	3.743	60.0
80	W8014M90-J	J	14.036	13.924	14.63	CF-2	4.5	0.375	4.5	0.07	0.938	—	4.055	12.125	3.743	81.5
90	W9014M90-J	J	15.79	15.677	—	C-3	4.5	0.375	4.5	0.07	0.938	—	4.055	13.563	—	77.4
112	W11214M90-J	J	19.65	19.535	—	C-3	4.5	0.375	4.5	0.07	0.938	—	4.055	17.375	—	116.2
144	W14414M90-M	M	25.264	25.147	—	C-3	5.5	1.563	6.75	1.132	—	11.375	4.055	23	—	220.0
168	W16814M90-M	M	29.475	29.355	—	C-3	5.5	1.563	6.75	1.132	—	11.375	4.055	27.25	—	207.0
192	W19214M90-M	M	33.686	33.564	—	C-3	5.5	1.563	6.75	1.132	—	11.375	4.055	31.375	—	268.4
216	W21614M90-M	M	37.896	37.772	—	C-3	5.5	1.563	6.75	1.132	—	11.375	4.055	35.625	—	278.1

* Weight Shown is for Sprocket Less Bushing.
• Reverse Mount Only

+ The numbers (1=Solid, 2=Web, 3=Arms) within the "Type" indicates construction, and the letter F indicates the sprocket has flanges.

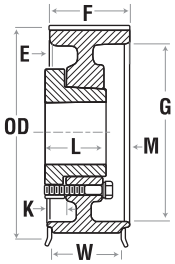
High HP HTS® Sprockets
14mm

Type A



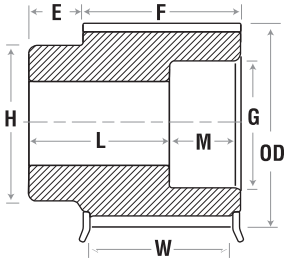
Type AF

Type D



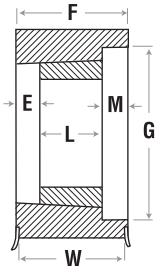
Type DF

Type MPB



Type MPBF

Type K



Type KF

No. of Teeth	Catalog Number	Bore	Pitch	Diameter		Type +	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Flange			E	L	M	K	H	F	G	W	
14mm Pitch, 120 mm (4.72 in.) Wide Belts (14M-120)																
28	W2814M120-MPB	MPB	4.912	4.805	5.56	MPBF-1	2.313	1	4.986	1.25	—	3.688	5.236	3.125	4.924	22.0
29	W2914M120-MPB	MPB	5.088	4.981	5.56	MPBF-1	2.313	1	4.986	1.25	—	3.688	5.236	3.125	4.924	23.8
30	W3014M120-MPB	MPB	5.263	5.156	6.13	MPBF-1	2.5	1	4.986	1.25	—	4.141	5.236	3.906	4.924	25.1
32	W3214M120-MPB	MPB	5.614	5.507	6.13	MPBF-1	2.5	1	4.986	1.25	—	4.141	5.236	3.906	4.924	29.0
34	W3414M120-MPB	MPB	5.965	5.857	6.5	MPBF-1	2.688	1	4.986	1.25	—	4.484	5.236	4.063	4.924	33.7
36	W3614M120-MPB	MPB	6.316	6.208	6.81	MPBF-1	3	1	4.986	1.25	—	4.875	5.236	4.688	4.924	34.0
38	W3814M120-MPB	MPB	6.667	6.559	7.16	MPBF-1	3.25	1	4.986	1.25	—	5.172	5.236	4.938	4.924	38.4
40	W4014M120-MPB	MPB	7.018	6.91	7.5	MPBF-1	3.438	1	4.986	1.25	—	5.563	5.236	5.063	4.924	43.4
44	W4414M120-3535	3535	7.72	7.611	8.22	KF-1	4	0.868	3.5	0.868	—	—	5.236	5.875	4.924	24.8
48	W4814M120-4040	4040	8.421	8.312	8.94	KF-1	4	0.618	4	0.618	—	—	5.236	6.625	4.924	31.8
52	W5214M120-F	F	9.123	9.014	9.69	AF-1	4	1.125	3.625	1.361	1.375	—	5.236	7.188	4.924	34.7
56	W5614M120-F	F	9.825	9.715	10.38	AF-1	4	1.125	3.625	1.361	1.375	—	5.236	7.875	4.924	48.4
60	W6014M120-F	F	10.527	10.417	11.06	AF-1	4	1.125	3.625	1.361	1.375	—	5.236	8.5	4.924	57.1
64	W6414M120-J	J	11.229	11.118	11.75	DF-1	4.5	0.293	4.5	1.029	1.02	—	5.236	9.25	4.924	69.7
68	W6814M120-J	J	11.93	11.82	12.5	DF-1	4.5	0.293	4.5	1.029	1.02	—	5.236	10	4.924	80.4
72	W7214M120-J	J	12.632	12.521	13.19	DF-1	4.5	0.293	4.5	1.029	1.02	—	5.236	10.688	4.924	92.2
80	W8014M120-J	J	14.036	13.924	14.63	DF-2	4.5	0.293	4.5	1.029	1.02	—	5.236	12.125	4.924	92.5
90	W9014M120-M	M	15.79	15.677	—	C-2	5.5	1.514	6.75	—	0.049	10	5.236	13.563	—	134.5
112	W11214M120-M	M	19.65	19.535	—	C-3	5.5	1.514	6.75	—	0.049	11.375	5.236	17.375	—	193.4
144	W14414M120-M	M	25.264	25.147	—	C-3	5.5	1.514	6.75	—	0.049	11.375	5.236	23	—	234.6
168	W16814M120-M	M	29.475	29.355	—	C-3	5.5	1.514	6.75	—	0.049	11.375	5.236	27.25	—	245.8
192	W19214M120-N	N	33.686	33.564	—	C-3	6	1.875	8.125	1.014	—	12	5.236	31.375	—	381.5

* Weight Shown is for Sprocket Less Bushing.
• Reverse Mount Only

+ The numbers (1=Solid, 2=Web, 3=Arms) within the "Type" indicates construction, and the letter F indicates the sprocket has flanges.

MPC® Synchronous Sprockets



Bushing Options

PB	Minimum Plain Bore
F	QD - Air Cooler Heat
No prefix	Taper Bushed

F 8MX 22S 12 - SH

Bushing Options

QD	JA, SH, SDS... S
TB	1008, 1108... 120100

Belt Pitch

8mm	**12, 21, 36, 62**
14mm	**20, 37, 68, 90, 125**

Belt Width (mm)

Number of Teeth *"S" identifies it as an MPC®*

Introducing our newest synchronous sprocket.

The addition of our MPC® sprocket line makes Martin your one-stop-shop for all your synchronous sprocket needs. Match your sprocket to your favorite belt.

MPC® synchronous sprockets are available in your desired configuration.

- Available in 8mm and 14mm pitches.
- Belt widths:

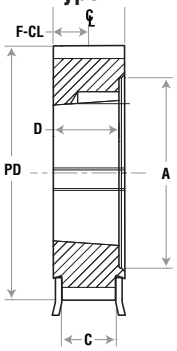
  12mm, 21mm, 36mm, 62mm (8mm pitch)

  20mm, 37mm, 68mm, 90mm, 125mm

  (14mm pitch)
- Available in QD, TB or other special adapters.
- Special diameters and widths, as well as special materials, are also available.

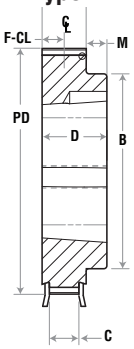
MPC® Sprockets
8mm

Type A



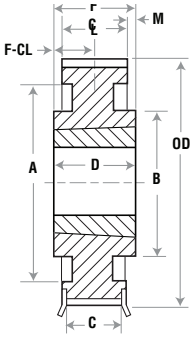
Type AF

Type B



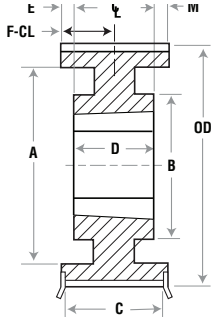
Type BF

Type C



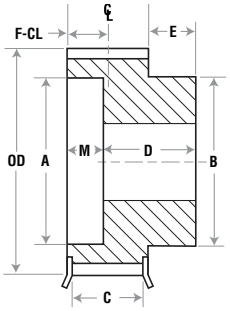
Type CF

Type D



Type DF

Type 6



Type 6F

8mm Pitch — 12mm Wide Belt

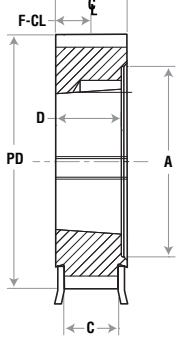
No. of Teeth	Catalog Number	Bore	Pitch Diameter	Diameter		Type	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Max Flange O.D.			A	B	C	D	E	F	M	F-CL	
MBP 8mm Pitch, 12mm (0.47 in.) Wide Belts (8M -12)																
22	PB8MX22S12	1/2	2.206	2.143	2.61	6F-1	1.188	-	1.79	0.57	1.31	0.46	0.82	-	0.41	1.1
25	PB8MX25S12	1/2	2.506	2.443	2.91	6F-1	1.500	-	2.08	0.57	1.31	0.46	0.82	-	0.41	1.5
28	PB8MX28S12	1/2	2.807	2.744	3.21	6F-1	1.750	-	2.34	0.57	1.31	0.46	0.82	-	0.41	1.9
30	PB8MX30S12	1/2	3.008	2.945	3.41	6F-1	1.813	-	2.54	0.57	1.42	0.57	0.82	-	0.41	2.3
32	PB8MX32S12	1/2	3.208	3.145	3.61	6F-1	2	-	2.73	0.57	1.42	0.57	0.82	-	0.41	2.7
Taper Bushed 8mm Pitch, 12mm (0.47 in.) Wide Belts (8M -12)																
22	8MX22S12-1008	1008	2.206	2.143	2.61	AF-1	1	-	-	0.63	0.88	-	0.88	-	0.44	0.5
25	8MX25S12-1108	1108	2.506	2.443	2.91	AF-1	1.125	-	-	0.63	0.88	-	0.88	-	0.44	0.7
26	8MX26S12-1108	1108	2.607	2.584	2.906	AF-1	1.125	-	-	0.63	0.88	-	0.88	-	0.44	0.8
27	8MX27S12-1108	1108	2.707	2.644	3.207	AF-1	1.125	-	-	0.63	0.88	-	0.88	-	0.44	0.9
28	8MX28S12-1108	1108	2.807	2.744	3.21	AF-1	1.125	-	-	0.63	0.88	-	0.88	-	0.44	1.0
29	8MX29S12-1108	1108	2.907	2.844	3.09	AF-1	1.125	-	-	0.63	0.88	-	0.88	-	0.44	1.2
30	8MX30S12-1108	1108	3.008	2.945	3.41	AF-1	1.125	-	-	0.63	0.88	-	0.88	-	0.44	1.3
31	8MX31S12-1210	1210	3.108	3.045	3.328	AF-1	1.25	-	-	0.75	1	-	1	-	0.5	1.3
32	8MX32S12-1210	1210	3.208	3.145	3.61	AF-1	1.25	-	-	0.75	1	-	1	-	0.5	1.4
33	8MX33S12-1610	1610	3.308	3.245	3.566	AF-1	1.625	-	-	0.75	1	-	1	-	0.5	1.3
34	8MX34S12-1610	1610	3.409	3.346	3.81	AF-1	1.625	-	-	0.75	1	-	1	-	0.5	1.3
35	8MX35S12-1610	1610	3.509	3.446	3.805	AF-1	1.625	-	-	0.75	1	-	1	-	0.5	1.3
36	8MX36S12-1610	1610	3.609	3.456	4.01	AF-1	1.625	-	-	0.75	1	-	1	-	0.5	1.2
37	8MX37S12-1610	1610	3.709	3.646	4.044	AF-1	1.625	-	-	0.75	1	-	1	-	0.5	1.6
38	8MX38S12-1610	1610	3.810	3.747	4.21	AF-1	1.62	-	-	0.75	1	-	1	-	0.5	1.7
39	8MX39S12-1610	1610	3.910	3.847	4.41	AF-1	1.625	-	-	0.75	1	-	1	-	0.5	1.7
40	8MX40S12-2012	2012	4.010	3.947	4.41	BF-1	2	-	3.56	0.57	1.25	-	0.82	0.43	0.41	1.7
41	8MX41S12-2012	2012	4.110	4.047	4.52	BF-1	2	-	3.65	0.65	1.25	-	0.82	0.43	0.41	1.8
42	8MX42S12-2012	2012	4.211	4.148	4.91	BF-1	2	-	3.76	0.57	1.25	-	0.82	0.43	0.41	2.2
45	8MX45S12-2012	2012	4.511	4.448	4.91	BF-1	2	-	3.76	0.57	1.25	-	0.82	0.43	0.41	2.5
48	8MX48S12-2012	2012	4.812	4.749	5.21	BF-1	2	-	3.76	0.57	1.25	-	0.82	0.43	0.41	3.4
50	8MX50S12-2012	2012	5.013	4.950	5.41	BF-1	2	-	3.76	0.57	1.25	-	0.82	0.43	0.41	3.7
53	8MX53S12-2012	2012	5.314	5.251	5.5	BF-1	2	-	3.76	0.57	1.25	-	0.82	0.43	0.41	4.7
56	8MX56S12-2012	2012	5.614	5.551	6.01	BF-1	2	-	3.76	0.57	1.25	-	0.82	0.43	0.41	5.4
60	8MX60S12-2012	2012	6.015	5.952	6.41	BF-1	2	-	3.76	0.57	1.25	-	0.82	0.43	0.41	6.3
63	8MX63S12-2012	2012	6.316	6.253	6.72	CF-1	2	5.71	4	0.57	1.25	-	0.82	0.43	0.41	5.6
67	8MX67S12-2012	2012	6.717	6.654	6.87	CF-1	2	6.14	4	0.57	1.25	-	0.82	0.43	0.41	4.3
71	8MX71S12-2012	2012	7.118	7.055	7.5	CF-1	2	6.51	4	0.57	1.25	-	0.82	0.43	0.41	4.7
75	8MX75S12-2012	2012	7.519	7.456	7.92	CF-1	2	6.9	4	0.57	1.25	-	0.82	0.43	0.41	5.1
80	8MX80S12-2012	2012	8.020	7.957	8.42	CF-1	2	7.23	4	0.57	1.25	-	0.82	0.43	0.41	5.8
90	8MX90S12-2012	2012	9.023	8.96	-	C-2	2	8.05	4	-	1.25	-	0.82	0.43	0.41	9.4
112	8MX112S12-2012	2012	11.229	11.166	-	C-2	2	10.25	4	-	1.25	-	0.82	0.43	0.41	16.6
140	8MX140S12-2012	2012	14.036	13.973	-	C-3	2	11.96	4.38	-	1.25	-	0.82	0.43	0.41	17.3
180	8MX180S12-2517	2517	18.046	17.893	-	C-3	2.5	15.8	4.88	-	1.75	-	0.82	0.93	0.41	30.0
224	8MX224S12-2517	2517	22.457	22.394	-	C-3	2.5	20.17	4.88	-	1.75	-	0.82	0.93	0.41	41.2

Type: 1- Solid 2 - Web 3 - Arms F=Flanged

NOTE: Weights for Minimum Plain Bore (MPB) Sprockets are with minimum bore. Weights for Bushed Sprockets less bushing. Dimensions in Inches. Weight in pounds.

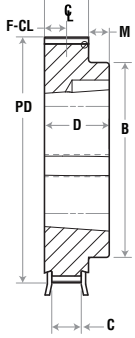
MPC® Sprockets 8mm

Type A



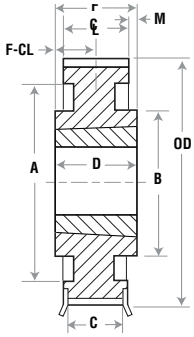
Type AF

Type B



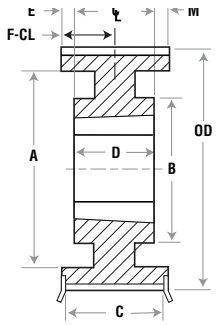
Type BF

Type C



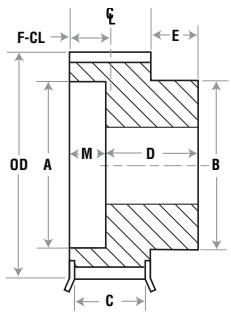
Type CF

Type D



Type DF

Type 6



Type 6F

8mm Pitch — 21mm Wide Belt

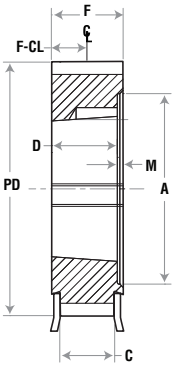
No. of Teeth	Catalog Number	Bore	Pitch Diameter	Diameter		Type	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Max Flange O.D.			A	B	C	D	E	F	M	F-CL	
MBP 8mm Pitch, 21mm (0.83 in.) Wide Belts (8M -21)																
22	PB8MX22S21	MPB	2.206	2.143	2.61	6F-1	1.188	-	1.79	0.92	1.65	0.45	1.2	-	0.60	1.3
25	PB8MX25S21	MPB	2.506	2.443	2.91	6F-1	1.5	-	2.08	0.92	1.65	0.45	1.2	-	0.60	1.8
28	PB8MX28S21	MPB	2.807	2.744	3.21	6F-1	1.75	-	2.34	0.92	1.65	0.45	1.2	-	0.60	2.3
30	PB8MX30S21	MPB	3.008	2.945	3.41	6F-1	1.813	-	2.54	0.92	1.77	0.57	1.2	-	0.60	2.8
32	PB8MX32S21	MPB	3.208	3.145	3.61	6F-1	2	-	2.73	0.92	1.77	0.57	1.2	-	0.60	3.2
Taper Bushed 8mm Pitch, 21mm (0.83 in.) Wide Belts (8M -21)																
22	8MX22S21-1008	1008	2.206	2.143	2.61	AF-1	1	1.63	-	0.92	0.88	-	1.2	-	0.60	0.6
25	8MX25S21-1108	1108	2.506	2.443	2.91	AF-1	1.125	1.92	-	0.92	0.88	-	1.2	-	0.60	0.8
26	8MX26S21-1108	1108	2.607	2.906	2.906	AF-1	1.125	1.85	-	0.92	0.88	-	1.2	-	0.60	0.8
27	8MX27S21-1108	1108	2.707	2.644	3.207	AF-1	1.125	1.95	-	0.92	0.88	-	1.2	-	0.60	1.0
28	8MX28S21-1108	1108	2.807	2.744	3.21	AF-1	1.125	2.18	-	0.92	0.88	-	1.2	-	0.60	1.1
29	8MX29S21-1108	1108	2.907	2.844	3.09	AF-1	1.125	2.15	-	0.92	0.88	-	1.2	-	0.60	1.4
30	8MX30S21-1108	1108	3.008	2.945	3.41	AF-1	1.125	2.38	-	0.92	0.88	-	1.2	-	0.60	1.5
31	8MX31S21-1210	1210	3.108	3.045	3.328	AF-1	1.25	2.35	-	0.92	1.00	-	1.2	-	0.60	1.6
32	8MX32S21-1210	1210	3.208	3.145	3.61	AF-1	1.25	2.58	-	0.92	1.00	-	1.2	-	0.60	3.0
33	8MX33S21-1610	1610	3.308	3.245	3.566	AF-1	1.625	2.66	-	0.92	1.00	-	1.2	-	0.60	1.4
34	8MX34S21-1610	1610	3.409	3.346	3.81	AF-1	1.625	2.66	-	0.92	1.00	-	1.2	-	0.60	1.9
35	8MX35S21-1610	1610	3.509	3.446	3.805	AF-1	1.625	2.75	-	0.92	1.00	-	1.2	-	0.60	1.5
36	8MX36S21-1610	1610	3.609	3.456	4.01	AF-1	1.625	2.96	-	0.92	1.00	-	1.2	-	0.60	1.6
37	8MX37S21-1610	1610	3.709	3.646	4.044	AF-1	1.625	2.95	-	0.92	1.00	-	1.2	-	0.60	1.7
38	8MX38S21-1610	1610	3.810	3.747	4.21	AF-1	1.625	3.15	-	0.92	1.00	-	1.2	-	0.60	1.9
39	8MX39S21-1610	1610	3.910	3.847	4.41	AF-1	1.625	3.14	-	0.92	1.00	-	1.2	-	0.60	2.0
40	8MX40S21-2012	2012	4.010	3.947	4.41	AF-1	2	-	-	0.97	1.25	-	1.25	-	0.63	2.0
41	8MX41S21-2012	2012	4.110	4.047	4.52	BF-1	2	-	3.4	1	1.25	-	1.20	-	0.60	2.2
42	8MX42S21-2012	2012	4.211	4.148	4.91	AF-1	2	-	-	0.97	1.25	-	1.25	-	0.63	2.4
45	8MX45S21-2012	2012	4.511	4.448	4.91	AF-1	2	-	-	0.97	1.25	-	1.25	-	0.63	3.0
48	8MX48S21-2012	2012	4.812	4.749	5.21	AF-1	2	-	-	0.97	1.25	-	1.25	-	0.63	3.4
50	8MX50S21-2012	2012	5.013	4.95	5.41	AF-1	2	-	-	0.97	1.25	-	1.25	-	0.63	4.2
53	8MX53S21-2012	2012	5.314	5.251	5.5	AF-1	2	-	-	0.97	1.25	-	1.25	-	0.63	5.0
56	8MX56S21-2012	2012	5.614	5.551	6.01	AF-1	2	-	-	0.97	1.25	-	1.25	-	0.63	4.9
60	8MX60S21-2012	2012	6.015	5.952	6.41	AF-1	2	-	-	0.97	1.25	-	1.25	-	0.63	6.9
63	8MX63S21-2012	2012	6.316	6.253	6.72	CF-1	2	5.71	3.76	0.92	1.25	-	1.20	0.05	0.60	7.7
67	8MX67S21-2517	2517	6.717	6.654	6.87	CF-1	2.5	6.14	4.5	0.92	1.75	-	1.20	0.55	0.60	5.7
71	8MX71S21-2517	2517	7.118	7.055	7.5	CF-1	2.5	6.51	4.5	0.92	1.75	-	1.20	0.55	0.60	6.1
75	8MX75S21-2517	2517	7.519	7.456	7.92	CF-1	2.5	6.9	4.5	0.92	1.75	-	1.20	0.55	0.60	9.2
80	8MX80S21-2517	2517	8.020	7.957	8.42	CF-1	2.5	7.23	4.5	0.92	1.75	-	1.20	0.55	0.60	7.5
90	8MX90S21-2517	2517	9.023	8.96	-	C-2	2.5	7.78	4.5	-	1.75	-	1.20	0.55	0.60	11.0
112	8MX112S21-2517	2517	11.229	11.166	-	C-2	2.5	10	4.5	-	1.75	-	1.20	0.55	0.60	19.4
140	8MX140S21-2517	2517	14.036	13.973	-	C-3	2.5	11.74	4.88	-	1.75	-	1.20	0.55	0.60	26.8
180	8MX180S21-3020	3020	18.046	17.893	-	C-3	3	15.49	6.25	-	2.00	-	1.20	0.80	0.60	36.6
224	8MX224S21-3020	3020	22.457	22.394	-	C-3	3	19.86	6.25	-	2.00	-	1.20	0.80	0.60	50.1

Type: 1- Solid 2 - Web 3 - Arms F=Flanged

NOTE: Weights for Minimum Plain Bore (MPB) Sprockets are with minimum bore. Weights for Bushed Sprockets less bushing. Dimensions in Inches. Weight in pounds.

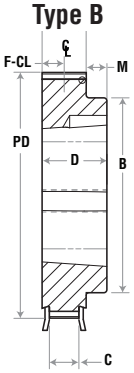
MPC® Sprockets
8mm

Type A



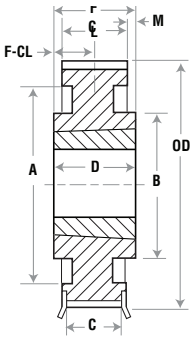
Type AF

Type B



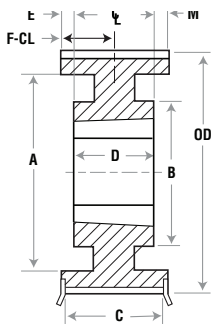
Type BF

Type C



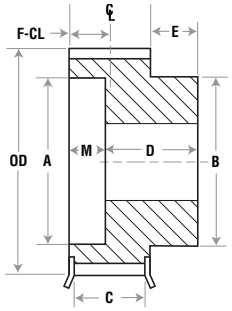
Type CF

Type D



Type DF

Type 6



Type 6F

8mm Pitch — 36mm Wide Belt

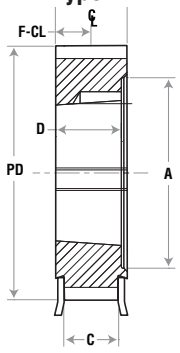
No. of Teeth	Catalog Number	Bore	Pitch Diameter	Diameter		Type	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Max Flange O.D.			A	B	C	D	E	F	M	F-CL	
MBP 8mm Pitch, 36mm (1.42 in.) Wide Belts (8M -36)																
22	PB8MX22S36	MPB	2.206	2.143	2.61	6F-1	1.188	-	1.79	1.58	2.44	.58	1.86	-	0.93	2.0
25	PB8MX25S36	MPB	2.506	2.443	2.91	6F-1	1.500	-	2.08	1.58	2.44	.58	1.86	-	0.93	2.7
28	PB8MX28S36	MPB	2.807	2.744	3.21	6F-1	1.750	-	2.34	1.58	2.44	.58	1.86	-	0.93	3.5
30	PB8MX30S36	MPB	3.008	2.945	3.41	6F-1	1.813	-	2.54	1.58	2.44	.58	1.86	-	0.93	4.1
32	PB8MX32S36	MPB	3.208	3.145	3.61	6F-1	2	-	2.73	1.58	2.44	.58	1.86	-	0.93	3.9
34	PB8MX34S36	MPB	3.409	3.346	3.81	6F-1	2.125	-	2.82	1.58	2.45	.59	1.86	-	0.93	4.3
36	PB8MX36S36	MPB	3.609	3.546	4.01	6F-1	2.313	-	3.13	1.58	2.51	.65	1.86	-	0.93	5.9
38	PB8MX38S36	MPB	3.81	3.747	4.21	6F-1	2.438	-	3.32	1.58	2.51	.65	1.86	-	0.93	6.7
Taper Bushed 8mm Pitch, 36mm (1.42 in.) Wide Belts (8M -36)																
32	8MX32S36-1210	1210	3.208	3.145	3.61	AF-1	1.250	2.58	-	1.58	1	-	1.83	0.83	0.93	2.0
33	8MX33S36-1610	1610	3.308	3.245	3.566	AF-1	1.625	2.56	-	1.66	1	-	1.83	0.83	0.93	1.7
34	8MX34S36-1610	1610	3.409	3.346	3.81	AF-1	1.625	2.66	-	1.58	1	-	1.83	0.83	0.93	1.8
35	8MX35S36-1610	1610	3.509	3.446	3.805	AF-1	1.625	2.76	-	1.66	1	-	1.83	0.83	0.93	2.0
36	8MX36S36-1610	1610	3.609	3.546	4.01	AF-1	1.625	2.96	-	1.58	1	-	1.83	0.83	0.93	2.7
37	8MX37S36-1610	1610	3.709	3.646	4.044	AF-1	1.625	2.9	-	1.66	1	-	1.83	0.83	0.93	2.1
38	8MX38S36-1610	1610	3.81	3.747	4.21	AF-1	1.625	3.15	-	1.58	1	-	1.83	0.83	0.93	2.9
39	8MX39S36-1610	1610	3.91	3.847	4.41	AF-1	1.625	3.1	-	1.58	1	-	1.83	0.83	0.93	2.4
40	8MX40S36-2012	2012	4.01	3.947	4.41	AF-1	2	3.35	-	1.58	1.25	-	1.83	0.58	0.93	2.5
41	8MX41S36-2012	2012	4.11	4.047	4.52	AF-1	2	3.36	-	1.58	1.25	-	1.83	0.58	0.93	2.4
42	8MX42S36-2012	2012	4.211	4.148	4.91	AF-1	2	3.62	-	1.58	1.25	-	1.83	0.58	0.93	2.8
45	8MX45S36-2012	2012	4.511	4.448	4.91	AF-1	2	3.62	-	1.58	1.25	-	1.83	0.58	0.93	4.0
48	8MX48S36-2012	2012	4.812	4.749	5.21	AF-1	2	4.14	-	1.58	1.25	-	1.83	0.58	0.93	4.3
50	8MX50S36-2012	2012	5.013	4.95	5.41	AF-1	2	4.13	-	1.58	1.25	-	1.83	0.58	0.93	5.1
53	8MX53S36-2012	2012	5.314	5.251	5.5	AF-1	2	4.76	-	1.58	1.25	-	1.83	0.58	0.93	6.0
56	8MX56S36-2012	2012	5.614	5.551	6.01	AF-1	2	4.92	-	1.58	1.25	-	1.83	0.58	0.93	6.5
60	8MX60S36-2517	2517	6.015	5.952	6.42	AF-1	2.5	5.13	-	1.58	1.75	-	1.83	0.58	0.93	8.9
63	8MX63S36-2517	2517	6.316	6.253	6.72	AF-1	2.5	5.71	-	1.58	1.75	-	1.83	0.08	0.93	9.3
67	8MX67S36-2517	2517	6.717	6.654	6.88	DF-1	2.5	5.98	4.25	1.58	1.75	-	1.83	0.08	0.93	10.0
71	8MX71S36-2517	2517	7.118	7.055	7.5	DF-1	2.5	6.39	4.25	1.58	1.75	-	1.83	0.08	0.93	7.0
75	8MX75S36-2517	2517	7.519	7.456	7.92	DF-1	2.5	6.79	4.25	1.58	1.75	-	1.83	0.08	0.93	13.3
80	8MX80S36-3020	3020	8.02	7.957	8.42	BF-1	3	-	5.75	1.58	2	-	1.83	0.08	0.93	15.3
90	8MX90S36-3020	3020	9.023	8.960	-	B-1	3	-	5.75	-	2	-	1.83	0.17	0.93	20.9
112	8MX112S36-3020	3020	11.229	11.166	-	C-2	3	9.8	5.75	-	2	-	1.83	0.17	0.93	22.0
140	8MX140S36-3020	3020	14.036	13.973	-	C-3	3	11.72	6.25	-	2	-	1.83	0.17	0.93	39.3
180	8MX180S36-3020	3020	18.046	17.983	-	C-3	3	15.31	6.25	-	2	-	1.83	0.17	0.93	48.9
224	8MX224S36-3525	3525	22.457	22.394	-	C-3	3.5	19.62	8.75	-	2.5	-	1.83	0.67	0.93	92.2

Type: 1- Solid 2 - Web 3 - Arms F=Flanged

NOTE: Weights for minimum plain bore (MPB) sprockets are with minimum bore.
Weights for bushed sprockets less bushing.
Dimensions in inches. Weight in pounds.

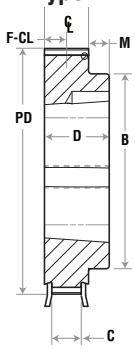
MPC® Sprockets 8mm

Type A



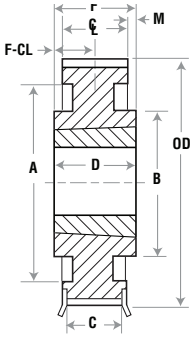
Type AF

Type B



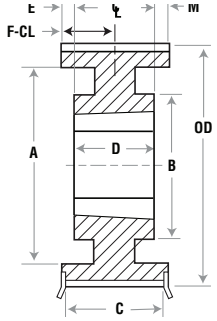
Type BF

Type C



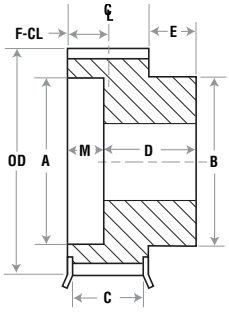
Type CF

Type D



Type DF

Type 6



Type 6F

8mm Pitch — 62mm Wide Belt

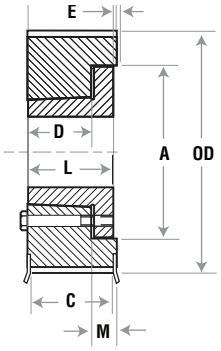
No. of Teeth	Catalog Number	Bore	Pitch Diameter	Diameter		Type	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Max Flange O.D.			A	B	C	D	E	F	M	F-CL	
MPB 8mm Pitch, 62 mm (2.44 in.) Wide Belts (8M - 62)																
22	PB8MX22S62	MPB	2.206	2.143	2.61	6F-1	1.188	-	1.79	2.63	3.56	0.68	2.88	-	1.46	2.4
25	PB8MX25S62	MPB	2.506	2.443	2.91	6F-1	1.5	-	2.08	2.63	3.56	0.68	2.88	-	1.46	3.6
28	PB8MX28S62	MPB	2.807	2.744	3.21	6F-1	1.75	-	2.34	2.63	3.56	0.68	2.88	-	1.46	4.6
30	PB8MX30S62	MPB	3.008	2.945	3.41	6F-1	1.813	-	2.54	2.63	3.5	0.62	2.88	-	1.46	5.3
32	PB8MX32S62	MPB	3.208	3.145	3.61	6F-1	2	-	2.73	2.63	3.5	0.62	2.88	-	1.46	5.6
34	PB8MX34S62	MPB	3.409	3.346	3.81	6F-1	2.125	-	2.82	2.63	3.5	0.62	2.88	-	1.46	5.7
36	PB8MX36S62	MPB	3.609	3.546	4.01	6F-1	2.313	-	3.13	2.63	3.56	0.68	2.88	-	1.46	8.0
38	PB8MX38S62	MPB	3.812	3.747	4.21	6F-1	2.438	-	3.32	2.63	3.56	0.68	2.88	-	1.46	9.1
40	PB8MX40S62	MPB	4.010	3.947	4.41	6F-1	2.563	-	3.52	2.63	3.63	0.75	2.88	-	1.46	10.3
42	PB8MX42S62	MPB	4.211	4.148	4.91	6F-1	2.75	-	3.79	2.63	3.63	0.75	2.88	-	1.46	11.6
45	PB8MX45S62	MPB	4.511	4.448	4.91	6F-1	2.75	-	3.79	2.63	3.63	0.75	2.88	-	1.46	13.1
Taper Bushed 8mm Pitch, 62mm (2.44 in.) Wide Belts (8M - 62)																
34	8MX34S62-1610	1610	3.409	3.346	3.81	AF-1	1.625	2.66	-	2.63	1	-	2.88	-	1.46	5.0
36	8MX36S62-1610	1610	3.609	3.546	4.01	AF-1	1.625	2.96	-	2.63	1	-	2.88	-	1.46	5.3
38	8MX38S62-1610	1610	3.812	3.747	4.21	AF-1	1.625	3.15	-	2.63	1	-	2.88	-	1.46	5.6
40	8MX40S62-2012	2012	4.010	3.947	4.41	AF-1	2	3.35	-	2.63	1.25	-	2.88	-	1.46	5.9
42	8MX42S62-2012	2012	4.211	4.148	4.91	AF-1	2	3.62	-	2.63	1.25	-	2.88	-	1.46	3.5
45	8MX45S62-2012	2012	4.511	4.448	4.91	AF-1	2	3.62	-	2.63	1.25	-	2.88	-	1.46	6.5
48	8MX48S62-2517	2517	4.812	4.749	5.21	AF-1	2.5	4.14	-	2.63	1.75	-	2.88	-	1.46	6.6
50	8MX50S62-2517	2517	5.013	4.95	5.41	AF-1	2.5	4.13	-	2.63	1.75	-	2.88	-	1.46	6.7
53	8MX53S62-2517	2517	5.314	5.251	5.5	AF-1	2.5	4.76	-	2.63	1.75	-	2.88	-	1.46	6.9
56	8MX56S62-2517	2517	5.614	5.551	6.01	AF-1	2.5	4.92	-	2.63	1.75	-	2.88	-	1.46	7.2
60	8MX60S62-3020	3020	6.015	5.952	6.42	AF-1	3	5.13	-	2.63	2	-	2.88	-	1.46	8.9
63	8MX63S62-3020	3020	6.316	6.253	6.72	AF-1	3	5.71	-	2.63	2	-	2.88	-	1.46	10.3
67	8MX67S62-3020	3020	6.717	6.654	6.88	AF-1	3	6.14	-	2.63	2	-	2.88	-	1.46	11.0
71	8MX71S62-3020	3020	7.118	7.055	7.5	AF-1	3	6.51	-	2.63	2	-	2.88	-	1.46	13.5
75	8MX75S62-3020	3020	7.519	7.456	7.92	AF-1	3	6.90	-	2.63	2	-	2.88	-	1.46	15.4
80	8MX80S62-3020	3020	8.020	7.957	8.42	AF-1	3	7.23	-	2.63	2	-	2.88	-	1.46	23.0
90	8MX90S62-3020	3020	9.023	8.96	-	D-1	3	7.39	5.42	-	2	-	2.88	0.91	1.46	32.7
112	8MX112S62-3020	3020	11.229	11.166	-	D-2	3	9.60	5.42	-	2	-	2.88	0.91	1.46	38.9
140	8MX140S62-3525	3525	14.036	13.973	-	D-2	3.5	12.40	8.75	-	2.5	-	2.88	0.41	1.46	54.5
180	8MX180S62-3525	3525	18.046	17.983	-	D-3	3.5	15.33	8.75	-	2.5	-	2.88	0.41	1.46	90.0
224	8MX224S62-3525	3525	22.457	22.394	-	D-3	3.5	19.38	8.75	-	2.5	-	2.88	0.41	1.46	92.3

Type: 1- Solid 2 - Web 3 - Arms F=Flanged

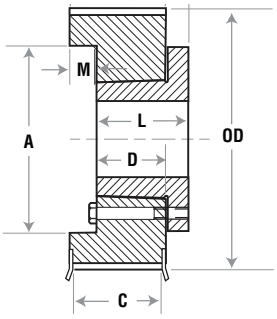
NOTE: Weights for minimum plain bore (MPB) sprockets are with minimum bore.
Weights for bushed sprockets less bushing.
Dimensions in inches. Weight in pounds.

MPC® Sprockets 8mm
Air Cool Heat Exchange

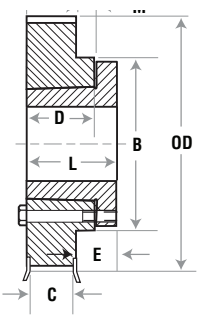
Type A



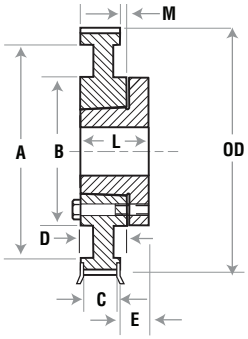
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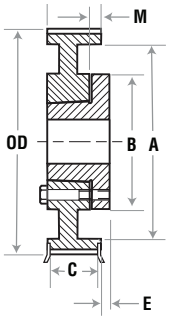
Type C



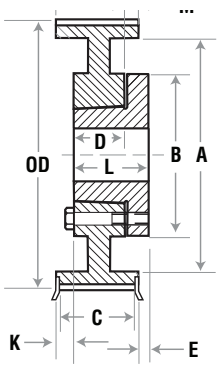
Type D



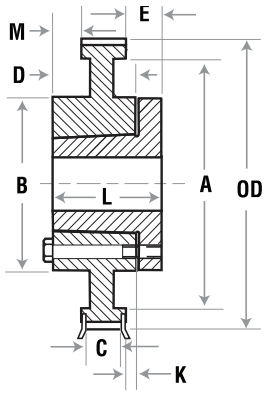
Type E



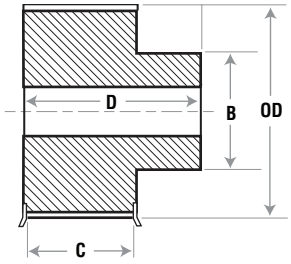
Type F



Type G



Type 6



8mm Pitch — 21mm Wide Air Cool Heat Exchange Belt

No. of Teeth	Catalog Number	Bore	Pitch Diameter	Diameter		Type	Max Bore	Dimensions									Weight Approx. (lbs.)
				O.D.	Max Flange O.D.			A	B	C	D	E	F	L	M	F-CL	
QD Bushed 8mm Pitch, 21mm (0.93 in.) Wide Belt (8M-21)																	
36	F8MX36S21-SH	SH	3.609	3.546	4.009	AF-1	1.688	2.85	-	0.92	0.81	0.39	1.2	1.94	0.39	0.6	2.1
38	F8MX38S21-SH	SH	3.81	3.747	4.21	AF-1	1.688	3.04	-	0.92	-	0.39	1.2	1.94	0.39	0.6	2.1
40	F8MX40S21-SH	SH	4.01	3.947	4.41	AF-1	1.688	3.24	-	0.92	-	0.39	1.2	1.94	0.39	0.6	2.3
42	F8MX42S21-SH	SH	4.211	4.148	4.911	AF-1	1.688	3.44	-	0.92	-	0.39	1.2	1.94	0.39	0.6	2.5
140	F8MX140S21-SF	SF	14.036	13.973	-	CF-2*	2.938	13.17	6.38	-	1.25	0.39	1.2	2.06	0.05	0.6	25.0
168	F8MX168S21-SF	SF	16.843	16.78	-	CF-3*	2.938	15.95	6.38	-	1.25	0.39	1.2	2.06	0.05	0.6	33.8
180	F8MX180S21-SF	SF	18.046	17.983	-	CF-3*	2.938	17.14	6.38	-	1.25	0.39	1.2	2.06	0.03	0.6	36.6
224	F8MX224S21-E	E	22.457	22.394	-	CF-3*	3.5	21.51	7.50	-	1.25	0.39	1.2	2.75	0.43	0.6	50.1

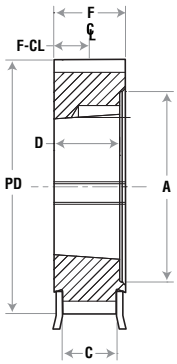
Type: 1- Solid 2 - Web 3 - Arms F=Flanged

* Flanged on bushings install side only.

NOTE: Weights for minimum plain bore (MPB) sprockets are with minimum bore.
Weights for bushed sprockets less bushing.
Dimensions in inches. Weight in pounds.

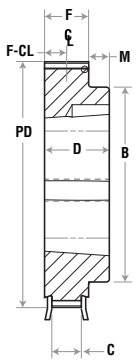
MPC® Sprockets 14mm

Type A



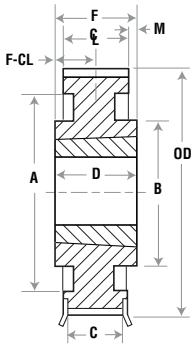
Type AF

Type B



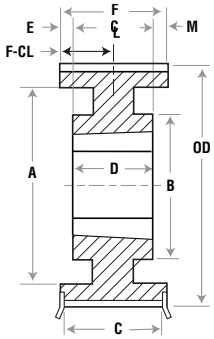
Type BF

Type C



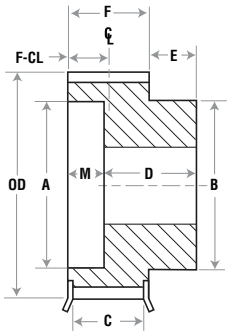
Type CF

Type D



Type DF

Type 6



Type 6F

14mm Pitch — 20mm Wide Belt

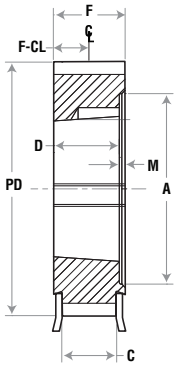
No. of Teeth	Catalog Number	Bore	Pitch Diameter	Diameter		Type	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Max Flange O.D.			A	B	C	D	E	F	M	F-CL	
Tapered Bushed 14mm Pitch, 20mm (.826 in.) Wide Belt (14M- 20)																
28	14MX28S20-2012	2012	4.912	4.802	5.4	A1-F	2	3.61	-	1.04	1.25	-	1.36	.11	0.68	3.9
29	14MX29S20-2012	2012	5.188	4.978	5.76	A1-F	2	3.99	-	1.04	1.25	-	1.36	.11	0.68	4.5
30	14MX30S20-2012	2012	5.263	5.153	5.76	A1-F	2	3.99	-	1.04	1.25	-	1.36	.11	0.68	4.8
31	14MX31S20-2012	2012	5.439	5.329	6.11	A1-F	2	4.22	-	1.04	1.25	-	1.36	.11	0.68	5.5
32	14MX32S20-2012	2012	5.614	5.504	6.11	A1-F	2	4.22	-	1.04	1.25	-	1.36	.11	0.68	5.9
33	14MX33S20-2012	2012	5.790	5.680	6.46	A1-F	2	4.53	-	1.04	1.25	-	1.36	.11	0.68	6.3
34	14MX34S20-2012	2012	5.965	5.855	6.46	A1-F	2	4.53	-	1.04	1.25	-	1.36	.11	0.68	6.9
35	14MX35S20-2012	2012	6.141	6.031	6.82	A1-F	2	4.95	-	1.04	1.25	-	1.36	.11	0.68	7.3
36	14MX36S20-2517	2517	6.316	6.206	6.82	BF-1	2.5	-	4.25	1.04	1.75	-	1.36	.39	0.68	7.6
37	14MX37S20-2517	2517	6.492	6.382	7.17	BF-1	2.5	-	4.25	1.04	1.75	-	1.36	.39	0.68	8.2
38	14MX38S20-2517	2517	6.667	6.557	7.17	BF-1	2.5	-	4.25	1.04	1.75	-	1.36	.39	0.68	8.9
39	14MX39S20-2517	2517	6.842	6.732	7.52	BF-1	2.5	-	4.25	1.04	1.75	-	1.36	.39	0.68	9.8
40	14MX40S20-2517	2517	7.018	6.908	7.52	BF-1	2.5	-	4.25	1.04	1.75	-	1.36	.39	0.68	10.1
43	14MX43S20-2517	2517	7.544	7.434	8.04	BF-1	2.5	-	4.25	1.04	1.75	-	1.36	.39	0.68	11.7
45	14MX45S20-3020	3020	7.895	7.785	8.4	BF-1	3	-	5.41	1.04	2	-	1.36	.64	0.68	13.5
48	14MX48S20-3020	3020	8.421	8.311	8.94	BF-1	3	-	5.75	1.04	2	-	1.36	.64	0.68	16.4
50	14MX50S20-3020	3020	8.772	8.662	9.29	BF-1	3	-	5.75	1.04	2	-	1.36	.64	0.68	18.3
53	14MX53S20-3020	3020	9.299	9.189	9.69	BF-1	3	-	5.75	1.04	2	-	1.36	.64	0.68	20.5
56	14MX56S20-3525	3525	9.825	9.715	10.36	BF-1	3.5	-	8.7	1.04	2.5	-	1.36	1.14	0.68	23.2
60	14MX60S20-3525	3525	10.527	10.417	11.07	BF-1	3.5	-	8.75	1.04	2.5	-	1.36	1.14	0.68	27.5
63	14MX63S20-3525	3525	11.053	10.943	11.59	BF-1	3.5	-	8.75	1.04	2.5	-	1.36	1.14	0.68	30.2
67	14MX67S20-3525	3525	11.755	11.645	12.5	BF-1	3.5	-	8.75	1.04	2.5	-	1.36	1.14	0.68	31.3
71	14MX71S20-3525	3525	12.457	12.347	13.07	CF-1	3.5	11.05	8.75	1.04	2.5	-	1.36	1.14	0.68	32.5
75	14MX75S20-3525	3525	13.158	13.048	13.73	CF-1	3.5	11.68	8.75	1.04	2.5	-	1.36	1.14	0.68	36.2
80	14MX80S20-3525	3525	14.036	13.926	14.62	CF-2	3.5	12.56	8.75	1.04	2.5	-	1.36	1.14	0.68	35.4
90	14MX90S20-3525	3525	15.790	15.680	-	C-2	3.5	14.26	8.75	-	2.5	-	1.36	1.14	0.68	41.3
112	14MX112S20-3525	3525	19.650	19.540	-	C-3	3.5	16.47	8.75	-	2.5	-	1.36	1.14	0.68	59.6
126	14MX126S20-3525	3525	22.106	24.45	-	C-3	3.5	20.5	8.75	-	2.5	-	1.36	1.14	0.68	66.0
140	14MX140S20-3525	3525	24.562	24.452	-	C-3	3.5	21.04	8.75	-	2.5	-	1.36	1.14	0.68	102.0
168	14MX168S20-3525	3525	29.475	29.365	-	C-3	3.5	25.90	8.75	-	2.5	-	1.36	1.14	0.68	99.5
180	14MX180S20-3525	3525	31.580	31.47	-	C-3	3.5	27.99	8.75	-	2.5	-	1.36	1.14	0.68	135.0
200	14MX200S20-3525	3525	35.089	24.979	-	C-3	3.5	31.46	8.75	-	2.5	-	1.36	1.14	0.68	156.0
224	14MX224S20-4030	4030	39.300	39.190	-	C-3	4	35.63	10	-	3	-	1.36	1.64	0.68	150.2

Type: 1- Solid 2 - Web 3 - Arms F=Flanged

NOTE: Weights for minimum plain bore (MPB) sprockets are with minimum bore.
Weights for bushed sprockets less bushing.
Dimensions in inches. Weight in pounds.

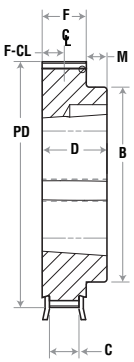
MPC® Sprockets
14mm

Type A



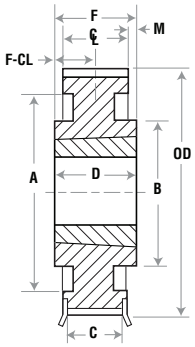
Type AF

Type B



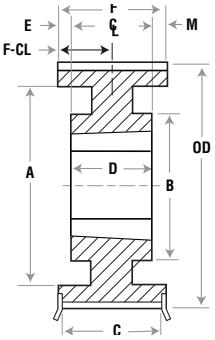
Type BF

Type C



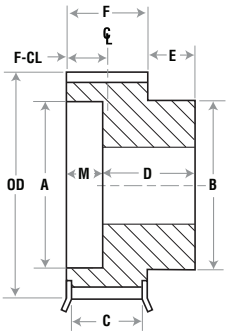
Type CF

Type D



Type DF

Type 6



Type 6F

14mm Pitch —37mm Wide Belt

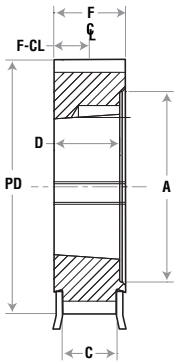
No. of Teeth	Catalog Number	Bore	Pitch Diameter	Diameter		Type	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Max Flange O.D.			A	B	C	D	E	F	M	F-CL	
MPB 14mm Pitch, 37mm (1.46 in.) Wide Belt (14M-37)																
28	PB14MX28S37	MPB	4.912	4.802	5.4	6F-1	2.938	-	3.97	1.74	2.86	0.8	2.06	-	1.03	11.7
Taper Bushed 14mm Pitch, 37mm (1.46 in.) Wide Belt (14M-37)																
28	14MX28S37-2012	2012	4.912	4.802	5.4	AF-1	2	3.61	-	1.74	1.25	-	2.06	0.81	1.03	4.2
29	14MX29S37-2517	2517	5.088	4.978	5.76	AF-1	2.5	3.99	-	1.74	1.75	-	2.06	0.31	1.03	4.7
30	14MX30S37-2517	2517	5.263	5.153	5.76	AF-1	2.5	3.99	-	1.74	1.75	-	2.06	0.31	1.03	5.0
31	14MX31S37-2517	2517	5.439	5.329	6.11	AF-1	2.5	4.22	-	1.74	1.75	-	2.06	0.31	1.03	6.0
32	14MX32S37-2517	2517	5.614	5.54	6.11	AF-1	2.5	4.22	-	1.74	1.75	-	2.06	0.31	1.03	7.2
33	14MX33S37-2517	2517	5.79	5.68	6.46	AF-1	2.5	4.53	-	1.74	1.75	-	2.06	0.31	1.03	7.5
34	14MX34S37-2517	2517	5.965	5.855	6.46	AF-1	2.5	4.53	-	1.74	1.75	-	2.06	0.31	1.03	7.8
35	14MX35S37-2517	2517	6.141	6.031	6.82	AF-1	2.5	4.95	-	1.74	1.75	-	2.06	0.31	1.03	8.3
36	14MX36S37-2517	2517	6.316	6.206	6.82	AF-1	2.5	4.95	-	1.74	1.75	-	2.06	0.31	1.03	8.8
37	14MX37S37-2517	2517	6.492	6.382	7.17	AF-1	2.5	5.27	-	1.74	1.75	-	2.06	0.31	1.03	9.3
38	14MX38S37-3020	3020	6.667	6.557	7.17	AF-1	3	5.27	-	1.74	2	-	2.06	0.06	1.03	10.8
39	14MX39S37-3020	3020	6.842	6.732	7.52	AF-1	3	5.54	-	1.74	2	-	2.06	0.06	1.03	11.9
40	14MX40S37-3020	3020	7.018	6.908	7.52	AF-1	3	5.54	-	1.74	2	-	2.06	0.06	1.03	12.2
43	14MX43S37-3020	3020	7.544	7.434	8.04	AF-1	3	6.16	-	1.74	2	-	2.06	0.06	1.03	12.5
45	14MX45S37-3020	3020	7.895	7.785	8.4	AF-1	3	6.42	-	1.74	2	-	2.06	0.06	1.03	15.8
48	14MX48S37-3020	3020	8.421	8.311	8.94	AF-1	3	6.96	-	1.74	2	-	2.06	0.06	1.03	18.7
50	14MX50S37-3020	3020	8.772	8.662	9.29	AF-1	3	7.44	-	1.74	2	-	2.06	0.06	1.03	21.1
53	14MX53S37-3020	3020	9.299	9.189	9.69	AF-1	3	7.84	-	1.74	2	-	2.06	0.06	1.03	24.7
56	14MX56S37-3525	3525	9.825	9.715	10.36	BF-1	3.5	-	8.70	1.74	2.5	-	2.06	0.44	1.03	28.2
60	14MX60S37-3525	3525	10.527	10.417	11.07	BF-1	3.5	-	8.75	1.74	2.5	-	2.06	0.44	1.03	32.2
63	14MX63S37-3525	3525	11.053	10.943	11.59	BF-1	3.5	-	8.75	1.74	2.5	-	2.06	0.44	1.03	42.8
67	14MX67S37-3525	3525	11.755	11.645	12.5	BF-1	3.5	-	8.75	1.74	2.5	-	2.06	0.44	1.03	43.5
71	14MX71S37-3525	3525	12.457	12.347	13.07	BF-1	3.5	-	8.75	1.74	2.5	-	2.06	0.44	1.03	44.1
75	14MX75S37-3525	3525	13.158	13.048	13.73	CF-1	3.5	11.68	8.75	1.74	2.5	-	2.06	0.44	1.03	45.5
80	14MX80S37-3525	3525	14.036	13.926	14.62	CF-2	3.5	12.56	8.75	1.74	2.5	-	2.06	0.44	1.03	48.7
90	14MX90S37-3525	3525	15.79	15.68	-	C-2	3.5	14.26	8.75	-	2.5	-	2.06	0.44	1.03	53.3
112	14MX112S37-3525	3525	19.65	19.54	-	C-3	3.5	16.39	8.75	-	2.5	-	2.06	0.44	1.03	87.0
126	14MX126S37-3525	3525	22.106	21.996	-	C-3	3.5	20.56	8.75	-	2.5	-	2.06	0.44	1.03	76.3
180	14MX180S37-4030	4030	31.58	31.47	-	C-3	4	27.59	10	-	3	-	2.06	0.94	1.03	191.4
200	14MX200S37-4030	4030	35.089	34.979	-	C-3	4	31.07	10	-	3	-	2.06	0.94	1.03	224.8
224	14MX224S37-4030	4030	39.30	39.19	-	C-3	4	35.24	10	-	3	-	2.06	0.94	1.03	267.7

Type: 1- Solid 2 - Web 3 - Arms F=Flanged

NOTE: Weights for minimum plain bore (MPB) sprockets are with minimum bore.
Weights for bushed sprockets less bushing.
Dimensions in inches. Weight in pounds.

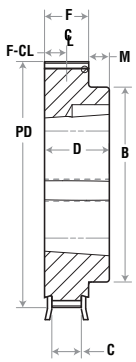
MPC® Sprockets 14mm

Type A



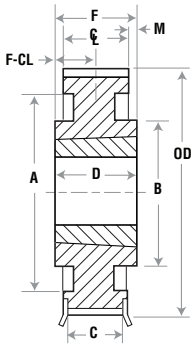
Type AF

Type B



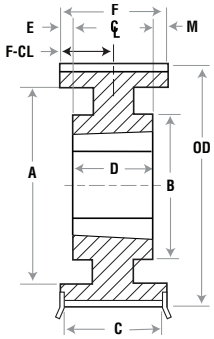
Type BF

Type C



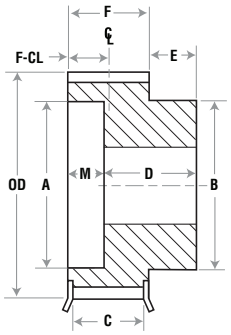
Type CF

Type D



Type DF

Type 6



Type 6F

14mm Pitch — 68mm Wide Belt

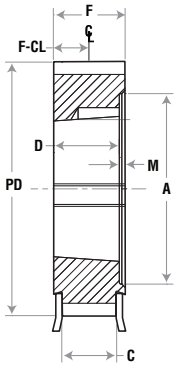
No. of Teeth	Catalog Number	Bore	Pitch Diameter	Diameter		Type	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Max Flange O.D.			A	B	C	D	E	F	M	F-CL	
MPB 14mm Pitch, 68mm (2.68 in.) Wide Belt (14M-68)																
28	PB14MX28S68	MPB	4.912	4.802	5.4	6F-1	2.938	-	3.97	3.01	4.13	0.81	3.322	-	1.66	17.0
29	PB14MX29S68	MPB	5.088	4.978	5.76	6F-1	3.188	-	4.35	3.01	4.13	0.81	3.322	-	1.66	19.0
30	PB14MX30S68	MPB	5.263	5.153	5.76	6F-1	3.188	-	4.35	3.01	4.13	0.81	3.322	-	1.66	20.0
31	PB14MX31S68	MPB	5.439	5.329	6.11	6F-1	3.438	-	4.57	3.01	4.13	0.81	3.322	-	1.66	16.8
32	PB14MX32S68	MPB	5.614	5.504	6.11	6F-1	3.438	-	4.57	3.01	4.13	0.81	3.322	-	1.66	18.0
33	PB14MX33S68	MPB	5.79	5.68	6.47	6F-1	3.5	-	4.89	3.01	4.33	1.01	3.322	-	1.66	26.0
34	PB14MX34S68	MPB	5.965	5.855	6.47	6F-1	3.5	-	4.89	3.01	4.33	1.01	3.322	-	1.66	21.1
Taper Bushed 14mm Pitch, 68mm (2.68 in.) Wide Belt (14M-68)																
29	14MX29S68-2517	2517	5.088	4.978	5.76	AF-1	2.5	3.99	-	3.01	1.75	-	3.322	-	1.66	14.7
30	14MX30S68-2517	2517	5.263	5.153	5.76	AF-1	2.5	3.99	-	3.01	1.75	-	3.322	-	1.66	14.0
31	14MX31S68-2517	2517	5.439	5.329	6.11	AF-1	2.5	4.22	-	3.01	1.75	-	3.322	-	1.66	14.3
32	14MX32S68-2517	2517	5.614	5.504	6.11	AF-1	2.5	4.22	-	3.01	1.75	-	3.322	-	1.66	14.6
33	14MX33S68-2517	2517	5.79	5.68	6.46	AF-1	2.5	4.53	-	3.01	1.75	-	3.322	-	1.66	14.9
34	14MX34S68-2517	2517	5.965	5.855	6.46	AF-1	2.5	4.53	-	3.01	1.75	-	3.322	-	1.66	15.2
35	14MX35S68-3020	3020	6.141	6.031	6.82	AF-1	3	4.95	-	3.01	2	-	3.322	-	1.66	15.5
36	14MX36S68-3020	3020	6.316	6.206	6.82	AF-1	3	4.95	-	3.01	2	-	3.322	-	1.66	15.8
37	14MX37S68-3020	3020	6.492	6.382	7.17	AF-1	3	5.27	-	3.01	2	-	3.322	-	1.66	16.1
38	14MX38S68-3020	3020	6.667	6.557	7.17	AF-1	3	5.27	-	3.01	2	-	3.322	-	1.66	16.4
39	14MX39S68-3020	3020	6.842	6.732	7.52	AF-1	3	5.54	-	3.01	2	-	3.322	-	1.66	16.7
40	14MX40S68-3020	3020	7.018	6.908	7.52	AF-1	3	5.54	-	3.01	2	-	3.322	-	1.66	17.0
43	14MX43S68-3020	3020	7.544	7.434	8.04	AF-1	3	6.16	-	3.01	2	-	3.322	-	1.66	17.2
45	14MX45S68-3020	3020	7.895	7.785	8.39	AF-1	3	6.42	-	3.01	2	-	3.322	-	1.66	20.4
48	14MX48S68-3525	3525	8.421	8.311	8.94	AF-1	3.5	6.96	-	3.01	2.5	-	3.322	-	1.66	24.6
50	14MX50S68-3525	3525	8.772	8.662	9.29	AF-1	3.5	7.44	-	3.01	2.5	-	3.322	-	1.66	29.4
53	14MX53S68-3525	3525	9.299	9.189	9.69	AF-1	3.5	7.84	-	3.01	2.5	-	3.322	-	1.66	35.7
56	14MX56S68-3525	3525	9.825	9.715	10.36	AF-1	3.5	8.35	-	3.01	2.5	-	3.322	-	1.66	39.9
60	14MX60S68-3525	3525	10.527	10.417	11.07	AF-1	3.5	9.06	-	3.01	2.5	-	3.322	-	1.66	50.6
63	14MX63S68-3525	3525	11.053	10.943	11.59	AF-1	3.5	9.59	-	3.01	2.5	-	3.322	-	1.66	58.0
67	14MX67S68-3525	3525	11.755	11.645	12.5	DF-1	3.5	10.36	8.75	3.01	2.5	-	3.322	0.82	1.66	60.0
71	14MX71S68-3525	3525	12.457	12.347	13.07	DF-1	3.5	11.05	8.75	3.01	2.5	-	3.322	0.82	1.66	63.3
75	14MX75S68-3525	3525	13.158	13.048	13.73	DF-1	3.5	11.68	8.75	3.01	2.5	-	3.322	0.82	1.66	68.6
80	14MX80S68-3525	3525	14.036	13.926	14.62	DF-2	3.5	12.56	8.75	3.01	2.5	-	3.322	0.82	1.66	76.3
90	14MX90S68-4030	4030	15.79	15.68	-	D-2	4	14.26	10	-	3	-	3.322	0.32	1.66	82.6
112	14MX112S68-4030	4030	19.65	19.54	-	D-3	4	16.35	10	-	3	-	3.322	0.32	1.66	100.4
140	14MX140S68-4030	4030	24.562	24.452	-	D-3	4.5	20.78	10	-	3	-	3.322	0.32	1.66	190.0
168	14MX168S68-4535	4535	29.475	29.365	-	C-3	4.5	25.23	10.5	-	3.5	-	3.322	0.18	1.66	239.1
180	14MX180S68-4335	4535	31.58	31.47	-	C-3	4.5	27.16	10.5	-	3.5	-	3.322	0.18	1.66	250.6
200	14MX200568-4535	4535	35.089	34.979	-	C-3	4.5	30.65	10.5	-	3.5	-	3.322	0.18	1.66	262.5
224	14MX224S68-5040	5040	39.3	39.19	-	C-3	5	34.82	11	-	4	-	3.322	0.68	1.66	350.0

Type: 1- Solid 2 - Web 3 - Arms F=Flanged

NOTE: Weights for Minimum Plain Bore (MPB) Sprockets are with minimum bore. Weights for Bushed Sprockets less bushing. Dimensions in Inches. Weight in pounds.

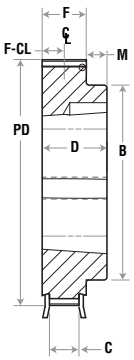
MPC® Sprockets
14mm

Type A



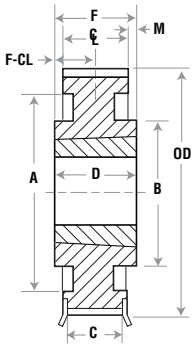
Type AF

Type B



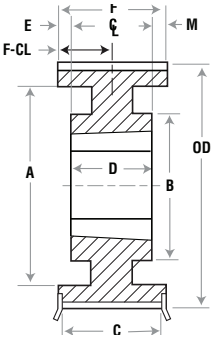
Type BF

Type C



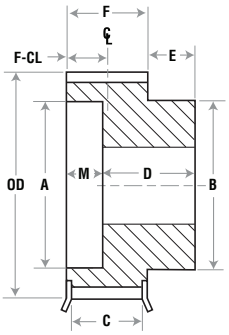
Type CF

Type D



Type DF

Type 6



Type 6F

14mm Pitch — 90mm Wide Belt

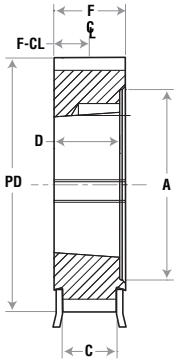
No. of Teeth	Catalog Number	Bore	Pitch Diameter	Diameter		Type	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Max Flange O.D.			A	B	C	D	E	F	M	F-CL	
MPB 14mm Pitch, 90mm (3.54 in.) Wide Belt (14M-90)																
28	PB14MX28S90	MPB	4.912	4.802	5.4	6F-1	2.938	-	3.97	3.88	5.14	0.95	4.192	-	2.1	20.0
29	PB14MX29S90	MPB	5.088	4.978	5.76	6F-1	3.188	-	4.35	3.88	5	0.81	4.192	-	2.1	22.1
30	PB14MX30S90	MPB	5.263	5.153	5.76	6F-1	3.188	-	4.35	3.88	5	0.81	4.192	-	2.1	24.0
31	PB14MX31S90	MPB	5.439	5.329	6.11	6F-1	3.438	-	4.57	3.88	5	0.81	4.192	-	2.1	21.8
32	PB14MX32S90	MPB	5.614	5.504	6.11	6F-1	3.438	-	4.57	3.88	5	0.81	4.192	-	2.1	27.0
33	PB14MX33S90	MPB	5.79	5.68	6.47	6F-1	3.5	-	4.89	3.88	5.2	1.01	4.192	-	2.1	30.0
34	PB14MX34S90	MPB	5.965	5.855	6.47	6F-1	3.5	-	4.89	3.88	5.2	1.01	4.192	-	2.1	27.2
35	PB14MX35S90	MPB	6.141	6.031	6.82	6F-1	3.813	-	5.30	3.88	5.2	1.01	4.192	-	2.1	28.7
36	PB14MX36S90	MPB	6.316	6.26	6.82	6F-1	3.813	-	5.30	3.88	5.2	1.01	4.192	-	2.1	30.3
37	PB14MX37S90	MPB	6.492	6.382	7.17	6F-1	4.125	-	5.63	3.88	5.2	1.01	4.192	-	2.1	32.1
38	PB14MX38S90	MPB	6.667	6.557	7.17	6F-1	4.125	-	5.63	3.88	5.2	1.01	4.192	-	2.1	33.9
39	PB14MX39S90	MPB	6.842	6.732	7.5	6F-1	4.375	-	5.89	3.88	5.2	1.01	4.192	-	2.1	35.8
40	PB14MX40S90	MPB	7.018	6.908	7.52	6F-1	4.375	-	5.89	3.88	5.2	1.01	4.192	-	2.1	37.7
Taper Bushed 14mm Pitch, 90mm (3.54 in.) Wide Belt (14M-90)																
35	14MX35S90-3020	3020	6.141	6.031	6.82	AF-1	3	4.95	-	3.88	2	-	4.192	2.19	2.1	22.9
36	14MX36S90-3020	3020	6.316	6.26	6.82	AF-1	3	4.95	-	3.88	2	-	4.192	2.19	2.1	23.1
37	14MX37S90-3020	3020	6.492	6.382	7.17	AF-1	3	5.27	-	3.88	2	-	4.192	2.19	2.1	23.4
38	14MX38S90-3020	3020	6.667	6.557	7.17	AF-1	3	5.27	-	3.88	2	-	4.192	2.19	2.1	23.7
39	14MX39S90-3020	3020	6.842	6.732	7.52	AF-1	3	5.54	-	3.88	2	-	4.192	2.19	2.1	24.0
40	14MX40S90-3020	3020	7.018	6.908	7.52	AF-1	3	5.54	-	3.88	2	-	4.192	2.19	2.1	24.3
43	14MX43S90-3525	3525	7.544	7.434	8.04	AF-1	3.5	6.16	-	3.88	2.5	-	4.192	1.69	2.1	24.7
45	14MX45S90-3525	3525	7.895	7.785	8.39	AF-1	3.5	6.42	-	3.88	2.5	-	4.192	1.69	2.1	27.3
48	14MX48S90-3525	3525	8.421	8.311	8.94	AF-1	3.5	6.96	-	3.88	2.5	-	4.192	1.69	2.1	33.4
50	14MX50S90-3525	3525	8.772	8.662	9.29	AF-1	3.5	7.44	-	3.88	2.5	-	4.192	1.69	2.1	29.3
53	14MX53S90-3525	3525	9.299	9.189	9.69	AF-1	3.5	7.83	-	3.88	2.5	-	4.192	1.69	2.1	46.8
56	14MX56S90-4030	4030	9.825	9.715	10.36	AF-1	4	8.35	-	3.88	3	-	4.192	1.69	2.1	42.1
60	14MX60S90-4030	4030	10.527	10.417	11.07	AF-1	4	9.06	-	3.88	3	-	4.192	1.69	2.1	50.5
63	14MX63S90-4030	4030	11.053	10.943	11.59	AF-1	4	9.59	-	3.88	3	-	4.192	1.69	2.1	64.6
67	14MX67S90-4030	4030	11.755	11.645	12.5	AF-1	4	9.88	-	3.88	3	-	4.192	1.69	2.1	70.0
71	14MX71S90-4030	4030	12.457	12.347	13.07	AF-1	4	10.67	-	3.88	3	-	4.192	1.69	2.1	86.7
75	14MX75S90-4030	4030	13.158	13.048	13.73	AF-1	4	11.63	-	3.88	3	-	4.192	1.69	2.1	85.0
80	14MX80S90-4030	4030	14.036	13.926	14.62	DF-1	4	12.56	10	3.88	3	-	4.192	1.69	2.1	88.0
90	14MX90S90-4030	4030	15.79	15.68	-	D-2	4	14.26	10	-	3	-	4.192	1.69	2.1	89.0
112	14MX112S90-4535	4535	19.65	19.54	-	D-2	4.5	16.35	10.5	-	3.5	-	4.192	0.69	2.1	197.9
140	14MX140S90-5040	5040	24.562	24.452	-	D-3	5	20.74	11	-	4	-	4.192	0.19	2.1	240.0
168	14MX168S90-6050	6050	29.475	29.365	-	C-3	6	25.11	15.5	-	5	-	4.192	0.81	2.1	327.3
180	14MX180S90-6050	6050	31.58	31.47	-	C-3	6	27.06	15.5	-	5	-	4.192	0.81	2.1	335.9
200	14MX200S90-6050	6050	35.089	34.979	-	C-3	6	30.29	15.5	-	5	-	4.192	0.81	2.1	344.5
224	14MX224S90-6050	6050	39.3	39.19	-	C-3	6	34.46	15.5	-	5	-	4.192	0.81	2.1	589.0

Type: 1- Solid 2 - Web 3 - Arms F=Flanged

NOTE: Weights for Minimum Plain Bore (MPB) Sprockets are with minimum bore. Weights for Bushed Sprockets less bushing. Dimensions in Inches. Weight in pounds.

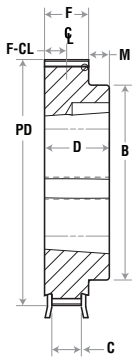
MPC® Sprockets 14mm

Type A



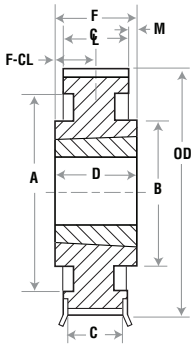
Type AF

Type B



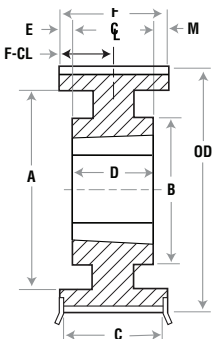
Type BF

Type C



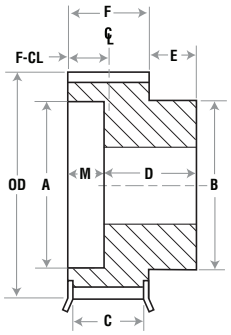
Type CF

Type D



Type DF

Type 6



Type 6F

14mm Pitch — 125mm Wide Belt

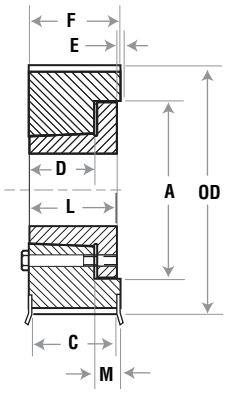
No. of Teeth	Catalog Number	Bore	Pitch Diameter	Diameter		Type	Max Bore	Dimensions								Weight Approx. (lbs.)
				O.D.	Max Flange O.D.			A	B	C	D	E	F	M	F-CL	
MPB 14mm Pitch, 125mm (4.92 in.) Wide Belt (14M-125)																
28	PB14MX28S125	MPB	4.912	4.802	5.4	6F-1	2.938	-	3.97	5.29	6.5	0.89	5.61	-	2.81	22.0
29	PB14MX29S125	MPB	5.088	4.978	5.76	6F-1	3.188	-	4.35	5.29	6.5	0.89	5.61	-	2.81	27.0
30	PB14MX30S125	MPB	5.263	5.153	5.76	6F-1	3.188	-	4.35	5.29	6.5	0.89	5.61	-	2.81	30.2
31	PB14MX31S125	MPB	5.439	5.329	6.11	6F-1	3.438	-	4.57	5.29	6.5	0.89	5.61	-	2.81	32.0
32	PB14MX32S125	MPB	5.614	5.504	6.11	6F-1	3.438	-	4.57	5.29	6.5	0.89	5.61	-	2.81	34.0
33	PB14MX33S125	MPB	5.79	5.68	6.47	6F-1	3.5	-	4.89	5.29	6.69	1.08	5.61	-	2.81	31.8
34	PB14MX34S125	MPB	5.965	5.855	6.47	6F-1	3.5	-	4.89	5.29	6.69	1.08	5.61	-	2.81	34.3
35	PB14MX35S125	MPB	6.141	6.031	6.82	6F-1	3.813	-	5.30	5.29	6.69	1.08	5.61	-	2.81	36.2
36	PB14MX36S125	MPB	6.316	6.206	6.82	6F-1	3.813	-	5.30	5.29	6.69	1.08	5.61	-	2.81	38.0
37	PB14MX37S125	MPB	6.492	6.382	7.17	6F-1	4.125	-	5.63	5.29	6.69	1.08	5.61	-	2.81	40.3
38	PB14MX38S125	MPB	6.667	6.557	7.17	6F-1	4.125	-	5.63	5.29	6.69	1.08	5.61	-	2.81	42.5
39	PB14MX39S125	MPB	6.842	6.732	7.52	6F-1	4.375	-	5.89	5.29	6.69	1.08	5.61	-	2.81	44.9
40	PB14MX40S125	MPB	7.018	6.908	7.52	6F-1	4.375	-	5.89	5.29	6.69	1.08	5.61	-	2.81	47.2
43	PB14MX43S125	MPB	7.543	7.434	8.04	6F-1	4.813	-	6.51	5.29	6.81	1.2	5.61	-	2.81	55.5
45	PB14MX45S125	MPB	7.894	7.785	8.4	6F-1	5	-	6.76	5.29	6.81	1.2	5.61	-	2.81	61.3
48	PB14MX48S125	MPB	8.421	8.311	8.94	6F-1	5.625	-	7.29	5.29	6.81	1.2	5.61	-	2.81	68.7
Taper Bushed 14mm Pitch, 125mm (4.92 in.) Wide Belt (14M-125)																
50	14MX50S125-4535	4535	8.772	8.662	9.29	AF-1	4.5	7.44	-	5.29	3.5	-	5.61	-	2.81	39.4
53	14MX53S125-4535	4535	9.299	9.189	9.69	AF-1	4.5	8.125	-	5.29	3.5	-	5.61	-	2.81	50.1
56	14MX56S125-4535	4535	9.825	9.715	10.36	AF-1	4.5	8.35	-	5.29	3.5	-	5.61	-	2.81	52.6
60	14MX60S125-4535	4535	10.527	10.417	11.07	AF-1	4.5	9.06	-	5.29	3.5	-	5.61	-	2.81	63.3
63	14MX63S125-4535	4535	11.053	10.943	11.59	AF-1	4.5	9.59	-	5.29	3.5	-	5.61	-	2.81	77.2
67	14MX67S125-4535	4535	11.755	11.645	12.5	AF-1	4.5	9.88	-	5.29	3.5	-	5.61	-	2.81	93.8
71	14MX71S125-5040	5040	12.457	12.347	13.07	AF-1	5	10.67	-	5.29	4	-	5.61	-	2.81	93.0
75	14MX75S125-5040	5040	13.158	13.048	13.73	AF-1	5	11.63	-	5.29	4	-	5.61	-	2.81	132.8
80	14MX80S125-5040	5040	14.036	13.926	14.62	AF-1	5	12.59	-	5.29	4	-	5.61	-	2.81	137.0
90	14MX90S125-5040	5040	15.79	15.68	-	D-1	5	14.26	11	-	4	-	5.61	1.61	2.81	121.0
112	14MX112S125-6050	6050	19.65	19.54	-	A-1	6	16.35	-	-	5	-	5.61	0.61	2.81	210.6
140	14MX140S125-6050	6050	24.562	24.452	-	D-3	6	20.74	15.5	-	5	-	5.61	0.61	2.81	270.3
168	14MX168S125-7060	7060	29.475	29.365	-	C-3	7	25.11	17	-	6	-	5.61	0.39	2.81	345.2
180	14MX180S125-7060	7060	31.58	31.47	-	C-3	7	27.06	17	-	6	-	5.61	0.39	2.81	365.2
200	14MX200S125-7060	7060	35.089	34.979	-	C-3	7	30.29	17	-	6	-	5.61	0.39	2.81	373.5
224	14MX224S125-7060	7060	39.3	39.19	-	C-3	7	34.21	17	-		-	5.61	0.39	2.81	482.3

Type: 1- Solid 2 - Web 3 - Arms F=Flanged

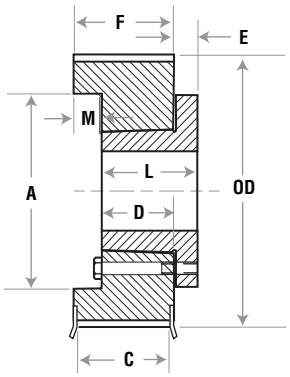
NOTE: Weights for minimum plain bore (MPB) sprockets are with minimum bore.
Weights for bushed sprockets less bushing.
Dimensions in inches. Weight in pounds.

MPC® Sprockets 14mm
Air Cool Heat Exchange

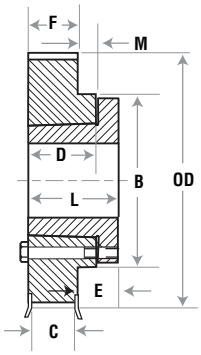
Type A



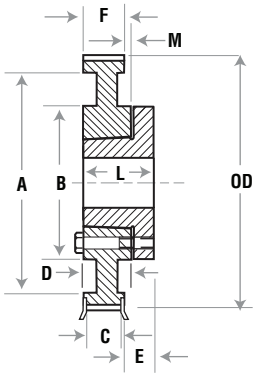
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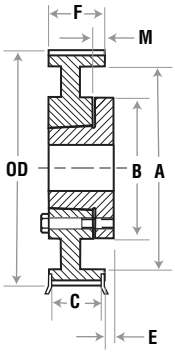
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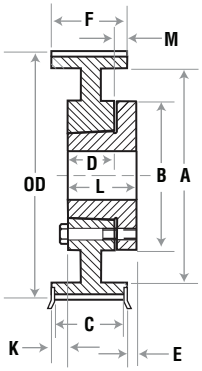
Type D



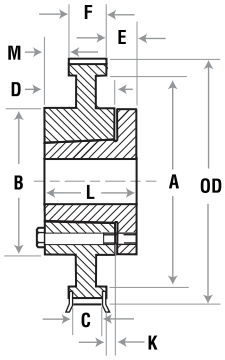
Type E



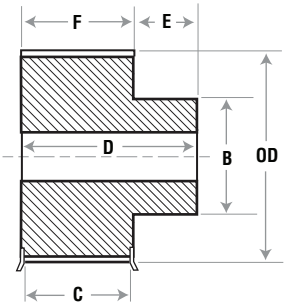
Type F



Type G



Type 6



14mm Pitch — 20mm Wide Air Cool Heat Exchange Belt

No. of Teeth	Catalog Number	Bore	Pitch Diameter	Diameter		Type	Max Bore	Dimensions									Weight Approx. (lbs.)
				O.D.	Max Flange O.D.			A	B	C	D	E	F	L	M	F-CL	
MPB 14mm Pitch, 20mm (0.787 in.) Wide Belt (14M-20)																	
28	F14MX28S20-SK	SK	4.912	4.802	5.402	AF-1	2.625	3.61	-	1.04	1.25	0.45	1.36	1.94	0.11	0.68	3.90
29	F14MX29S20-SK	SK	5.088	4.978	5.763	AF-1	2.625	3.85	-	1.04	1.25	0.45	1.36	1.94	0.11	0.68	4.50
30	F14MX30S20-SK	SK	5.263	5.153	5.763	AF-1	2.625	3.99	-	1.04	1.25	0.45	1.36	1.94	0.11	0.68	4.80
31	F14MX31S20-SK	SK	5.439	5.329	6.114	AF-1	2.625	4.2	-	1.04	1.25	0.45	1.36	1.94	0.11	0.68	5.50
32	F14MX32S20-SK	SK	5.614	5.504	6.114	AF-1	2.625	4.22	-	1.04	1.25	0.45	1.36	1.94	0.11	0.68	5.9
33	F14MX33S20-SK	SK	5.79	5.68	6.465	AF-1	2.625	4.53	-	1.04	1.25	0.45	1.36	1.94	0.11	0.68	6.3
34	F14MX34S20-SK	SK	5.965	5.855	6.465	AF-1	2.625	4.53	-	1.04	1.25	0.45	1.36	1.94	0.11	0.68	6.9
35	F14MX35S20-SK	SK	6.141	6.031	6.816	AF-1	2.625	4.89	-	1.04	1.25	0.45	1.36	1.94	0.11	0.68	7.3
140	F14MX140S20-E	E	24.56	24.452	-	CF-3*	3.5	23.21	7.5	1.04	1.63	1.15	1.36	2.75	0.27	0.68	66.10
168	F14MX168S20-F	F	29.472	29.365	-	GF-3*	4	27.46	7.25	1.04	2.5	1:58	1.36	3.75	0.56	0.68	90.00
180	F14MX180S20-F	F	31.58	31.47	-	CF-3*	4	29.38	7.25	1.04	2.5	2.14	1.36	3.75	1.14	0.68	107.30
200	F14MX200S20-F	F	35.086	34.98	-	GF-3*	4	32.88	7.25	1.04	2.5	1.26	1.36	3.75	0.88	0.68	119.00
224	F14MX224S20-F	F	39.3	39.19	-	CF-3*	4	37.13	7.25	1.04	2.5	1.15	1.36	3.75	1.14	0.68	125.00

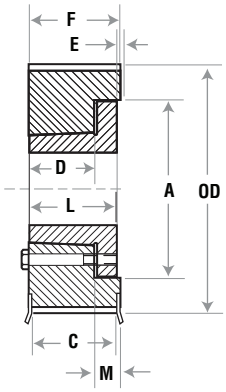
Type: 1- Solid 2 - Web 3 - Arms F=Flanged

* Flanged on bushings install side only.

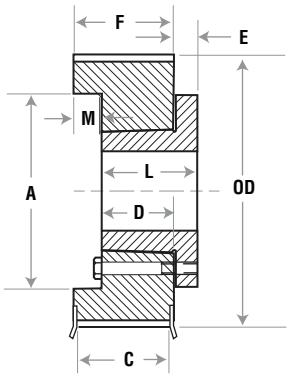
NOTE: Weights for minimum plain bore (MPB) sprockets are with minimum bore.
Weights for bushed sprockets less bushing.
Dimensions in inches. Weight in pounds.

MPC® Sprockets 14mm Air Cool Heat Exchange

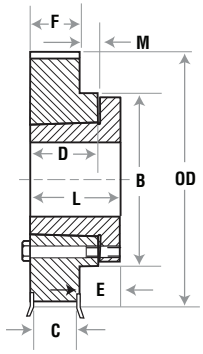
Type A



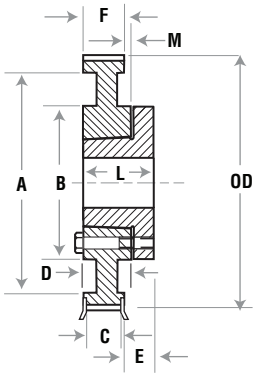
Type B



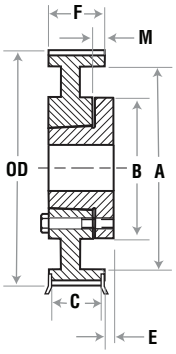
Type C



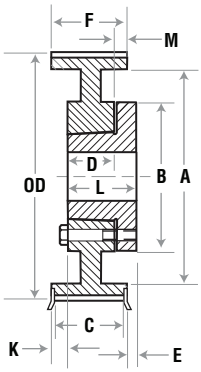
Type D



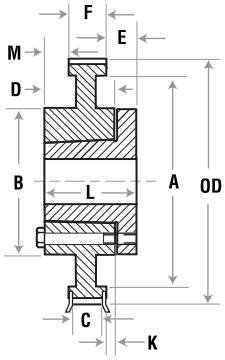
Type E



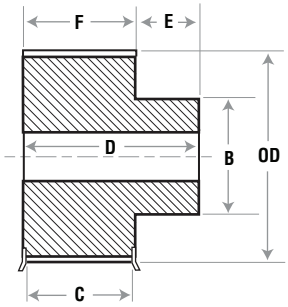
Type F



Type G



Type 6



14mm Pitch — 37mm Wide Air Cool Heat Exchange Belt

No. of Teeth	Catalog Number	Bore	Pitch Diameter	Diameter		Type	Max Bore	Dimensions									Weight Approx. (lbs.)
				O.D.	Max Flange O.D.			A	B	C	D	E	F	L	M	F-CL	
MPB 14mm Pitch, 20mm (0.787 in.) Wide Belt (14M-20)																	
28	F14MX28S37-SK	SK	4.912	4.802	5.402	BF-1	2.625	3.61	-	1.74	1.25	0.56	2.06	1.94	0.81	1.03	4.20
29	F14MX29S37-SK	SK	5.088	4.978	5.763	BF-1	2.625	3.75	-	1.74	1.25	0.56	2.06	1.94	0.81	1.03	4.70
30	F14MX30S37-SK	SK	5.263	5.153	5.763	BF-1	2.625	3.89	-	1.74	1.25	0.56	2.06	1.94	0.81	1.03	5.00
31	F14MX31S37-SK	SK	5.439	5.329	6.114	AF-1	2.625	4.06	-	1.74	1.25	-0.25	2.06	1.94	0.81	1.03	6.00
32	F14MX32S37-SK	SK	5.614	5.504	6.114	AF-1	2.625	4.22	-	1.74	1.25	-0.25	2.06	1.94	0.81	1.03	7.10
33	F14MX33S37-SK	SK	5.79	5.68	6.465	AF-1	2.625	4.41	-	1.74	1.25	-0.25	2.06	1.94	0.81	1.03	7.50
34	F14MX34S37-SK	SK	5.965	5.855	6.465	AF-1	2.625	4.53	-	1.74	1.25	-0.25	2.06	1.94	0.81	1.03	7.80
35	F14MX35S37-SK	SK	6.141	6.031	6.816	AF-1	2.625	4.75	-	1.74	1.25	-0.25	2.06	1.94	0.81	1.03	8.30
36	F14MX36S37-SF	SF	6.315	6.206	6.816	AF-1	2.813	4.94	-	1.74	1.5	-0.19	2.06	2.06	0.56	1.03	8.80
180	F14MX180S37-E	E	31.580	31.47	-	DF-3*	3.5	29.38	7.5	-	1.63	0.69	2.03	2.75	0.21	1.02	120.00
200	F14MX200S37-E	E	35.086	34.98	-	DF-3*	3.5	32.92	7.5	-	1.63	0.69	2.03	2.75	0.21	1.02	130.00
224	F14MX224S37-E	E	39.300	39.19	-	DF-3*	3.5	37.13	7.5	-	1.63	0.69	2.03	2.75	0.21	1.02	177.00

Type: 1- Solid 2 - Web 3 - Arms F=Flanged

* Flanged on bushing's install side only.

NOTE: Weights for minimum plain bore (MPB) sprockets are with minimum bore.
Weights for bushed sprockets less bushing.
Dimensions in inches. Weight in pounds.

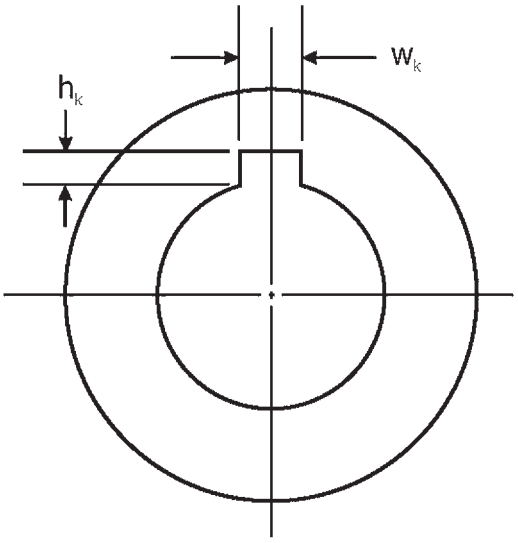
Sprocket Specifications

Sprocket Tolerance Specifications

MPC® sprockets are made to close tolerances. Strict adherence to the standard tolerances (as shown in table below) is highly recommended.

Sprocket Outside Diameter and Pitch

Outside Diameter Range (in)	Outside Diameter Tolerance (in)	Pitch to Pitch Tolerance	
		Adjacent Grooves	Accumulative Over 90 Degrees
Over 2 to and including 4	+ 0.004 - 0	± 0.001	± 0.0045
Over 4 to and including 7	+ 0.005 - 0	± 0.001	± 0.005
Over 7 to and including 12	+ 0.006 - 0	± 0.001	± 0.005
Over 12 to and including 20	+ 0.007 - 0	± 0.001	± 0.0065
Over 20	+ 0.008 - 0	± 0.001	± 0.0075



Sprocket Runout Radiant Runout*

Outside Diameter		Total Eccentricity Total Indicator Reading	
in	mm	in	mm
Over 2 to 4	50 100	0.003	0.08
Over 4 to 8	100 200	0.004	0.10
Over 8	200	0.005 per inch O.D. over 8”	.013 per mm O.C. over 200mm
		(may not exceed face diameter tolerance)	

***Total indicator reading**

Axial Runout*

For outside diameters 1.0 inches and under ..... 0.001 inches
For each additional inch of outside diameter up through 10.0 inches, add ..... 01 inches
For each additional inch outside diameter over 10.0 inches, add ..... 05 inches

***Total Indicator Reading**

Sprocket and Bushing Keyseat

Shaft Diameter (in)	Width wk †	Depth hk (in) + 0.015 0
Up through 7/16 (0.44)	3/32 (0.0938)	3/64 (0.047)
over 7/16 (0.44) to and incl. 9/16 (0.56)	1/8 (0.125)	1/16 (0.062)
over 9/16 (0.56) to and incl. 7/8 (0.88)	3/16 (0.1875)	3/32 (0.094)
over 7/8 (0.88) to and incl. 1-1/4 (1.25)	1/4 (0.250)	1/8 (0.125)
over 1-1/4 (1.25) to and incl. 1-3/8 (1.38)	5/16 (0.3125)	5/32 (0.156)
over 1-3/8 (1.38) to and incl. 1-3/4 (1.75)	3/8 (0.375)	3/16 (0.188)
over 1-3/4 (1.75) to and incl. 2-1/4 (2.25)	1/2 (0.500)	1/4 (0.250)
over 2-1/4 (2.25) to and incl. 2-3/4 (2.75)	5/8 (0.625)	5/16 (0.312)
over 2-3/4 (2.75) to and incl. 3-1/4 (3.25)	3/4 (0.750)	3/8 (0.375)
over 3-1/4 (3.25) to and incl. 3-3/4 (3.75)	7/8 (0.875)	7/16 (0.438)
over 3-3/4 (3.75) to and incl. 4-1/2 (4.50)	1 (1)	1/2 (0.500)
over 4-1/2 (4.50) to and incl. 5-1/2 (5.50)	1-1/4 (1.250)	5/8 (0.625)

† Tolerance on width Wk
For width up through 1/2 (0.500) ..... +0.002, 0 inches
For width up through 1/2 (0.500) up through 1 (1) ..... +0.003, 0 inches
For width over 1 (1) ..... +0.004, 0 inches

PLASTICS

PRODUCT **PAGE**

SECTION I – NON-METALLIC SPROCKETS . . . . . L-2 – L-30
SPROCKETS - STOCK
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NO. 35 – ⅜" PITCH L-6
NO. 40 – ½" PITCH L-7
NO. 50 – ⅝" PITCH L-8
NO. 60 – ¾" PITCH L-9
NO. 80 – 1" PITCH L-10
NO. 100 – 1¼" PITCH L-11
SPROCKETS - METRIC . . . . . L-12 – L-14
IDLER SPROCKETS L-15
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SECTION II – NATURAL NYLON GEARS . . . . . L-35 – L-40
GEARS - STOCK – 14½° PRESSURE ANGLE
4DP – 2" FACE L-36
5DP – 1¾" FACE L-37
6DP – 1½" FACE L-38
8DP – 1¼" FACE L-39
10DP – 1" FACE L-40
12DP – ¾" FACE L-41
16DP – ½" FACE L-42
20DP – ⅜" FACE L-43
GEAR RACKS – 14½° PRESSURE ANGLE L-44
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SECTION III – WHEELS & ROLLERS . . . . . L-45 – L-46

SECTION IV – SPECIALTY ITEMS . . . . . L-47 – L-61
WASTE WATER TREATMENT PRODUCTS . . . . . L-47 – L-49
REPLACEMENT PARTS FOR BOTTLING & PACKAGING PLANTS L-50
STATIONARY GUIDES . . . . . L-51 – L-61

Non-Metallic Sprockets



Benefits:

- **Extend chain life**
- **Corrosion resistant materials**
- **Light-weight**
- **Usda/fda approved**
- **For use with steel or plastic chain**

To meet our customers' diverse needs, Martin offers many roller chain sprockets made of industrial plastics. Plastic roller chain sprockets often prove superior in performance and durability compared with conventional metallic sprockets.

The benefits of using plastic roller chain sprockets include extended chain life, corrosion resistance, light weight, and decreased noise levels.

Martin plastic sprockets are available in USDA/ FDA approved materials for applications involving food or drug processing and packaging.

Roller chain is available in sizes No. 25, 35, and 40. Most roller chain sprockets are available in "A" plate, "B" hub, or "C" hub styles. "B" hubs are made with either plastic or bolt-on metal hubs. Martin also manufactures metal hubs in steel and stainless steel.

Non-standard or custom-sized sprockets are also available, including square bores, snap ring and grease grooves, special cutouts, and special tooth dimensions. Martin can fabricate products from several types of plastics, including:

- **Nylon**
- **UHMW**
- **Acetal**
- **Teflon®**
- **Polypropylene**

Roller Chain Sprockets Nomenclature



D 160 B 16 NM 2 1/4

# of Strands

Blank Single
D Double
E Triple
F Quadruple
DS Double Single

Chain Pitch (measured in eighths)

25 = 2/8 = 1/4"
35 = 3/8 = 3/8"
40 = 4/8 = 1/2"
41 = 4/8 = 1/2"
50 = 5/8 = 5/8"
60 = 6/8 = 3/4"
80 = 8/8 = 1"
100 = 10/8 = 1 1/4"
120 = 12/8 = 1 1/2"
140 = 14/8 = 1 3/4"
160 = 16/8 = 2"
180 = 18/8 = 2 1/4"
200 = 20/8 = 2 1/2"
240 = 24/8 = 3"

Sprocket Type

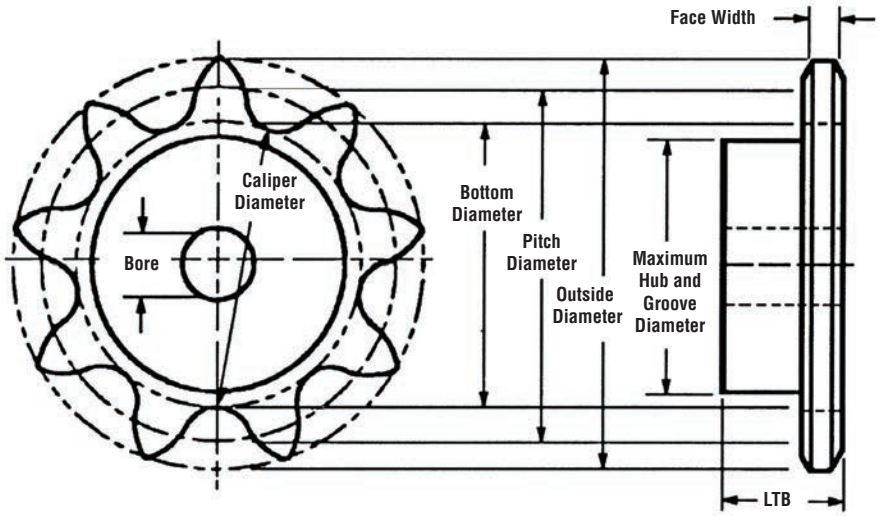
A Plate Only
B Hub One Side
C Hub Both Sides
D Detachable Hubs
JA, SH,... QD
BTB Taper Bushed
H, P, Q,... MST®
BS Bored-To-Size

# of Teeth

Material

NM Non-Metallic

Bore Size



Sprocket Dimensional Specifications

Bottom Diameter (B.D.) – The diameter of a circle tangent to the seating curve at the bottom of the tooth gap of a roller chain sprocket.

Caliper Diameter – Since the bottom diameter of a sprocket with odd number of teeth cannot be measured directly, caliper diameters are the measurement across the tooth gaps nearly opposite.

Pitch Diameter (P.D.) – The diameter across to the pitch circle which is the circle followed by the centers of the chain pins as the sprocket revolves in mesh with the chain.

$$PD = \frac{PITCH}{SIN\ (180/Nt)}$$

Outside Diameter (O.D.) – The measurement from the tip of the sprocket tooth across to the corresponding point directly across the sprocket. It is comparatively unimportant as the tooth length is not vital to proper meshing with the chain. The outside diameter may vary depending on type of cutter used.

OD = (Pitch) (.6 + COT [180 / Nt])

Hub Diameter (HOD) – That distance across the hub from one side to another. This diameter must not exceed the calculated diameter of the inside of the chain side bars.

Maximum Sprocket Bore – Maximum Sprocket Bore is determined by the required hub wall thickness for proper strength. Allowance must be made for keyway and setscrews.

Face Width – Face width is limited in its maximum dimension to allow proper clearance to provide for chain engagement and disengagement. The minimum width is limited to provide the proper strength to carry the imposed loads.

Length Thru Bore (LTB) – Length Thru Bore (or L.T.B.) must be sufficient to allow a long enough key to withstand the torque transmitted by the shaft. This also assures stability of the sprocket on the shaft.

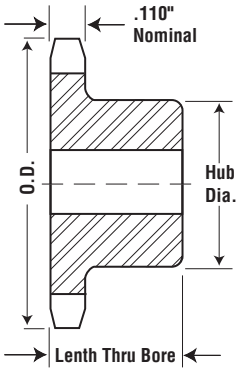
Plastic Sprockets

No. 25 ¼" Pitch

Available with:

- Stock Bore
- Finished Bore Sizes





TYPE B

Single-Type B — Nylon

Number of Teeth	Catalog Number	Diameter		Type	Bore (in)		Hub (in)	
		Outside	Pitch		Stock	Max	Diameter	LTB
9	25B9NM	0.837	0.731	B	0.25	0.25	0.594	0.5
10	25B10NM	0.919	0.809	B	0.25	0.313	0.563	0.485
11	25B11NM	1.001	0.887	B	0.25	0.375	0.563	0.485
12	25B12NM	1.083	0.966	B	0.25	0.438	0.688	0.485
13	25B13NM	1.164	1.045	B	0.25	0.5	0.75	0.485
14	25B14NM	1.245	1.123	B	0.375	0.5	0.75	0.485
15	25B15NM	1.326	1.202	B	0.375	0.5	0.75	0.485
16	25B16NM	1.407	1.281	B	0.375	0.5	0.813	0.485
17	25B17NM	1.487	1.361	B	0.375	0.5	0.906	0.485
18	25B18NM	1.568	1.44	B	0.375	0.5	1	0.485
19	25B19NM	1.648	1.519	B	0.375	0.5	1.063	0.485
20	25B20NM	1.728	1.598	B	0.375	0.5	1.156	0.485
21	25B21NM	1.809	1.677	B	0.375	0.5	1.156	0.485
22	25B22NM	1.889	1.757	B	0.375	0.5	1.156	0.485
23	25B23NM	1.969	1.836	B	0.375	0.5	1.156	0.485
24	25B24NM	2.049	1.915	B	0.5	0.188	1.781	0.7
25	25B25NM	2.129	1.995	B	0.5	1	1.86	0.7
26	25B26NM	2.209	2.074	B	0.5	0.188	1.938	0.7
27	25B27NM	2.289	2.153	B	0.5	1	2	0.7
28	25B28NM	2.369	2.233	B	0.5	0.188	1.219	0.7
29	25B29NM	2.449	2.312	B	0.5	1	2	0.7
30	25B30NM	2.529	2.392	B	0.5	1	2	0.7
31	25B31NM	2.609	2.471	B	0.5	1	2	0.7
32	25B32NM	2.688	2.551	B	0.5	1	2	0.7
33	25B33NM	2.688	2.63	B	0.5	1	2	0.7
34	25B34NM	2.848	2.709	B	0.5	1	2	0.7
35	25B35NM	2.928	2.789	B	0.5	1	2	0.7
36	25B36NM	3.008	2.868	B	0.5	1	2	0.7
37	25B37NM	3.087	2.948	B	0.5	1	2	0.7
39	25B39NM	3.167	3.107	B	0.5	1	2	0.7
40	25B40NM	3.327	3.186	B	0.5	1	2	0.7
41	25B41NM	3.406	3.266	B	0.5	1	2	0.7
42	25B42NM	3.486	3.345	B	0.5	1	2	0.7
43	25B43NM	3.566	3.425	B	0.5	1	2	0.7
44	25B44NM	3.646	3.504	B	0.5	1	2	0.7
45	25B45NM	3.725	3.584	B	0.5	1	2	0.7
46	25B46NM	3.805	3.663	B	0.5	1	2	0.7
47	25B47NM	3.885	3.743	B	0.5	1	2	0.7
48	25B48NM	3.964	3.822	B	0.5	1	2	0.7
49	25B49NM	4.044	3.902	B	0.5	1.5	2	0.75
50	25B50NM	4.124	3.981	B	0.5	1.5	2	0.75
54	25B54NM	4.442	4.3	B	0.5	1.5	2	0.75
60	25B60NM	4.92	4.777	B	0.5	0.875	1.375	0.61

Notes:

- Standard Material: Natural Nylon.
- Other numbers of teeth and hub styles available.
- Available as stock drilled bore, finished drive bore with keyway and setscrews, or idler bore.
- A Plate and C Style also available.

No. 35
3/8" Pitch

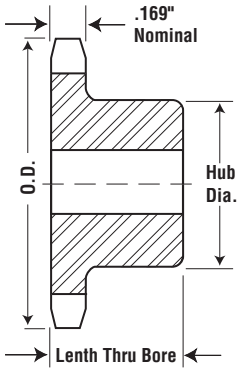
Plastic Sprockets

Martin

Available with:

- Stock Bore
- Finished Bore Sizes





TYPE B

Single-Type B — Nylon

Number of Teeth	Catalog Number	Diameter		Type	Bore (in)		Hub (in)	
		Outside	Pitch		Stock	Max	Diameter	LTB
8	35B8NM	1.13	0.98	B	0.25	0.375	0.75*	0.75
9	35B9NM	1.096	1.096	B	0.25	0.375	0.844*	0.75
10	35B10NM	1.379	1.214	B	0.375	0.438	0.969*	0.75
11	35B11NM	1.502	1.331	B	0.375	0.5	1.063*	0.75
12	35B12NM	1.625	1.449	B	0.5	0.563	1.219*	0.75
13	35B13NM	1.746	1.567	B	0.5	0.5	1.250*	0.75
14	35B14NM	1.868	1.685	B	0.5	0.75	1.25	0.75
15	35B15NM	1.989	1.804	B	0.5	0.813	1.344	0.875
16	35B16NM	2.11	1.922	B	0.5	0.938	1.469	0.875
17	35B17NM	2.231	2.041	B	0.5	0.875	1.594	0.875
18	35B18NM	2.352	2.16	B	0.5	0.688	1.719	0.875
19	35B19NM	2.472	2.278	B	0.5	1	1.844	0.875
20	35B20NM	2.593	2.397	B	0.5	1.188	1.938	0.875
21	35B21NM	2.713	2.516	B	0.5	1	2	0.875
22	35B22NM	2.833	2.635	B	0.5	1	2	0.875
23	35B23NM	2.953	2.754	B	0.5	1	2	0.875
24	35B24NM	3.073	2.873	B	0.5	1.188	2	0.875
25	35B25NM	3.193	2.992	B	0.5	1	2	0.875
26	35B26NM	3.313	3.111	B	0.5	1.438	2	0.875
27	35B27NM	3.433	3.23	B	0.5	1	2	0.875
28	35B28NM	3.553	3.349	B	0.5	1	2	0.875
29	35B29NM	3.673	3.468	B	0.5	1	2	0.875
30	35B30NM	3.793	3.588	B	0.5	1.438	2	0.875
31	35B31NM	3.913	3.707	B	0.5	1	2	0.875
32	35B32NM	4.032	3.826	B	0.5	1.5	2	0.875
33	35B33NM	4.152	3.945	B	0.5	1.5	2.375	0.875
34	35B34NM	4.272	4.064	B	0.5	1.5	2.375	0.875
35	35B35NM	4.392	4.183	B	0.5	1.438	2.375	0.875
36	35B36NM	4.511	4.303	B	0.5	1.438	2.375	0.875
37	35B37NM	4.631	4.422	B	0.5	1.5	2.375	0.875
38	35B38NM	4.751	4.541	B	0.5	1.5	2.375	0.875
39	35B39NM	4.87	4.66	B	0.5	1.5	2.375	0.875
40	35B40NM	4.99	4.78	B	0.5	1.75	2.375	1
41	35B41NM	5.109	4.899	B	0.5	1.5	2.375	1
42	35B42NM	5.229	5.018	B	0.5	1.5	2.375	1
43	35B43NM	5.349	5.137	B	0.5	1.5	2.375	1
44	35B44NM	5.468	5.257	B	0.5	1.5	2.375	1
45	35B45NM	5.588	5.376	B	0.5	1.75	2.375	1
46	35B46NM	5.707	5.495	B	0.5	1.5	2.375	1
47	35B47NM	5.827	5.614	B	0.5	1.5	2.375	1
48	35B48NM	5.946	5.734	B	0.5	1.5	2.375	1

* Has recessed groove for chain clearance.

Notes:

- Standard Material: Natural Nylon.
- Other numbers of teeth and hub styles available.
- Available as stock drilled bore, finished drive bore with keyway and setscrews, or idler bore.
- A Plate and C Style also available.

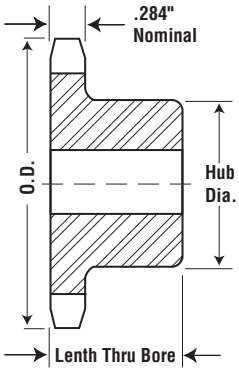
Plastic Sprockets

No. 40 ½" Pitch

Available with:

- Stock Bore
- Finished Bore Sizes





TYPE B

Single-Type B — Nylon

Number of Teeth	Catalog Number	Diameter		Type	Bore (in)		Hub (in)	
		Outside	Pitch		Stock	Max	Diameter	LTB
8	40B8NM	1.507	1.307	B	0.5	0.5	1	0.875
9	40B9NM	1.674	1.462	B	0.5	0.5	1.063	0.875
10	40B10NM	1.839	1.618	B	0.5	0.5	1.25	0.875
11	40B11NM	2.003	1.775	B	0.5	0.5	1.375	0.875
12	40B12NM	2.166	1.932	B	0.5	0.625	1.563	0.875
13	40B13NM	2.329	2.089	B	0.5	0.625	1.563	0.875
14	40B14NM	2.491	2.247	B	0.5	0.75	1.688	0.875
15	40B15NM	2.652	2.405	B	0.5	0.875	1.813	0.875
16	40B16NM	2.814	2.563	B	0.5	0.938	2	0.875
17	40B17NM	2.975	2.721	B	0.5	1	2.125	1
18	40B18NM	3.136	2.879	B	0.5	1.125	2.313	1
19	40B19NM	3.296	3.308	B	0.5	1.25	2.5	1
20	40B20NM	3.457	3.196	B	0.5	1.25	2.625	1
21	40B21NM	3.617	3.355	B	0.5	1.25	2.75	1
22	40B22NM	3.778	3.513	B	0.5	1.375	2.875	1
23	40B23NM	3.938	3.672	B	0.5	1.375	3	1
24	40B24NM	4.098	3.831	B	0.5	1.5	3.25	1
25	40B25NM	4.258	3.989	B	0.5	1.5	3.25	1
26	40B26NM	4.418	4.148	B	0.5	1.5	3.25	1
27	40B27NM	4.578	4.307	B	0.5	1.5	3.25	1
28	40B28NM	4.738	4.466	B	0.5	1.5	3.25	1
29	40B29NM	4.897	4.625	B	0.5	1.5	3.25	1
30	40B30NM	5.057	4.783	B	0.5	1.5	3.25	1
31	40B31NM	5.217	4.942	B	0.5	1.5	3.25	1
32	40B32NM	5.377	5.101	B	0.5	1.5	3.25	1
33	40B33NM	5.536	5.26	B	0.5	1.5	3.25	1
34	40B34NM	5.696	5.419	B	0.5	1.5	3.25	1
35	40B35NM	5.855	5.578	B	0.5	1.5	3.25	1
36	40B36NM	6.015	5.737	B	0.5	1.5	3.25	1
37	40B37NM	6.175	5.896	B	0.5	1.5	3.25	1
38	40B38NM	6.334	6.055	B	0.5	1.5	3.25	1
39	40B39NM	6.494	6.214	B	1	1.5	3.25	1
40	40B40NM	6.653	6.373	B	1	1.75	3.5	1.125
41	40B41NM	6.813	6.532	B	1	1.75	3.5	1.125
42	40B42NM	6.972	6.691	B	1	1.75	3.5	1.125
43	40B43NM	7.131	6.85	B	1	1.75	3.5	1.125
44	40B44NM	7.291	7.009	B	1	1.75	3.5	1.125
45	40B45NM	7.45	7.168	B	1	1.75	3.5	1.125
46	40B46NM	7.61	7.327	B	1	1.75	3.5	1.125
47	40B47NM	7.769	7.486	B	1	1.75	3.5	1.125
48	40B48NM	7.929	7.645	B	1	1.75	3.5	1.125

Notes:

- Standard Material: Natural Nylon.
- Other numbers of teeth and hub styles available.
- Available as stock drilled bore, finished drive bore with keyway and setscrews, or idler bore.
- A Plate and C Style also available.

No. 50
5/8" Pitch

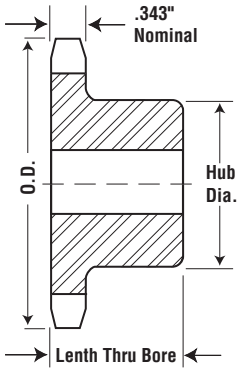
Plastic Sprockets

Martin

Available with:

- Stock bore
- Finished bore sizes





TYPE B

Single-Type B — Nylon

Number of Teeth	Catalog Number	Diameter		Type	Bore (in)		Hub (in)	
		Outside	Pitch		Stock	Max	Diameter	LTB
9	50B9NM	2.092	1.827	B	0.5	0.625	1.375*	1
10	50B10NM	1.839	2.023	B	0.5	0.75	1.563*	1
11	50B11NM	2.504	2.218	B	0.5	0.875	1.75*	1
12	50B12NM	2.708	2.415	B	0.5	1	1.984*	1
13	50B13NM	2.911	2.612	B	0.5	0.875	1.875	1
14	50B14NM	3.113	2.803	B	0.5	1	2.125	1
15	50B15NM	3.315	3.006	B	0.5	1.25	2.375	1
16	50B16NM	3.517	3.204	B	0.5	1.25	2.5	1
17	50B17NM	3.718	3.401	B	0.5	1.375	2.688	1
18	50B18NM	3.92	3.599	B	0.5	1.5	2.875	1
19	50B19NM	4.12	3.797	B	0.5	1.625	3	1
20	50B20NM	4.321	3.995	B	0.5	1.625	3	1
21	50B21NM	4.522	4.193	B	0.5	1.625	3	1
22	50B22NM	4.722	4.392	B	0.5	1.625	3	1
23	50B23NM	4.922	4.59	B	0.5	1.625	3	1
24	50B24NM	5.122	4.788	B	0.5	1.625	3	1.25
25	50B25NM	5.322	4.987	B	0.5	1.625	3	1.25
26	50B26NM	5.522	5.185	B	0.5	1.625	3	1.25
27	50B27NM	5.722	5.384	B	0.5	1.625	3	1.25
28	50B28NM	5.922	5.582	B	0.5	1.625	3	1.25
29	50B29NM	6.122	5.781	B	0.5	1.625	3	1.25
30	50B30NM	6.321	5.979	B	0.5	1.75	3.75	1.25
31	50B31NM	6.521	6.178	B	0.5	1.75	3.75	1.25
32	50B32NM	6.721	6.376	B	0.5	1.75	3.75	1.25
33	50B33NM	6.92	6.575	B	0.5	1.75	3.75	1.25
34	50B34NM	7.12	6.774	B	0.5	1.75	3.75	1.25
35	50B35NM	7.319	6.972	B	0.5	1.75	3.75	1.25
36	50B36NM	7.519	7.171	B	0.5	1.75	3.75	1.25
37	50B37NM	7.718	7.37	B	0.5	1.75	3.75	1.25
38	50B38NM	7.918	7.568	B	0.5	1.75	3.75	1.25
39	50B39NM	8.117	7.767	B	0.5	1.75	3.75	1.25
40	50B40NM	8.316	7.966	B	0.75	2	3.5	1.25
41	50B41NM	8.516	8.165	B	0.75	2	3.5	1.25
42	50B42NM	8.715	8.363	B	0.75	2	3.5	1.25
43	50B43NM	8.914	8.562	B	0.75	2	3.5	1.25
44	50B44NM	9.114	8.761	B	0.75	2	3.5	1.25
45	50B45NM	9.313	8.96	B	0.75	2.375	4	1.25
46	50B46NM	9.512	9.159	B	0.75	2.375	4	1.25
47	50B47NM	9.711	9.357	B	0.75	2.375	4	1.25
48	50B48NM	9.911	9.556	B	0.75	2.375	4	1.25

* Has recessed groove for chain clearance.

Notes:

- Standard Material: Natural Nylon.
- Other numbers of teeth and hub styles available.
- Available as stock drilled bore, finished drive bore with keyway and setscrews, or idler bore.
- A Plate and C Style also available.

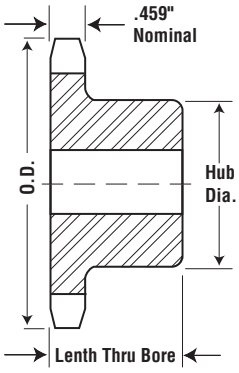
Plastic Sprockets

No. 60 ¾" Pitch

Available with:

- Stock bore
- Finished bore sizes





TYPE B

Single-Type B — Nylon

Number of Teeth	Catalog Number	Diameter		Type	Bore (in)		Hub (in)	
		Outside	Pitch		Stock	Max	Diameter	LTB
8	60B8NM	2.261	1.96	B	0.5	0.625	1.5*	1.25
9	60B9NM	2.511	2.193	B	0.5	0.875	1.5*	1.25
10	60B10NM	2.758	2.427	B	0.5	1	0.5	1.25
11	60B11NM	3.004	2.662	B	0.75	1	2*	1.25
12	60B12NM	3.249	2.898	B	0.75	1	2	1.25
13	60B13NM	3.493	3.134	B	0.75	1	2.313	1.25
14	60B14NM	3.736	3.37	B	0.75	1	2.5	1.25
15	60B15NM	3.978	3.607	B	0.75	1	2.875	1.25
16	60B16NM	4.221	3.844	B	0.75	1	3	1.25
17	60B17NM	4.462	4.082	B	1	2	3.25	1.25
18	60B18NM	4.703	4.319	B	1	2	3.5	1.25
19	60B19NM	4.945	4.557	B	1	2	3.5	1.25
20	60B20NM	5.185	4.794	B	1	2	3.875	1.25
21	60B21NM	5.426	5.032	B	1	2	4	1.25
22	60B22NM	5.666	5.27	B	1	2	4	1.25
23	60B23NM	5.907	5.508	B	1	2	4	1.25
24	60B24NM	6.147	5.746	B	1	2	4	1.25
25	60B25NM	6.387	5.984	B	1	2	4	1.25
26	60B26NM	6.627	6.222	B	1	2.5	4	1.25
27	60B27NM	6.867	6.46	B	1	2.5	4	1.25
28	60B28NM	7.106	6.699	B	1	2.5	4	1.25
29	60B29NM	7.346	6.937	B	1	2.5	4	1.25
30	60B30NM	7.586	7.175	B	1	2.5	4	1.25
31	60B31NM	7.825	7.413	B	1	2.5	4	1.25
32	60B32NM	8.065	7.652	B	1	2.5	4	1.25
33	60B33NM	8.304	7.89	B	1	2.5	4	1.25
34	60B34NM	8.544	8.128	B	1	3	4.5	1.25
35	60B35NM	8.783	8.367	B	1	3	4.5	1.25
36	60B36NM	9.023	8.605	B	1	3	4.5	1.25
37	60B37NM	9.262	8.844	B	1	3	4.5	1.25
38	60B38NM	9.501	9.082	B	1	3	4.5	1.25
39	60B39NM	9.74	9.321	B	1	3	4.5	1.25
40	60B40NM	9.98	9.559	B	1	3	4.5	1.25
41	60B41NM	10.219	9.798	B	1	3	4.5	1.25
42	60B42NM	10.458	10.036	B	1	3.5	5	1.25
43	60B43NM	10.697	10.275	B	1	3.5	5	1.25
44	60B44NM	10.936	10.513	B	1	3.5	5	1.25
45	60B45NM	11.175	10.752	B	1	3.5	5	1.25
46	60B46NM	11.415	10.99	B	1	3.5	5	1.25
47	60B47NM	11.654	11.229	B	1	3.5	5	1.25
48	60B48NM	11.893	11.467	B	1	3.5	5	1.25
49	60B49NM	12.132	11.706	B	1	3.5	5	1.25
50	60B50NM	12.371	11.944	B	1	3.5	5	1.25

* Has recessed groove for chain clearance.

Notes:

- Standard Material: Natural Nylon.
- Other numbers of teeth and hub styles available.
- Available as stock drilled bore, finished drive bore with keyway and setscrews, or idler bore.
- A Plate and C Style also available.

No. 80
1" Pitch

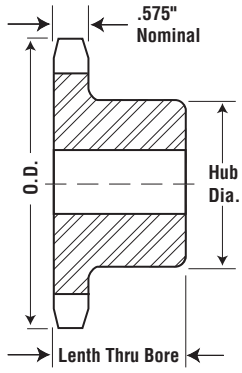
Plastic Sprockets

Martin

Available with:

- Stock bore
- Finished bore sizes





TYPE B

Single-Type B — Nylon

Number of Teeth	Catalog Number	Diameter		Type	Bore (in)		Hub (in)	
		Outside	Pitch		Stock	Max	Diameter	LTB
8	80B8NM	3.014	2.613	B	0.75	1	2*	1.5
9	80B9NM	3.347	2.924	B	0.75	1	2*	1.5
10	80B10NM	3.678	3.236	B	0.75	1	2	1.5
11	80B11NM	4.006	3.549	B	0.75	1	2	1.5
12	80B12NM	4.332	3.864	B	0.75	1	2	1.5
13	80B13NM	4.657	4.179	B	1	2	3.25	1.5
14	80B14NM	4.981	4.494	B	1	2	3.25	1.5
15	80B15NM	5.305	4.81	B	1	2	3.25	1.5
16	80B16NM	5.627	5.126	B	1	2	3.25	1.5
17	80B17NM	5.95	5.442	B	1	2	3.25	1.5
18	80B18NM	6.271	5.759	B	1	2	3.25	1.5
19	80B19NM	6.593	6.076	B	1	2.5	4	1.5
20	80B20NM	6.914	6.392	B	1	2.5	4	1.5
21	80B21NM	7.235	6.71	B	1	2.5	4	1.75
22	80B22NM	7.555	7.027	B	1	2.5	4	1.75
23	80B23NM	7.876	7.344	B	1	2.5	4	1.75
24	80B24NM	8.196	7.661	B	1	2.5	4	1.75
25	80B25NM	8.516	7.979	B	1	2.5	4	1.75
26	80B26NM	8.836	8.296	B	1	3	4.5	2
27	80B27NM	9.156	8.614	B	1	3	4.5	2
28	80B28NM	9.475	8.931	B	1	3	4.5	2
29	80B29NM	9.795	9.249	B	1	3	4.5	2
30	80B30NM	10.114	9.567	B	1	3	4.5	2
31	80B31NM	10.434	9.885	B	1	3	4.5	2
32	80B32NM	10.753	10.202	B	1	3.5	5	2
33	80B33NM	11.072	10.52	B	1	3.5	5	2
34	80B34NM	11.392	10.838	B	1	3.5	5	2
35	80B35NM	11.711	11.156	B	1	3.5	5	2
36	80B36NM	12.03	11.474	B	1	3.5	5	2
37	80B37NM	12.349	11.792	B	1	3.5	5	2
38	80B38NM	12.668	12.11	B	1	4	5.5	2
39	80B39NM	12.987	12.428	B	1	4	5.5	2
40	80B40NM	13.306	12.746	B	1	4	5.5	2
41	80B41NM	13.625	13.063	B	1	4	5.5	2
42	80B42NM	13.944	13.382	B	1	4	5.5	2
43	80B43NM	14.263	13.7	B	1	4	5.5	2
44	80B44NM	14.582	14.018	B	1	4	6	2
45	80B45NM	14.901	14.336	B	1	4	6	2
46	80B46NM	15.219	14.654	B	1	4	6	2
47	80B47NM	15.538	14.972	B	1	4	6	2
48	80B48NM	15.857	15.29	B	1	4	6	2
49	80B49NM	16.176	15.608	B	1	4	6	2
50	80B50NM	16.495	15.926	B	1	4	6	2

* Has recessed groove for chain clearance.

Notes:

- Standard Material: Natural Nylon.
- Other numbers of teeth and hub styles available.
- Available as stock drilled bore, finished drive bore with keyway and setscrews, or idler bore.
- A Plate and C Style also available.

Martin

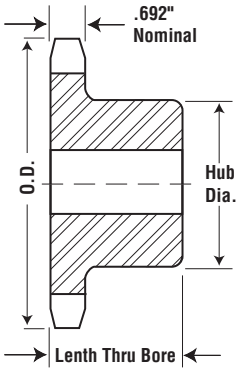
Plastic Sprockets

No. 100 1¼" Pitch

Available with:

- Stock bore
- Finished bore sizes





TYPE B

Single-Type B — Nylon

Number of Teeth	Catalog Number	Diameter		Type	Bore (in)		Hub (in)	
		Outside	Pitch		Stock	Max	Diameter	LTB
8	100B8NM	3.768	3.266	B	0.75	1	2	1.75
9	100B9NM	4.184	3.655	B	0.75	1	2	1.75
10	100B10NM	4.597	4.045	B	1	2.25	3.25	1.75
11	100B11NM	5.007	4.437	B	1	2.25	3.25	1.75
12	100B12NM	5.415	4.83	B	1	2.25	3.25	1.75
13	100B13NM	5.821	5.223	B	1	2.25	3.25	1.75
14	100B14NM	6.227	5.617	B	1	2.25	3.25	1.75
15	100B15NM	6.631	6.012	B	1	2.5	4	1.75
16	100B16NM	7.034	6.407	B	1	2.5	4	1.75
17	100B17NM	7.437	6.803	B	1	2.5	4	1.75
18	100B18NM	7.839	7.198	B	1	2.5	4	1.75
19	100B19NM	8.241	7.594	B	1	2.5	4	2
20	100B20NM	8.642	7.991	B	1	2.5	4	2
21	100B21NM	9.043	8.387	B	1	3	4.5	2
22	100B22NM	9.444	8.783	B	0.5	3	4.5	2
23	100B23NM	9.844	9.18	B	0.5	3	4.5	2
24	100B24NM	10.245	9.577	B	0.5	3	4.5	2
25	100B25NM	10.645	9.973	B	0.5	3	4.5	2
26	100B26NM	11.045	10.37	B	0.5	3.5	5	2
27	100B27NM	11.444	10.767	B	0.5	3.5	5	2
28	100B28NM	11.844	11.164	B	0.5	3.5	5	2
29	100B29NM	12.244	11.561	B	0.5	3.5	5	2
30	100B30NM	12.643	11.958	B	0.5	3.5	5	2
31	100B31NM	13.043	12.356	B	0.5	4	5.5	2
32	100B32NM	13.441	12.753	B	0.5	4	5.5	2
33	100B33NM	13.841	13.15	B	0.5	4	5.5	2
34	100B34NM	14.24	13.547	B	0.5	4	5.5	2
35	100B35NM	14.639	13.945	B	0.5	4	5.5	2.5
36	100B36NM	15.038	14.342	B	1	4	5.5	2.5
37	100B37NM	15.436	14.74	B	1	4	6	2.5
38	100B38NM	15.835	15.137	B	1	4	6	2.5
39	100B39NM	16.234	15.534	B	1	4	6	2.5
40	100B40NM	16.633	15.932	B	1	4	6	2.5
41	100B41NM	17.031	16.329	B	1	4	6	2.5
42	100B42NM	17.43	16.727	B	1	4	6	2.5
43	100B43NM	17.829	17.124	B	1	4	6	2.5
44	100B44NM	18.228	17.522	B	1	4	6	2.5
45	100B45NM	18.626	17.919	B	1	4	6	2.5
46	100B46NM	19.024	18.317	B	1	4	6	2.5
47	100B47NM	19.423	18.715	B	1	4	6	2.5
48	100B48NM	19.821	19.112	B	1	4	6	2.5
49	100B49NM	20.22	19.51	B	1	4	6	2.5
50	100B50NM	20.619	19.907	B	1	4	6	2.5

Notes:

- Standard Material: Natural Nylon.
- Other numbers of teeth and hub styles available.
- Available as stock drilled bore, finished drive bore with keyway and setscrews, or idler bore.
- A Plate and C Style also available.

Metric
Plastic Sprockets

ISO **08B-1**

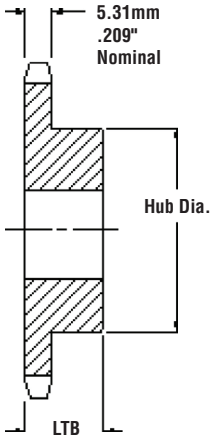
METRIC **40**

0.500 INCH (12.70mm) PITCH SIMPLEX

CHAIN DATA:
BS 228/7ISO
08B-1PITCH: 12.70mm (0.500 in.)
ROLLER DIAMETER: 8.51mm (0.335 in.)
ROLLER WIDTH: 7.75mm (0.305 in.)
TENSILE: 1820 kilos (4000 lbs.)



TYPE B



Single-Type B — Nylon

Number of Teeth	Catalog Number	Diameter		Type	Bore (mm)		Hub (mm)	
		Outside	Pitch		Stock	Max	Diameter	LTB
11	08B11NM	52.4	45	B	12	20	34.93	22.23
12	08B12NM	56.4	49.1	B	12	25	39.67	22.23
13	08B13NM	60.4	53.1	B	12	25	39.67	22.23
14	08B14NM	64.4	57.1	B	12	25	42.86	22.23
15	08B15NM	68.4	61.1	B	12	30	46.02	22.23
16	08B16NM	72.5	65.1	B	15	35	50.8	22.23
17	08B17NM	76.5	69.1	B	15	40	53.98	25.4
18	08B18NM	80.5	73.1	B	15	40	58.72	25.4
19	08B19NM	84.5	77.2	B	15	45	63.5	25.4
20	08B20NM	88.6	81.2	B	15	45	66.68	25.4
21	08B21NM	92.6	85.2	B	15	45	69.85	25.4
22	08B22NM	96.6	89.2	B	15	45	73.03	25.4
23	08B23NM	100.6	93.3	B	15	50	76.2	25.4
24	08B24NM	104.7	97.3	B	15	50	82.55	25.4
25	08B25NM	108.7	101.3	B	15	55	82.55	25.4
26	08B26NM	112.7	105.3	B	15	55	82.55	25.4
27	08B27NM	116.8	109.4	B	15	55	82.55	25.4
28	08B28NM	120.8	113.4	B	15	55	82.55	25.4
29	08B29NM	124.8	117.5	B	15	55	82.55	25.4
30	08B30NM	128.9	121	B	15	55	82.55	25.4

Notes:

- Standard Material: Natural Nylon.
- Other numbers of teeth and hub styles available.
- Available as stock drilled bore, finished drive bore with keyway and setscrews, or idler bore.
- A Plate and C Style also available.
- Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

Metric Plastic Sprockets

ISO **10B-1**

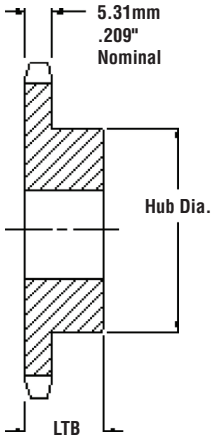
METRIC **50**

0.625 INCH (15.88mm) PITCH SIMPLEX

CHAIN DATA:
BS 228/11ISO 10B-1
PITCH: 15.88mm (0.625 in.)
ROLLER DIAMETER: 10.16mm (0.400 in.)
ROLLER WIDTH: 9.65mm (0.380 in.)
TENSILE: 2270 kilos (4500 lbs.)



TYPE B



Single-Type B — Nylon

Number of Teeth	Catalog Number	Diameter		Type	Bore (mm)		Hub (mm)	
		Outside	Pitch		Stock	Max	Diameter	LTB
11	10B11NM	66	56.4	B	15	25	44.45	25.4
12	10B12NM	71	61.3	B	15	30	50.39	25.4
13	10B13NM	76	66.3	B	15	30	47.63	25.4
14	10B14NM	81	71.3	B	15	35	53.98	25.4
15	10B15NM	86	76.4	B	15	35	60.33	25.4
16	10B16NM	91.1	81.4	B	15	40	63.5	25.4
17	10B17NM	96.1	86.4	B	15	40	68.25	25.4
18	10B18NM	101.1	91.4	B	15	45	73.03	25.4
19	10B19NM	106.1	96.4	B	15	50	76.2	25.4
20	10B20NM	111.2	101.5	B	20	50	76.2	25.4
21	10B21NM	116.2	106.5	B	20	50	76.2	25.4
22	10B22NM	121.2	111.6	B	20	50	76.2	25.4
23	10B23NM	126.3	116.6	B	20	50	76.2	25.4
24	10B24NM	131.3	121.6	B	20	50	76.2	31.75
25	10B25NM	136.3	126.7	B	20	50	76.2	31.75
26	10B26NM	141.4	131.7	B	20	50	76.2	31.75
27	10B27NM	146.4	136.8	B	20	50	76.2	31.75
28	10B28NM	151.5	141.8	B	20	50	76.2	31.75
29	10B29NM	155.49	146.8	B	20	50	76.2	31.75
30	10B30NM	161.6	151.9	B	20	55	82.55	31.75

Notes:

- Standard Material: Natural Nylon.
- Other numbers of teeth and hub styles available.
- Available as stock drilled bore, finished drive bore with keyway and setscrews, or idler bore.
- A Plate and C Style also available.
- Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

Metric
Plastic Sprockets

ISO 12B-1

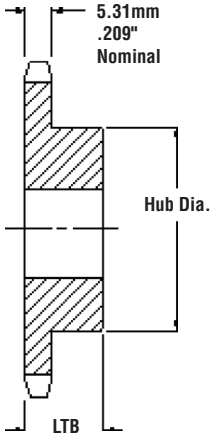
METRIC 60

0.750 INCH (19.05mm) PITCH SIMPLEX

CHAIN DATA:
BS 228/13ISO 12B-1
PITCH: 19.05mm (0.750 in.)
ROLLER DIAMETER: 12.07mm (0.475 in.)
ROLLER WIDTH: 11.68mm (0.460 in.)
TENSILE: 2950 kilos (6500 lbs.)



TYPE B



Single-Type B — Nylon

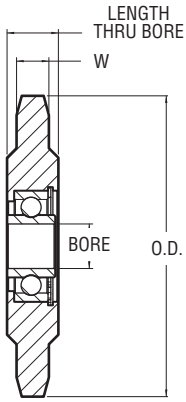
Number of Teeth	Catalog Number	Diameter		Type	Bore (mm)		Hub (mm)	
		Outside	Pitch		Stock	Max	Diameter	LTB
11	12B11NM	79.4	67.64	B	18	30	52.37	31.75
12	12B12NM	85.4	73.61	B	18	35	60.32	31.75
13	12B13NM	91.3	79.6	B	18	35	59.51	31.75
14	12B14NM	97.4	85.6	B	18	40	65.07	31.75
15	12B15NM	103.4	91.6	B	18	45	73.03	31.75
16	12B16NM	109.4	97.6	B	18	50	77.77	31.75
17	12B17NM	115.4	103.7	B	18	55	82.55	31.75
18	12B18NM	121.5	109.7	B	18	60	88.9	31.75
19	12B19NM	127.5	115.7	B	18	60	88.9	31.75
20	12B20NM	133.5	121.8	B	18	65	98.43	31.75
21	12B21NM	139.6	127.9	B	18	70	101.6	31.75
22	12B22NM	145.6	133.9	B	18	70	101.6	31.75
23	12B23NM	151.6	139.9	B	18	70	101.6	31.75
24	12B24NM	157.7	145.9	B	18	70	101.6	31.75
25	12B25NM	163.7	152	B	18	70	101.6	31.75
26	12B26NM	169.8	158	B	18	70	101.6	31.75
27	12B27NM	175.8	164.1	B	18	70	101.6	31.75
28	12B28NM	181.9	170.2	B	18	70	101.6	31.75
29	12B29NM	186.6	176.2	B	18	70	101.6	31.75
30	12B30NM	194	182.2	B	18	70	101.6	31.75

Notes:

- Standard Material: Natural Nylon.
- Other numbers of teeth and hub styles available.
- Available as stock drilled bore, finished drive bore with keyway and setscrews, or idler bore.
- A Plate and C Style also available.
- Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

Non-Metallic Teeth – Ball Bearing Type





Ball Bearing Idler Sprockets — Non Metallic Teeth

No. Teeth	Catalog Number	Bearing Type	Chain Size	O.D	Stock Bore	Length Thru Bore	W	Wt. Lbs.
17	40BB17NM 1/2	Ball	40	2.97	0.510	0.72	0.284	0.24
18	40BB18NM 5/8	Ball	40	3.14	0.638	0.72	0.284	0.23
17	50BB17NM 1/2	Ball	50	3.72	0.510	0.72	0.343	0.29
18	50BB18NM 5/8	Ball	50	3.92	0.638	0.72	0.343	0.29
15	60BB15NM 1/2	Ball	60	3.98	0.510	0.72	0.459	0.32
16	60BB16NM 5/8	Ball	60	4.22	0.638	0.72	0.459	0.33
12	80BB12NM 3/4	Ball	80	4.33	0.750	0.61	0.575	0.44

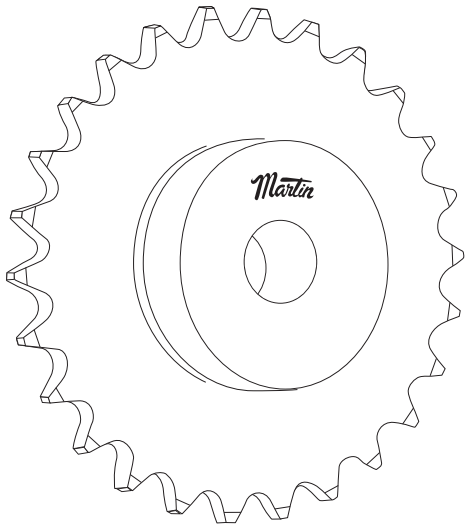
Note: .510 Stock Bore is +.005 .000; .638 Stock Bore Is +.005 .000;
.750 Stock Bore Is +.005 .000

Radial Load Capacity in Pounds at Various Speeds Ball Bearings

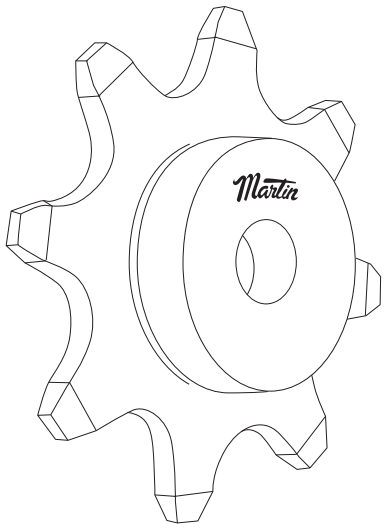
Idler Size	RPM					
	100	500	1000	1500	2000	2500
.375" Bore	620	363	288	252	229	212
.5" & .625" Bore	800	460	360	320	290	270
.75" Bore	1290	755	600	523	478	440

Ratings shown above are based on an average bearing life of 2500 hours.

Double Pitch
Plastic Sprockets

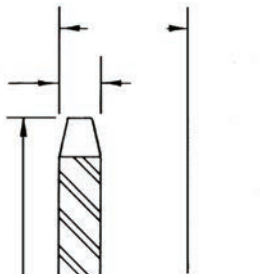


Standard Roller
Double Duty



Carrier
Roller

Double-Pitch Sprockets



Standard Rollers



Carrier Rollers

Series C-2000 chains have rollers of the same diameters and widths as American Standard Roller Chains of one half the conveyor chain pitch. Engaged by every other tooth, double duty sprockets have two teeth per chain pitch. During each revolution only half the teeth function effectively. Sprockets with odd numbers of teeth will allow any given tooth to engage only on every other revolution, automatically increasing sprocket life. Double duty sprockets with even number of teeth may be manually advanced one tooth periodically to increase sprocket life. Martin Stock C-2000 series sprockets are furnished double duty only.

Sprockets for the C-2002 series chain with carrier rollers are cut with space cutters or standard hobs for the American Standard roller Chain of the same diameter. Each sprocket tooth meshes with these chains. Double-duty sprockets cannot be made for double pitch chain with Carrier Rollers.

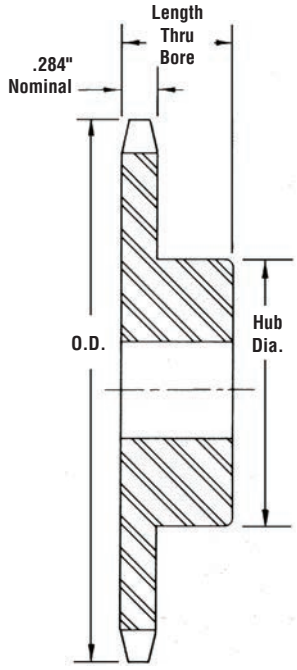
NOTE: For drives of 31 teeth or more we recommend using Standard sprockets with series C-2000 chains.

All altered double pitch sprockets requiring a keyway will be furnished with keyway on center line of tooth, unless otherwise specified.

Double Pitch Plastic Sprockets

Martin manufactures sprockets for double pitch roller chain. Double pitch sprockets reduce sprocket contact with the chain by half, engaging every other sprocket tooth. This reduces wear and thus increases sprocket longevity.

The standard material used on Martin's non-metallic double pitch sprocket is UHMW. Other materials such as nylon or acetal may be requested. Consult Martin for selection assistance when special applications are required.



TYPE B

1-Inch Double-Pitch
Conveyor or Drive Series — Standard Roller
Double Pitch — 2040/C2040 — Nylon

Number of Teeth	Catalog Number	Diameter		Type	Bore (in)		Hub (in)	
		Outside	Pitch		Stock	Max	Diameter	LTB
11	2040B11NM	1.85	2	B	0.5	0.813	1.375*	0.875
12	2040B12NM	2	2.17	B	0.5	0.813	1.563*	0.875
13	2040B13NM	2.15	2.33	B	0.5	0.656	1.563*	0.875
14	2040B14NM	2.31	2.49	B	0.5	1.031	1.688*	0.875
15	2040B15NM	2.46	2.65	B	0.5	1.219	1.719	0.875
16	2040B16NM	2.61	2.81	B	0.5	1.281	1.875	0.875
17	2040B17NM	2.77	2.98	B	0.5	1.313	2.047	1
18	2040B18NM	2.92	3.14	B	0.5	1.469	2.219	1
19	2040B19NM	3.08	3.3	B	0.5	1.625	2.375	1
20	2040B20NM	3.24	3.46	B	0.5	1.625	2.547	1
21	2040B21NM	3.39	3.62	B	0.5	1.781	2.703	1
22	2040B22NM	3.55	3.78	B	0.5	1.875	2.875	1
23	2040B23NM	3.71	3.94	B	0.5	2	3	1
24	2040B24NM	3.86	4.1	B	0.5	2.25	3.25	1
25	2040B25NM	4.02	4.26	B	0.5	2.25	3.25	1
26	2040B26NM	4.18	4.42	B	0.5	2.25	3.25	1
28	2040B28NM	4.49	4.74	B	0.5	2.25	3.25	1
30	2040B30NM	4.81	5.06	B	0.5	2.25	3.25	1

* Recessed groove in hub for chain clearance.

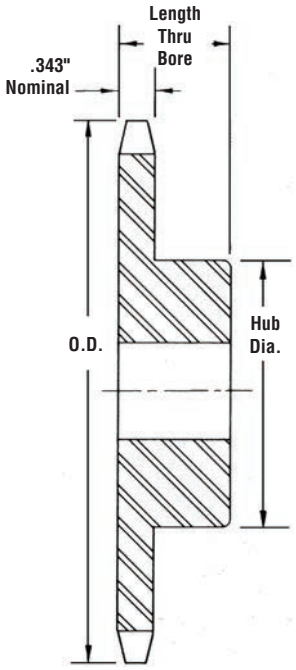
Conveyor or Drive Series — Carrier Roller
Double Pitch — 2042/C2042 — Nylon

Number of Teeth	Catalog Number	Diameter		Type	Bore (in)		Hub (in)	
		Outside	Pitch		Stock	Max	Diameter	LTB
8	2042B8NM	2.61	3.01	B	0.5	1.281	1.875	0.875
9	2042B9NM	2.92	3.35	B	0.5	1.469	2.219	0.875
10	2042B10NM	3.24	3.68	B	0.5	1.75	2.547	1
11	2042B11NM	3.55	4	B	0.5	1.875	2.625	1
12	2042B12NM	3.86	4.33	B	0.5	2.25	3.063	1
13	2042B13NM	4.18	3.66	B	0.5	2.25	3.25	1
14	2042B14NM	4.49	4.98	B	0.5	2.25	3.25	1
15	2042B15NM	4.81	5.3	B	0.5	2.25	3.25	1
16	2042B16NM	5.13	5.63	B	0.5	2.25	3.25	1
17	2042B17NM	5.44	5.95	B	0.5	2.25	3.25	1
18	2042B18NM	5.76	6.27	B	0.5	2.25	3.25	1
19	2042B19NM	6.08	6.59	B	0.5	2.25	3.25	1
20	2042B20NM	6.39	6.91	B	0.5	2.375	3.5	1.125
21	2042B21NM	6.71	7.24	B	0.5	2.375	3.5	1.125
22	2042B22NM	7.01	7.56	B	0.5	2.375	3.5	1.125
23	2042B23NM	7.34	7.88	B	0.5	2.375	3.5	1.125
24	2042B24NM	7.66	8.2	B	0.5	2.375	3.5	1.125
25	2042B25NM	7.98	8.52	B	0.5	2.375	3.5	1.125
26	2042B26NM	8.3	8.84	B	0.5	2.375	3.5	1.125
28	2042B28NM	8.93	9.48	B	0.5	2.375	3.5	1.125
30	2042B30NM	9.57	10.11	B	0.5	2.375	3.5	1.125

* Recessed groove in hub for chain clearance.

- Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

Double Pitch
Plastic Sprockets



TYPE B

1¼-Inch Double-Pitch
Conveyor or Drive Series — Standard Roller
Double Pitch — 2050/C2050 — Nylon

Number of Teeth	Catalog Number	Diameter		Type	Bore (in)		Hub (in)	
		Outside	Pitch		Stock	Max	Diameter	LTB
11	2050B11NM	2.315	2.5	B	0.5	0.813	1.750*	1
12	2050B12NM	2.5	2.71	B	0.5	1	1.984	1
13	2050B13NM	2.69	2.91	B	0.5	1.219	1.719	1
14	2050B14NM	2.881	3.11	B	0.5	1.281	1.938	1
15	2050B15NM	3.073	3.32	B	0.5	1.406	2.156	1
16	2050B16NM	3.266	3.52	B	0.5	1.594	2.359	1
17	2050B17NM	3.46	3.72	B	0.5	1.75	2.563	1
18	2050B18NM	3.655	3.92	B	0.5	1.781	2.781	1
19	2050B19NM	3.85	4.12	B	0.5	1.969	2.984	1
20	2050B20NM	4.045	4.32	B	0.5	2	3	1
21	2050B21NM	4.241	4.52	B	0.5	2	3	1
22	2050B22NM	4.437	4.72	B	0.5	2	3	1
23	2050B23NM	4.633	4.92	B	0.5	2	3	1
24	2050B24NM	4.83	5.12	B	0.5	2	3	1.25
25	2050B25NM	5.026	5.32	B	0.5	2	3	1.25
26	2050B26NM	5.223	5.52	B	0.5	2	3	1.25
28	2050B28NM	5.617	5.92	B	0.5	2	3	1.25
30	2050B30NM	6.012	6.32	B	0.5	2.25	3.25	1.25

* Recessed groove in hub for chain clearance.

Conveyor or Drive Series — Carrier Roller
Double Pitch — 2052/C2052 — Nylon

Number of Teeth	Catalog Number	Diameter		Type	Bore (in)		Hub (in)	
		Outside	Pitch		Stock	Max	Diameter	LTB
8	2052B08NM	3.266	3.77	B	0.5	1.594	2.359	1
9	2052B09NM	3.655	4.19	B	0.5	1.781	2.781	1
10	2052B10NM	4.045	4.6	B	0.5	2	3	1
11	2052B11NM	4.437	5.01	B	0.5	2	3	1
12	2052B12NM	4.83	5.42	B	0.5	2	3	1.25
13	2052B13NM	5.223	5.82	B	0.5	2	3	1.25
14	2052B14NM	5.617	6.23	B	0.5	2	3	1.25
15	2052B15NM	6.012	6.63	B	0.5	2.25	3.25	1.25
16	2052B16NM	6.407	7.03	B	0.5	2.25	3.25	1.25
17	2052B17NM	6.803	7.44	B	0.5	2.25	3.25	1.25
18	2052B18NM	7.198	7.84	B	0.5	2.25	3.25	1.25
19	2052B19NM	7.595	8.24	B	0.5	2.25	3.25	1.25
20	2052B20NM	7.991	8.64	B	0.5	2.25	3.25	1.25
21	2052B21NM	8.387	9.04	B	0.5	2.25	3.25	1.25
22	2052B22NM	8.783	9.44	B	0.5	2.25	3.25	1.25
23	2052B23NM	9.18	9.85	B	0.5	2.75	3.75	1.25
24	2052B24NM	9.577	10.25	B	0.5	2.75	3.75	1.25
25	2052B25NM	9.973	10.65	B	0.5	2.75	3.75	1.25
26	2052B26NM	10.37	11.05	B	0.5	2.75	3.75	1.25
28	2052B28NM	11.164	11.84	B	0.5	2.75	3.75	1.25
30	2052B30NM	11.958	12.64	B	0.5	2.75	3.75	1.25

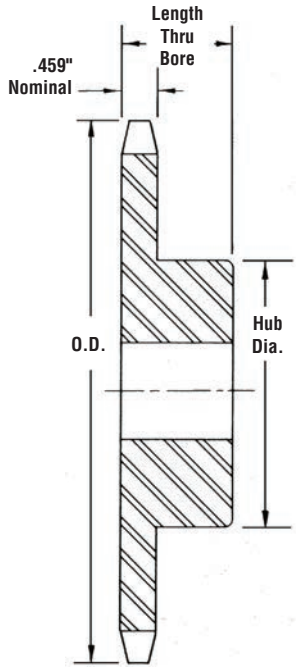
* Recessed groove in hub for chain clearance.

• Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

1½-Inch Double-Pitch
Conveyor or Drive Series — Standard Roller
Double Pitch — 2060/C2060 — Nylon

Number of Teeth	Catalog Number	Diameter		Type	Bore (in)		Hub (in)	
		Outside	Pitch		Stock	Max	Diameter	LTB
11	2060B11NM	2.773	3	B	0.5	1	2.063*	1.25
12	2060B12NM	3	3.25	B	0.5	1.25	2.375*	1.25
13	2060B13NM	3.228	3.49	B	0.5	1.313	2.078	1.25
14	2060B14NM	3.457	3.74	B	0.5	1.563	2.328	1.25
15	2060B15NM	3.699	3.98	B	0.5	1.75	2.594	1.25
16	2060B16NM	3.92	4.22	B	0.5	1.844	2.844	1.25
17	2060B17NM	4.152	4.46	B	0.5	2.094	3.094	1.25
18	2060B18NM	4.386	4.7	B	0.5	2.281	3.344	1.25
19	2060B19NM	4.62	4.94	B	0.5	2.344	3.5	1.25
20	2060B20NM	4.854	5.19	B	0.5	2.563	3.875	1.25
21	2060B21NM	5.089	5.43	B	0.5	2.75	4	1.25
22	2060B22NM	5.324	5.67	B	0.5	2.75	4	1.25
23	2060B23NM	5.56	5.91	B	0.5	2.75	4	1.25
24	2060B24NM	5.796	6.15	B	0.5	2.75	4	1.25
25	2060B25NM	6.032	6.39	B	0.5	2.75	4	1.25
26	2060B26NM	6.268	6.63	B	0.5	2.75	4	1.25
28	2060B28NM	6.741	7.11	B	0.5	2.75	4	1.25
30	2060B30NM	7.215	7.59	B	0.5	2.75	4	1.25

* Recessed groove in hub for chain clearance.



TYPE B

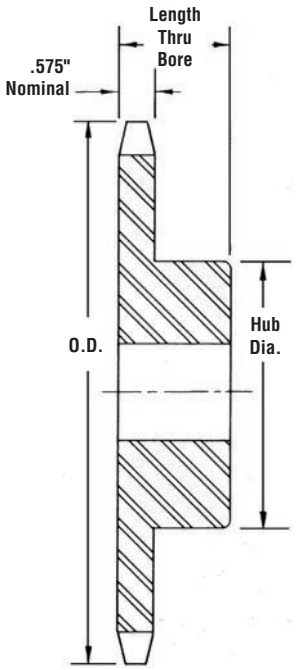
Conveyor or Drive Series — Carrier Roller
Double Pitch — 2062/C2062 — Nylon

Number of Teeth	Catalog Number	Diameter		Type	Bore (in)		Hub (in)	
		Outside	Pitch		Stock	Max	Diameter	LTB
8	2062B08NM	3.92	4.52	B	0.5	1.844	2.844	1.25
9	2062B09NM	4.386	5.02	B	0.5	2.281	3.344	1.25
10	2062B10NM	4.854	5.52	B	0.5	2.563	3.828	1.25
11	2062B11NM	5.324	6.01	B	0.5	2.75	4	1.25
12	2062B12NM	5.796	6.5	B	0.5	2.75	4	1.25
13	2062B13NM	6.268	6.99	B	0.5	2.75	4	1.25
14	2062B14NM	6.741	7.47	B	0.5	2.75	4	1.25
15	2062B15NM	7.215	7.96	B	0.5	2.25	4	1.25
16	2062B16NM	7.689	8.44	B	0.5	2.25	4	1.25
17	2062B17NM	8.163	8.92	B	0.5	2.25	4	1.25
18	2062B18NM	8.638	9.41	B	0.5	2.25	4	1.25
19	2062B19NM	9.113	9.89	B	0.5	2.25	4.25	1.25
20	2062B20NM	9.589	10.37	B	0.5	2.25	4.25	1.25
21	2062B21NM	10.064	10.85	B	0.5	2.25	4.25	1.25
22	2062B22NM	10.54	11.33	B	0.5	2.25	4.25	1.25
23	2062B23NM	11.016	11.81	B	0.5	2.75	4.25	1.25
24	2062B24NM	11.492	12.29	B	0.5	2.75	4.25	1.25
25	2062B25NM	11.968	12.77	B	0.5	2.75	4.25	1.25
26	2062B26NM	12.444	13.25	B	0.5	2.75	4.25	1.75
28	2062B28NM	13.397	14.21	B	0.5	2.75	4.25	1.75
30	2062B30NM	14.35	15.17	B	0.5	2.75	4.25	1.75

* Recessed groove in hub for chain clearance.

• Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

Double Pitch
Plastic Sprockets



TYPE B

2-Inch Double-Pitch
Conveyor or Drive Series — Standard Roller
Double Pitch — 2080/C2080 — Nylon

Number of Teeth	Catalog Number	Diameter		Type	Bore (in)		Hub (in)	
		Outside	Pitch		Stock	Max	Diameter	LTB
11	2080B11NM	3.694	4.01	B	0.5	1.5	2.813*	1.625
12	2080B12NM	4	4.33	B	0.5	1.688	3.125*	1.625
13	2080B13NM	4.304	4.66	B	0.5	1.781	2.75	1.5
14	2080B14NM	4.61	4.98	B	0.5	2.125	3.125	1.5
15	2080B15NM	4.917	5.3	B	0.5	2.281	3.438	1.5
16	2080B16NM	5.226	5.63	B	0.5	2.531	3.75	1.5
17	2080B17NM	5.53	5.95	B	0.5	2.75	4	1.5
18	2080B18NM	5.848	6.27	B	0.5	2.75	4.25	1.5
19	2080B19NM	6.16	6.59	B	0.5	2.75	4.25	1.5
20	2080B20NM	6.472	6.91	B	0.5	2.75	4.25	1.5
21	2080B21NM	6.785	7.23	B	0.5	2.75	4.25	1.5
22	2080B22NM	7.099	7.56	B	0.5	2.75	4.25	1.75
23	2080B23NM	7.413	7.88	B	0.5	2.75	4.25	1.75
24	2080B24NM	7.727	8.2	B	0.5	2.75	4.25	1.75
25	2080B25NM	8.042	8.52	B	0.5	2.75	4.25	1.75
26	2080B26NM	8.357	8.84	B	0.5	3.25	4.75	2
28	2080B28NM	8.988	9.48	B	0.5	3.25	4.75	2
30	2080B30NM	9.62	10.11	B	0.5	3.25	4.75	2

* Recessed groove in hub for chain clearance.

Conveyor or Drive Series — Carrier Roller
Double Pitch — 2082/C2082 — Nylon

Number of Teeth	Catalog Number	Diameter		Type	Bore (in)		Hub (in)	
		Outside	Pitch		Stock	Max	Diameter	LTB
8	2082B08NM	5.226	6.03	B	0.5	2.531	3.75	1.75
9	2082B09NM	5.848	6.7	B	0.5	2.75	4.25	1.75
10	2082B10NM	6.472	7.36	B	0.5	2.75	4.25	1.75
11	2082B11NM	7.099	8.01	B	0.5	2.75	4.25	1.75
12	2082B12NM	7.727	8.66	B	0.5	2.75	4.25	1.75
13	2082B13NM	8.357	9.31	B	0.5	2.75	4.75	2
14	2082B14NM	8.988	9.96	B	0.5	2.75	4.75	2
15	2082B15NM	9.62	10.61	B	0.5	2.75	4.75	2
16	2082B16NM	10.252	11.25	B	0.5	2.75	4.75	2
17	2082B17NM	10.885	11.9	B	0.5	2.75	4.75	2
18	2082B18NM	11.518	12.54	B	0.5	2.75	4.75	2
19	2082B19NM	12.151	13.19	B	0.5	2.75	4.75	2
20	2082B20NM	12.785	13.83	B	0.5	2.75	4.75	2
21	2082B21NM	13.419	14.47	B	0.5	2.75	4.75	2
22	2082B22NM	14.053	15.11	B	0.5	2.75	4.75	2
23	2082B23NM	14.688	15.75	B	0.5	2.75	4.75	2
24	2082B24NM	15.323	16.39	B	0.5	2.75	4.75	2
25	2082B25NM	15.958	17.03	B	0.5	2.75	4.75	2
26	2082B26NM	16.593	17.67	B	0.5	3.5	5.25	2
28	2082B28NM	17.863	18.95	B	0.5	3.5	5.25	2
30	2082B30NM	19.134	20.23	B	0.5	3.5	5.25	2

* Recessed groove in hub for chain clearance.

• Maximum bores shown will accommodate standard keyseat and setscrew over keyseat. Slightly larger bores are possible with no keyseat, shallow keyseat, or setscrew at angle to keyseat.

Mill Duty
Plastic Sprockets

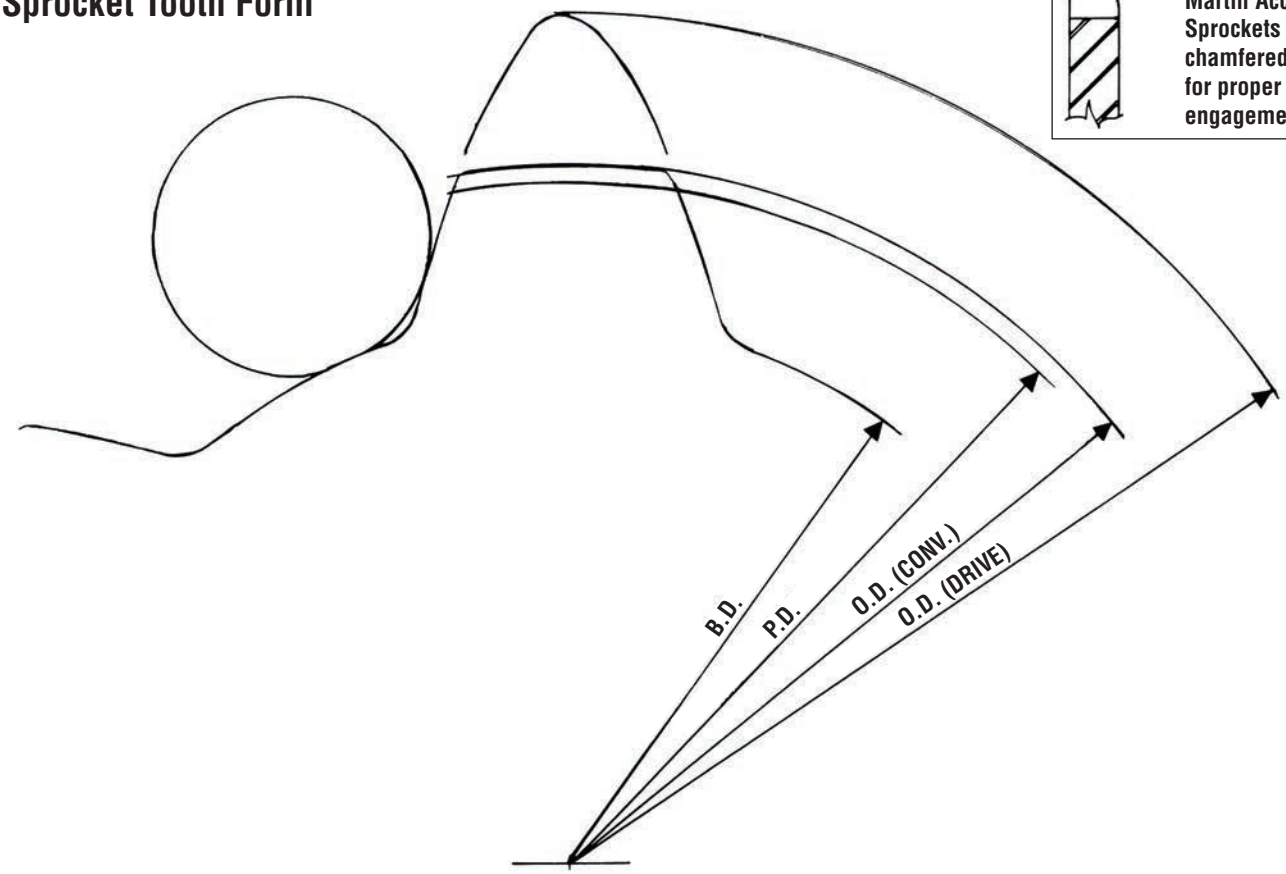


Conveyor Style Tooth for Chains:
78 — 82 — 124 — 132



Driver Style Tooth for Chains:
55 — 1030

Typical "Drive" & "Conveyor" Sprocket Tooth Form



NOTE: All Martin Accu-Torch Sprockets have chamfered teeth for proper chain engagement.

Mill Duty Sprockets are not intended to replace cut tooth roller chain sprockets.

Mill Duty
Plastic Sprockets

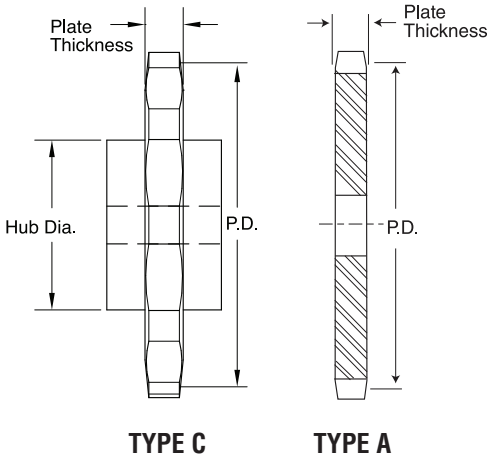
Mill duty (also known as agricultural chain or AG Chain) sprockets are machined from UHMW. These non-metallic sprockets are lighter in weight than standard steel sprockets. Non-metallic sprockets are also corrosion resistant, require little or no lubrication, and are generally more durable than traditional steel sprockets.

Martin offers mill duty sprockets in all popular sizes as well as custom made-to-order sprockets. Standard sizes include 55 series, 78 series, 82 series, and 132 series. Sprockets can be manufactured in A, B, C. & D styles, as well as split and special sprockets styles.



Sprockets Available to fit Standard Chain Sizes

25	95R	WD-120	458	CS730	D963R
32	102B	H121	468	823	E963R
42	H102	SD121	WD-480	825	F963R
45	102.5	WD-122	483	830	998
S51	103	WD-123	520	844	1030
51	H104	WD-124	531	856	1036
52	W-106	130	625R	859	1113
55	S-110	132	667	F912R	1120
D60	WD-110	183	678	E922	1131
62	111SP	188	698	F922	F1222
67	111	194	CS720S	925R	2124
78	WD-112	196	720S	933	2180
W-78	WD-116	197	730	951	4850
94R	WD-119	348	A730	B963R	9250



55 SERIES PLASTIC SPROCKETS FOR CHAINS:
C55, CA550, CA555, 55, 16D

Type C — 1.631" Pitch

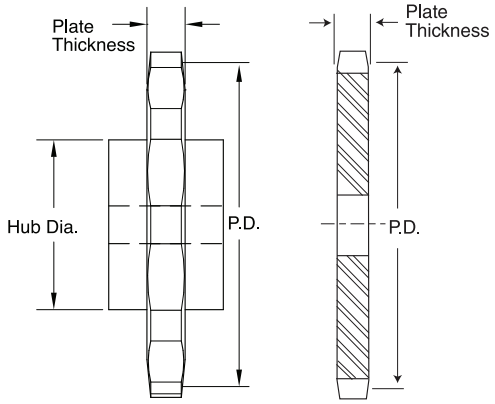
PLATE THICKNESS 0.625"
ROLLER DIAMETER 0.7187"

Type A

Number of Teeth	Catalog Number	Pitch Diameter	Type	Stock Bore	Max. Bore	Hub Diameter	LTB	Catalog Number	Type	Stock Bore
6	55C6NM	3.26	C	0.5	1	1.75	1.75	55A6NM	A	0.5
7	55C7NM	3.76	C	0.5	1	2	1.75	55A7NM	A	0.5
8	55C8NM	4.26	C	0.5	1.25	2.75	2	55A8NM	A	0.5
9	55C9NM	4.77	C	0.5	1.5	3	2.625	55A9NM	A	0.5
10	55C10NM	5.28	C	0.5	2	3.5	2	55A10NM	A	0.5
11	55C11NM	5.79	C	1	2.5	4	2.625	55A11NM	A	1
12	55C12NM	6.3	C	1	2.5	4	2.688	55A12NM	A	1
13	55C13NM	6.82	C	1	2.5	4	2.688	55A13NM	A	1
14	55C14NM	7.33	C	1	2.5	4	2.625	55A14NM	A	1
15	55C15NM	7.84	C	1	2.5	4	2.625	55A15NM	A	1
16	55C16NM	8.36	C	1	2.5	4	2.625	55A16NM	A	1
17	55C17NM	8.88	C	1	3	4.5	2.625	55A17NM	A	1
18	55C18NM	9.39	C	1	3	4.5	2.625	55A18NM	A	1
19	55C19NM	9.9	C	1	3	4.5	2.625	55A19NM	A	1
20	55C20NM	10.43	C	1	3.5	5	3.188	55A20NM	A	1
21	55C21NM	10.94	C	1	3.5	5	3.125	55A21NM	A	1
22	55C22NM	11.43	C	1	3.5	5	3.188	55A22NM	A	1
23	55C23NM	11.97	C	1	3.5	5	3.188	55A23NM	A	1
24	55C24NM	12.5	C	1	3.5	5	3.188	55A24NM	A	1

Mill Duty Plastic Sprockets





TYPE C **TYPE A**

78 **SERIES PLASTIC SPROCKETS FOR CHAINS:** 78, H74, 75, H75, H78, H78LR, (14, 18 TEETH ONLY), H78RT, H78SR, H79, 88, 188, S188, S78, R588, RR588, R778, RR778, 988, IS880, 87R, IS881, 81X, IS882, 433½, LXS881, LXS886, US881, LXS887, LXS882, 488, XS578, SS188, C188, US278R, US882, 578R, 588R

Type C — 2.609" Pitch

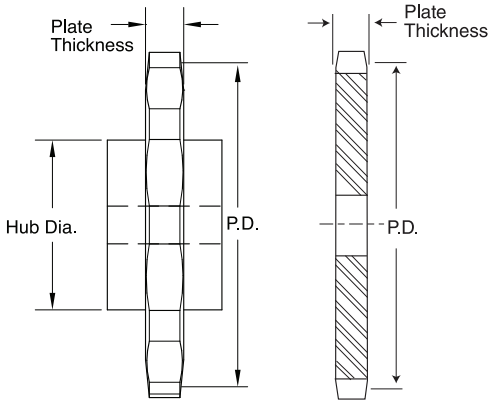
PLATE THICKNESS 0.875"
ROLLER DIAMETER 0.875"

Type A

Number of Teeth	Catalog Number	Pitch Diameter	Type	Stock Bore	Max. Bore	Hub Diameter	LTB	Catalog Number	Type	Stock Bore
6	78C6NM	5.22	C	0.750	1.250	3.400	2.000	78A6NM	A	0.5
7	78C7NM	6.01	C	0.750	1.250	3.500	2.000	78A7NM	A	0.5
8	78C8NM	6.82	C	0.750	2.000	4.750	4.000	78A8NM	A	0.5
9	78C9NM	7.63	C	0.755	2.000	5.250	4.000	78A9NM	A	0.5
10	78C10NM	8.44	C	0.755	2.500	5.250	4.000	78A10NM	A	0.5
11	78C11NM	9.26	C	0.755	2.500	5.250	4.000	78A11NM	A	0.5
12	78C12NM	10.08	C	0.755	3.000	5.250	4.000	78A12NM	A	0.5
13	78C13NM	10.9	C	0.755	3.000	5.500	4.000	78A13NM	A	0.5
14	78C14NM	11.72	C	0.755	3.000	5.500	4.000	78A14NM	A	0.5
15	78C15NM	12.55	C	0.755	3.500	5.500	3.750	78A15NM	A	0.5
16	78C16NM	13.37	C	1.000	3.500	5.563	3.765	78A16NM	A	0.5
17	78C17NM	14.2	C	1.000	3.500	6.000	3.765	78A17NM	A	0.5
19	78C19NM	15.85	C	1.000	3.500	6.000	3.750	78A19NM	A	0.5
21	78C21NM	17.51	C	1.000	3.500	6.000	3.750	78A21NM	A	0.5
24	78C24NM	19.99	C	1.000	3.500	7.000	3.875	78A24NM	A	0.5
25	78C25NM	20.82	C	1.000	4.000	7.000	3.875	78A25NM	A	0.5
28	78C28NM	23.3	C	1.000	4.000	7.000	3.875	78A28NM	A	0.5
30	78C30NM	24.96	C	1.000	4.000	9.000	3.875	78A30NM	A	0.5
35	78C35NM	29.11	C	1.000	5.000	9.000	4.875	78A35NM	A	0.5
40	78C40NM	33.25	C	1.000	5.000	9.000	3.750	78A40NM	A	0.5
42	78C42NM	34.91	C	1.000	5.000	9.000	4.875	78A42NM	A	0.5
46	78C46NM	38.23	C	1.000	5.000	9.000	3.750	78A46NM	A	0.5

Mill Duty Plastic Sprockets – Split





TYPE C **TYPE A**

78 **SERIES PLASTIC SPROCKETS FOR CHAINS:** 78, H74, 75, H75, H78, H78LR, (14, 18 TEETH ONLY), H78RT, H78SR, H79, 88, 188, S188, S78, R588, RR588, R778, RR778, 988, IS880, 87R, IS881, 81X, IS882, 433½, LXS881, LXS886, US881, LXS887, LXS882, 488, XS578, SS188, C188, US278R, US882, 578R, 588R

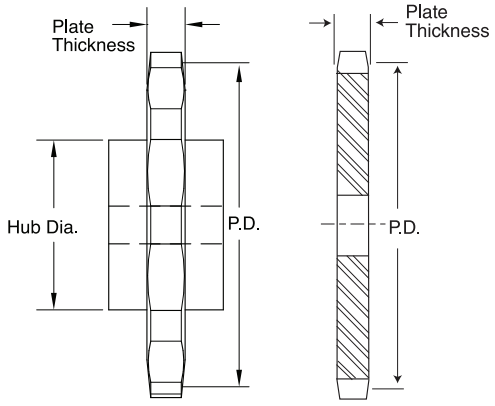
Type C — 2.609" Pitch

PLATE THICKNESS 0.875"
ROLLER DIAMETER 0.875"

Number of Teeth	Catalog Number	Pitch Diameter	Type	Stock Bore	Max. Bore	Hub Diameter	LTB
6	78C6NMS	5.22	C	1	1.5	3.39	2.875
7	78C7NMS	6.01	C	1	2	4	2.875
8	78C8NMS	6.82	C	1	2	4	2.875
9	78C9NMS	7.63	C	1	2.125	5	2.875
10	78C10NMS	8.44	C	1	2.75	5	2.875
11	78C11NMS	9.26	C	1	2.75	5	2.875
12	78C12NMS	10.08	C	1	2.75	5	2.875
13	78C13NMS	10.09	C	1	2.75	5	2.875
14	78C14NMS	11.72	C	1	2.75	5	2.875
15	78C15NMS	12.55	C	1	2.75	5	2.875
16	78C16NMS	13.37	C	1	4	7	3.75
17	78C17NMS	14.2	C	1	4	7	3.875
18	78C18NMS	15.02	C	1	4	7	3.875
19	78C19NMS	15.85	C	1	4	7	3.875
21	78C21NMS	17.51	C	1.75	4.5	8.875	3.875
22	78C22NMS	18.33	C	1.75	4.5	8.875	3.875
24	78C24NMS	19.99	C	1.75	4.5	8.875	3.781
25	78C25NMS	20.82	C	1.75	4.5	8.875	3.875
27	78C27NMS	22.47	C	1.75	4.5	8.875	3.875
28	78C28NMS	23.3	C	1.75	4.5	8.875	3.875
30	78C30NMS	24.96	C	1.75	4.5	8.875	3.875
34	78C34NMS	28.28	C	1.75	4.5	8.875	3.875
40	78C40NMS	33.25	C	1.75	4.5	8.875	3.875
45	78C45NMS	37.4	C	1.75	6.5	12	3.875

Mill Duty Plastic Sprockets – Chainsaver





TYPE C **TYPE A**

78 **SERIES PLASTIC SPROCKETS FOR CHAINS:** 78, H74, 75, H75, H78, H78LR, (14, 18 TEETH ONLY), H78RT, H78SR, H79, 88, 188, S188, S78, R588, RR588, R778, RR778, 988, IS880, 87R, IS881, 81X, IS882, 433½, LXS881, LXS886, US881, LXS887, LXS882, 488, XS578, SS188, C188, US278R, US882, 578R, 588R

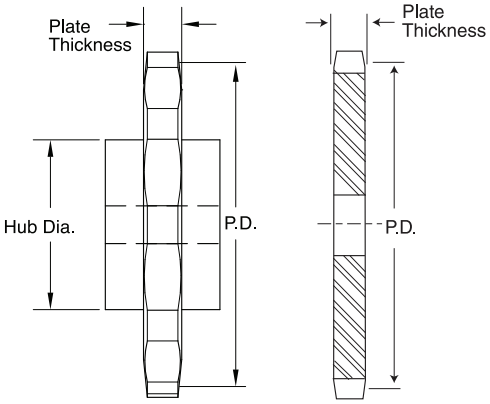
Type C — 2.609" Pitch

PLATE THICKNESS 0.875"
ROLLER DIAMETER 0.875"

Number of Teeth	Catalog Number	Pitch Diameter	Type	Stock Bore	Max. Bore	Hub Diameter	LTB
4	78CS4NM	3.69	C	0.5	0.75	1.48	2
5	78CS5NM	4.44	C	0.75	1	2.46	2
6	78CS6NM	5.22	C	0.75	1.25	3.39	2
7	78CS7NM	6.01	C	0.75	1.75	4.29	2
8	78CS8NM	6.82	C	0.75	2.5	5.17	2
9	78CS9NM	7.63	C	0.75	3	6.04	2

Mill Duty
Plastic Sprockets





TYPE C **TYPE A**

82 **SERIES PLASTIC SPROCKETS FOR CHAINS:**
H82, 131, 527R, 4103, WH82, S131, 527RX, C131, WR82, WS62, C9103, 382, 103 —SS131 —6131

Type C — 3.075" Pitch

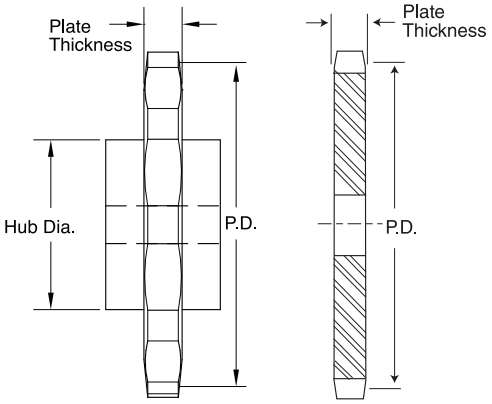
PLATE THICKNESS 1"
ROLLER DIAMETER 1.2187"

Type A

Number of Teeth	Catalog Number	Pitch Diameter	Type	Stock Bore	Max. Bore	Hub Diameter	LTB	Catalog Number	Type	Stock Bore
7	82C7NM	7.09	C	1	2.5	4	3.75	82A7NM	A	1
8	82C8NM	8.04	C	1	3	4.5	3.75	82A8NM	A	1
9	82C9NM	8.99	C	1	3	4.5	3.75	82A9NM	A	1
10	82C10NM	9.95	C	1	3	4.5	3.75	82A10NM	A	1
11	82C11NM	10.91	C	1	3.5	5	3.75	82A11NM	A	1
12	82C12NM	11.88	C	1	3.5	5	3.75	82A12NM	A	1
13	82C13NM	12.85	C	1	4	5	3.75	82A13NM	A	1
14	82C14NM	13.82	C	1	4	5.5	3.75	82A14NM	A	1
15	82C15NM	14.79	C	1	4	6	3.75	82A15NM	A	1
16	82C16NM	15.76	C	1	4	6	3.75	82A16NM	A	1
17	82C17NM	16.73	C	1	4	6	3.75	82A17NM	A	1
18	82C18NM	17.71	C	1	4	6	3.75	82A18NM	A	1

Mill Duty Plastic Sprockets





TYPE C **TYPE A**

1030 SERIES PLASTIC SPROCKETS FOR CHAINS: 1030, CHAMPIONNO.3, R1033, R1035, 1037, 1539, SS40, LXS1031, API3, LXS1032, SS40Hyp, IS1030, IS1031, IS1032, IS1037, US1031, 1190, SXX, 1190R, US1032

Type C — 3.075" Pitch

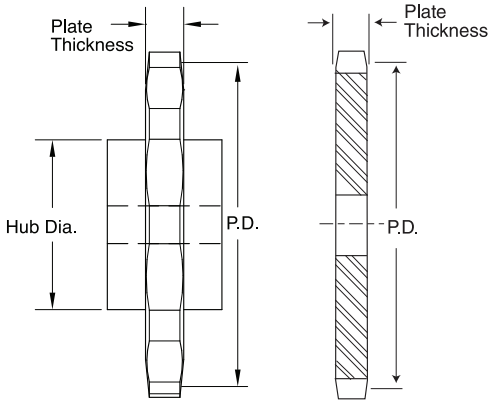
PLATE THICKNESS 1.25"
ROLLER DIAMETER 1.25"

Type A

Number of Teeth	Catalog Number	Pitch Diameter	Type	Stock Bore	Max. Bore	Hub Diameter	LTB	Catalog Number	Type	Stock Bore
8	1030C8NM	8.04	C	1	3	4.5	3.75	1030A8NM	A	1
9	1030C9NM	8.99	C	1	3	4.5	3.75	1030A9NM	A	1
10	1030C10NM	9.95	C	1	3	4.5	3.75	1030A10NM	A	1
11	1030C11NM	10.91	C	1	3.5	5	3.75	1030A11NM	A	1
12	1030C12NM	11.88	C	1	3.5	5	3.75	1030A12NM	A	1
13	1030C13NM	12.85	C	1	4	5.5	3.75	1030A13NM	A	1
15	1030C15NM	14.79	C	1	4	6	3.75	1030A15NM	A	1
17	1030C17NM	16.73	C	1	4	6	3.75	1030A17NM	A	1
19	1030C19NM	18.68	C	1	4	6	3.75	1030A19NM	A	1
21	1030C21NM	20.63	C	1	5	7	3.75	1030A21NM	A	1
24	1030C24NM	23.56	C	1	5	7	3.75	1030A24NM	A	1
25	1030C25NM	24.53	C	1	5	7	3.75	1030A25NM	A	1
28	1030C28NM	27.46	C	1	6	8	3.75	1030A28NM	A	1
30	1030C30NM	29.42	C	1	6	8	3.75	1030A30NM	A	1
35	1030C35NM	34.3	C	1	6	8	3.75	1030A35NM	A	1
40	1030C40NM	39.19	C	1	6	9	3.75	1030A40NM	A	1

Mill Duty
Plastic Sprockets





TYPE C **TYPE A**

124 **SERIES PLASTIC SPROCKETS FOR CHAINS:**
H124, W124, WS124, WR124, WH124

Type C — 4.000" Pitch

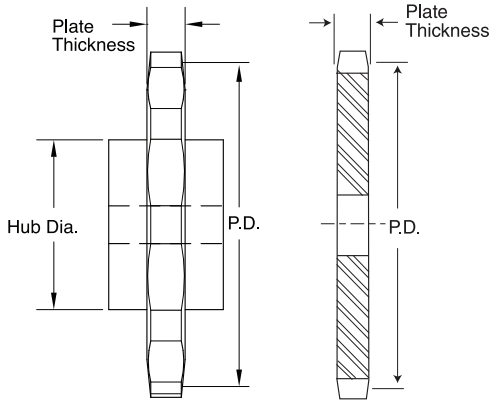
PLATE THICKNESS 1.5"
ROLLER DIAMETER 1.5"

Type A

Number of Teeth	Catalog Number	Pitch Diameter	Type	Stock Bore	Max. Bore	Hub Diameter	LTB	Catalog Number	Type	Stock Bore
6	124C6NM	8	C	1	3	4.5	3.75	124A6NM	A	1
7	124C7NM	9.22	C	1	3	5.75	4.5	124A7NM	A	1
8	124C8NM	10.45	C	1	3.5	5	4	124A8NM	A	1
9	124C9NM	11.7	C	1	3.5	5.75	4.5	124A9NM	A	1
10	124C10NM	12.94	C	1	4	5.75	4.5	124A10NM	A	1
11	124C11NM	14.2	C	1	4	6	4.5	124A11NM	A	1
12	124C12NM	15.45	C	1	4	6	4.5	124A12NM	A	1
13	124C13NM	16.71	C	1	4	6	4.5	124A13NM	A	1
14	124C14NM	17.98	C	1	4	7	4.5	124A14NM	A	1
15	124C15NM	19.24	C	1	4	6	4.5	124A15NM	A	1
16	124C16NM	20.5	C	1	5	7	4.5	124A16NM	A	1

Mill Duty Plastic Sprockets





TYPE C **TYPE A**

132 **SERIES PLASTIC SPROCKETS FOR CHAINS:** C132, A132, A132WS, WS132, C132M, C132W, SX150, SXA150, 150X, 6150, W157, WH157, WR157

Type C — 6.050" Pitch

PLATE THICKNESS 2.75"
ROLLER DIAMETER 1.7187"

Type A

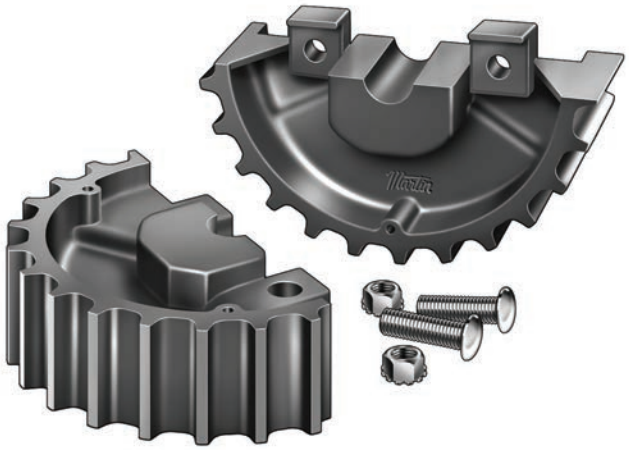
Number of Teeth	Catalog Number	Pitch Diameter	Type	Stock Bore	Max. Bore	Hub Diameter	LTB	Catalog Number	Type	Stock Bore
6	132C6NM	12.1	C	1	3	6.5	6	132A6NM	A	1
7	132C7NM	13.94	C	1	3	6.5	6	132A7NM	A	1
8	132C8NM	15.81	C	1	3	7	5.75	132A8NM	A	1
9	132C9NM	17.69	C	1	3	9	6.75	132A9NM	A	1
10	132C10NM	19.58	C	1	3.75	9	6.75	132A10NM	A	1
11	132C11NM	21.47	C	1	3.75	9	6.75	132A11NM	A	1
12	132C12NM	23.38	C	1	3.75	9	6.75	132A12NM	A	1

Plastic Flat-Top Conveyor Sprockets

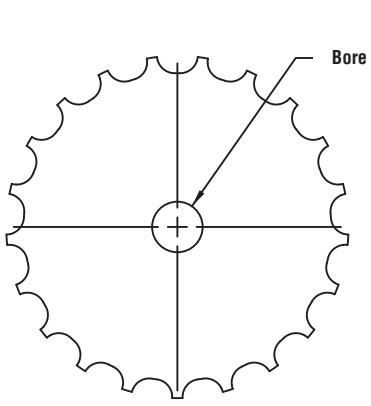
Martin manufacturers flat top conveyor sprockets from USDA / FDA grade UHMW and thermoplastics. These sprockets are completely interchangeable with cast, steel, or other types of plastic sprockets. Martin's non-metallic flat top conveyor sprockets are lightweight, chemical resistant, and require no lubrication. They are designed for use with both steel and plastic chain. Most popular sizes and styles are available. For special applications, Martin offers quick turnaround times on custom orders.

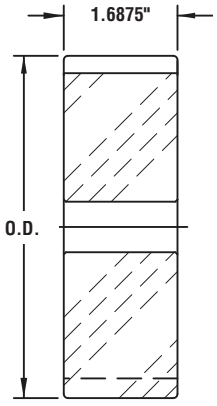




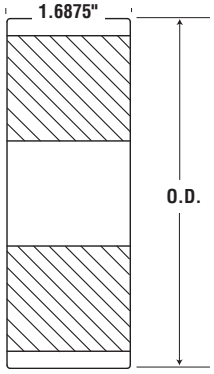


Plastic Flat-Top Conveyor Sprockets





Series 815 Sprocket



Solid Face

Series 815 Sprocket — UHMW

Catalog Number	No. of Teeth		Pitch Diameter	Outside Diameter	Bore (in)	
	Actual	Effective			Stock	Max
815A19NM	19	9.5	4.62	4.61	0.75	1.25
815A20NM	20	10	4.854	4.86	0.75	1.25
815A21NM	21	10.5	5.089	5.12	0.75	1.75
815A22NM	22	11	5.324	5.35	0.75	1.75
815A23NM	23	11.5	5.56	5.59	0.75	1.75
815A24NM	24	12	5.796	5.83	0.75	2
815A25NM	25	12.5	6.032	6.07	0.75	2
815A27NM	27	13.5	6.504	6.56	0.75	2
815A29NM	29	14.5	6.978	7.05	0.75	2.5
815A31NM	31	15.5	7.452	7.53	0.75	2.5
815A41NM	41	20.5	9.826	9.93	0.75	2.5

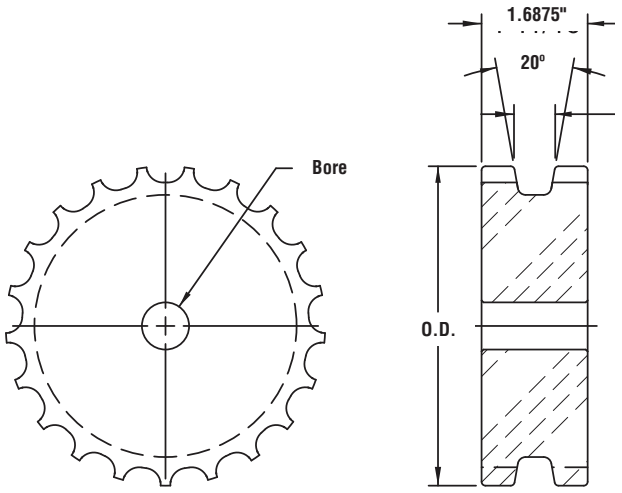
Series 815 — Split Thermoplastic

Catalog Number	No. of Teeth		Pitch Diameter	Outside Diameter	Bore (in)		Weight
	Actual	Effective			Stock	Max	
QRS815A21P	21	10.5	5.089 (129.26)	5.12 (130)	0.75 (19.1)	1.5 (38.1)	0.94 (0.43)
QRS815A23P	23	11.5	5.560 (141.22)	5.59 (142)	0.75 (19.1)	1.5 (38.1)	1 (0.45)
QRS815A25P	25	12.5	6.032 (153.21)	6.07 (154.2)	0.75 (19.1)	1.5 (38.1)	1.1 (0.5)
QRS815A27P	27	13.5	6.504 (165.20)	6.56 (166.6)	0.75 (19.1)	1.5 (38.1)	1.25 (0.57)

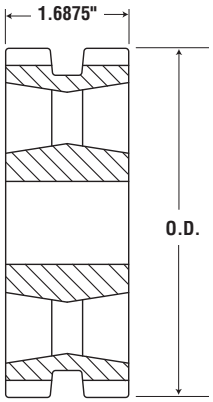
Thermoplastic temperature operating range –20°F to +300°F

• NOTE: Supplied with 5/16-18 plated setscrew @ 90° to split.

Plastic Flat-Top Conveyor Sprockets



Series 820 Sprocket



Grooved Face

Series 820 Sprocket — UHMW

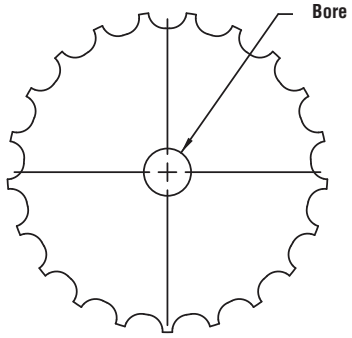
Catalog Number	No. of Teeth		Pitch Diameter	Outside Diameter	Bore (in)	
	Actual	Effective			Stock	Max
820A19NM	19	9.5	4.62	4.61	0.75	1.25
820A20NM	20	10	4.854	4.86	0.75	1.25
820A21NM	21	10.5	5.089	5.12	0.75	1.75
820A22NM	22	11	5.324	5.35	0.75	1.75
820A23NM	23	11.5	5.56	5.59	0.75	1.75
820A24NM	24	12	5.796	5.83	0.75	2
820A25NM	25	12.5	6.032	6.07	0.75	2
820A27NM	27	13.5	6.504	6.56	0.75	2
820A29NM	29	14.5	6.978	7.05	0.75	2.5
820A31NM	31	15.5	7.452	7.53	0.75	2.5
820A41NM	41	20.5	9.826	9.93	0.75	2.5

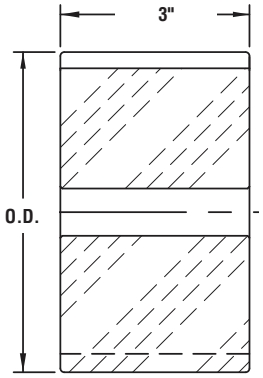
Series 820 — Split Thermoplastic

Catalog Number	No. of Teeth		Pitch Diameter	Outside Diameter	Bore (in)		Weight
	Actual	Effective			Stock	Max	
QRS820A21P	21	10.5	5.089 (129.26)	5.12 (130.0)	0.75 (19.1)	1.5 (38.1)	.94 (.43)
QRS820A23P	23	11.5	5.560 (141.22)	5.59 (142.0)	0.75 (19.1)	1.5 (38.1)	1.00 (.45)
QRS820A25P	25	12.5	6.032 (153.21)	6.07 (154.2)	0.75 (19.1)	1.5 (38.1)	1.10 (.50)
QRS820A27P	27	13.5	6.504 (165.20)	6.56 (166.6)	0.75 (19.1)	1.5 (38.1)	1.25 (.57)

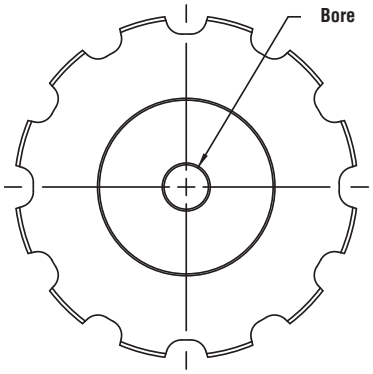
Thermoplastic temperature operating range –20°F to +300°F

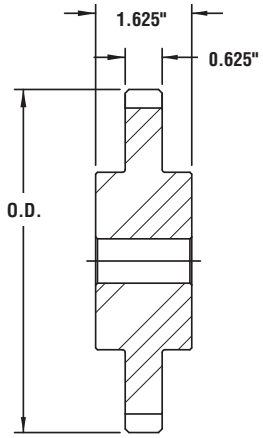
• NOTE: Supplied with 5/16-18 plated setscrew @ 90° to split.





Series 821 Sprocket





Series 821 Sprocket

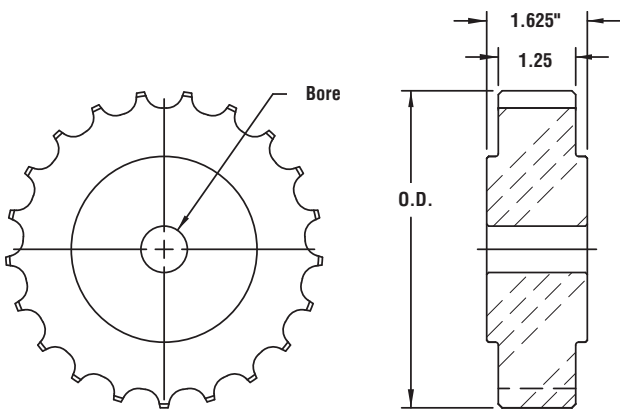
Series 821 Sprocket — UHMW

Catalog Number	No. of Teeth		Pitch Diameter	Outside Diameter	Bore (in)	
	Actual	Effective			Stock	Max
821A21NM	21	10.5	5.089	5.12	0.75	1.75
821A23NM	23	11.5	5.56	5.59	0.75	1.75
821A25NM	25	12.5	6.032	6.07	0.75	2
821A27NM	27	13.5	6.504	6.56	0.75	2
821A29NM	29	14.5	6.978	7.05	0.75	2.5

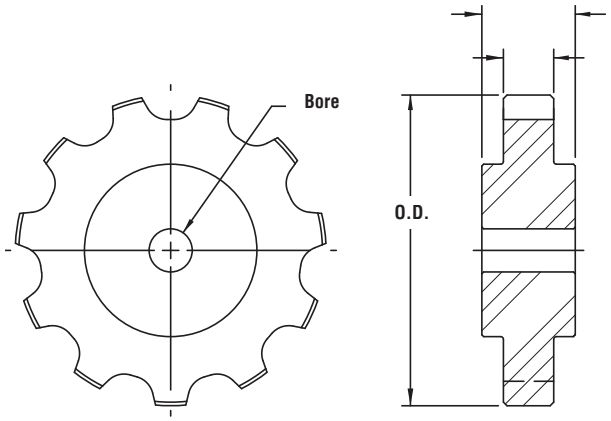
Series 880 Sprocket — UHMW

Catalog Number	No. of Teeth		Pitch Diameter	Outside Diameter	Bore (in)	
	Actual	Effective			Stock	Max
880C9NM	9	9	4.386	4.33	0.75	1.75
880C10NM	10	10	4.854	4.82	0.75	1.75
880C11NM	11	11	5.325	5.31	0.75	1.75
880C12NM	12	12	5.796	5.8	0.75	1.75
880C15NM	15	15	7.215	7.26	0.75	1.75

Natural Nylon Sprockets



Series 881 Sprocket



Series 882 Sprocket

Series 881 Sprocket — UHMW

Catalog Number	No. of Teeth		Pitch Diameter	Outside Diameter	Bore (in)	
	Actual	Effective			Stock	Max
881C21NM	21	10.5	5.089	5.124	0.75	1.75
881C23NM	23	11.5	5.56	5.59	0.75	1.75
881C25NM	25	12.5	6.032	6.07	0.75	1.75

Series 882 Sprocket — UHMW

Catalog Number	No. of Teeth		Pitch Diameter	Outside Diameter	Bore (in)	
	Actual	Effective			Stock	Max
882C9NM	9	9	4.386	4.43	0.75	1.75
882C10NM	10	10	4.854	4.92	0.75	1.75
882C11NM	11	11	5.325	5.41	0.75	1.75
882C12NM	12	12	5.796	5.9	0.75	1.75
882C15NM*	15	15	7.215	7.36	0.75	1.75

Plastic Gears Introduction



Martin offers "B" style nylon spur gears. Other styles and materials are available as made-to-order. Spur gears are available with stock bore, idler bore, or finished bore with keyway and setscrews. Standard material of construction is UHMW, nylon and acetal. Gear rack is supplied in nominal 48" lengths, however other lengths can be supplied upon request.

Plastic gears have been used successfully without lubrication in many of todays open gear applications. Many will work lubrication free in demanding applications where steel gears will rust or require continuous maintenance.

One key issue in selecting a plastic gear is proper sizing. Plastics have different properties than metals and are sensitive to changing operating conditions. In addition to load data, attention to drive geometry, environmental and operating conditions and plastic material properties is critical.

Martin's dedicated sales staff has the experience and knowledge to help you identify and specify the proper gear for your application.

Benefits of Plastic:

- Cost effective
- Noise reduction
- Ability to absorb shock and vibration
- Relatively low coefficient of friction
- Corrosion resistance - elimination of plating, or protective coatings
- Tolerances often less critical than metal due to greater resilience



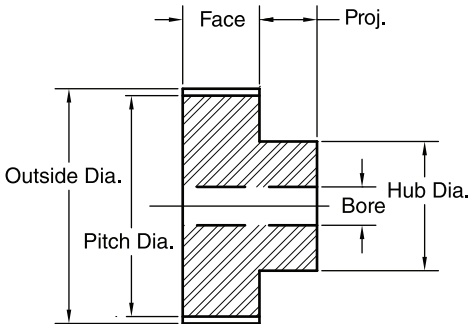
4 DP
2" Face

Nylon Stock Spur Gears
14½°Pressure Angle

Martin

Our spur gears are machined from solid plates of material, resulting in a spur gear that you can count on to get the job done.

- Standard material: natural oil-filled nylon
- Other numbers of teeth and hub styles available
- Available as finished bore with keyway and set screws





Natural Oil-Filled Nylon Spur Gears

Number of Teeth	Catalog Number	4DP		Type	Bore (in)		Hub (in)	
		Pitch	Outside		Stock	Max.*	Diameter	Project
11	NM411	3	3.5	B	0.75	1.25	2.25	0.875
12	NM412	3	3.5	B	0.75	1.25	2.25	0.875
13	NM413	3.25	3.75	B	0.75	1.25	2.25	0.875
14	NM414	3.5	4	B	0.75	1.625	2.75	0.875
15	NM415	3.75	4.25	B	0.75	1.75	3	0.875
16	NM416	4	4.5	B	0.75	1.75	3.25	0.875
17	NM417	4.25	4.75	B	0.75	2	3.5	0.875
18	NM418	4.5	5	B	0.75	2	3.5	0.875
19	NM419	4.75	5.25	B	0.75	2	3.5	0.875
20	NM420	5	5.5	B	0.75	2.125	3.75	0.875
21	NM421	5.25	5.75	B	0.75	2.375	4	0.875
22	NM422	5.5	6	B	0.75	2.625	4.5	0.875
24	NM424	6	6.5	B	0.75	2.875	4.5	1.5
26	NM426	6.5	7	B	0.75	2.875	4.5	1.5
28	NM428	7	7.5	B	0.75	2.875	4.5	1.5
30	NM430	7.5	8	B	0.75	2.875	4.5	1.5
32	NM432	8	8.5	B	0.75	2.875	4.5	1.5
36	NM436	9	9.5	B	0.75	2.875	4.5	1.5
40	NM440	10	10.5	B	0.75	3.375	5.125	1.5
42	NM442	10.5	11	B	0.75	3.375	5.125	1.5
44	NM444	11	11.5	B	0.75	3.375	5.125	1.5
48	NM448	12	12.5	B	0.75	3.375	5.125	1.5
54	NM454	13.5	14	B	0.75	3.375	5	1.5
56	NM456	14	14.5	B	0.75	3.375	5	1.5
60	NM460	15	15.5	B	0.75	3.375	5	1.5
64	NM464	16	16.5	B	0.75	3.375	5	1.5
72	NM472	18	18.5	B	0.75	3.375	5.5	1.5
80	NM480	20	20.5	B	0.75	3.375	5.5	1.5
84	NM484	21	21.5	B	0.75	3.375	5.5	1.5
88	NM488	22	22.5	B	0.75	3.375	6.125	1.5
96	NM496	24	24.5	B	0.75	3.375	6.125	1.5

* Recommended Maximum Bore With Keyway and Setscrew.

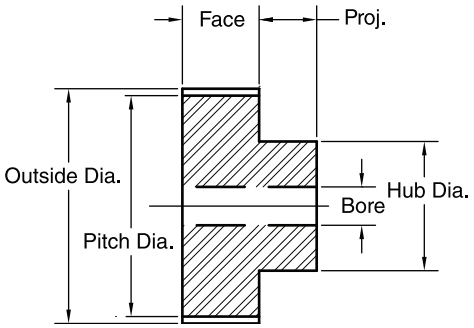
14½° P.A. Gears Will Not Operate With 20° P.A.

Nylon Stock Spur Gears

14½°Pressure Angle

5 DP

1¾" Face





Natural Oil-Filled Nylon Spur Gears

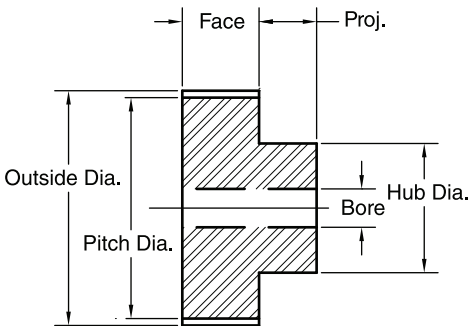
Number of Teeth	Catalog Number	4DP		Type	Bore (in)		Hub (in)	
		Pitch	Outside		Stock	Max.*	Diameter	Project
11	NM511	2.4	2.8	B	0.75	1	1.781	0.875
12	NM512	2.4	2.8	B	0.75	1	1.781	0.875
13	NM513	2.6	3	B	0.75	1	2	0.875
14	NM514	2.8	3.2	B	0.75	1	2.188	0.875
15	NM515	3	3.4	B	0.75	1	2.375	0.875
16	NM516	3.2	3.6	B	0.75	1	2.594	0.875
17	NM517	3.4	3.8	B	0.75	1.5	2.875	0.875
18	NM518	3.6	4	B	0.75	1.75	3	0.875
19	NM519	3.8	4.2	B	0.75	2	3.25	0.875
20	NM520	4	4.4	B	0.75	2	3.375	0.875
21	NM521	4.2	4.6	B	0.75	2	3.375	0.875
22	NM522	4.4	4.8	B	0.75	2	3.375	0.875
23	NM523	4.6	5	B	0.75	2	3.375	0.875
24	NM524	4.8	5.2	B	0.75	2	3.75	0.875
25	NM525	5	5.4	B	0.75	2	3.75	0.875
26	NM526	5.2	5.6	B	0.75	2	3.75	0.875
28	NM528	5.6	6	B	0.75	2	3.75	0.875
30	NM530	6	6.4	B	0.75	2	3.75	0.875
35	NM535	7	7.4	B	0.75	2.5	3.75	1.25
40	NM540	8	8.4	B	0.75	2.5	3.75	1.25
45	NM545	9	9.4	B	0.75	2.5	3.75	1.25
50	NM550	10	10.4	B	0.75	2.5	3.75	1.25
55	NM555	11	11.4	B	0.75	3	3.75	1.25
60	NM460	12	12.4	B	0.75	3	3.75	1.25
70	NM570	14	14.4	B	0.75	3	5	1.5
80	NM580	16	16.4	B	0.75	3	5	1.5
90	NM590	18	18.4	B	0.75	3.5	5	1.5

* Recommended Maximum Bore With Keyway and Setscrew.

14½° P.A. Gears Will Not Operate With 20° P.A.

6 DP
1½" Face

Nylon Stock Spur Gears
14½°Pressure Angle





Natural Oil-Filled Nylon Spur Gears

Number of Teeth	Catalog Number	4DP		Type	Bore (in)		Hub (in)	
		Pitch	Outside		Stock	Max.*	Diameter	Project
11	NM611	2	2.333	B	0.5	0.75	1.5	0.875
12	NM612	2	2.333	B	0.5	0.75	1.5	0.875
14	NM614	2.333	2.666	B	0.5	0.875	1.813	0.875
15	NM615	2.5	2.833	B	0.75	1.125	2	0.875
16	NM616	2.666	3	B	0.75	1.25	2.156	0.875
18	NM618	3	3.333	B	0.75	1.375	2.5	0.875
20	NM620	3.333	3.666	B	0.75	1.625	2.844	0.875
21	NM621	3.5	3.833	B	0.75	1.75	3	0.875
22	NM622	3.666	4	B	0.75	1.75	3	0.875
24	NM624	4	4.333	B	0.75	1.75	3	1
27	NM627	4.5	4.833	B	0.75	1.75	3	1
28	NM628	4.666	5	B	0.75	1.75	3	1
30	NM630	5	5.333	B	0.75	1.75	3.125	1
32	NM632	5.333	5.666	B	0.75	1.75	3.125	1
33	NM633	5.5	5.833	B	0.75	1.75	3.25	1
36	NM636	6	6.333	B	0.75	2.375	4	1
39	NM639	6.5	6.833	B	0.75	2.375	4	1
40	NM640	6.666	7	B	0.75	2.375	4	1
42	NM642	7	7.333	B	0.75	2.375	4	1
45	NM645	7.5	7.833	B	0.75	2.375	4	1
48	NM648	8	8.333	B	0.75	2.5	4.125	1
52	NM652	8.666	9	B	0.75	2.625	4.25	1
54	NM654	9	9.333	B	0.75	2.75	4.375	1
58	NM658	9.666	10	B	0.75	2.75	4.375	1
60	NM660	10	10.333	B	0.75	2.75	4.375	1.25
64	NM664	10.666	11	B	0.75	2.75	4.375	1.25
66	NM666	11	11.333	B	0.75	2.75	4.375	1.25
72	NM672	12	12.333	B	0.75	2.75	4.375	1.25
84	NM684	14	14.333	B	0.75	2.875	4.5	1.25
96	NM696	16	16.333	B	0.75	3.375	5.125	1.25

* Recommended Maximum Bore With Keyway and Setscrew.

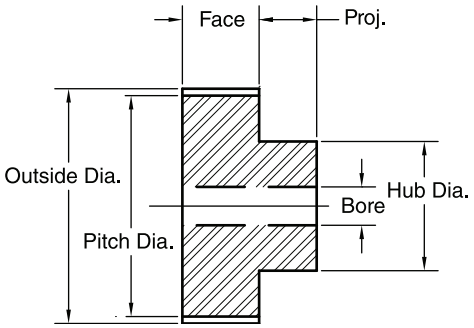
14½° P.A. Gears Will Not Operate With 20° P.A.

Nylon Stock Spur Gears

14½°Pressure Angle

8 DP

1¼" Face





Natural Oil-Filled Nylon Spur Gears

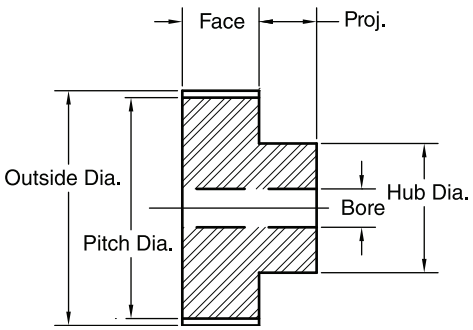
Number of Teeth	Catalog Number	4DP		Type	Bore (in)		Hub (in)	
		Pitch	Outside		Stock	Max.*	Diameter	Project
11	NM811	1.5	1.75	B	0.5	0.75	1.125	0.75
12	NM812	1.5	1.75	B	0.5	0.75	1.125	0.75
13	NM813	1.625	1.875	B	0.5	0.75	1.25	0.75
14	NM814	1.75	2	B	0.5	0.625	1.375	0.75
15	NM815	1.875	2.125	B	0.5	0.75	1.5	0.75
16	NM816	2	2.25	B	0.5	0.875	1.625	0.75
17	NM817	2.125	2.375	B	0.5	0.875	1.75	0.75
18	NM818	2.25	2.5	B	0.75	1	1.875	0.75
19	NM819	2.375	2.625	B	0.75	1.125	2	0.75
20	NM820	2.5	2.75	B	0.75	1.125	2.125	0.75
21	NM821	2.625	2.875	B	0.75	1.25	2.25	0.75
22	NM822	2.75	3	B	0.75	1.25	2.375	0.75
24	NM824	3	3.25	B	0.75	1.5	2.625	1
26	NM826	3.25	3.5	B	0.75	1.5	2.625	1
28	NM828	3.5	3.75	B	0.75	1.625	2.75	1
30	NM830	3.75	4	B	0.75	1.75	2.875	1
32	NM832	4	4.25	B	0.75	1.75	3	1
36	NM836	4.5	4.75	B	0.75	1.75	3	1
40	NM840	5	5.25	B	0.75	1.75	3	1
42	NM842	5.25	5.5	B	0.75	1.75	3	1
44	NM844	5.5	5.75	B	0.75	1.75	3	1
48	NM848	6	6.25	B	0.75	1.75	3	1

* Recommended Maximum Bore With Keyway and Setscrew.

14½° P.A. Gears Will Not Operate With 20° P.A.

10 DP
1" Face

Nylon Stock Spur Gears
14½°Pressure Angle





Natural Oil-Filled Nylon Spur Gears

Number of Teeth	Catalog Number	4DP		Type	Bore (in)		Hub (in)	
		Pitch	Outside		Stock	Max.*	Diameter	Project
11	NM1011	1.2	1.4	B	0.25	0.5	0.938	0.625
12	NM1012	1.2	1.4	B	0.25	0.5	0.938	0.625
13	NM1013	1.3	1.5	B	0.25	0.5	1	0.625
14	NM1014	1.4	1.6	B	0.5	0.5	1.125	0.625
15	NM1015	1.5	1.7	B	0.5	0.75	1.219	0.625
16	NM1016	1.6	1.8	B	0.5	0.75	1.313	0.625
17	NM1017	1.7	1.9	B	0.5	0.75	1.375	0.625
18	NM1018	1.8	2	B	0.5	0.75	1.531	0.625
19	NM1019	1.9	2.1	B	0.5	0.75	1.563	0.625
20	NM1020	2	2.2	B	0.5	0.875	1.719	0.625
21	NM1021	2.1	2.3	B	0.5	0.875	1.75	0.625
22	NM1022	2.2	2.4	B	0.75	1	1.875	0.625
24	NM1024	2.4	2.6	B	0.75	1.125	2.125	0.625
25	NM1025	2.5	2.7	B	0.75	1.25	2.219	0.625
26	NM1026	2.6	2.8	B	0.75	1.25	2.125	0.625
28	NM1028	2.8	3	B	0.75	1.25	2.125	0.875
30	NM1030	3	3.2	B	0.75	1.25	2.125	0.875
32	NM1032	3.2	3.4	B	0.75	1.25	2.125	0.875
35	NM1035	3.5	3.7	B	0.75	1.25	2.25	0.875
36	NM1036	3.6	3.8	B	0.75	1.25	2.25	0.875
38	NM1038	3.8	4	B	0.75	1.25	2.25	0.875
40	NM1040	4	4.2	B	0.75	1.25	2.25	0.875
42	NM1042	4.2	4.4	B	0.75	1.25	2.25	0.875
45	NM1045	4.5	4.7	B	0.75	1.375	2.5	0.875
48	NM1048	4.8	5	B	0.75	1.375	2.5	0.875
50	NM1050	5	5.2	B	0.75	1.375	2.5	0.875
54	NM1054	5.4	5.6	B	0.75	1.375	2.5	0.875
55	NM1055	5.5	5.7	B	0.75	1.375	2.5	0.875
60	NM1060	6	6.2	B	0.75	1.375	2.5	0.875

* Recommended Maximum Bore With Keyway and Setscrew.

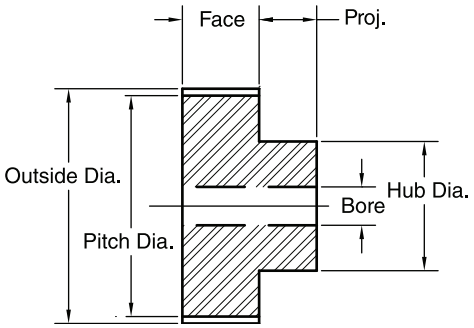
14½° P.A. Gears Will Not Operate With 20° P.A.

Nylon Stock Spur Gears

14½°Pressure Angle

12 DP

¾" Face





Natural Oil-Filled Nylon Spur Gears

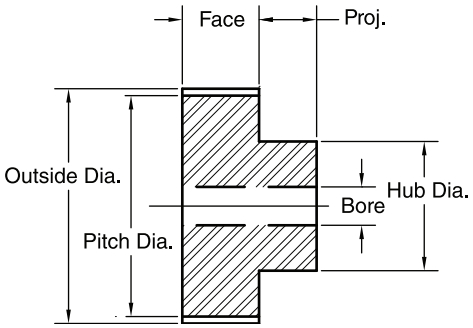
Number of Teeth	Catalog Number	4DP		Type	Bore (in)		Hub (in)	
		Pitch	Outside		Stock	Max.*	Diameter	Project
11	NM1211	1	1.167	B	0.25	0.5	0.75	0.5
12	NM1212	1	1.167	B	0.25	0.5	0.75	0.5
13	NM1213	1.083	1.25	B	0.25	0.5	0.813	0.5
14	NM1214	1.167	1.333	B	0.25	0.5	0.906	0.5
15	NM1215	1.25	1.417	B	0.25	0.5	1	0.5
16	NM1216	1.333	1.5	B	0.5	0.5	1.063	0.5
17	NM1217	1.413	1.58	B	0.5	0.5	1.125	0.5
18	NM1218	1.5	1.667	B	0.5	0.5	1.25	0.5
19	NM1219	1.583	1.75	B	0.5	0.75	1.313	0.5
20	NM1220	1.667	1.833	B	0.5	0.875	1.813	0.5
21	NM1221	1.75	1.917	B	0.5	0.75	1.5	0.5
22	NM1222	1.833	2	B	0.5	0.875	1.563	0.5
23	NM1223	1.917	2.083	B	0.5	0.875	1.625	0.5
24	NM1224	2	2.166	B	0.5	0.875	1.75	0.5
25	NM1225	2.083	2.25	B	0.5	0.875	1.844	0.5
26	NM1226	2.167	2.333	B	0.5	1	1.938	0.625
28	NM1228	2.333	2.5	B	0.5	1.25	2.063	0.625
30	NM1230	2.5	2.667	B	0.5	1.25	2.25	0.625
32	NM1232	2.667	2.833	B	0.5	1.25	2.25	0.625
34	NM1234	2.833	3	B	0.5	1.25	2.25	0.625
36	NM1236	3	3.167	B	0.5	1.375	2.5	0.625
39	NM1239	3.167	3.333	B	0.5	1.375	2.5	0.625
40	NM1240	3.333	3.5	B	0.5	1.375	2.5	0.625
42	NM1242	3.5	3.666	B	0.5	1.375	2.5	0.625
44	NM1244	3.667	3.833	B	0.5	1.375	2.5	0.625
48	NM1248	4	4.166	B	0.5	1.375	2.5	0.75
54	NM1254	4.5	4.666	B	0.75	1.625	2.75	0.75
56	NM1256	4.667	4.833	B	0.75	1.625	2.75	0.75
60	NM1260	5	5.166	B	0.75	1.625	2.75	0.75
64	NM1264	5.333	5.5	B	0.75	1.625	2.75	0.75
66	NM1266	5.5	5.666	B	0.75	1.625	2.75	0.75
72	NM1272	6	6.166	B	0.75	1.625	2.75	0.75

* Recommended Maximum Bore With Keyway and Setscrew.

14½° P.A. Gears Will Not Operate With 20° P.A.

16 DP
½" Face

Nylon Stock Spur Gears
14½°Pressure Angle





Natural Oil-Filled Nylon Spur Gears

Number of Teeth	Catalog Number	4DP		Type	Bore (in)		Hub (in)	
		Pitch	Outside		Stock	Max.*	Diameter	Project
11	NM1611	0.75	0.875	B	0.25	0.375	0.563	0.438
12	NM1612	0.75	0.875	B	0.25	0.375	0.563	0.438
13	NM1613	0.812	0.937	B	0.25	0.375	0.625	0.438
14	NM1614	0.875	1	B	0.25	0.375	0.688	0.438
15	NM1615	0.937	1.062	B	0.25	0.5	0.75	0.438
16	NM1616	1	1.125	B	0.25	0.5	0.813	0.438
17	NM1617	1.062	1.187	B	0.25	0.5	0.875	0.438
18	NM1618	1.125	1.25	B	0.25	0.5	0.938	0.438
19	NM1619	1.187	1.312	B	0.25	0.5	1	0.438
20	NM1620	1.25	1.375	B	0.5	0.5	1.063	0.438
21	NM1621	1.312	1.438	B	0.5	0.5	1.125	0.438
22	NM1622	1.375	1.5	B	0.5	0.5	1.188	0.438
23	NM1623	1.437	1.562	B	0.5	0.5	1.25	0.438
24	NM1624	1.5	1.625	B	0.5	0.625	1.313	0.438
26	NM1626	1.625	1.75	B	0.5	0.75	1.438	0.438
28	NM1628	1.75	1.875	B	0.5	0.75	1.5	0.5
30	NM1630	1.875	2	B	0.5	0.875	1.625	0.5
32	NM1632	2	2.125	B	0.5	1	1.75	0.5
34	NM1634	2.125	2.25	B	0.5	1.125	1.875	0.5
36	NM1636	2.25	2.375	B	0.5	1.125	2	0.5
38	NM1638	2.375	2.5	B	0.5	1.125	2	0.5
40	NM1640	2.5	2.626	B	0.75	1.125	2	0.5
44	NM1644	2.75	2.875	B	0.5	1.125	2	0.5
48	NM1648	3	3.125	B	0.5	1.125	2	0.5
52	NM1652	3.25	3.375	B	0.5	1.125	2	0.5
54	NM1654	3.375	3.5	B	0.5	1.125	2	0.5
56	NM1656	3.5	3.625	B	0.5	1.125	2	0.5
60	NM1660	3.75	3.875	B	0.5	1.125	2	0.5
64	NM1664	4	4.125	B	0.5	1.125	2	0.625
68	NM1668	4.25	4.375	B	0.5	1.25	2.25	0.625
72	NM1672	4.5	4.625	B	0.5	1.25	2.25	0.625
80	NM1680	5	5.125	B	0.5	1.25	2.25	0.625
84	NM1684	5.25	5.375	B	0.5	1.25	2.25	0.625
88	NM1688.	5.5	5.625	B	0.5	1.25	2.25	0.625
96	NM1696	6	6.125	B	0.5	1.25	2.25	0.625

* Recommended Maximum Bore With Keyway and Setscrew.

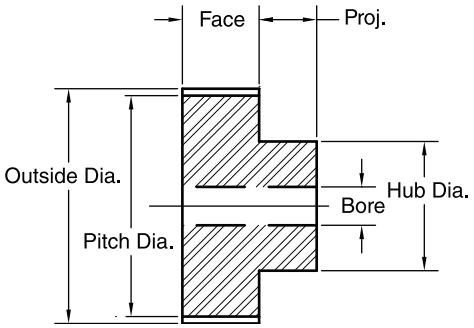
14½° P.A. Gears Will Not Operate With 20° P.A.

Nylon Stock Spur Gears

14½°Pressure Angle

20 DP

⅜" Face





Natural Oil-Filled Nylon Spur Gears

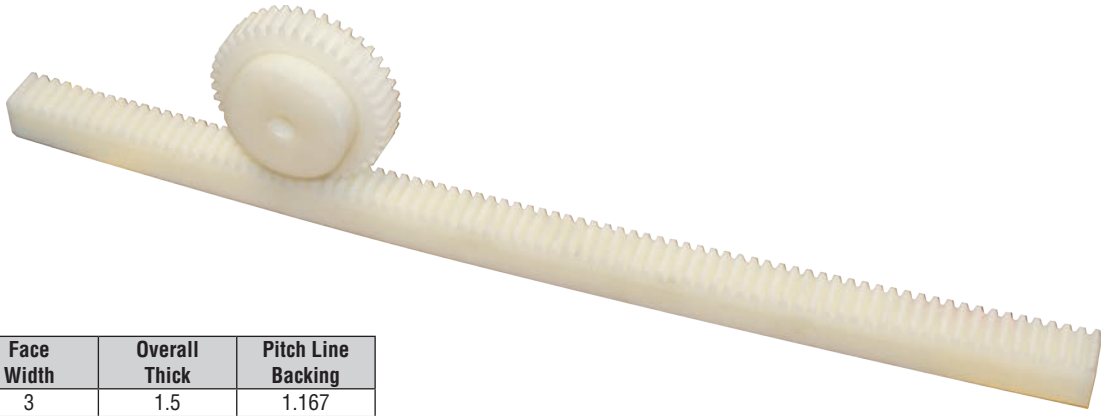
Number of Teeth	Catalog Number	4DP		Type	Bore (in)		Hub (in)	
		Pitch	Outside		Stock	Max.*	Diameter	Project
11	NM2011	0.55	0.65	B	0.25	0.313	0.406	0.375
12	NM2012	0.6	0.7	B	0.25	0.313	0.469	0.375
14	NM2014	0.7	0.8	B	0.25	0.313	0.547	0.375
15	NM2015	0.75	0.85	B	0.25	0.375	0.609	0.375
18	NM2018	0.9	1	B	0.25	0.375	0.75	0.375
20	NM2020	1	1.1	B	0.25	0.375	0.859	0.375
24	NM2024	1.2	1.3	B	0.375	0.563	1.063	0.375
30	NM2030	1.5	1.6	B	0.375	0.813	1.359	0.375
32	NM2032	1.6	1.7	B	0.375	0.875	1.438	0.5

* Recommended Maximum Bore With Keyway and Setscrew.

14½° P.A. Gears Will Not Operate With 20° P.A.

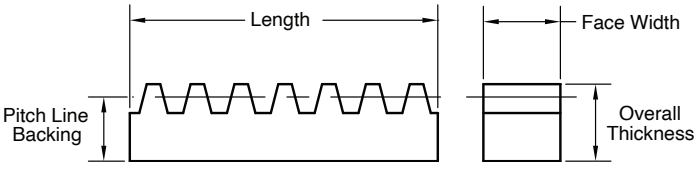
Machined Nylon Gear Rack

- Standard material: natural oil-filled nylon
- Other dimensions available
- Supplied as nominal 48" lengths.
- Matched ends available upon request



Gear Rack 14½° PA

Pitch	Catalog Number	Face Width	Overall Thick	Pitch Line Backing
3	R3X4NM	3	1.5	1.167
4	R4X4NM	2	1.5	1.25
4	RA4X4NM	2	2	1.75
5	R5X4NM	1.75	1.25	1.05
5	RA5X4NM	1.75	1.5	1.3
6	R6X4NM	1.5	1	0.833
6	RA6X4NM	1.5	1.5	1.333
8	R8X4NM	1.25	0.75	0.625
8	RA8X4NM	1.25	1.25	1.125
10	R10X4NM	1	0.625	0.525
10	RA10X4NM	1	1	0.9
12	R12X4NM	0.75	0.5	0.417
12	RA12X4NM	0.75	0.75	0.667
16	RA16X4NM	0.5	0.5	0.438
20	RA20X4NM	0.375	0.375	0.325



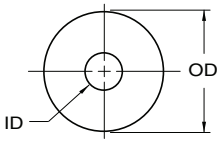
Gear Rack 20° PA

Pitch	Catalog Number	Face Width	Overall Thick	Pitch Line Backing
3	R3X4NM	3	1.5	1.167
4	R4X4NM	2	1.5	1.25
4	RA4X4NM	2	2	1.75
5	R5X4NM	1.75	1.25	1.05
5	RA5X4NM	1.75	1.5	1.3
6	R6X4NM	1.5	1	0.833
6	RA6X4NM	1.5	1.5	1.333
8	R8X4NM	1.25	0.75	0.625
8	RA8X4NM	1.25	1.25	1.125
10	R10X4NM	1	0.625	0.525
10	RA10X4NM	1	1	0.9
12	R12X4NM	0.75	0.5	0.417
12	RA12X4NM	0.75	0.75	0.667
16	RA16X4NM	0.5	0.5	0.438
20	RA20X4NM	0.375	0.375	0.325

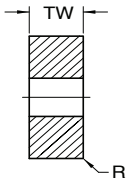
Wheels & Rollers

UHMW – White

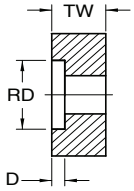
Martin wheels may be used as a direct replacement for conventional steel or aluminum wheels in many applications. These industrial plastic wheels are quiet operating, non-marking and corrosion resistant while maintaining a high load capacity.



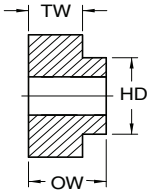
SHARP CORNER EDGE



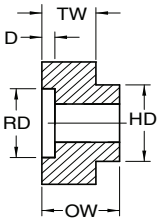
TYPE E



TYPE F



TYPE G

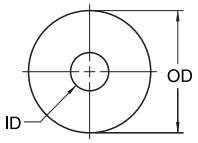


TYPE H

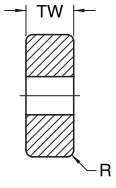
Wheels & Roller – Sharp Corner Edges

Part Number	Type	Outside Diameter	Inside Diameter	TW Tread Width	OW Overall Width	HD Hub Diameter	RD Recess Diameter	D Recess Depth
WRS1001NM	E	0.438	0.125	0.25	–	–	–	–
WRS1002NM	G	0.438	0.125	0.25	0.313	0.313	–	–
WRS1003NM	F	0.438	0.139	0.313	–	–	0.219	0.063
WRS1004NM	F	0.438	0.139	0.313	–	–	0.313	0.125
WRS1005NM	E	0.5	0.201	0.313	–	–		
WRS1006NM	F	0.563	0.264	0.313	–	–	0.469	0.063
WRS1007NM	E	0.625	0.201	0.5	–	–		
WRS1008NM	H	0.688	0.389	0.188	0.25	0.5	0.5	0.063
WRS1009NM	E	0.75	0.264	0.781	–	–	–	–
WRS1010NM	E	0.75	0.264	1	–	–	–	–
WRS1011NM	E	0.875	0.187	0.5	–	–	–	–
WRS1012NM	F	0.875	0.327	0.469			0.625	0.188
WRS1013NM	H	0.875	0.201	0.313	0.375	0.688	0.625	0.125
WRS1014NM	F	1	0.38	0.375	–	–	0.813	0.063
WRS1015NM	E	1.125	0.26	0.375	–	–	–	–
WRS1016NM	F	1.5	0.317	0.406	–		1.25	0.156
WRS1017NM	G	2.5	0.326	1.375	1.5	0.75	–	–
WRS1018NM	G	3	0.505	1.375	1.25	0.875	–	–

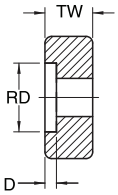
NOTE: Dimensions in inches.



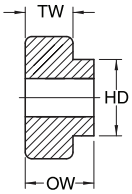
Radius Edge



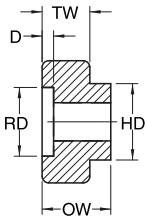
TYPE E



TYPE F



TYPE G



TYPE H

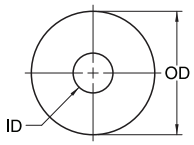
Wheels & Roller – Radius Edges

Part Number	Type	Outside Diameter	Inside Diameter	TW Tread Width	OW Overall Width	HD Hub Diameter	RD Recess Diameter	D Recess Depth	R Radius
WRR2001NM	F	0.375	0.095	0.375	–	–	0.188	0.125	0.125
WRR2002NM	F	0.5	0.19	0.375	–	–	0.375	0.063	0.063
WRR2003NM	F	0.625	0.187	0.313	–	–	0.313	0.125	0.063
WRR2004NM	H	0.75	0.201	0.25	0.281	0.313	0.656	0.063	0.063
WRR2005NM	E	0.75	0.264	0.5	–	–	–	–	0.125
WRR2006NM	G	0.875	0.139	0.375	0.438	0.5	–	–	0.125
WRR2007NM	F	1	0.201	0.5	–	–	0.563	0.094	0.063
WRR2008NM	E	1.125	0.264	0.375	–	–	–	–	0.125
WRR2009NM	H	1.125	0.326	0.375	0.438	0.5	0.625	0.063	0.125
WRR2010NM	E	2	0.641	0.125	–	–	–	–	0.063
WRS1018NM	G	3	0.505	1.375	1.25	0.875	–		–

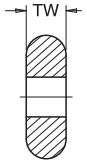
NOTE: Dimensions in inches.

Wheels & Rollers

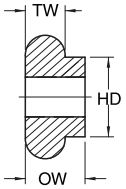
UHMW – White



FULL RADIUS EDGES



TYPE M

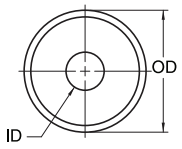


TYPE N

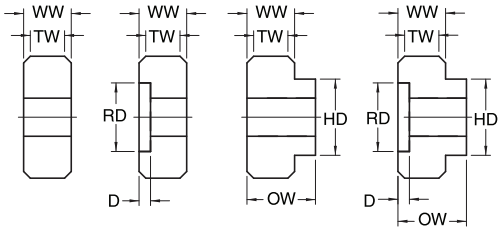
Wheels & Roller – Full Radius Edges

Part Number	Type	Outside Diameter	Inside Diameter	TW Tread Width	OW Overall Width	HD Hub Diameter
WRFR4001NM	M	0.75	0.264	0.25	–	–
WRFR4002NM	N	0.75	0.264	0.25	0.313	0.375
WRFR4003NM	N	0.75	0.312	0.25	0.5	0.5
WRFR4004NM	N	0.938	0.375	0.188	0.25	0.5
WRFR4005NM	M	1	0.201	0.25	–	–
WRFR4006NM	M	1.5	0.389	0.75	–	–
WRFR4007NM	N	1.5	0.389	0.75	1	0.75
WRFR4008NM	M	2	0.389	1	–	–

NOTE: Dimensions in inches.



CHAMFERED EDGES



TYPE I TYPE J TYPE K TYPE L

- Trolley wheels
- Guide wheels
- Spools
- Crowned wheels
- Pallet jack wheels

Wheels & Roller – Chamfered Edges

Part Number	Type	Outside Diameter	Inside Diameter	TW Tread Width	OW Overall Width	HD Hub Diameter	RD Recess Diameter	D Recess Depth	Chamfer
WRC3001NM	L	0.75	0.326	0.219	0.5	0.5	0.563	0.031	45° × .031
WRC3002NM	I	0.875	0.326	0.25	–	–	–	–	45° × .031
WRC3003NM	L	0.875	0.375	0.188	0.375	0.5	0.5	0.031	45° × .031
WRC3004NM	K	0.875	0.389	0.188	0.375	0.5	–	–	45° × .031
WRC3005NM	J	0.938	0.375	0.313	–	–	–	–	45° × .031
WRC3006NM	K	0.938	0.389	0.188	0.375	0.5	0.5	0.063	45° × .031
WRC3007NM	I	1	0.75	0.5	–	–	–	–	45° × .063
WRC3008NM	J	1	0.389	0.188	–	–	0.813	0.063	45° × .031
WRC3009NM	I	1.063	0.326	0.25	–	–	–	–	45° × .063
WRC3010NM	L	1.063	0.389	0.094	0.563	0.625	0.625	0.063	45° × .094
WRC3011NM	I	1.5	0.505	1	–	–	–	–	45° × .125

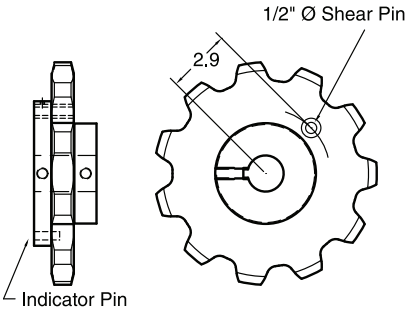
NOTE: Dimensions in inches.
Other sizes are available upon request.
Other materials, such as Acetal, Teflon® and Nylon, are also available.

78 Series Shear Pin Sprocket

- Nylon body & nylon sprocket
- Includes trip indicator

No. Teeth	Part Number	Pitch Dia.	Type	Bore Max.	A	B	C	D
10	78SP10NM	8.44	C	2	4.875	3.25	3.75	8
11	78SP11NM	9.26	C	2.5	4.875	3.25	3.75	8
13	78SP13NM	10.9	C	3	5.875	3.75	4.438	9

NOTE: Dimensions in inches.

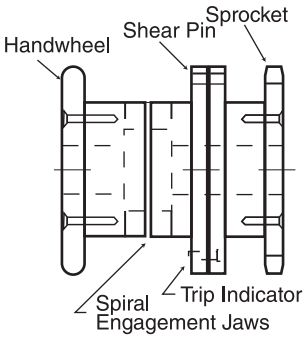


78 Series Jaw Clutch Sprocket

- Nylon Body & Nylon Sprocket
- Includes Trip Indicator

No. Teeth	Part Number	Pitch Dia.	Type	Bore Max.	A	B	C	D
11	78JC11	9.26	C	2.5	3.5	2.75	3	14.25

NOTE: Dimensions in inches.



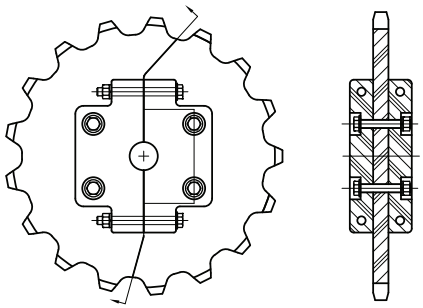
720 Series Split Sprocket

- UHMW sprocket plates & hubs
- 304 Stainless steel hardware as standard
- 316 Stainless steel hardware optional
- Standard rim and chain-saver rim available
- Other numbers of teeth available

6.0" Pitch, 1" Nominal Plate Width
4" Length Thru Bore, C- Hub

No. Teeth	Part Number	Pitch Dia.	Outside Dia.	Bore Stock	Max Drive	Max Idler	Hub Dia.	Nom LTB
13	720C13NMS	12.91	13.5	1	3.25	3.625	7	4
17	720C17NMS	16.59	17.09	1.75	3.938	5	8.875	4
19	720C19NMS	18.45	18.95	1.75	3.938	5	8.875	4
21	720C21NMS	20.33	20.83	1.75	3.938	5	8.875	4
23	720C23NMS	22.21	22.71	1.75	3.938	5	8.875	4
25	720C25NMS	24.1	24.6	1.75	4.5	6	10.5	4

NOTE: Dimensions in inches.

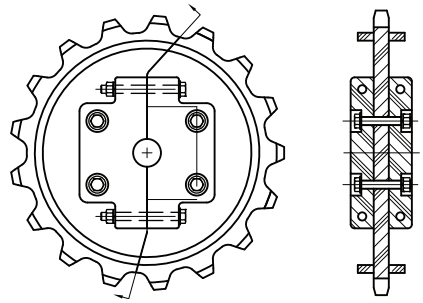


720 Series Split Sprocket

6.0" Pitch, 1" Nominal Plate Width
4" Length Thru Bore, C- Hub

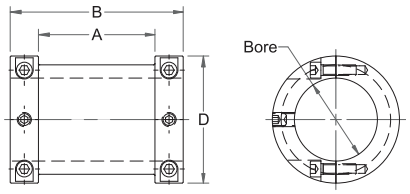
No. Teeth	Part Number	Pitch Dia.	Outside Dia.	Chainsaver Hub Dia.	Bore Stock	Max Drive	Max Idler	Hub Dia.	Nom LTB
13	720CS13NMS	12.89	13.39	10.03	1	3.25	3.625	7	4
17	720CS17NMS	16.59	17.09	14.07	1.75	3.938	5	8.875	4
19	720CS19NMS	18.45	18.95	16.06	1.75	3.938	5	8.875	4
21	720CS21NMS	20.33	20.83	18.04	1.75	3.938	5	8.875	4
23	720CS23NMS	22.21	22.71	20	1.75	3.938	5	8.875	4
25	720CS25NMS	24.1	24.6	22.03	1.75	4.5	6	10.5	4

NOTE: Dimensions in inches.



Static Shaft Bushings

These static shaft bushings protect expensive shafts from damage caused by idler sprockets. Manufactured from green oil-filled nylon with stainless steel hardware. They are as durable as stainless steel counterparts at a fraction of the cost. They are chemical, corrosion, moisture and abrasive resistant. Custom sizes and materials available.



Static Shaft Bushing-Split

Part Number	Max. Shaft Size	A	B	D
WTB4700	2.938	4.13	6.125	4.5
WTB6400	4	4.13	6.125	6
WTB7200	4.5	4.13	6.125	6.25
WTB8400	5.25	4.13	6.125	7

NOTE: Dimensions in inches.

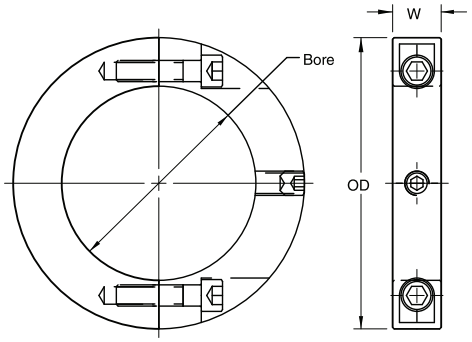
Shaft Collars – Regular Duty

Part Number	W	Outside Diameter	Bore	
			Stock	Max.
WTSC600	1	6	1.75	4
WTSC800	1	8	3.25	5

Shaft Collars – Heavy Duty

Part Number	W	Outside Diameter	Bore	
			Stock	Max.
WTSC2600	2.5	6	1.75	4
WTSC2800	2.5	8	3.25	5

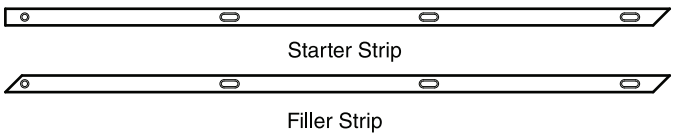
NOTE: Dimensions in inches.



Shaft Collar

Wear Strips

These wear strips are easy to install and provide superior protection for rails and other moving machinery. Strips include slots for weld washer installations. We can easily accommodate any special spacing or size requirement for the strips and slots.



Filler Wear Strips

Starter Wear Strips

Part Number	Thickness	Width	Length	Center Line	Part Number	Thickness	Width	Length	Center Line
WTF1000	0.38	2.63	120	1.31	WTS1100	0.38	2.63	120	1.31
WTF1002	0.38	3	120	1.5	WTS1102	0.38	3	120	1.5
WTF1003	0.5	2.5	120	1.25	WTS1103	0.5	2.5	120	1.25
WTF1004	0.5	3	120	1.5	WTS1104	0.5	3	120	1.5
WTF1005	0.5	3.5	120	1.75	WTS1105	0.5	3.5	120	1.75
WTF1006	0.5	4	120	2	WTS1106	0.5	4	120	2
WTF1007	0.5	5	120	2.5	WTS1107	0.5	5	120	2.5
WTF1008	0.63	2.5	120	1.25	WTS1108	0.63	2.5	120	1.25
WTF1009	0.63	3	120	1.5	WTS1109	0.63	3	120	1.5
WTF1010	0.63	4	120	2	WTS1110	0.63	4	120	2
WTF1011	0.63	5	120	2.5	WTS1111	0.63	5	120	2.5

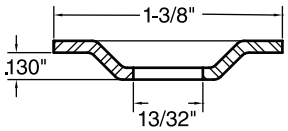
NOTE: Dimensions in inches.

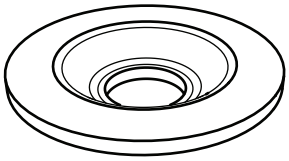
Weld Washers

Used to fasten wear strips to rails and tank floors.

Part Number	Material	Diameter
WTWW1375SS	Stainless Steel	1.375

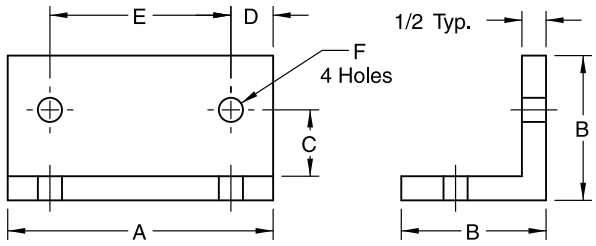
NOTE: Dimensions in inches.





Wear Shoes

Wear shoes may be manufactured to fit your particular application. For custom wear shoes, please provide your Martin representative with specifications.

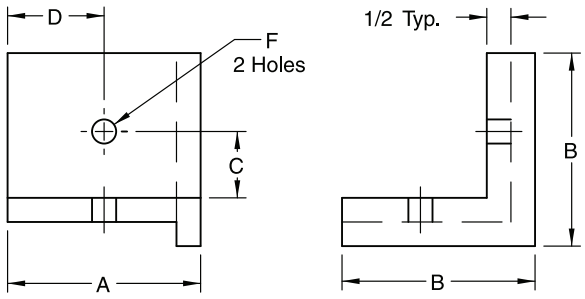


Carrying Wear Shoes

Carrying Wear Shoes

Part Number	A	B	C	D	E	F
WTWS1001	5.5	3	1.31	0.88	3.75	0.5
WTWS1550	5.5	3	1.38	0.88	3.75	0.5
WTWS1600	6	3	1.38	1.13	3.75	0.5

NOTE: Dimensions in inches.

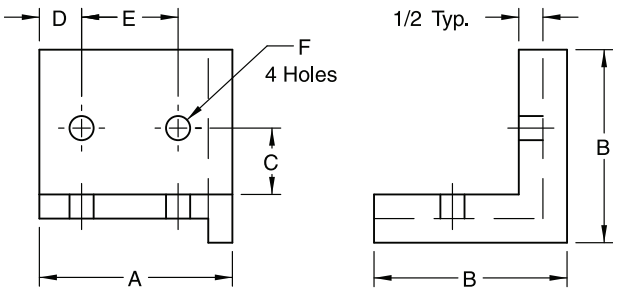


Single Hole Return Wear Shoes

Single Hole Return Wear Shoes

Part Number	A	B	C	D	E	F
WTWS2001	4	3.5	1.31	2	–	0.5
WTWS2450	4	3.5	1.38	2	–	0.5
WTWS2550	4.5	3.5	1.38	2.25	–	0.5

NOTE: Dimensions in inches.



Double Hole Return Wear Shoes

Double Hole Return Wear Shoes

Part Number	A	B	C	D	E	F
WTWS3400	4	3.5	1.38	0.88	2	0.5
WTWS3450	4.5	3.5	1.38	0.88	1	0.5
WTWS3600	6	3.5	1.38	1.13	3.75	0.5

NOTE: Dimensions in inches.

Replacement Parts For Bottling & Packaging Plant

Martin manufactures star wheels, guides and associated components in a variety of engineering plastics as well as metals, providing you with a single source for all your processing and packaging components.

Martin's 31 branch locations and vast manufacturing capabilities mean we can provide you with the convenience of working with one manufacturer who understands your needs and can ensure all parts work together as required as well as offering fast turnaround on all custom work.



Application:

- Beverage bottling
- Pharmaceutical packaging
- Canning
- Food processing
- Glass inspection machines
- Labeling machines
  - – Cappers
  - – Cleaners
  - – Steamers
  - – Fillers
  - – Labelers
  - – Coders
  - – Pluggers
  - – Pump placers
  - – Monoblock
  - – Cottoners

Benefits of Plastic Components:

- Exceptional resistance to wear and abrasion
- Food grade approved material – FDA compliant
- High impact strength
- Corrosion and chemical resistance
- Self-lubricating, eliminating routine/costly maintenance
- Low co-efficient of friction
- Light weight – typically 1/7th the weight of steel
- High visibility colors for increased safety - Makes for easy identification of parts
- Significant noise reduction
- No loose hardware

Mounting Options:

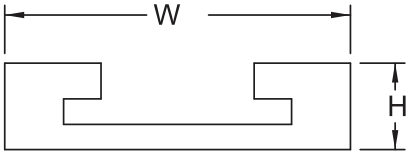
- **Standard** - Using OEM original bolt on method of securing and positioning parts.
- **Quick Change** - Requires one-time modifications to your machines to utilize quick change securing methods.



For a fast & free quote

Contact your Martin distributor

or visit martinsprocket.com



Corner Track – Tab Design

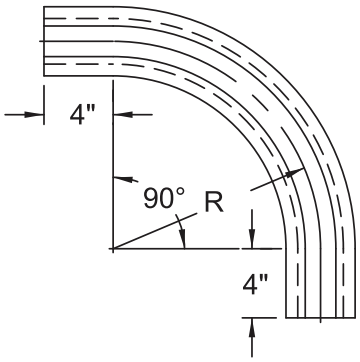
SolidTrack 90º Corners

Tab Design with Extensions

UHMW — White

Part Number	Chain Number	Standard Radius R	W	H
CHNGCT1111NM	SS881T, D880T, D879T, K3-1/4	18", 24", 30"	4	1
CHNGCT1211NM	SS881T, D880T, D879T, K4-1/2	24", 30", 36"	5	1
CHNGCT1221NM	D882TLW K4-1/2	24", 30", 36"	5	1 – 3/8
CHNGCT1421NM	D882TLW K7-1/2	24", 30", 36"	8	1 – 3/8
CHNGCT1521NM	D882TLW K10	24", 30", 36"	10 - _	1 – 3/8
CHNGCT1621NM	D882TLW K12	24", 30", 36"	12 - _	1 – 3/8
CHNGCT1131NM	1873T, 1874T, K3-1/4	18", 24", 30"	4	1 – 3/8
CHNGCT1231NM	1873T, 1874T, K4-1/2	18", 24", 30"	5	1 – 3/8
CHNGCT1331NM	1873T, 1874T, K6	18", 24", 30"	6 - _	1 – 3/8
CHNGCT1431NM	1873T, 1874T, K7-1/2	18", 24", 30"	8	1 – 3/8
CHNGCT1531NM	1873T K10	18", 24", 30"	10 - _	1 – 3/8
CHNGCT1631NM	1873T K12	18", 24", 30"	12 - _	1 – 3/8

NOTE: 4" straight extensions on each end.
Specify radius when ordering.
30" corner radius and above are furnished in two 45° segments.



Corner Track – Tab Design with Extensions

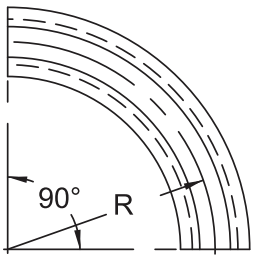
SolidTrack 90º Corners

Tab Design without Extensions

UHMW — White

Part Number	Chain Number	Standard Radius R	W	H
CHNGCT1113NM	SS881T, D880T, D879T, K3-1/4	18", 24", 30"	4	1
CHNGCT1213NM	SS881T, D880T, D879T, K4-1/2	24", 30", 36"	5	1
CHNGCT1223NM	D882TLW K4-1/2	24", 30", 36"	5	1 – 3/8
CHNGCT1423NM	D882TLW K7-1/2	24", 30", 36"	8	1 – 3/8
CHNGCT1523NM	D882TLW K10	24", 30", 36"	10 - _	1 – 3/8
CHNGCT1623NM	D882TLW K12	24", 30", 36"	12 - _	1 – 3/8
CHNGCT1133NM	1873T, 1874T, K3-1/4	18", 24", 30"	4	1 – 3/8
CHNGCT1233NM	1873T, 1874T, K4-1/2	18", 24", 30"	5	1 – 3/8
CHNGCT1333NM	1873T, 1874T, K6	18", 24", 30"	6 - _	1 – 3/8
CHNGCT1433NM	1873T, 1874T, K7-1/2	18", 24", 30"	8	1 – 3/8
CHNGCT1533NM	1873T K10	18", 24", 30"	10 - _	1 – 3/8
CHNGCT1633NM	1873T K12	18", 24", 30"	12 - _	1 – 3/8

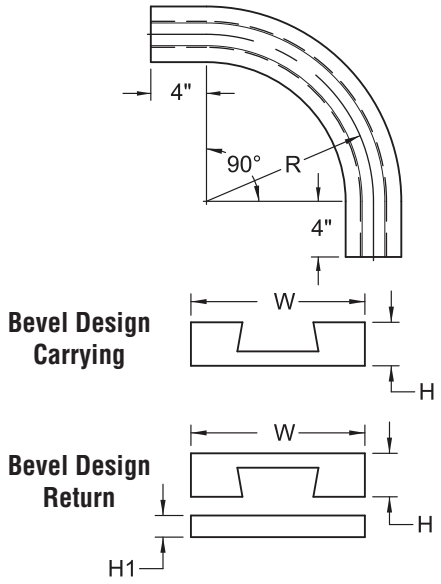
NOTE: Specify radius when ordering.
30" corner radius and above are furnished in two 45° segments.



Corner Track – Tab Design without Extensions

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SolidTrack®
Corner Track - Bevel Design



Corner Track – Bevel Design with Extensions

SolidTrack 90º Corners – Carrying
Bevel Design with Extensions — UHMW — White

Part Number	Chain Number	Standard Radius R	W	H
CHNGCB2111-18NM	SS881, D880, D879 K3-1/4	18'	4	1
CHNGCB2111-24NM	SS881, D880, D879 K3-1/4	24"	4	1
CHNGCB2111-30NM	SS881, D880, D879 K3-1/4	30"	4	1
CHNGCB2211-24NM	SS881, D880, D879 K4-1/2	24"	5	1
CHNGCB2211-30NM	SS881, D880, D879 K4-1/2	30"	5	1
CHNGCB2211-36NM	SS881, D880, D879 K4-1/2	36"	5	1

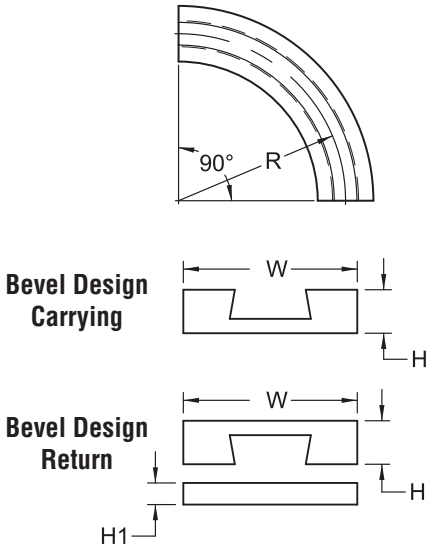
NOTE: 4" straight extensions on each end.
30" corner radius and above are furnished in two 45° segments.

SolidTrack 90º Corners – Return
Bevel Design with Extensions — UHMW — White

Part Number	Chain Number	Standard Radius R	W	H	H1
CHNGCB311118NM	SS881, D880, D879 K3-1/4	18'	4	1	0.625
CHNGCB311124NM	SS881, D880, D879 K3-1/4	24"	4	1	0.625
CHNGCB311130NM	SS881, D880, D879 K3-1/4	30"	4	1	0.625
CHNGCB321124NM	SS881, D880, D879 K4-1/2	24"	5	1	0.625
CHNGCB321130NM	SS881, D880, D879 K4-1/2	30"	5	1	0.625
CHNGCB321136NM	SS881, D880, D879 K4-1/2	36"	5	1	0.625

NOTE: 4" straight extensions on each end.
30" corner radius and above are furnished in two 45° segments.

SolidTrack® is a registered trademark of Quandrant EPP AG, a Poly Hi Solidur, Inc. Company



Corner Track – Bevel Design without Extensions

SolidTrack 90º Corners – Carrying

Bevel Design without Extensions

UHMW — White

Part Number	Chain Number	Standard Radius R	W	H
CHNGCB211318NM	SS881, D880, D879 K3-1/4	18'	4	1
CHNGCB211324NM	SS881, D880, D879 K3-1/4	24"	4	1
CHNGCB211330NM	SS881, D880, D879 K3-1/4	30"	4	1
CHNGCB221324NM	SS881, D880, D879 K4-1/2	24"	5	1
CHNGCB221330NM	SS881, D880, D879 K4-1/2	30"	5	1
CHNGCB221336NM	SS881, D880, D879 K4-1/2	36"	5	1

NOTE: 30" corner radius and above are furnished in two 45° segments.

SolidTrack 90º Corners – Return

Bevel Design without Extensions

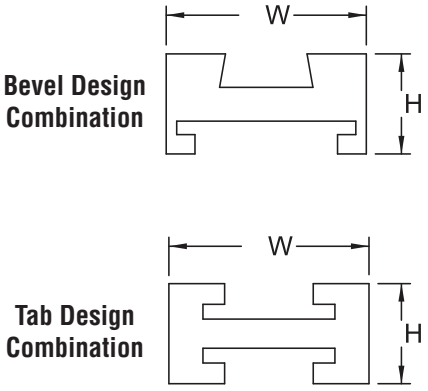
UHMW — White

Part Number	Chain Number	Standard Radius R	W	H	H1
CHNGCB311318NM	SS881, D880, D879 K3-1/4	18'	4	1	0.625
CHNGCB311324NM	SS881, D880, D879 K3-1/4	24"	4	1	0.625
CHNGCB311330NM	SS881, D880, D879 K3-1/4	30"	4	1	0.625
CHNGCB321324NM	SS881, D880, D879 K4-1/2	24"	5	1	0.625
CHNGCB321330NM	SS881, D880, D879 K4-1/2	30"	5	1	0.625
CHNGCB321336NM	SS881, D880, D879 K4-1/2	36"	5	1	0.625

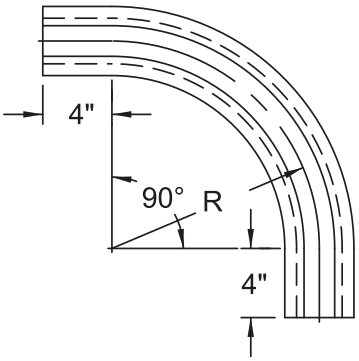
NOTE: 30" corner radius and above are furnished in two 45° segments.

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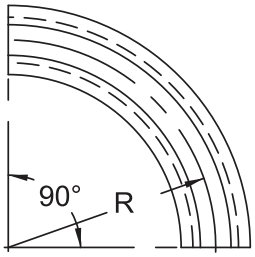
SolidTrack®
Corner Track - Combination Design



Corner Track
Combination Design



Corner Track – Tab Design
with Extensions



Corner Track – Tab Design
without Extensions

SolidTrack 90º Corners – Combination
Tab Design without Extensions

UHMW — White

Part Number	Chain Number	Standard Radius R	W	H
CHNGCCT1113NM	SS881T, D880T, D879T K3-1/4	18", 24", 30"	4	2.00
CHNGCCT1213NM	SS881T, D880T, D879T K4-1/2	24", 30", 36"	5	2.00
CHNGCCT1223NM	D882TLW K4-1/2	24", 30", 36"	5	2.63
CHNGCCT1423NM	D882TLW K7-1/2	24", 30", 36"	8	2.63
CHNGCCT1523NM	D882TLW K10	24", 30", 36"	10 - _	2.63
CHNGCCT1623NM	D882TLW K12	24", 30", 36"	12 - _	2.63
CHNGCCT1133NM	1873T, 1874T K3-1/4	18", 24", 30"	4	2.63
CHNGCCT1233NM	1873T, 1874T K4-1/2	18", 24", 30"	5	2.63
CHNGCCT1333NM	1873T, 1874T K6	18", 24", 30"	6 - _	2.63
CHNGCCT1433NM	1873T, 1874T K7-1/2	18", 24", 30"	8	2.63
CHNGCCT1533NM	1873T, 1874T K10	18", 24", 30"	10 - _	2.63
CHNGCCT1633NM	1873T, 1874T K12	18", 24", 30"	12 – _	2.63

NOTE: 4" straight extensions on each end.
30" corner radius and above are furnished in two 45° segments.

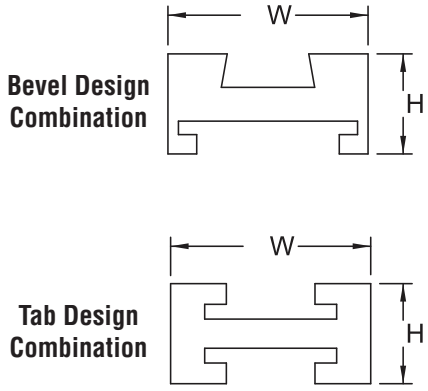
SolidTrack 90º Corners – Combination
Bevel Design without Extensions

UHMW — White

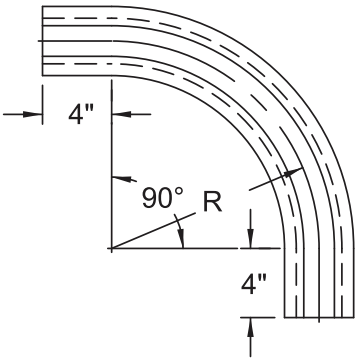
Part Number	Chain Number	Standard Radius R	W	H
CHNGCCB2113NM	SS881, D880, D879 K3-1/4	18", 24", 30"	4	2.00
CHNGCCB2213NM	SS881, D880, D879 K4-1/2	24", 30", 36"	5	2.00

NOTE: 4" straight extensions on each end.
30" corner radius and above are furnished in two 45° segments.

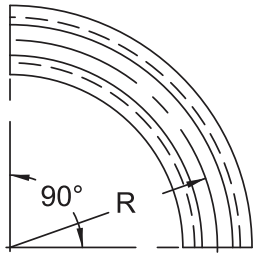
SolidTrack® is a registered trademark of Quandrant EPP AG, a Poly Hi Solidur, Inc. Company



Corner Track
Combination Design



Corner Track – Tab Design
with Extensions



Corner Track – Tab Design
without Extensions

SolidTrack 90º Corners – Combination

Tab Design with Extensions

UHMW — White

Part Number	Chain Number	Standard Radius R	W	H
CHNGCCT1111NM	SS881T, D880T, D879T K3-1/4	18", 24", 30"	4	2.00
CHNGCCT1211NM	SS881T, D880T, D879T K4-1/2	24", 30", 36"	5	2.00
CHNGCCT1221NM	D882TLW K4-1/2	24", 30", 36"	5	2.63
CHNGCCT1421NM	D882TLW K7-1/2	24", 30", 36"	8	2.63
CHNGCCT1521NM	D882TLW K10	24", 30", 36"	10 - _	2.63
CHNGCCT1621NM	D882TLW K12	24", 30", 36"	12 - _	2.63
CHNGCCT1131NM	1873T, 1874T K3-1/4	18", 24", 30"	4	2.63
CHNGCCT1231NM	1873T, 1874T K4-1/2	18", 24", 30"	5	2.63
CHNGCCT1331NM	1873T, 1874T K6	18", 24", 30"	6 - _	2.63
CHNGCCT1431NM	1873T, 1874T K7-1/2	18", 24", 30"	8	2.63
CHNGCCT1531NM	1873T K10	18", 24", 30"	10 - _	2.63
CHNGCCT1631NM	1873T K12	18", 24", 30"	12 – _	2.63

NOTE: 4" straight extensions on each end.
30" corner radius and above are furnished in two 45° segments.

SolidTrack 90º Corners – Combination

Bevel Design with Extensions

UHMW — White

Part Number	Chain Number	Standard Radius R	W	H
CHNGCCB2111NM	SS881, D880, D879 K3-1/4	18", 24", 30"	4	2.00
CHNGCCB2211NM	SS881, D880, D879 K4-1/2	24", 30", 36"	5	2.00

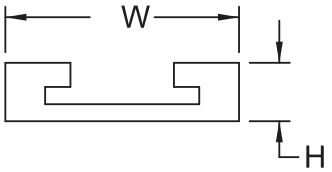
NOTE: 4" straight extensions on each end.
30" corner radius and above are furnished in two 45° segments.

SolidTrack® is a registered trademark of Quandrant EPP AG, a Poly Hi Solidur, Inc. Company

SolidTrack® Straight Track - Tab, Bevel & Combination Design

SolidTrack – Straight Tab Design UHMW — White

Part Number	Chain Number	Standard Radius R	W	H
CHNGST1112NM	SS881T, D880T, D879T K3-1/4	10'	4	1.00
CHNGST1212NM	SS881T, D880T, D879T K4-1/2	10'	5	1.00
CHNGST1222NM	D882TLW K4-1/2	10'	5	1.38
CHNGST1422NM	D882TLW K7-1/2	10'	8	1.38
CHNGST1522NM	D882TLW K10	10'	10 - _	1.38
CHNGST1622NM	D882TLW K12	10'	12 - _	1.38
CHNGST1132NM	1873T, 1874T, K3-1/4	10'	4	1.38
CHNGST1232NM	1873T, 1874T, K4-1/2	10'	5	1.38
CHNGST1332NM	1873T, 1874T, K6	10'	6 - _	1.38
CHNGST1432NM	1873T, 1874T, K7-1/2	10'	8	1.38
CHNGST1532NM	1873T K10	10'	10 - _	1.38
CHNGST1632NM	1873T K12	10'	12 - _	1.38



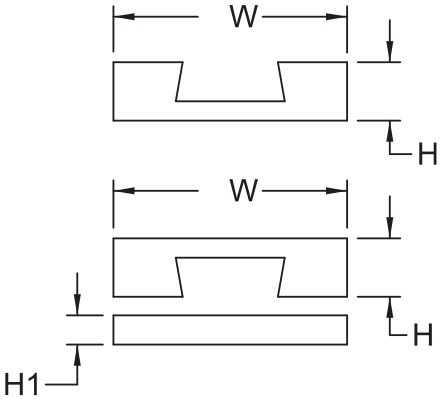
Straight Track – Tab Design

SolidTrack Straight – Carrying Bevel Design UHMW — White

Part Number	Chain Number	Standard Radius R	W	H
CHNGSB2112NM	SS881, D880, D879, K3-1/4	10'	4	1.00
CHNGSB2212NM	SS881, D880, D879, K4-1/2	10'	5	1.00

SolidTrack Straight – Return Bevel Design UHMW — White

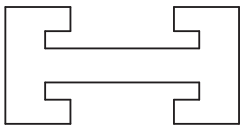
Part Number	Chain Number	Standard Radius R	W	H	H1
CHNGSB3112NM	SS881, D880, D879, K3-1/4	10'	4	1.00	0.625
CHNGSB3212NM	SS881, D880, D879, K4-1/2	10'	5	1.00	0.625



Straight Track – Bevel Design

SolidTrack Straight – Combination Tab Design UHMW — White

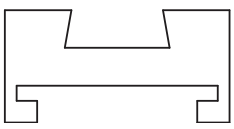
Part Number	Chain Number	Standard Lengths
CHNGSC1112NM	SS881T, D880T, D879T K3-1/4	10'
CHNGSC1212NM	SS881T, D880T, D879T K4-1/2	10'
CHNGSC1222NM	D882TLW K4-1/2	10'
CHNGSC1422NM	D882TLW K7-1/2	10'
CHNGSC1522NM	D882TLW K10	10'
CHNGSC1622NM	D882TLW K12	10'
CHNGSC1132NM	1873T, 1874T, K3-1/4	10'
CHNGSC1232NM	1873T, 1874T, K4-1/2	10'
CHNGSC1332NM	1873T, 1874T, K6	10'
CHNGSC1432NM	1873T, 1874T, K7-1/2	10'
CHNGSC1532NM	1873T K10	10'
CHNGSC1632NM	1873T K12	10'



Straight Track – Tab Design Combination

SolidTrack Straight – Combination Bevel Design UHMW — White

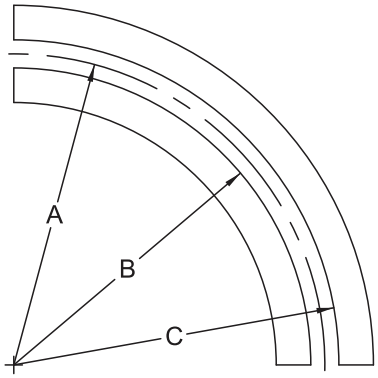
Part Number	Chain Number	Standard Lengths
CHNGSC2112NM	SS881, D880, D879, K3-1/4	10'
CHNGSC2212NM	SS881, D880, D879, K4-1/2	10'



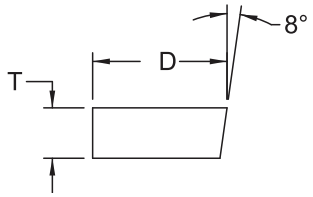
Straight Track – Bevel Design Combination

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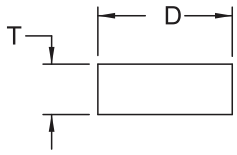
Radius Curve Wearstrip For Flat Top Chain



Radius Curve Wearstrip



Bevel Chain Design



Tab Chain Design

Radius Curve Wearstrip — Bevel Design — UHMW — White

Part Number	Wearstrip No.	Chain No.	Nom. Corner Radius A	Track Radius		Width D	Thickness T (+0, -1/16)
				Inside B	Outside C		
CHNGWB1813NM	U18B3	880, 881	18	17.1875	18.8125	1.00	0.375
CHNGWB2413NM	U24B3	880, 881	24	23.1875	24.8125	1.00	0.375
CHNGWB3013NM	U30B3	880, 881	30	29.1875	30.8125	1.50	0.375
CHNGWB2415NM	U24B5	882	24	22.859375	25.140625	1.50	0.625
CHNGWB3015NM	U30B5	882	30	28.859375	31.140625	1.50	0.625

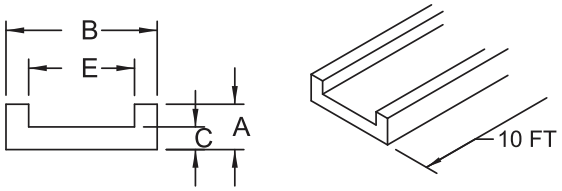
NOTE: 30" radius furnished in two 45° segments to make one 90° segment. All others are 90° segment.
Dimensions in inches.

Radius Curve Wearstrip — Tab Design — UHMW — White

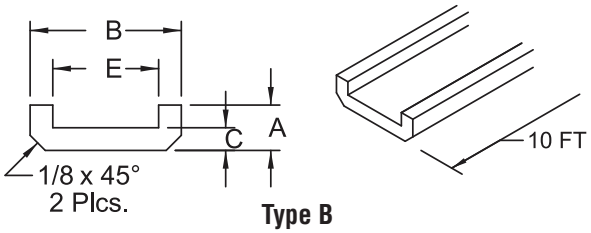
Part Number	Wearstrip No.	Chain No.	Nom. Corner Radius A	Track Radius		Width D	Thickness T (+0, -1/16)
				Inside B	Outside C		
CHNGWT1803NM	U18R3	880, 881	18	17.125	18.875	1.50	0.375
CHNGWT2403NM	U24R3	880, 881	24	23.125	24.875	1.50	0.375
CHNGWT3003NM	U30R3	880, 881	30	29.125	30.875	1.50	0.375
CHNGWT2405NM	U24R5	882	24	22.859375	25.140625	1.50	0.625
CHNGWT3005NM	U30R5	882	30	28.859375	31.140625	1.50	0.625
CHNGWT1806NM	U18R6	1873, 1874, 3873	18	17.3125	18.6875	1.50	0.75
CHNGWT2406NM	U24R6	1873, 1874, 3873	24	23.3125	24.6875	1.50	0.75
CHNGWT3006NM	R30R6	1873, 1874, 3873	30	29.3125	30.6875	1.50	0.75

NOTE: 30" radius furnished in two 45° segments to make one 90° segment. All others are 90° segment.
Dimensions in inches.

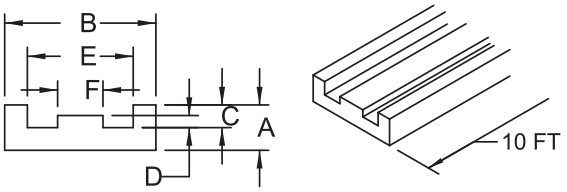
SolidTrack® Straight Track - Tab, Bevel & Combination Design



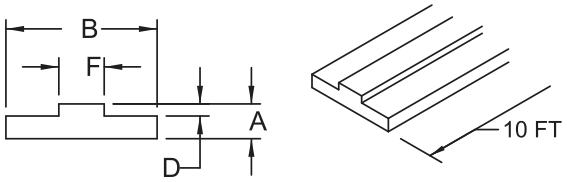
Type A



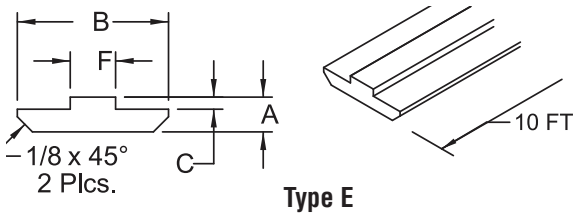
Type B



Type B



Type D



Type E
for use with U channel

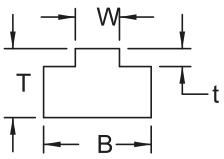
Chain Guide Raceway

UHMW — White

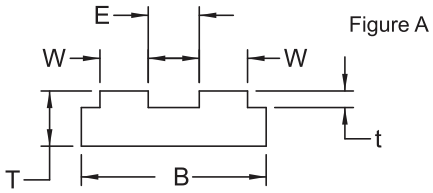
Part Number	Type	ANSI Chain No.	A Minimum	B Minimum	C	D	E	F
CHNGR1040NM	A	2040	0.31	1.25	0.19	–	0.88	–
CHNGR1050NM	A	2050	0.38	1.25	0.22	–	1.00	–
CHNGR1060NM	A	2060	0.38	1.50	0.19	–	1.25	–
CHNGR1080NM	A	2080	0.50	2.00	0.25	–	1.56	–
CHNGR1100NM	A	2100	0.63	2.25	0.31	–	1.88	–
CHNGR1120NM	A	2120	0.63	2.75	0.25	–	2.25	–
CHNGR1003NM	A	H78/S188	1.25	4.25	0.38	–	3.50	–
CHNGR1004NM	A	81X/1578	1.00	3.00	0.38	–	2.50	–
CHNGR0040NM	B	2040	0.31	1.25	0.19	–	0.88	–
CHNGR0050NM	B	2050	0.38	1.25	0.22	–	1.00	–
CHNGR0060NM	B	2060	0.38	1.50	0.19	–	1.25	–
CHNGR0080NM	B	2080	0.50	2.00	0.25	–	1.56	–
CHNGR0100NM	B	2100	0.63	2.25	0.31	–	1.88	–
CHNGR0120NM	B	2120	0.63	2.75	0.25	–	2.25	–
CHNGR2040NM	C	2040	0.31	1.00	0.14	0.08	0.69	0.25
CHNGR2050NM	C	2050	0.38	1.25	0.81	0.10	0.81	0.31
CHNGR2060NM	C	2060	0.50	1.50	0.21	0.12	1.13	0.44
CHNGR2080NM	C	2080	0.50	2.00	0.25	0.13	1.44	0.56
CHNGR5040NM	D	2040	0.31	1.00	0.08	–	–	0.25
CHNGR5050NM	D	2050	0.31	1.25	0.10	–	–	0.31
CHNGR5060NM	D	2060	0.31	1.25	0.12	–	–	0.44
CHNGR5080NM	D	2080	0.38	1.50	0.13	–	–	0.56
CHNGR5100NM	D	2100	0.50	2.00	0.21	–	–	0.69
CHNGR5120NM	D	2120	0.50	2.25	0.26	–	–	0.94
CHNGR6040NM	E	2040	0.31	1.00	0.80	–	–	0.25
CHNGR6050NM	E	2050	0.31	1.25	0.10	–	–	0.31
CHNGR6060NM	E	2060	0.31	1.25	0.12	–	–	0.44
CHNGR6080NM	E	2080	0.38	1.50	0.13	–	–	0.56
CHNGR6100NM	E	2100	0.50	2.00	0.21	–	–	0.69
CHNGR6120NM	E	2120	0.50	2.25	0.26	–	–	0.94

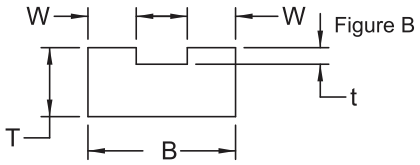
NOTE: 30" radius furnished in two 45° segments to make one 90° segment. All others are 90° segment.
Dimensions in inches.

UltraTrac Chain Guides For ANSI Standard Roller Chain



UltraTrac Chain Guide – Type T





UltraTrac Chain Guide – Type TD

Type T

For ANSI Standard Roller Chain

UHMW — White

Part Number	ANSI Chain No.	B	T	W	t
CHNGUTT2825NM	25	0.78	0.59	0.10	0.09
CHNGUTT2835NM	35	0.78	0.59	0.17	0.10
CHNGUTT2840NM	40	0.78	0.59	0.29	0.10
CHNGUTT2850NM	50	0.78	0.59	0.36	0.12
CHNGUTT2860NM	60	1.10	0.59	0.47	0.15
CHNGUTT2880NM	80	1.34	0.71	0.60	0.18
CHNGUTT2810NM	100	1.61	1.00	0.72	0.26
CHNGUTT2812NM	120	2.01	1.25	0.96	0.31
CHNGUTT2814NM	140	2.17	1.50	0.96	0.36
CHNGUTT2816NM	160	2.61	1.50	1.21	0.42
CHNGUTT2818NM	180	2.88	1.50	1.35	0.47

NOTE: Standard guide length is 10 ft.
Diimensions in inches

Type TD

For Double Strand ANSI Standard Roller Chain

UHMW — White

Part Number	ANSI Chain No.	B	T	W	t	E	Fig.
CHNGUTTD2925NM	25-2	0.78	0.59	0.1	0.09	0.15	A
CHNGUTTD2935NM	35-2	0.78	0.59	0.17	0.1	0.23	A
CHNGUTTD2940NM	40-2	0.85	0.59	0.29	0.1	0.27	B
CHNGUTTD2950NM	50-2	1.07	0.59	0.35	0.12	0.37	B
CHNGUTTD2960NM	60-2	1.34	0.59	0.47	0.15	0.4	B
CHNGUTTD2980NM	80-2	1.75	0.71	0.6	0.18	0.55	B

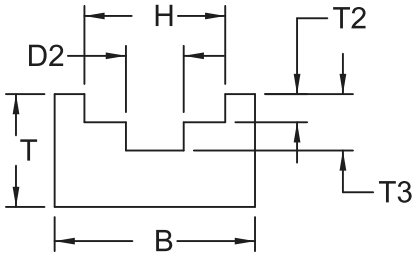
NOTE: Standard guide length is 10 ft.
Diimensions in inches

UltraTrac Chain Guides
For ANSI Standard Roller Chain

Type U
For ANSI Standard Roller Chain — UHMW — White

Part Number	ANSI Chain No.	B	T	T2	T3	D2	H
CHNGUTU3025NM	25	0.78	0.59	0.09	0.13	0.12	0.27
CHNGUTU3035NM	35	0.78	0.59	0.15	0.22	0.16	0.39
CHNGUTU3040NM	40/2040	0.78	0.59	0.18	0.26	0.21	0.51
CHNGUTU3050NM	50/2050	1.10	0.71	0.24	0.35	0.28	0.67
CHNGUTU3060NM	60/2060	1.10	0.71	0.28	0.41	0.32	0.78
CHNGUTU3080NM	80/2080	1.50	0.79	0.30	0.47	0.43	1.04

NOTE: Standard guide length is 10 ft.
Diimensions in inches.

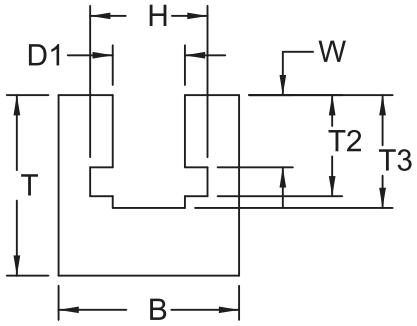


UltraTrac Chain Guide – Type U

Type K
For ANSI Standard Roller Chain — UHMW — White

Part Number	ANSI Chain No.	B	T	T2	T3	D1	H
CHNGUTK3125NM	25	0.78	0.88	0.10	0.24	0.15	0.27
CHNGUTK3135NM	35	0.78	0.88	0.17	0.40	0.22	0.39
CHNGUTK3140NM	40/2040	1.10	1.05	0.29	0.52	0.33	0.51
CHNGUTK3150NM	50/2050	1.50	1.43	0.35	0.61	0.42	0.67
CHNGUTK3160NM	60/2060	1.50	1.85	0.47	0.88	0.49	0.78
CHNGUTK3180NM	80/2080	1.50	2.45	0.60	1.19	0.65	1.04

NOTE: Standard guide length is 10 ft.
Diimensions in inches.

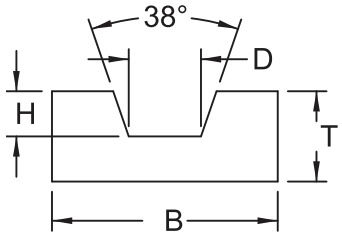


UltraTrac Chain Guide – Type U

Type U
For ANSI Standard Roller Chain — UHMW — White

Part Number	ANSI Chain No.	B	T	T2	T3	D1	H
CHNGUTU3025NM	25	0.78	0.59	0.09	0.13	0.12	0.27
CHNGUTU3035NM	35	0.78	0.59	0.15	0.22	0.16	0.39
CHNGUTU3040NM	40/2040	0.78	0.59	0.18	0.26	0.21	0.51
CHNGUTU3050NM	50/2050	1.10	0.71	0.24	0.35	0.28	0.67
CHNGUTU3060NM	60/2060	1.10	0.71	0.28	0.41	0.32	0.78
CHNGUTU3080NM	80/2080	1.50	0.79	0.30	0.47	0.43	1.04

NOTE: Standard guide length is 10 ft.
Diimensions in inches.



UltraTrac Chain Guide – Type U

UltraTrac Chain Guides For ANSI Standard Roller Chain

MATERIAL	COMMON APPLICATIONS
UHMW	
• Excellent abrasion resistance • Low co-efficient of friction • Shear strength of approximately 3,500 psi • Flexural mod. of approximately 125,000 psi • Economical • Floats in water • Two common types: » Natural virgin – Food applications » Black reprocessed – Resistant to UV degradation – Slightly less expensive – May have multi-colored specks	• Wear strips • Chain guide • Conveyor beds • Large structural components • RC sprockets (usually 50 series and larger) • Mill Sprockets (Engineering Class) (nearly always black reprocessed UHMW) • Bushings
Nylon	
• Good abrasion resistance • Excellent PV value for bearing applications • Shear strength of approximately 10,500 psi • Flexural mod. of approximately 500,000 psi • Mid-priced • Does not float in water • Will absorb moisture resulting in dimensional changes and reduced strength • Several common types: » Natural – Food applications » MD filled (dark grey color) – High load bushings » Oil-filled (natural or green color) – Gears, bushings, other sliding wear components	• High temperature wear strips • Small structural components • Bushings • Spur Gears • RC sprockets (usually 50 series and smaller)
Acetal	
• Typically used for structural components • Not great for wear applications • Shear strength of approximately 8,000 psi • Flexural mod. of approximately 400,000 psi • Mid-priced • Does not float in water • Does not absorb moisture, good dimensional stability • Also known as DuPont® Delrin® acetal resin. • Available in white, or black.	• High temperature wear strips • Small structural components • RC sprockets (usually 50 series and smaller). • Bushings • Spur gears • Components of food processing equipment exposed to wet environments clamps, rollers, dies.

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Notes

Notes

Notes

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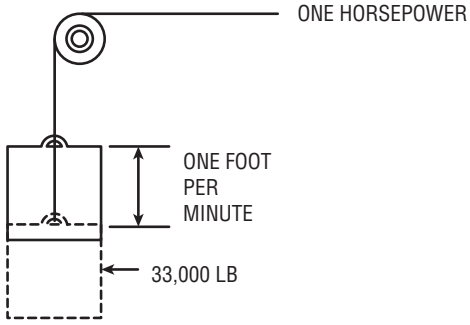
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Horsepower/Torque

Horsepower

One HP is the rate of work required to raise 33,000 pounds one foot in one minute.



$$HP = \frac{Force \times FPM}{33{,}000}$$

$$HP = \frac{Torque\ (in\ Pound\text{-}Inches) \times RPM}{63{,}025}$$

$$HP = \frac{Torque\ (in\ Pound\text{-}Feet) \times RPM}{5{,}252}$$

Torque: The twisting or turning effort around a shaft tending to cause rotation. Torque is determined by multiplying the applied force times the distance from the point where force is applied to the shaft center.

TQ = F (force) × R (radius)

$$Torque\ (in\ pound\text{-}inches) = \frac{63{,}025 \times HP}{RPM}$$

$$= Force \times Lever\ Arm\ (in\ Inches)$$

$$Torque\ (in\ pound\text{-}feet) = \frac{5{,}252 \times HP}{RPM}$$

$$= Force \times Lever\ Arm\ (in\ Feet)$$

Torque Calculation Example

20 HP at 100 RPM = 12,605 pound-inches Torque

2.0 HP at 10 RPM = 12,605 pound-inches Torque

Force = Working loads in pounds
FPM = Feet per minute
RPM = Revolutions per minute
Lever Arm = Distance from the force to the center of rotation on inches or feet

Overhung Loads

An overhung load is a bending force imposed on a shaft due to the torque transmitted by v-drives, chain drives, and other power transmission devices, other than flexible couplings.

Most motor and reducer manufacturers list the maximum values allowable for overhung loads. It is desirable that these figures be compared with the load actually imposed by the connected drive.

Overhung loads may be calculated as follows:

$$O.H.L. = \frac{63{,}000 \times HP \times F}{N \times R}$$

Where: HP = Transmitted HP × Service Factor
N = RPM of shaft
R = Radius of sprocket, pulley, etc.
F = Factor

Weights of the drive components are usually negligible. The formula is based on the assumption that the load is applied at a point equal to one shaft diameter from the bearing face. Factor F depends on the type of drive used:

F = 1.00 for single chain drives
1.10 for timing belt drives
1.25 for spur or helical gear or double chain drives
1.50 for v-belt drives
2.50 for flat belt drives

Example: Find the overhung load imposed on a reducer by a double chain drive transmitting 7 HP @ 30 RPM. The pitch diameter of the sprocket is 10"; service factor is 1.3.

$$O.H.L. = \frac{(63{,}000)(7 \times 1.3)\ (1.25)}{(30) \times (5)} = 4{,}780\ lbs$$

Horsepower/Speed/Torque Relationships		
HP	**Speed (RPM)**	**Torque**
Constant	Increases	Decreases
Constant	Decreases	Increases
Increases	Constant	Increases
Decreases	Constant	Decreases
Increases	Increases	Constant
Decreases	Decreases	Constant

Torque (in Pound-Inches) For Horsepower/RPM

Torque for 1-50 HP @ 50-220 RPM

HP	Revolutions Per Minute																	
	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
1	1261	1050	900	788	700	630	573	525	485	450	420	394	371	350	332	315	300	286
2	2521	2101	1801	1576	1401	1260	1145	1050	969	900	840	787	741	700	663	630	600	572
3	3782	3151	2701	2363	2101	1890	1718	1575	1454	1350	1260	1181	1112	1050	995	945	900	859
4	5042	4202	3601	3151	2801	2521	2291	2100	1939	1800	1680	1575	1482	1400	1326	1260	1200	1145
5	6303	5252	4502	3939	3501	3151	2864	2626	2424	2250	2100	1969	1853	1750	1658	1575	1500	1432
6	7563	6303	5402	4727	4202	3781	3437	3151	2908	2701	2521	2363	2224	2100	1990	1890	1800	1718
7	8824	7353	6302	5515	4902	4411	4010	3676	3393	3151	2941	2757	2595	2450	2321	2205	2100	2005
8	10084	8403	7203	6303	5602	5042	4583	4201	3878	3601	3361	3151	2965	2801	2653	2521	2400	2291
9	11345	9454	8103	7090	6303	5672	5156	4726	4363	4051	3781	3545	3336	3151	2985	2836	2701	2578
10	12605	10504	9004	7878	7003	6302	5729	5252	4848	4501	4201	3939	3707	3501	3317	3151	3001	2864
11	13866	11555	9904	8666	7703	6932	6302	5777	5332	4951	4621	4332	4078	3851	3648	3466	3301	3151
12	15126	12605	10804	9454	8403	7563	6875	6302	5817	5402	5042	4726	4448	4201	3980	3781	3601	3437
13	16387	13655	11705	10242	9104	8193	7448	6827	6302	5852	5462	5120	4819	4551	4312	4096	3901	3724
14	17647	14706	12605	11029	9804	8823	8021	7352	6787	6302	5882	5514	5190	4901	4643	4411	4201	4010
15	18908	15756	13505	11817	10504	9453	8594	7878	7272	6752	6302	5908	5561	5252	4975	4726	4501	4297
16	20168	16807	14406	12605	11204	10084	9167	8403	7756	7202	6722	6302	5931	5602	5307	5042	4801	4583
17	21429	17857	15306	13393	11905	10714	9740	8928	8241	7653	7142	6696	6302	5952	5639	5357	5102	4870
18	22689	18908	16206	14181	12605	11344	10313	9453	8726	8103	7563	7090	6673	6302	5970	5672	5402	5156
19	23950	19958	17107	14968	13305	11974	10886	9979	9211	8553	7983	7484	7044	6652	6302	5987	5702	5443
20	25210	21008	18007	15756	14006	12605	11459	10504	9696	9003	8403	7878	7414	7002	6634	6302	6002	5729
21	26471	22059	18907	16544	14706	13235	12032	11029	10181	9453	8823	8272	7785	7352	6965	6617	6302	6016
22	27731	23109	19808	17332	15406	13865	12605	11554	10665	9903	9243	8665	8156	7703	7297	6932	6602	6302
23	28992	24160	20708	18120	16106	14495	13178	12079	11150	10354	9663	9059	8526	8053	7629	7247	6902	6588
24	30252	25210	21609	18908	16807	15126	13750	12605	11635	10804	10084	9453	8897	8403	7961	7563	7202	6875
25	31513	26260	22509	19695	17507	15756	14323	13130	12120	11254	10504	9847	9268	8753	8292	7878	7503	7161
26	32773	27311	23409	20483	18207	16386	14896	13655	12605	11704	10924	10241	9639	9103	8624	8193	7803	7448
27	34034	28361	24310	21271	18908	17016	15469	14180	13089	12154	11344	10635	10009	9453	8956	8508	8103	7734
28	35294	29412	25210	22059	19608	17647	16042	14705	13574	12605	11764	11029	10380	9803	9287	8823	8403	8021
29	36555	30462	26110	22847	20308	18277	16615	15231	14059	13055	12184	11423	10751	10154	9619	9138	8703	8307
30	37815	31513	27011	23634	21008	18907	17188	15756	14544	13505	12605	11817	11122	10504	9951	9453	9003	8594
31	39076	32563	27911	24422	21709	19537	17761	16281	15029	13955	13025	12211	11492	10854	10283	9768	9303	8880
32	40336	33613	28811	25210	22409	20168	18334	16806	15513	14405	13445	12605	11863	11204	10614	10084	9603	9167
33	41597	34664	29712	25998	23109	20798	18907	17331	15998	14855	13865	12998	12234	11554	10946	10399	9903	9453
34	42857	35714	30612	26786	23809	21428	19480	17857	16483	15306	14285	13392	12605	11904	11278	10714	10204	9740
35	44118	36767	31512	27573	24510	22058	20053	18382	16968	15756	14705	13786	12975	12254	11609	11029	10504	10026
36	45378	37815	32413	28361	25210	22689	20626	18907	17453	16206	15126	14180	13346	12605	11941	11344	10804	10313
37	46639	38865	33313	29149	25910	23319	21199	19432	17937	16656	15546	14574	13717	12955	12273	11659	11104	10599
38	47889	39916	34214	29937	26611	23949	21772	19958	18422	17106	15966	14968	14088	13305	12605	11974	11404	10886
39	49160	40996	35114	30725	27311	24579	22345	20483	18907	17557	16386	15362	14458	13655	12936	12289	11704	11172
40	50420	42017	36014	31513	28011	25210	22918	21008	19392	18007	16806	15756	14829	14005	13268	12605	12004	11459
41	51681	43067	36915	32300	28711	25840	23491	21533	19877	18457	17226	16150	15200	14355	13600	12920	12304	11745
42	52941	44118	37815	33088	29412	26470	24064	22058	20362	18907	17647	16544	15570	14705	13931	13235	12605	12032
43	54202	45168	38715	33876	30112	27100	24637	22584	20846	19357	18067	16938	15941	15056	14263	13550	12905	12318
44	55462	46218	39616	34664	30812	27731	25210	23109	21331	19807	18487	17331	16312	15406	14595	13865	13205	12605
45	56723	47269	40516	35452	31513	28361	25783	23634	21816	20258	18907	17725	16683	15756	14927	14180	13505	12891
46	57383	48319	41416	36239	32213	28991	26356	24159	22301	20708	19327	18119	17053	16106	15258	14495	13805	13177
47	59244	49370	42317	37027	32913	29621	26928	24684	22786	21158	19747	18513	17424	16456	15590	14810	14105	13464
48	60504	50420	43217	37815	33613	30252	27501	25210	23270	21608	20168	18907	17795	16806	14922	15126	14405	13750
49	61764	51470	44117	38603	34314	30882	28074	25735	23755	22058	20588	19301	18166	17156	16253	15441	14705	14037
50	63025	52521	45018	39319	35014	31512	28647	26260	24240	22509	21008	19695	18536	17507	16585	15756	15006	14323

Torque (in Pound-Inches) For Horsepower/RPM

Torque for 1-50 HP @ 230-1000 RPM

HP	Revolutions Per Minute																		
	230	240	250	260	270	280	290	300	350	400	450	500	550	600	650	700	800	900	1000
1	274	263	252	242	233	225	217	210	180	157	140	126	114	105	96	90	78	70	63
2	548	525	504	484	466	450	434	420	360	315	280	252	229	210	193	180	157	140	126
3	822	787	756	727	700	675	651	630	540	472	420	378	343	315	290	270	236	210	189
4	1096	1050	1008	969	933	900	869	840	720	630	560	504	458	420	387	360	315	280	252
5	1370	1313	1260	1212	1167	1125	1087	1050	900	787	700	630	572	525	484	450	393	350	315
6	1644	1575	1512	1454	1401	1350	1303	1260	1080	945	840	756	687	630	581	540	472	420	378
7	1918	1838	1764	1696	1633	1575	1521	1470	1260	1102	980	882	802	735	678	630	551	490	441
8	2192	2100	2016	1939	1867	1800	1738	1680	1440	1260	1120	1008	916	840	775	720	630	560	504
9	2466	2363	2268	2181	2100	2025	1955	1890	1620	1418	1260	1134	1031	945	872	810	709	630	567
10	2740	2626	2521	2424	2334	2250	2173	2100	1800	1575	1400	1260	1145	1050	969	900	787	700	630
11	3014	2888	2773	2666	2567	2475	2390	2310	1980	1733	1540	1386	1260	1155	1066	990	866	770	693
12	3288	3151	3025	2908	2801	2701	2607	2521	2160	1890	1680	1512	1375	1260	1163	1080	945	840	756
13	3562	3413	3277	3151	3034	2926	2825	2731	2340	2048	1820	1638	1489	1365	1260	1170	1024	910	819
14	3836	3676	3529	3393	3267	3151	3042	2941	2521	2205	1960	1764	1604	1470	1357	1260	1102	980	882
15	4110	3939	3781	3636	3501	3376	3259	3151	2701	2363	2100	1890	1718	1575	1454	1350	1181	1050	945
16	4384	4201	4033	3878	3734	3601	3477	3361	2881	2521	2240	2016	1833	1680	1551	1440	1260	1120	1008
17	4658	4464	4285	4120	3968	3826	3694	3571	3061	2678	2380	2142	1948	1785	1648	1530	1339	1190	1071
18	4932	4726	4537	4363	4201	4051	3911	3781	3241	2836	2521	2268	2062	1890	1745	1620	1418	1260	1134
19	5206	4989	4789	4605	4435	4276	4129	3991	3421	2993	2661	2394	2177	1995	1842	1710	1496	1330	1197
20	5480	5252	5042	4848	4668	4501	4346	4201	3601	3151	2801	2521	2291	2100	1939	1800	1575	1400	1260
21	5754	5514	5294	5090	4901	4726	4563	4411	3781	3308	2941	2647	2406	2205	2036	1890	1654	1470	1323
22	6028	5777	5546	5332	5135	4951	4781	4621	3961	3466	3081	2773	2521	2310	2133	1980	1733	1540	1386
23	6302	6039	5798	5575	5368	5177	4998	4831	4141	3623	3221	2899	2635	2415	2230	2070	1811	1610	1449
24	6576	6302	6050	5817	5602	5402	5215	5042	4321	3781	3361	3025	2750	2521	2327	2160	1890	1680	1512
25	6850	6565	6302	6060	5835	5627	5433	5252	4501	3939	3501	3151	2864	2626	2424	2250	1969	1750	1575
26	7124	6827	6554	6302	6069	5852	5650	5462	4681	4096	3641	3277	2979	2731	2521	2340	2048	1820	1638
27	7398	7090	6806	6544	6302	6077	5867	5672	4861	4254	3781	3403	3093	2836	2617	2430	2127	1890	1701
28	7672	7352	7058	6787	6535	6302	6085	5882	5042	4411	3921	3529	3208	2941	2714	2521	2205	1960	1764
29	7946	7615	7310	7029	6769	6527	6302	6092	5222	4569	4061	3655	3323	3046	2811	2611	2284	2030	1827
30	8220	7878	7563	7272	7002	6752	6519	6302	5402	4726	4201	3781	3437	3151	2908	2701	2363	2100	1890
31	8494	8140	7815	7514	7236	6977	6737	6512	5582	4884	4341	3907	3552	3256	3005	2791	2442	2170	1953
32	8768	8403	8067	7756	7469	7202	6954	6722	5762	5042	4481	4033	3666	3361	3102	2881	2520	2240	2016
33	9042	8665	8319	7999	7703	7427	7171	6932	5942	5199	4621	4159	3781	3466	3199	2971	2599	2310	2079
34	9316	8928	8571	8241	7936	7653	7389	7142	6122	5357	4761	4285	3896	3571	3296	3061	2678	2380	2142
35	9590	9191	8823	8484	8169	7878	7606	7352	6302	5514	4901	4411	4010	3676	3393	3151	2757	2450	2205
36	9864	9453	9075	8726	8403	8103	7823	7563	6482	5672	5042	4537	4125	3781	3490	3241	2836	2521	2268
37	10138	9716	9327	8968	8636	8328	8041	7773	6662	5829	5182	4663	4239	3886	3587	3331	2913	2591	2331
38	10412	9978	9579	9211	8870	8553	8258	7983	6842	5987	5322	4789	4354	3991	3684	3421	2993	2661	2394
39	10686	10241	9831	9453	9103	8778	8475	8193	7022	6144	5462	4915	4469	4096	3781	3511	3072	2731	2457
40	10960	10504	10084	9696	9337	9003	8693	8403	7202	6302	5602	5042	4583	4201	3878	3601	3151	2801	2521
41	11234	10766	10336	9938	9570	9228	8910	8613	7382	6460	5742	5168	4698	4306	3975	3691	3230	2871	2584
42	11508	11029	10588	10181	9803	9453	9127	8823	7563	6617	5882	5294	4812	4411	4072	3781	3308	2941	2647
43	11782	11292	10840	10423	10037	9678	9345	9033	7743	6775	6022	5420	4927	4516	4169	3871	3387	3011	2710
44	12057	11554	11092	10665	10270	9903	9562	9243	7923	6932	6162	5546	5042	4621	4266	3961	3466	3081	2773
45	12331	11817	11344	10908	10504	10129	9779	9453	8103	7090	6302	5672	5156	4726	4363	4051	3545	3151	2836
46	12605	12079	11596	11150	10737	10354	9997	9963	8283	7247	6442	5798	5271	4831	4460	4141	3623	3221	2899
47	12879	12342	11848	11393	10971	10579	10214	9873	8463	7405	6582	5924	5385	4936	4557	4231	3702	3291	2962
48	13153	12605	12100	11635	11204	10804	10431	10084	8643	7563	6722	6050	5500	5042	4654	4321	3781	3361	3025
49	13427	12867	12352	11877	11437	11029	10649	10294	8823	7720	6862	6176	5614	5147	4751	4411	3860	3431	3088
50	13701	13130	12605	12120	11671	11254	10866	10504	9003	7878	7002	6302	5729	5252	4848	4501	3939	3501	3151

Torque (in Pound-Inches) For Horsepower/RPM

Torque for 51-100 HP @ 50-220 RPM

HP	Revolutions Per Minute																	
	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220
51	64286	53571	45918	40178	35714	32142	29220	26785	24725	22959	21428	20089	18907	17857	16917	16071	15306	14610
52	65546	54622	46819	40966	36414	32773	29793	27310	25210	23409	21848	20483	19278	18207	17249	16386	15606	14896
53	66807	55672	47719	41754	37115	33403	30366	27836	25694	23859	22268	20877	19649	18557	17580	16701	15906	15183
54	68067	56723	48619	42542	37815	34033	30939	28361	26179	24309	22689	21271	20019	18907	17912	17016	16206	15469
55	69328	57773	49520	43330	38515	34663	31512	28886	26664	24760	23109	21664	20390	19257	18244	17331	16506	15756
56	70588	58823	50420	44118	39216	35294	32085	29411	27149	25210	23529	22058	20761	19607	18575	17647	16806	16042
57	71849	59874	51320	44905	39916	35924	32658	29937	27634	25660	23950	22452	21132	19957	18907	17962	17106	16329
58	73109	60924	52221	45693	40616	36554	33231	30462	28118	26110	24370	22846	21502	20308	19239	18277	17406	16615
59	74370	61975	53121	46481	41316	37184	33804	30987	28603	26560	24790	23240	21873	20658	19571	18592	17707	16902
60	75630	63025	54021	47269	42017	37815	34377	31512	29088	27010	25210	23634	22244	21008	19902	18907	18007	17188
61	76891	64075	54922	48057	42717	38445	34950	32037	29573	27461	25630	24028	22614	21358	20234	19222	18307	17475
62	78151	65126	55822	48844	43417	39075	35523	32563	30058	27911	26050	24422	22985	21708	20566	19537	18607	17761
63	79412	66176	56722	49632	44118	39705	36096	33088	30543	28361	26470	24816	23356	22058	20897	19852	18907	18048
64	80672	67227	57623	50420	44818	40336	36669	33613	31027	28811	26890	25210	23727	22408	21229	20168	19207	18334
65	81933	68277	58523	51208	45518	40966	37242	34138	31512	29261	27310	25604	24097	22759	21561	20483	19507	18621
66	83193	69328	59423	51996	46218	41596	37815	34663	31997	29711	27731	25997	24468	23109	21892	20798	19807	18907
67	84454	70378	60324	52783	46919	42226	38388	35189	32482	30162	28151	26391	24839	23459	22224	21113	20108	19194
68	85714	71428	61224	53571	47619	42857	38961	35714	32967	30612	28571	26785	25210	23809	22556	21428	20408	19480
69	86975	72479	72125	54359	48319	43487	39534	36239	33451	31062	28991	27179	25580	24159	22888	21743	20708	19766
70	88235	73529	63025	55147	49019	44117	40106	36764	33936	31512	29411	27573	25951	24509	23219	22058	21008	20053
71	89496	74580	63925	55935	49720	44747	40679	37289	34421	31962	29831	27967	26322	24859	23551	22373	21308	20339
72	90756	75630	64826	56723	50420	45378	41252	37815	34906	32413	30252	28361	26693	25210	23883	22689	21608	20626
73	92017	76680	65726	57510	51120	46008	41825	38340	35391	32863	30672	28755	27063	25560	24214	23004	21908	20912
74	93277	77731	66626	58298	51821	46638	42398	38865	35875	33313	31092	29149	27434	25910	24546	23319	22208	21199
75	94538	78781	67527	59086	52521	47268	42971	39390	36360	33763	31512	29543	27805	26260	24878	23634	22509	21485
76	95798	79832	68427	59874	53221	47899	43544	39916	36845	34213	31932	29937	28176	26610	25210	23949	22809	21772
77	97059	80882	69327	60662	53921	48529	44117	40441	37330	34663	32353	30330	28546	26960	25541	24264	23109	22058
78	98319	81933	70228	61449	54622	49159	44690	40966	37815	35114	32773	30724	28917	27310	25873	24579	23409	22345
79	99580	82983	71128	62237	55322	49789	45263	41491	38299	35564	33193	31118	29288	27661	26205	24894	23709	22631
80	100804	84033	72029	63024	56022	50420	45836	42016	38784	36014	33613	31512	29658	28011	26536	25210	24009	22918
81	102101	85084	72929	63813	56722	51050	46409	42542	39269	36464	34033	31906	30029	28361	26868	25525	24309	23204
82	103361	86134	73829	64601	57423	51680	46982	43067	39754	36914	34453	32300	30400	28711	27200	25840	24609	23491
83	104622	87185	74730	65388	58123	52310	47555	43592	40239	37365	34874	32694	30771	29061	27532	26155	24909	23777
84	105882	88235	75630	66176	58823	52941	48128	44117	40724	37815	35294	33088	31141	29411	27863	26470	25210	24064
85	107143	89285	76530	66964	59524	53571	48701	44642	41208	38265	35714	33482	31512	29761	28195	26785	25510	24350
86	108403	90336	77430	67752	60224	54201	49274	45168	41693	38715	36134	33876	31883	30112	28527	27100	25810	24637
87	109664	91386	78331	68540	60924	54831	49847	45693	42178	39165	36554	34269	32254	30462	28858	27415	26110	24923
88	110924	92437	79231	69328	61624	55462	50420	46218	42663	39615	36974	34663	32624	30812	29190	27731	26410	25210
89	112185	93487	80132	70115	62325	56092	50993	46743	43148	40066	37395	35057	32995	31163	29522	28046	26710	25496
90	113445	94538	81032	70903	63025	56722	51566	47268	43632	40516	37815	35451	33366	31512	29854	28361	27010	25783
91	114706	95588	81932	71691	63725	57352	52139	47794	44117	40966	38235	35845	33737	31862	30185	28676	27310	26069
92	115967	96638	82833	72479	64426	57983	52712	48319	44602	41416	38655	36239	34107	32212	30517	28991	27611	26355
93	117227	97689	83733	73267	65126	58613	53285	48844	45087	41866	39075	36633	34478	32563	30849	29306	27911	26642
94	118487	98739	84634	74054	65826	59243	53857	49369	45572	42317	39495	37027	34849	32913	31180	29621	28211	26928
95	119748	99790	85534	74842	66526	59873	54430	49895	46056	42767	39916	37421	35220	33263	31512	29936	28511	27215
96	121008	100840	86434	75630	67227	60504	55003	50420	46541	43217	40336	37815	35590	33613	31844	30252	28811	27501
97	122269	101890	87335	76418	67927	61134	55576	50945	47026	43667	40756	38209	35961	33963	32176	30567	29111	27788
98	123529	102941	88235	77206	68627	61764	56149	51470	47511	44117	41176	38602	36332	34313	32507	30882	29411	28074
99	124780	103991	89135	77993	69328	62394	56722	51995	47996	44567	41596	38996	36702	34663	32839	31197	29711	28361
100	126050	105042	90036	78781	70028	63025	57295	52521	48481	45018	42016	39390	37073	35014	33171	31512	30012	28647

Torque (in Pound-Inches) For Horsepower/RPM

Torque for 51-100 HP @ 230-1000 RPM

HP	Revolutions Per Minute																		
	230	240	250	260	270	280	290	300	350	400	450	500	550	600	650	700	800	900	1000
51	13975	13392	12857	12362	11904	11479	11083	10714	9183	8035	7141	6428	5844	5357	4945	4591	4017	3571	3314
52	14249	13655	13109	12605	12138	11704	11301	10924	9363	8193	7282	6554	5958	5462	5042	4681	4096	3641	3277
53	14523	13918	13361	12847	12371	11929	11518	11134	9543	8350	7422	6680	6073	5567	5138	4771	4175	3711	3340
54	14797	14180	13613	13089	12605	12154	11735	11344	9723	8508	7563	6806	6187	5672	5235	4861	4254	3781	3403
55	15071	14443	13865	13332	12838	12379	11953	11554	9903	8665	7703	6932	6302	5777	5332	4951	4332	3851	3466
56	15345	14705	14117	13574	13071	12605	12170	11764	10084	8823	7843	7058	6417	5882	5429	5042	4411	3921	3529
57	15619	14968	14369	13817	13305	12830	12387	11974	10264	8981	7983	7184	6531	5987	5526	5132	4490	3991	3592
58	15893	15231	14621	14059	13538	13055	12605	12184	10444	9138	8123	7310	6646	6092	5623	5222	4569	4061	3655
59	16167	15493	14873	14301	13772	13280	12822	12394	10624	9296	9263	7436	6760	6197	5720	5312	4648	4131	3718
60	16441	15756	15126	14544	14055	13505	13039	12605	10804	9453	8403	7563	6875	6302	5817	5402	4726	4201	3781
61	16715	16018	15378	14786	14239	13730	13257	12815	10984	9611	8543	7689	6990	6407	5914	5492	4805	4271	3844
62	16989	16281	15630	15029	14472	13955	13474	13025	11164	9768	8683	7815	7104	6512	6011	5582	4884	4341	3907
63	17263	16544	15882	15271	14705	14180	13691	13235	11344	9926	8823	7941	7219	6617	6108	5672	4963	4411	3970
64	17537	16806	16134	15513	14939	14405	13908	13445	11524	10084	8963	8067	7333	6722	6205	5762	5041	4481	4033
65	17811	17069	16386	15756	15172	14630	14126	13655	11704	10241	9103	8193	7448	6827	6302	5852	5120	4551	4096
66	18085	17331	16638	15998	15406	14855	14343	13865	11884	10399	9243	8319	7563	6932	6399	5942	5199	4621	4159
67	18359	17594	16890	16241	15639	15081	14560	14075	12064	10556	9383	8445	7677	7037	6496	6032	5278	4691	4222
68	18633	17857	17142	16483	15873	15306	14778	14285	12244	10714	9523	8571	7792	7142	6593	6122	5357	4761	4285
69	18907	18119	17394	16725	16106	15531	14995	14495	12424	10871	9663	8697	7906	7247	6690	6212	5435	4831	4348
70	19181	18382	17647	16968	16339	15756	15212	14705	12605	11029	9803	8823	8021	7352	6787	6302	5514	4901	4411
71	19455	18644	17899	17210	16573	15981	15430	14915	12785	11186	9943	8949	8135	7457	6884	6392	5593	4971	4474
72	19729	18907	18151	17453	16806	16206	15647	15126	12965	11344	10084	9075	8250	7563	6981	6482	5672	5042	4537
73	20003	19170	18403	17695	17040	16431	15864	15336	13145	11502	10224	9201	8365	7668	7078	6572	5751	5112	4600
74	20277	19432	18655	17937	17273	16656	16082	15546	13325	11659	10364	9327	8479	7773	7175	6662	5829	5182	4663
75	20551	19695	18907	18180	17507	16881	16299	15756	13505	11817	10504	9453	8594	7878	7272	6752	5908	5252	4726
76	20825	19957	19159	18422	17740	17106	16516	15966	13685	11974	10644	9579	8708	7983	7369	6842	5987	5322	4789
77	21099	20220	19411	18665	17973	17331	16734	16176	13865	12132	10784	9705	8823	8088	7466	6932	6066	5392	4852
78	21373	20483	19663	18907	18207	17557	16951	16386	14045	12289	10924	9831	8938	8193	7563	7022	6144	5462	4915
79	21647	20745	19915	19149	18440	17782	17168	16596	14225	12447	11064	9957	9052	8298	7659	7112	6223	5532	4978
80	21921	21008	20168	19392	18674	18007	17386	16806	14405	12605	11204	10084	9167	8403	7756	7202	6302	5602	5042
81	22195	21271	20420	19634	18907	18232	17603	17016	14585	12762	11344	10210	9281	8508	7853	7292	6381	5672	5105
82	22469	21533	20672	19877	19141	18457	17820	17226	14765	12920	11484	10336	9396	8613	7950	7382	6460	5742	5168
83	22743	21796	20924	20119	19374	18682	18038	17436	14945	13077	11624	10462	9511	8718	8047	7472	6538	5812	5231
84	23017	22058	21176	20362	19607	18907	18255	17647	15126	13235	11764	10588	9625	8823	8144	7563	6617	5882	5294
85	23291	22321	21428	20604	19841	19132	18472	17857	15306	13392	11904	10714	9740	8928	8241	7653	6696	5952	5357
86	23565	22584	21680	20846	20074	19357	18690	18067	15486	13550	12044	10840	9854	9033	8338	7743	6775	6022	5420
87	23840	22846	21932	21089	20308	19582	18907	18277	15666	13707	12184	10966	9969	9138	8435	7833	6853	6092	5483
88	24114	23109	22184	21331	20541	19807	19124	18487	15846	13865	12324	11092	10084	9243	8532	7923	6932	6162	5546
89	24388	23371	22436	21574	20775	20033	19342	18697	16026	14023	12464	11218	10198	9348	8629	8013	7011	6232	5609
90	24662	23634	22689	21816	21008	20258	19559	18907	16206	14180	12605	11344	10313	9453	8726	8103	7090	6302	5672
91	24936	23897	22941	22058	21241	20483	19776	19117	16386	14338	12745	11470	10427	9558	8823	8193	7169	6372	5735
92	25210	24159	23193	22301	21475	20708	19994	19327	16566	14495	12885	11596	10542	9663	8920	8283	7247	6442	5798
93	25484	24422	23445	22543	21708	20933	20211	19537	16746	14653	13025	11722	10656	9768	9017	8373	7326	6512	5861
94	25758	24684	23697	22786	21942	21158	20428	19747	16926	14810	13165	11848	10771	9873	9114	8463	7405	6582	5924
95	26032	24947	23949	23028	22175	21383	20646	19957	17106	14968	13305	11974	10886	9978	9211	8553	7484	6652	5987
96	26306	25210	24201	23270	22408	21608	20863	20168	17286	15126	13445	12100	11000	10084	9308	8643	7562	6722	6050
97	26580	25472	24453	23513	22642	21833	21080	20378	17466	15383	13585	12226	11115	10189	9405	8733	7641	6792	6113
98	26854	25735	24705	23755	22875	22058	21298	20588	17647	15441	13725	12352	11229	10294	9502	8823	7720	6862	6176
99	27128	25997	24957	23998	23109	22283	21515	20798	17827	15598	13865	12478	11344	10399	9599	8913	7799	6932	6239
100	27402	26260	25210	24240	23342	22509	21732	21008	18007	15756	14005	12605	11459	10504	9696	9003	7878	7002	6302

Electrical Formulas

To Find	Alternating Current	
	Single-Phase	Three-Phase
Amperes when horsepower is known	$\frac{HP \times 746}{E \times Eff. \times pf}$	$\frac{HP \times 746}{1.73 \times E \times Eff. \times pf}$
Amperes when kilowatts are known	$\frac{Kw \times 1000}{E \times pf}$	$\frac{Kw \times 1000}{1.73 \times E \times pf}$
Amperes when Kva are known	$\frac{Kva \times 1000}{E}$	$\frac{Kva \times 1000}{1.73 \times E}$
Kilowatts	$\frac{I \times E \times pf}{1000}$	$\frac{1.73 \times I \times E \times pf}{1000}$
Kva	$\frac{I \times E}{1000}$	$\frac{1.73 \times I \times E}{1000}$
Horsepower = (output)	$\frac{I \times E \times Eff. \times pf}{746}$	$\frac{1.73 \times I \times E \times Eff. \times pf}{746}$

I = Amperes; E = Volts; Eff. = Efficiency; pf = power factor;
Kva = Kilovolt amperes; Kw = Kilowatts; R = Ohms

To Find	Alternating or Direct Current
Amperes when voltage and resistance is known	$\frac{E}{R}$
Voltage when resistance and current are known	IR
Resistance when voltage and current are known	$\frac{E}{I}$

General Information (Approximation)

All Values At 100% Load

- At 1800 RPM, a motor develops 36 lb-in per hp
- At 1200 RPM, a motor develops 54 lb-in per hp
- At 575 volts, a 3-phase motor draws 1 amp per hp
- At 460 volts, a 3-phase motor draws 1.25 amp per hp
- At 230 volts, a 3-phase motor draws 2.5 amp per hp
- At 230 volts, a single-phase motor draws 5 amp per hp
- At 115 volts, a single-phase motor draws 10 amp per hp

Temperature Conversion:

Deg C = (Deg F - 32) × 5/9
Deg F = (Deg C × 9/5) + 32

Motor Amps @ Full Load †

HP	Alternating Current		DC	HP	Alternating Current		DC	HP	Alternating Current		DC	HP	Alternating Current		DC
	Single Phase	3-Phase			Single Phase	3-Phase			Single Phase	3-Phase			Single Phase	3-Phase	
1/2	4.9	2.0	2.7	5	28	14.4	20	25	....	60	92	75	....	180	268
1	8.0	3.4	4.8	7 1/2	40	21.0	29	30	....	75	110	100	....	240	355
1 1/2	10.0	4.8	6.6	10	50	26.0	38	40	....	100	146	125	....	300	443
2	12.0	6.2	8.5	15	....	38.0	56	50	....	120	180	150	....	360	534
3	17.0	8.6	12.5	20	....	50.0	74	60	....	150	215	200	....	480	712

† Values are for all speeds and frequencies @ 230 volts.
Amperage other than 230 volts can be figured:

$$V = \frac{230 \times \text{Amp from Table}}{\text{New Voltage}}$$

Example:

For 60 HP, 3 phase @ 550 volts: $\frac{(230 \times 150)}{550}$ = 62 amps.

Power Factor estimated @ 80% for most motors. Efficiency is usually 80-90%.

NEMA Electrical Enclosure Types

Type	Description
NEMA Type 1 (General Purpose)	For indoor use wherever oil, dust, or water is not a problem
NEMA Type 2 (Driptight)	Used indoors to exclude falling moisture and dirt
NEMA Type 3 (Weatherproof)	Provides protection against rain, sleet, and snow
NEMA Type 4 (Watertight)†	Needed when subject to great amounts of water from any angle — such as areas which are repeatedly hosed down

Type	Description
NEMA Type 5 Dust Tight (Non-Hazardous)	Used for excluding dust (All NEMA 12 and JIC enclosures are usually suitable for NEMA 5 use)
NEMA Type 9 Dust Tight (Hazardous)*	For locations where combustible dusts are present
NEMA Type 12 (Industrial Use)	Used for excluding oil, coolant, flying dust, lint, etc

NOTE: Joint Industry Conference (JIC) enclosures are similar in design to NEMA 12's.
For more complete details see NEMA or JIC Standards for enclosures.
† Not designed to be submerged.
* Class II Groups E, F, and G.

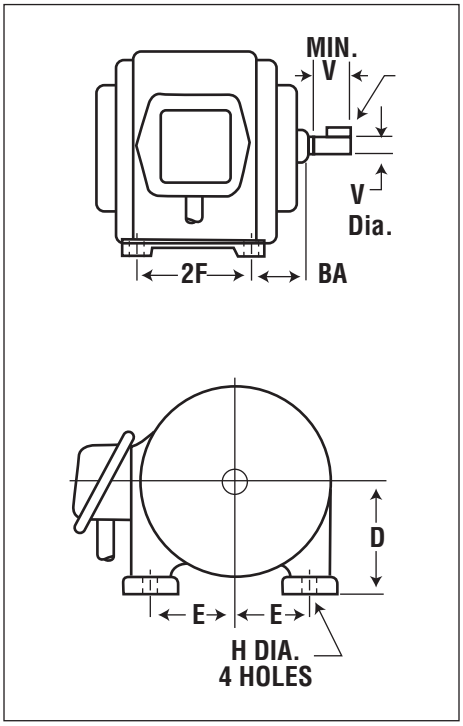
NEMA Frame Designation

Frame Assignments

HP	Motor Speed, RPM				HP	Motor Speed, RPM			
	3600	1800	1200	900		3600	1800	1200	900
1/8 - 1/3	—	48	—	—	15	215T, 256U	254T, 284U	284T, 324U	286T, 326U
1/8 - 1/2	48	—	56	—	20	254T, 284U	256T, 286U	286T, 326U	324T, 364U
1/6	—	—	48	—	25	256T, 286U	284T, 324U	324T, 364U	326T, 365U
1/3 - 1	—	56	—	—	30	284TS, 324S	286T, 326U	326T, 365U	364T, 404U
3/4 - 1	56	—	—	—	40	286TS, 326S	324T, 364U	364T, 404U	365T, 405U
1/2	—	—	—	143T	50	324TS, 364US	326T, 365U, 365US	365T, 405U	404T, 444U
3/4	—	—	143T	145T	60	326TS, 365US	364TS▲, 404U, 404US	404T, 444U	405T, 445U
1	—	143T	145T	182T	75	364TS, 404US	365TS▲, 405U, 405US	405T, 445U	444T
1 1/2	143T	145T	182T	184T	100	365TS, 405US	404TS▲, 444US	444T	445T
2	145T	145T	184T	213T	125	404TS, 444US	405TS▲, 445US	445T	—
3	145T	182T	213T	215T, 254U	150	405TS, 445US	444TS▲	—	—
5	182T	184T	215T, 254U	254T, 256U	200	444TS	445TS▲	—	—
7 1/2	184T	213T, 254U	254T, 256U	256T, 284U	250	445TS	—	—	—
10	213T, 254U	215T, 256U	256T, 284U	284T, 286U	—	—	—	—	—

Motor Frame Dimensions

Frame Size	D	E	2F	H Dia. (4) Holes	U Dia.	BA	V Min.	Key
48	3	2 1/8	2 3/4	11/32	1/2	2 1/2	...	3/64 FLAT
56	3 1/2	2 7/16	3	11/32	5/8	2 3/4	...	3/16 × 3/16 × 1 3/8
143T	3 1/2	2 3/4	4	11/32	7/8	2 1/4	2	3/16 × 3/16 × 1 3/8
145T	3 1/2	2 3/4	5	11/32	7/8	2 1/4	2	3/16 × 3/16 × 1 3/8
182T	4 1/2	3 3/4	4 1/2	13/32	1 1/8	2 3/4	2 1/2	1/4 × 1/4 × 1 3/4
184T	4 1/2	3 3/4	5 1/2	13/32	1 1/8	2 3/4	2 1/2	1/4 × 1/4 × 1 3/4
213T	5 1/4	4 1/4	5 1/2	13/32	1 3/8	3 1/2	3 1/8	5/16 × 5/16 × 2 3/8
215T	5 1/4	4 1/4	7	13/32	1 3/8	3 1/2	3 1/8	5/16 × 5/16 × 2 3/8
254U	6 1/4	5	8 1/4	17/32	1 3/8	4 1/4	3 1/2	5/16 × 5/16 × 2 3/4
254T	6 1/4	5	8 1/4	17/32	1 5/8	4 1/4	3 3/4	3/8 × 3/8 × 2 7/8
256U	6 1/4	5	10	17/32	1 3/8	4 1/4	3 1/2	5/16 × 5/16 × 2 3/4
256T	6 1/4	5	10	17/32	1 5/8	4 1/4	3 3/4	3/8 × 3/8 × 2 7/8
284U	7	5 1/2	9 1/2	17/32	1 5/8	4 3/4	4 5/8	3/8 × 3/8 × 3 3/4
284T	7	5 1/2	9 1/2	17/32	1 7/8	4 3/4	4 3/8	1/2 × 1/2 × 3 1/4
284TS	7	5 1/2	9 1/2	17/32	1 5/8	4 3/4	3	3/8 × 3/8 × 1 7/8
286U	7	5 1/2	11	17/32	1 5/8	4 3/4	4 5/8	3/8 × 3/8 × 3 3/4
286T	7	5 1/2	11	17/32	1 7/8	4 3/4	4 3/8	1/2 × 1/2 × 3 1/4
286TS	7	5 1/2	11	17/32	1 5/8	4 3/4	3	3/8 × 3/8 × 1 7/8
324U	8	6 1/4	10 1/2	21/32	1 7/8	5 1/4	5 3/8	1/2 × 1/2 × 4 1/4
324T	8	6 1/4	10 1/2	21/32	2 1/8	5 1/4	5	1/2 × 1/2 × 3 7/8
324TS	8	6 1/4	10 1/2	21/32	1 7/8	5 1/4	3 1/2	1/2 × 1/2 × 2
326U	8	6 1/4	12	21/32	1 7/8	5 1/4	5 3/8	1/2 × 1/2 × 4 1/4
326T	8	6 1/4	12	21/32	2 1/8	5 1/4	5	1/2 × 1/2 × 3 7/8
326TS	8	6 1/4	12	21/32	1 7/8	5 1/4	3 1/2	1/2 × 1/2 × 2
364U	9	7	11 1/4	21/32	2 1/8	5 7/8	6 1/8	1/2 × 1/2 × 5
364US	9	7	11 1/4	21/32	1 7/8	5 7/8	3 1/2	1/2 × 1/2 × 2
364T	9	7	11 1/4	21/32	2 3/8	5 7/8	5 5/8	5/8 × 5/8 × 4 1/4
364TS	9	7	11 1/4	21/32	1 7/8	5 7/8	3 1/2	1/2 × 1/2 × 2
365U	9	7	12 1/4	21/32	2 1/8	5 7/8	6 1/8	1/2 × 1/2 × 5
365US	9	7	12 1/4	21/32	1 7/8	5 7/8	3 1/2	1/2 × 1/2 × 2
365T	9	7	12 1/4	21/32	2 3/8	5 7/8	5 5/8	5/8 × 5/8 × 4 1/4
365TS	9	7	12 1/4	21/32	1 7/8	5 7/8	3 1/2	1/2 × 1/2 × 2
404U	10	8	12 1/4	13/16	2 3/8	6 5/8	6 7/8	5/8 × 5/8 × 5 1/2
404US	10	8	12 1/4	13/16	2 1/8	6 5/8	4	1/2 × 1/2 × 2 3/4
404T	10	8	12 1/4	13/16	2 7/8	6 5/8	7	3/4 × 3/4 × 5 5/8
404TS	10	8	12 1/4	13/16	2 1/8	6 5/8	4	1/2 × 1/2 × 2 3/4
405U	10	8	13 3/4	13/16	2 3/8	6 5/8	6 7/8	5/8 × 5/8 × 5 1/2
405US	10	8	13 3/4	13/16	2 1/8	6 5/8	4	1/2 × 1/2 × 2 3/4
405T	10	8	13 3/4	13/16	2 7/8	6 5/8	7	3/4 × 3/4 × 5 5/8
405TS	10	8	13 3/4	13/16	2 1/8	6 5/8	4	1/2 × 1/2 × 2 3/4
444U	11	9	14 1/2	13/16	2 7/8	7 1/2	8 3/8	3/4 × 3/4 × 7
444US	11	9	14 1/2	13/16	2 1/8	7 1/2	4	1/2 × 1/2 × 2 3/4
444T	11	9	14 1/2	13/16	3 3/8	7 1/2	8 1/4	7/8 × 7/8 × 6 7/8
444TS	11	9	14 1/2	13/16	2 3/8	7 1/2	4 1/2	5/8 × 5/8 × 3
445U	11	9	16 1/2	13/16	2 7/8	7 1/2	8 3/8	3/4 × 3/4 × 7
445US	11	9	16 1/2	13/16	2 1/8	7 1/2	4	1/2 × 1/2 × 2 3/4
445T	11	9	16 1/2	13/16	3 3/8	7 1/2	8 1/4	7/8 × 7/8 × 6 7/8



Shaded area indicates typical single phase standard squirreM-cage, open type, a-c motors. Balance of table same except three phase, design A and B.

▲ When these motors are used with v-belt or chain drives, the correct frame size is the one with the suffix "S" omitted — consult manufacturer.

Shaft Selection

Important factors to consider when calculating shaft size

(a) Shafting is subject to a **bending moment** and a **torsional moment.**

(b) Bending moment is that force which tends to **bend** a shaft.

(c) Torsional moment is that force which tends to **twist** a shaft.

(d) Shaft size is determined by the **combined action** of the bending and torsional moments.

Refer to Shaft Selection Charts 2 and 3 developed by the American Society of Mechanical Engineers to simplify selection. The charts should be used in conjunction with Service Factors (Table 1) to modify the selection for conditions under which the shaft will operate.

A = Shaft length from center of bearing to center of load

L = Unbalanced load in pounds

W = Suspended weight of elevator (chain, buckets, etc.) in pounds

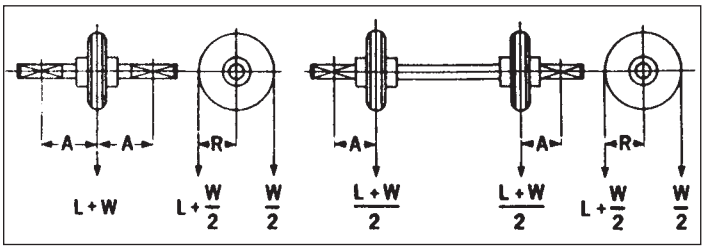
R = Radius of wheel in inches

B = Bending moment

T = Torsional moment

$$B = A \frac{L + W}{2} \text{ inch pounds}$$

$$T = R \times L \text{ inch pounds}$$



Selection Procedure

1. Compute the bending moment from the above formula.
2. Determine the service factor for bending that will suit conditions from table 1.
3. Compute the torsional moment from the above formula.
4. Determine the service factor for torsion that will suit conditions from table 1.
5. Draw a horizontal line across selection chart 2 or 3 on pages M-10 and M-11, from the point where the **torsional moment intersects** its selected service factor line.
6. Draw a vertical lineup selection chart 2 or 3 from the point where the **bending moment intersects** its selected factor line.
7. Intersection of above lines will give required shaft size.
8. For shafts not weakened by keyways, multiply the shaft size obtained by .91 For the corrected shaft size. See note at the bottom of Selection Chart 3.

Horsepower required may be computed directly from the righthand side of Selection Charts by correcting the figure in line with the horizontal torsional moment line by the speed in RPM.

Table 1 • Service Factors

Type of Loading	Service Factor	
	For Bending	For Torsion
Stationary Shafts –		
Gradually applied loads	1.0	1.0
Suddenly applied loads	1.5 to 2.0	1.5 to 2.0
Rotating Shafts –		
Gradually applied or steady loads	1.5	1.0
Suddenly applied loads –		
Minor shock only	1.5 to 2.0	1.0 to 1.5
Suddenly applied loads –		
Heavy shock	2.0 to 2.5	1.5 to 2.5

Selection Example:

Select shaft size for head shaft of chain conveyor subject to following requirements:

(a) Torsion (inch/lbs) — 20,500

(b) Bending moment (inch/lbs) — 13,300

(c) Service Factors:
Torsion — 1.0
Bending — 1.5

At the extreme left on Selection Chart 2, the torsion moment may be found for the Service Factor of 1.0. Draw a horizontal line to the right from the 20,500 point. The bending moment is given at the bottom of the chart. Find the 13,300 point; draw a line from this point to the right on the diagonal until it intersects the 1.5 Service Factor line, then project the line upward vertically until it intersects the horizontal line drawn from the 20,500 torsion point. At this intersection point, it is found that a shaft of approximately 2 13/16" diameter is required.

Select the nearest standard size shaft which is 2 15/16".

For a shaft subjected to the same conditions, but not weakened by keyways, the size of the shaft required would be (.91 × 2.8125) or 2.56 (29/16"). See note at the bottom of the charts.

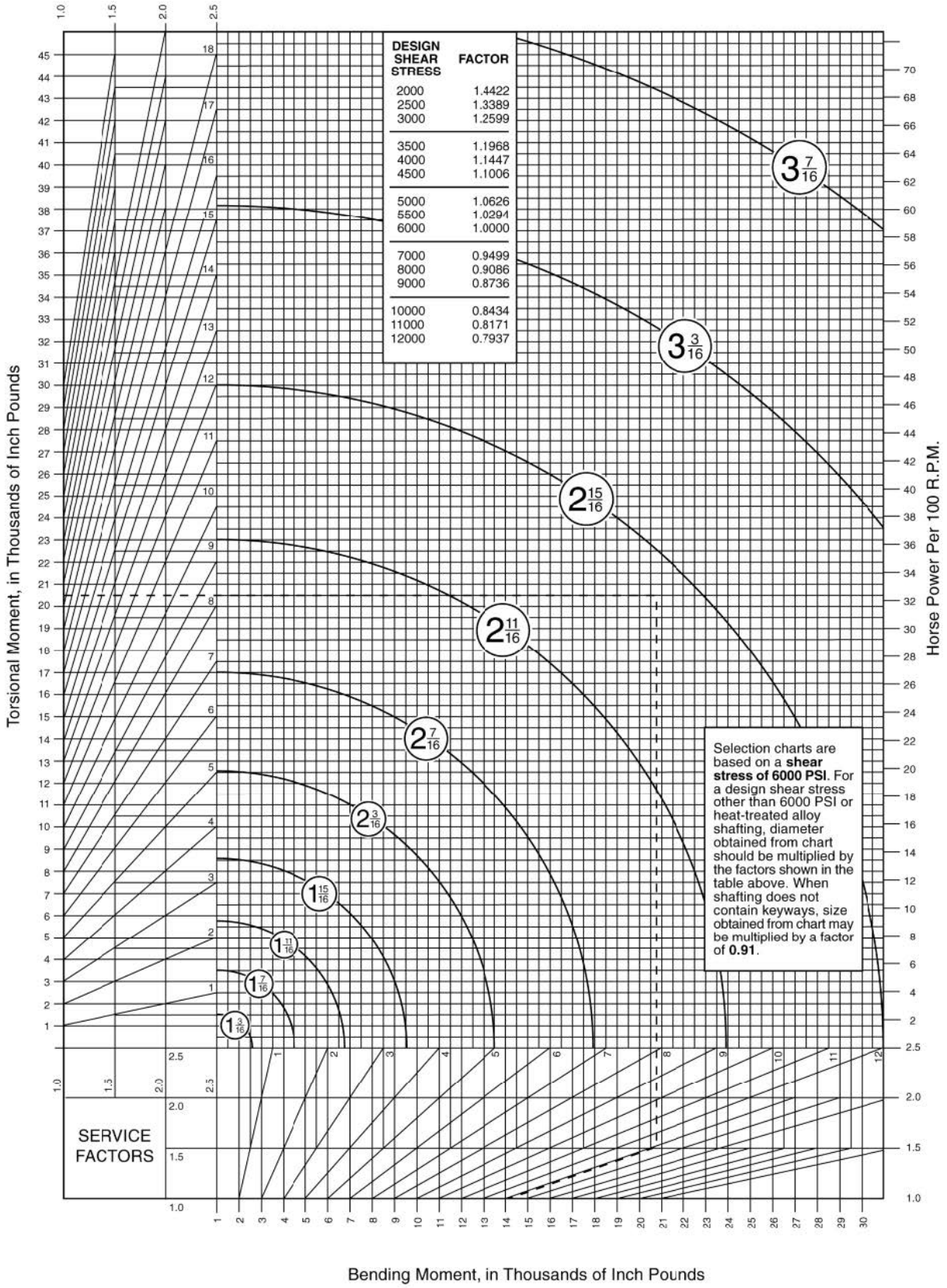
On this same chart at the right, the horsepower ratings at 100 RPM are given based on the formula:

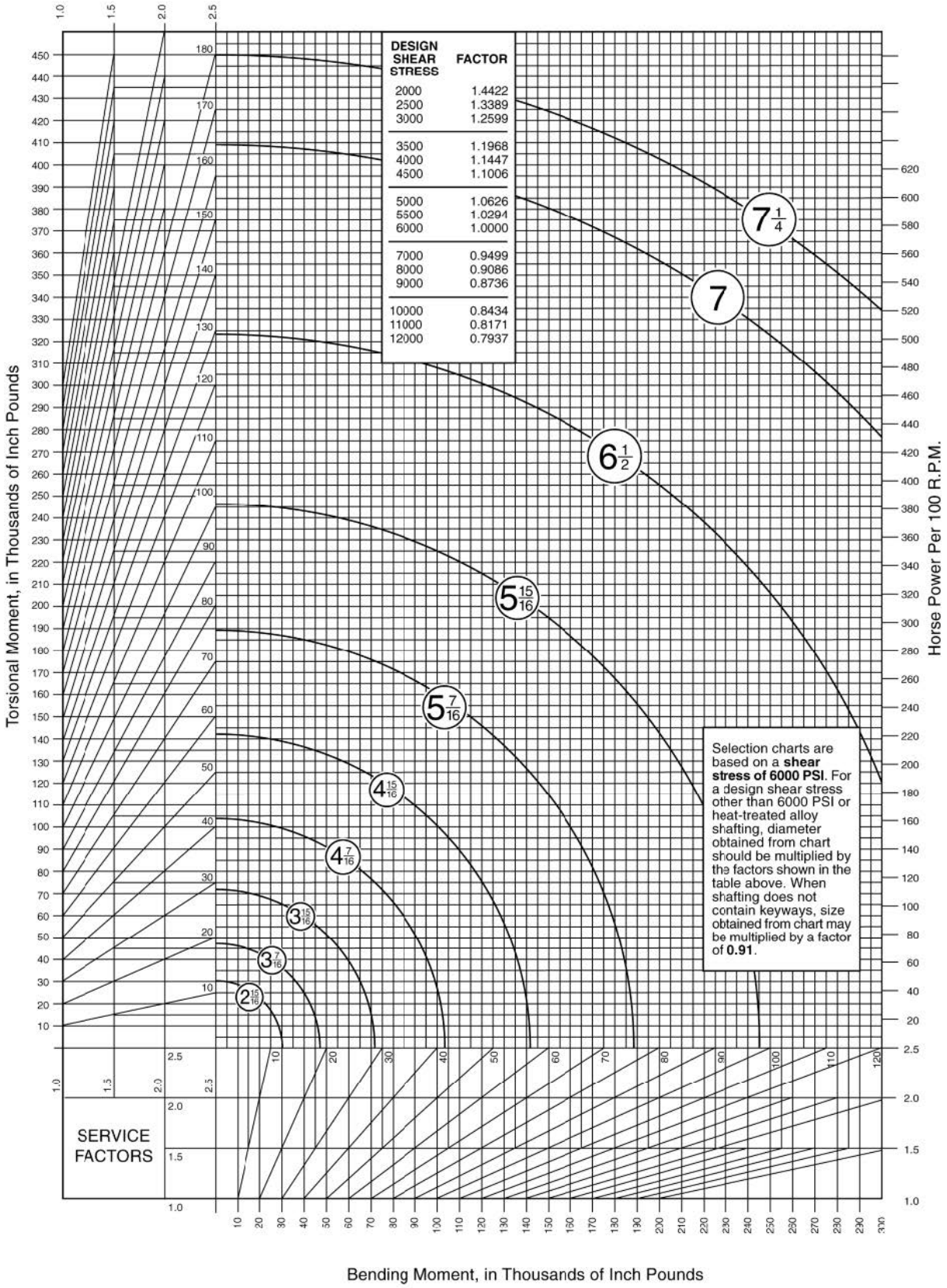
$$HP = \frac{TS}{63{,}000}$$

T = Torque in inch-pounds

S = Speed in RPM

The horsepower is directly proportional to the speed of the shaft in RPM.


DESIGN SHEAR STRESS
FACTOR
2000 1.4422
2500 1.3389
3000 1.2599
3500 1.1968
4000 1.1447
4500 1.1006
5000 1.0626
5500 1.0291
6000 1.0000
7000 0.9499
8000 0.9086
9000 0.8736
10000 0.8434
11000 0.8171
12000 0.7937
Selection charts are based on a **shear stress of 6000 PSI**. For a design shear stress other than 6000 PSI or heat-treated alloy shafting, diameter obtained from chart should be multiplied by the factors shown in the table above. When shafting does not contain keyways, size obtained from chart may be multiplied by a factor of **0.91**.
SERVICE FACTORS
Torsional Moment, in Thousands of Inch Pounds
Horse Power Per 100 R.P.M.
Bending Moment, in Thousands of Inch Pounds


DESIGN SHEAR STRESS
FACTOR
2000 1.4422
2500 1.3389
3000 1.2599
3500 1.1968
4000 1.1447
4500 1.1006
5000 1.0626
5500 1.0294
6000 1.0000
7000 0.9499
8000 0.9086
9000 0.8736
10000 0.8434
11000 0.8171
12000 0.7937
Selection charts are based on a **shear stress of 6000 PSI**. For a design shear stress other than 6000 PSI or heat-treated alloy shafting, diameter obtained from chart should be multiplied by the factors shown in the table above. When shafting does not contain keyways, size obtained from chart may be multiplied by a factor of **0.91**.
SERVICE FACTORS
Torsional Moment, in Thousands of Inch Pounds
Horse Power Per 100 R.P.M.
Bending Moment, in Thousands of Inch Pounds

Flywheel Formulas

Flywheels are occasionally used on a few machines, such as air compressors, to even out load pulsations. These formulas are useful in designing entire flywheel rims. It is also possible to use V-Belt sheaves as a flywheel thus eliminating the need for a separate flywheel in the system. Consult Martin with specific requirements.

Formulas for Entire Flywheel

W = weight (pounds)

R = radius of gyration (feet)

N = speed (RPM)

t = time to change from N1 to N2 (seconds)

F = face of rim (inches)

D = outside diameter of rim (inches)

d = inside diameter of rim (inches)

P = weight per cubic inch of material (pounds)

Kinetic energy of rotation of a flywheel (foot pounds) = $.0001705\ N^2(WR^2)^*$.

Torque to accelerate or decelerate a flywheel uniformly (pound-inches) $= \dfrac{.03908(N_2 - N_1)(WR^2)^*}{t}$

Where N_2 = final RPM and N_1 = initial RPM

Velocity at outside diameter (feet per minute) = 0.2618 ND

*WR^2 = flywheel effect (pounds × feet^2). See table below for WR^2 of rims. Ordinarily the WR^2 of the rim only is considered. In unusual instances the relatively small WR^2 values of the hub and arms or web can be added directly to the WR2^{2}of the rim if desired. To find the WR^2 of a hub or web use the WR^2 formula for rims, substituting the hub or web outside diameter, inside diameter, and width for D, d, and F respectively. When arms are used instead of a web an approximate WR^2 value of the arms is the total weight of the arms in pounds times the square of the radius in feet from the shaft center line to the mid-point of the arms between hub and rim.

Table 1 • Service Factors

Property	Cast Iron Rim (Based on .26 lb per cubic inch)	Steel Rim (Based on .283 lbs per cubic inch)	Rim of any Material (Weighing P Pounds per cubic inch)
Volume (Cubic Inches)	$.7854F(D^2 - d^2)$	$.7854F(D^2 - d^2)$	$.7854F(D^2 - d^2)$
W Weight (Pounds)	$.2042F(D^2 - d^2)$	$.2223F(D^2 - d^2)$	$.7854FP(D^2 - d^2)$
Radius of Gyration (Feet)	$\sqrt{\dfrac{.8681(D^2 + d^2)}{1000}}$	$\sqrt{\dfrac{.8681(D^2 + d^2)}{1000}}$	$\sqrt{\dfrac{.8681(D^2 + d^2)}{1000}}$
WR^2 Wt. × Sq. of Radius of Gyration (lb × Ft^2)	$\dfrac{.1773F(D^4 - d^4)}{1000}$	$\dfrac{.1929F(D^4 - d^4)}{1000}$	$\dfrac{.6818FP(D^4 - d^4)}{1000}$
T▲ Tensile Load in Rim (lb)	$\dfrac{.3078FN^2(D^3 - d^3)}{1000}$	$\dfrac{.3350FN^2(D^3 - d^3)}{1000}$	$\dfrac{1.184PFN^2(D^3 - d^3)}{1000}$

▲ Centrifugal force causes this tensile load at each and every section of the rim. Thus on rims split into two or more sections, the fastening at each joint should be designed to take the full load as calculated from the formula below.

Electrical Formulas

R = Distance from the axis of rotation to the center of gravity of the body (feet)

N = Revolutions per minute (RPM)

v = Velocity of the center of gravity of the body (feet per second)

g = Acceleration due to gravity (32.16 commonly)

$$F = \frac{Wv^2}{gR} = \frac{WRN^2}{2933} = .000341\ WRN^2$$

F = Centrifugal force tending to move the body outward from the axis of rotation (pounds)

W = Weight of body (pounds)

Weights of Steel

NOTE: The steel weights in this section are nominal and are based on an approximate weight of 40.80 pounds per square foot, one inch thick. There may be differences between nominal weights and actual scale weights because of variation in manufacturing practices.

Hot Rolled and Cold Finished Steel Products Nominal Weight

Product	Thickness	Width	Length	Formulas
Plates, Strip and Flats	Inches	Inches	Inches	.2833 × T × W × L
	Inches	Inches	Feet	3.4 × T × W × L
	Inches	Feet	Feet	40.8 × T × W × L
	USS. Ga No.	Feet	Feet	Wt./Sq. Ft. × W × L
	Wt. per Sq. Ft.	Feet	Feet	Wt./Sq. Ft. × W × L
Hot and C.R. Sheets	Inches	Inches	Inches	.2904 × T × W × L
	Inches	Inches	Feet	3.485 × T × W × L
	Inches	Feet	Feet	41.82 × T × W × L
	USS. Ga No.	Feet	Feet	Wt./Sq. Ft. × W × L
	Wt. per Sq. Ft.	Feet	Feet	Wt./Sq. Ft. × W × L

Product	Thickness	Diameter	Formulas
Plate Circles	Inches	Inches	.2225 × T × D2
	Inches	Feet	32.05 × T × D2
Sheet Circles	Inches	Inches	.228 × T × D2
	Inches	Feet	32.85 × T × D2
	Diameter	**Length**	**Formulas**
Bars { Square	Inches	Feet	3.4 × D2 × L
Bars { Round	Inches	Feet	2.67 × D2 × L
Bars { Hexagon	Inches	Feet	2.945 × D2 × L
Bars { Octagon	Inches	Feet	2.817 × D2 × L

T = thickness L = length W = width D = diameter

Steel Rounds

Size in Inches	Pounds Per Foot	Size in Inches	Pounds Per Foot
7/8	2.04	2 15/16	23.04
15/16	2.35	3	24.03
1	2.67	3 1/16	25.05
1 1/16	3.01	3 1/8	26.08
1 1/8	3.38	3 3/16	27.13
1 3/16	3.77	3 1/4	28.20
1 1/4	4.17	3 5/16	29.30
1 5/16	4.60	3 3/8	30.42
1 3/8	5.05	3 7/16	31.55
1 7/16	5.52	3 1/2	32.71
1 1/2	6.01	3 9/16	33.89
1 9/16	6.52	3 5/8	35.09
1 5/8	7.05	3 11/16	36.31
1 11/16	7.60	3 3/4	37.55
1 3/4	8.18	3 15/16	38.81
1 13/16	8.77	3 7/8	40.10
1 7/8	9.39	3 15/16	41.40
1 15/16	10.02	4	42.73
2	10.68	4 1/16	44.07
2 1/16	11.36	4 1/8	45.44
2 1/8	12.06	4 3/16	46.83
2 3/16	12.78	4 1/4	48.23
2 1/4	13.52	4 5/16	49.66
2 3/16	14.28	4 3/8	51.11
2 3/8	15.06	4 7/16	52.58
2 7/16	15.87	4 1/2	54.08
2 1/2	16.69	4 9/16	55.59
2 9/16	17.53	4 5/8	57.12
2 5/8	18.40	4 11/16	58.68
2 11/16	19.29	4 3/4	60.25
2 3/4	20.19	4 13/16	61.85
2 13/16	21.12	4 7/8	63.46
2 7/8	22.07	4 15/16	65.10

Standard Sheet Weights

Ga. Number	Thickness in Inches	Weight Per Square Foot in Pounds
Over 3/16" are plates		
7	.1793	7.500
8	.1644	6.875
9	.1494	6.250
10	.1345	5.625
11	.1196	5.000
12	.1046	4.375
13	.0897	3.750
14	.0747	3.125
15	.0673	2.812
16	.0598	2.500

Carbon Steel Plates

Size in Inches	Weight Per Square Foot in Pounds
3/16	7.76
1/4	10.20
5/16	12.75
3/8	15.30
7/16	17.85
1/2	20.40
9/16	22.95
5/8	25.50
3/4	30.60
13/16	33.15
7/8	35.70
1	40.80
1 1/8	45.90
1 1/4	51.00
1 3/8	56.10
1 1/2	61.20

Note: Stainless steel weighs approximately 10% more than carbon steel.

Steel Properties

The information shown below is offered as a general guide to physical properties of steel in common use. Lower tensile properties are to be expected in large sections; the values of strength decrease as the size of the section increases. These values are not guaranteed and must **NOT** be used in specifying the raw materials or as a basis for acceptance or rejection of material. It must not be assumed that these properties will be obtained in all cases as they vary widely with permissible variations in analysis, size of section, rolling conditions, grain size, and methods of heat treatment. Dependable physical properties can only be obtained through carefully controlled analysis and heat treatment.

Average Properties of Standard Steel

AISI Number	SAE Number	Condition of Steel	Strength in 1000 PSI		% Elong. in 2"	% Red. of Area	Hardness		Machinability % of B1112 CD
			Tensile	Yield			Brinell	Rockwell	
B1112	1112	COLD DRAWN BESSEMER	75-90	60-70	12-16	40-50	170-185	80-95B	100
C1018	1018	NATURAL HOT ROLLED	55-70	40-50	25-35	50-65	120-140	-	55
		COLD DRAWN	70-85	50-70	18-25	45-55	160-180	80-90B	65
		1" RD. CARBURIZED AT 1700°F, COOLED IN BOX, REHEATED, QUENCHED – CORE PROPERTIES	90-100	60-80	10-22	35-50	200-230	93-98B	-
C1020	1020	NATURAL HOT ROLLED	60-80	40-50	25-35	50-65	120-145	60-98B	50
		COLD DRAWN	70-80	45-70	15-25	45-60	120-160	70-85B	60
C1117	1117	NATURAL HOT ROLLED	60-70	37-47	20-30	45-60	135-150	-	80
		COLD DRAWN	80-90	60-75	15-20	40-50	160-190	80-90B	90
		1" RD. CARBURIZED AT 1700°F, COOLED IN BOX, REHEATED, QUENCHED – CORE PROPERTIES	95-110	60-85	10-25	35-50	210-240	15-22C	-
C1035	1035	NATURAL HOT ROLLED	75-85	40-55	18-25	40-55	155-175	-	60
		COLD DRAWN	85-95	65-80	15-25	40-50	170-200	85-95B	65
		1" RD. QUENCHED, TEMPERED 1000°F	95-105	70-80	20-25	55-60	195-220	93-98B	55
C1040	1040	NATURAL HOT ROLLED	80-90	45-55	18-25	35-50	165-185	-	60
		COLD DRAWN	90-100	70-85	14-20	35-50	190-215	91-98B	62
		1" RD. QUENCHED, TEMPERED 1000°F	100-110	75-85	15-25	45-60	210-240	17-23C	52
C1042	1042	NATURAL HOT ROLLED	85-95	50-60	15-25	35-50	175-205	-	58
		COLD DRAWN	90-105	75-90	12-20	30-45	185-215	-	60
		1" RD. QUENCHED, TEMPERED 1000°F	105-120	80-90	15-25	40-60	215-250	-	-
C1045	1045	NATURAL HOT ROLLED	85-105	50-65	15-25	35-45	175-215	-	55
		COLD DRAWN	90-110	75-90	12-20	30-45	195-230	95-99B	58
		1" RD. QUENCHED, TEMPERED 1000°F	110-130	80-95	12-25	40-55	235-260	22-26C	47
C1141	1141	NATURAL HOT ROLLED	90-110	60-80	15-25	25-45	180-220	-	65
		COLD DRAWN	100-120	85-105	8-18	20-50	195-230	-	70
		1" RD. QUENCHED, TEMPERED 1000°F	120-145	100-130	10-20	35-50	270-310	-	-
C1144	1144	NATURAL HOT ROLLED	95-110	60-85	15-25	30-45	200-240	-	75
		COLD DRAWN	100-120	90-115	7-17	20-45	210-245	17-23C	85
		1" RD. QUENCHED, TEMPERED 1000°F	130-150	110-130	15	45	286-302	29-31C	-
C1050	1050	NATURAL HOT ROLLED	95-110	55-70	15-20	25-40	210-325	-	50
		1" RD. QUENCHED, TEMPERED 1000°F	115-135	85-100	10-22	35-50	240-265	23-27C	-
4140	4140	HOT ROLLED, ANNEALED	90-100	60-70	20-30	50-60	185-210	91-95B	55
		COLD DRAWN, ANNEALED	110-120	85-95	15-25	45-55	230-250	20-25C	65
		HEAT TREATED, COLD DRAWN.	140-155	125-140	12-20	45-55	270-300	26-30C	45
		1" RD. QUENCHED, TEMPERED 1000°F	150-160	130-140	15-20	50-60	320-350	34-37C	-
		2" RD. QUENCHED, TEMPERED 1000°F	145-155	125-135	15-20	50-60	320-345	33-36C	-
		3" RD. QUENCHED, TEMPERED 1000°F	130-145	115-125	15-20	55-65	280-310	28-32C	-
E52100	52100	HOT ROLLED, ANNEALED .	100-110	75-85	20-25	50-60	210-235	-	45
		1"" RD. QUENCHED, TEMPERED 1000°F	180-195	65-80	10-15	35-45	375-415	40-43C	-
8620	8620	NATURAL HOT ROLLED	90-95	55-65	18-25	45-60	160-200	85-95B	55
		COLD DRAWN	90-105	65-80	15-25	40-50	185-215	90-96B	60-70
		1" RD. CARBURIZED 1700°F., COOLED IN BOX, REHEATED, QUENCHED – CORE PROPERTIES	120-135	90-110	15-20	40-50	285-350	28-40C	-
8645	8645	NATURAL HOT ROLLED	105-125	55-75	15-25	35-50	220-270	20-28C	48-55
		HOT ROLLED, ANNEALED	100-110	50-60	20-25	40-55	210-230	17-21C	54
		2" RD. QUENCHED, TEMPERED 1000°F	140-150	110-125	15-20	45-55	300-320	30-34C	-
		3" RD. QUENCHED, TEMPERED 1000°F	130-140	105-115	15-20	50-60	285-310	29-32C	-
8742	8742	NATURAL HOT ROLLED	110-125	50-70	15-25	35-50	230-270	22-28C	45-50
		COLD DRAWN, ANNEALED	105-120	95-105	10-18	35-45	210-235	95-99B	60
		1" RD. QUENCHED, TEMPERED 1000°F	155-165	135-145	15-20	45-52	330-335	35-38C	-
		2" RD. QUENCHED, TEMPERED 1000°F	135-145	110-120	15-20	50-60	290-320	30-33C	-

Physical Properties of Various Metals

Metals and Alloys	Stress in Thousands of Pounds per Square Inch				Modulus of Elasticity 1,000,000 lb	Elongation %
	Tension Ultimate	Tension Yield Point	Compression Ultimate	Shea Ultimate		
ALUMINUM, TYPE 3003-0, ANNEALED	16	6	-	11	10	40
ALUMINUM, TYPE 3003-H18, HARD.	29	27	-	16	10	10
ALUMINUM, TYPE 5052-0, ANNEALED	28	13	-	18	10.2	30
ALUMINUM, TYPE 5052-H38, HARD.	42	37	-	24	10.2	8
ALUMINUM, TYPE 5056-0, ANNEALED	42	22	-	26	10.3	35
ALUMINUM, TYPE 2014-0, ANNEALED.	27	14	-	18	10.6	18
ALUMINUM, TYPE 2014-T4, HEAT TREATED	62	42	-	38	10.6	20
ALUMINUM, TYPE C4A, CASTING, SOLUTION HEAT TREAT	32	16	16▲	24	-	8.5
ALUMINUM, TYPE S5C, AS DIE CAST	30	16	16▲	19	-	9
BRASS, ALUMINUM, ANNEALED	60	27	-	-	16	55
BRASS, RED, 15% ZN, ANNEALED.	39	10	-	31	17	48
BRASS, RED, 15% ZN, HARD	70	57	-	42	17	5
BRASS, RED, LEADED, CAST, GRADE 4A	33-46	17-24	10-12▲	-	9.1-14.8	20-35
BRASS, RED, LEADED, CAST, GRADE 4B	30-38	12-17	11-12▲	-	-	15-27
BRASS, YELLOW, 35% ZN, ANNEALED	46	14	-	32	15	65
BRASS, YELLOW, 35% ZN, HARD.	74	60	-	43	15	8
BRONZE, ALUMINUM, AS CAST	67-95	27-45	-	-	15-18	5-35
BRONZE, COMMERCIAL, 10% ZN, ANNEALED.	37†	10†	-	28†	17	45†
BRONZE, MANGANESE, ANNEALED.	65†	30†	-	42†	15	33†
BRONZE, PHOSPHOR, ANNEALED	40-66	14-24	-	-	16-17	48-70
BRONZE, TIN, HIGH LEADED, CAST	23-38	11-22	12-16▲	-	8.5-13	7-20
BRONZE, TIN, LEADED, CAST	33-48	16-26	9-15▲	-	10.6-16	15-40
COPPER, BERYLLIUM, ANNEALED	60-80†	25-35†	-	50-60†	19	35-50†
INCONEL, CAST.	65-90	-	-	-	23	10-20
INCONEL, S, CAST	90-120	80-100	-	-	25	1-3
IRON, CAST, CLASS 30	30-34	-	115	44	15	-
IRON, CAST, CLASS 35	35-40	-	125	43	16	-
IRON, MALLEABLE, CLASS 32510	50	33	90	46	25	10-18
IRON, MALLEABLE, CLASS 35018	55	37	90	51	25	18-25
IRON, NODULAR (DUCTILE) CLASS 60-45-10.	60	45	120	-	22-25	10-25
IRON, NODULAR (DUCTILE) CLASS 80-60-3.	80	60	160	-	22-25	3-10
IRON, PEARLITIC, MALLEABLE	60-90	40-70	-	-	28	3-12
IRON, WROUGHT, HOT ROLLED	34-47	23-24	-	-	29	7-35
LEAD, HARD, ROLLED.	4.0-4.6	-	-	-	-	31-48
MONEL, CAST	65-90	32-45	-	-	23	20-50
MONEL, S, CAST	120-145	80-130	-	-	24.2	1-4
MONEL, SHAPES, PLATE, ETC., ANNEALED	70-85†	25-45†	-	-	26	35-50†
NICKEL, CAST	50-65	15-30	-	-	21.5	15-30
NICKEL, SILVER, ANNEALED	49-63†	18-30†	-	-	17-18	35-60†
STEEL, CAST CARBON, CLASS 70,000 NORMALIZED.	70	38	-	-	30	28
STEEL, CAST LOW ALLOY, CLASS 100,000, NORMALIZE & TEMPERED	100	68	-	-	29-30	20
STEEL, CAST LOW ALLOY, CLASS 120,000, QUENCHED AND TEMPERED	120	95	-	-	29-30	16
STEEL, CAST LOW ALLOY, CLASS 200,000, QUENCHED AND TEMPERED	200	170	-	-	29-30	5
STEEL, SHEETS	48	25	-	-	29-30	18-27
STEEL, STAINLESS, AUSTENITIC, TYPES 304, 316	85	35	-	-	28	55-60
STEEL, STAINLESS, MARTENSITIC, TYPE 416	75	40	-	-	29	30
STEEL, STRUCTURAL, BRIDGE AND BUILDING, ASTM A7	60-72	33	33▲	45-54	29-30	21
STEEL, STRUCTURAL, HIGH STRENGTH, LOW ALLOY, ASTM A242	63-72	42-50	42-50▲	47-53	29-30	18-24
ZINC, DIE CAST ALLOY, XXIII.	41	-	60▲	31	-	10

† When hardened, strength values are higher, elongation less.

▲ Compression yield point.

Hardness Conversion Chart

Brinell, Rockwell, and Scleroscope Hardness Numbers with Corresponding Tensile Strength

Brinell 10 MM Ball 3000 Kg	Rockwell "C" 120 Cone 150 Kg	Scleroscope Shore Model C	Tensile Strength 1000 Pound Per Square Inch
745	68	100	368
712	66	95	352
682	64	91	337
653	62	87	324
627	60	84	311
601	58	81	298
578	57	78	287
555	55	75	276
534	53	72	266
514	52	70	256
495	50	67	247
477	49	65	238
461	47	63	229
444	46	61	220
429	45	59	212
415	44	57	204
401	42	55	196
388	41	54	189
375	40	52	182
362	38	51	176
351	37	49	170
341	36	48	165
331	35	46	160
321	34	45	155
311	33	44	150
302	32	43	146
293	31	42	142
285	30	40	138
277	29	39	134
269	28	38	131
262	26	37	128
255	25	37	125
248	24	36	122
241	23	35	119
235	22	34	116
229	21	33	113
223	20	32	110
	Rockwell "B" 1/16" Ball 100 Kg.		
217	97	31	107
212	96	31	104
207	95	30	101
202	94	30	99
197	93	29	97
192	92	28	95
187	91	28	93
183	90	27	91
179	89	27	89
174	88	26	87

Decimal Equivalent Table

Decimal and Millimeter Equivalents of Fractions

Inches		Millimeters	Inches		Millimeters	Inches		Millimeters
Fractions	Decimals		Fractions	Decimals		Fractions	Decimals	
1/64	0.015625	0.397	23/64	0.359375	9.128	45/64	0.703125	17.859
1/32	0.03125	0.794	3/8	0.375	9.525	23/32	0.71875	18.256
3/64	0.046875	1.191	25/64	0.390625	9.922	47/64	0.734375	18.653
1/16	0.0625	1.588	13/32	0.40625	10.319	3/4	0.750	19.050
5/64	0.078125	1.984	27/64	0.421875	10.716	49/64	0.765625	19.447
3/32	0.09375	2.381	7/16	0.4375	11.113	25/32	0.78125	19.844
7/64	0.109375	2.778	29/64	0.453125	11.509	51/64	0.796875	20.241
1/8	0.125	3.175	15/32	0.46875	11.906	13/16	0.8125	20.638
9/64	0.140625	3.572	31/64	0.484375	12.303	53/64	0.828125	21.034
5/32	0.15625	3.969	1/2	0.500	12.700	27/32	0.84375	21.431
11/64	0.171875	4.366	33/64	0.515625	13.097	55/64	0.859375	21.828
3/16	0.1875	4.763	17/32	0.53125	13.494	7/8	0.875	22.225
13/64	0.203125	5.159	35/64	0.546875	13.891	57/64	0.890625	22.622
7/32	0.21875	5.556	9/16	0.5625	14.288	29/32	0.90625	23.019
15/64	0.234375	5.953	37/64	0.578125	14.684	59/64	0.921875	23.416
1/4	0.250	6.350	19/32	0.59375	15.081	15/16	0.9375	23.813
17/64	0.265625	6.747	39/64	0.609375	15.478	61/64	0.953125	24.209
9/32	0.28125	7.144	5/8	0.625	15.875	31/32	0.96875	24.606
19/64	0.296875	7.541	41/64	0.640625	16.272	63/64	0.984375	25.003
5/16	0.3125	7.938	21/32	0.65625	16.669	1	1.000	25.400
21/64	0.328125	8.334	43/64	0.671875	17.066			
11/32	0.34375	8.731	11/16	0.6875	17.463			

Decimal Equivalents of Millimeters

MM	Inches	MM	Inches	MM	Inches	MM	Inches	MM	Inches	MM	Inches	MM	Inches	MM	Inches
0.1	.00394	9.5	0.37401	22.5	0.88582	35.5	1.39763	48.5	1.90944	61.5	2.42125	74.5	2.93306	87.5	3.44487
0.2	.00787	10.0	0.39370	23.0	0.90551	36.0	1.41732	49.0	1.92913	62.0	2.44094	75.0	2.95275	88.0	3.46456
0.3	.01181	10.5	0.41338	23.5	0.92519	36.5	1.43700	49.5	1.94881	62.5	2.46062	75.5	2.97243	88.5	3.48424
0.4	.01575	11.0	0.43307	24.0	0.94488	37.0	1.45669	50.0	1.96850	63.0	2.48031	76.0	2.99212	89.0	3.50393
0.5	.01968	11.5	0.45275	24.5	0.96456	37.5	1.47637	50.5	1.98818	63.5	2.49999	76.5	3.01180	89.5	3.52361
0.6	.02362	12.0	0.47244	25.0	0.98425	38.0	1.49606	51.0	2.00787	64.0	2.51968	77.0	3.03149	90.0	3.54330
0.7	.02756	12.5	0.49212	25.5	1.00393	38.5	1.51574	51.5	2.02755	64.5	2.53936	77.5	3.05117	90.5	3.56298
0.8	.03149	13.0	0.51181	26.0	1.02362	39.0	1.53543	52.0	2.04724	65.0	2.55905	78.0	3.07086	91.0	3.58267
0.9	.03543	13.5	0.53149	26.5	1.04330	39.5	1.55511	52.5	2.06692	65.5	2.57873	78.5	3.09054	91.5	3.60235
1.0	.03937	14.0	0.55118	27.0	1.06299	40.0	1.57480	53.0	2.08661	66.0	2.59842	79.0	3.11023	92.0	3.62204
1.5	.05905	14.5	0.57086	27.5	1.08267	40.5	1.59488	53.5	2.10629	66.5	2.61810	79.5	3.12991	92.5	3.64172
2.0	.07874	15.0	0.59055	28.0	1.10236	41.0	1.61417	54.0	2.12598	67.0	2.63779	80.0	3.14960	93.0	3.66141
2.5	.09842	15.5	0.61023	28.5	1.12204	41.5	1.63385	54.5	2.14566	67.5	2.65747	80.5	3.16928	93.5	3.68109
3.0	.11811	16.0	0.62992	29.0	1.14173	42.0	1.65354	55.0	2.16535	68.0	2.67716	81.0	3.18897	94.0	3.70078
3.5	.13779	16.5	0.64960	29.5	1.16141	42.5	1.67322	55.5	2.18503	68.5	2.69684	81.5	3.20865	94.5	3.72046
4.0	.15748	17.0	0.66929	30.0	1.18110	43.0	1.69291	56.0	2.20472	69.0	2.71653	82.0	3.22834	95.0	3.74015
4.5	.17716	17.5	0.68897	30.5	1.20078	43.5	1.71259	56.5	2.22440	69.5	2.73621	82.5	3.24802	95.5	3.75983
5.0	.19685	18.0	0.70866	31.0	1.22047	44.0	1.73228	57.0	2.24409	70.0	2.75590	83.0	3.26771	96.0	3.77952
5.5	.21653	18.5	0.72834	31.5	1.24015	44.5	1.75196	57.5	2.26377	70.5	2.77558	83.5	3.28739	96.5	3.79920
6.0	.23622	19.0	0.74803	32.0	1.25984	45.0	1.77165	58.0	2.28346	71.0	2.79527	84.0	3.30708	97.0	3.81889
6.5	.25590	19.5	0.76771	32.5	1.27952	45.5	1.79133	58.5	2.30314	71.5	2.81495	84.5	3.32676	97.5	3.83857
7.0	.27559	20.0	0.78740	33.0	1.29921	46.0	1.81102	59.0	2.32283	72.0	2.83464	85.0	3.34645	98.0	3.85826
7.5	.29527	20.5	0.80708	33.5	1.31889	46.5	1.83070	59.5	2.34251	72.5	2.85432	85.5	3.36613	98.5	3.87794
8.0	.31496	21.0	0.82677	34.0	1.33858	47.0	1.85039	60.0	2.36220	73.0	2.87401	86.0	3.38682	99.0	3.89763
8.5	.34464	21.5	0.84645	34.5	1.35826	47.5	1.87007	60.5	2.38188	73.5	2.89369	86.5	3.40550	99.5	3.91731
9.0	.35433	22.0	0.86614	35.0	1.37795	48.0	1.88976	61.0	2.40157	74.0	2.91338	87.0	3.42519	100.0	3.93700

English Metric System Equivalents

Decimal Equivalents of Millimeters

Unit	Millimeters	Centimeters	Inches	Feet	Yards	Meters
1 MILLIMETER =	1	.1	.03937	.003281	.001094	.001
1 CENTIMETER =	10	1	.3937	.032808	.010936	.01
1 INCH =	25.4001	2.54001	1	.083333	.027778	.025400
1 FOOT =	304.801	30.4801	12	1	.333333	.304801
1 YARD =	914.402	91.4402	36	3	1	.914402
1 METER =	1000	100	39.37	3.28083	1.09361	1

Unit	Feet	Yards	Meters	Rods	Furlongs	Miles (Statute)
1 ROD =	16.5	5.5	5.02921	1	.025 (1/40)	.003125 (1/320)
1 FURLONG =	660	220	201.168	40	1	.125 (1/8)
1 KILOMETER =	3280.8	1093.6	1000	199	4.971	.62137
1 MILE (STATUTE) =	5280	1760	1609.35	320	8	1

1 NAUTICAL MILE = 6080.2 FEET = 1.15155 STATUTE MILES = 1/3 LEAGUE.
1 LIGHT YEAR = 5.879 TRILLION MILES = 9.46 TRILLION KILOMETERS.

Weight Equivalents

Unit	Grains	Grams	Ounces (Troy)	Ounces (Avoir.)	Pounds (Troy)	Pounds (Avoir.)	Kilograms
1 MILLIMETER =	1	.064799	.002083	.002286	.000174	.000143	.000065
1 OUNCE (TROY) =	480	31.1035	1	1.09714	.083333	.068571	.031104
1 OUNCE (AVOIR.) =	437.5	28.3495	.911458	1	.075955	.0625	.028350
1 POUND (TROY) =	5760	373.242	12	13.1657	1	.822857	.373242
1 POUND (AVOIR.) =	7000	453.592	14.5833	16	1.21528	1	.453592
1 KILOGRAM =	15432.4	1000	32.1507	35.2740	2.67923	2.20462	1

Unit	Kilograms	Pounds (Troy)	Pounds (Avoir.)	Metric Tons	Net (Short) Tons	Gross (Long) Tons
1 METRIC TON =	1000	2679.23	2204.62	1	1.10231	.984206
1 NET (SHORT) TON =	907.185	2430.56	2000	.907185	1	.892857
1 GROSS (LONG) TON =	1016.05	2722.22	2240	1.01605	1.12	1

Volume and Capacity Equivalents

Unit	Cubic Centimeters	Cubic Inches	Liters	Quarts (Liquid)	Quarts (Dry)	Gallons (Liquid)	Gallons (Dry)	Cubic Feet
1 CU. CENTIMETER =	1	.06102	.001	.00106	.00091	.00026	.00023	.00004
1 CU. INCH =	16.387	1	.01639	.01732	.01488	.00433	.00372	.00058
1 GILL =	118.29	7.2188	.11829	.125	.10742	.03125	.02686	.00418
1 PINT (LIQUID) =	473.18	28.875	.47318	.5	.42968	.125	.10742	.01671
1 PINT (DRY) =	550.62	33.600	.55062	.58182	.5	.14546	.125	.01945
1 LITER =	1000	61.023	1	1.0567	.90808	.26417	.22702	.03531
1 QUART (LIQUID) =	946.36	57.75	.94636	1	.85937	.25	.21484	.03342
1 QUART (DRY) =	1101.2	67.201	1.1012	1.1637	1	.29091	.25	.03889
1 GALLON (LIQUID) =	3785.4	231	3.7854	4	3.4375	1	.85937	.13368
1 GALLON (DRY) =	4404.9	268.80	4.4049	4.6546	4	1.1636	1	.15556
1 PECK =	8809.8	537.61	8.8098	9.3092	8	2.3273	2	.31111
1 CU. FOOT =	28317.0	1728	28.317	29.922	25.714	7.4805	6.4285	1
1 BUSHEL =	35239.3	2150.4	35.239	37.237	32	9.3092	8	1.2445
1 BARREL =	119241.2	7276.5	119.24	126	108.28	31.5	27.070	4.2109
1 CU. YARD =	764559.4	46656	764.56	807.90	694.28	201.97	173.57	27
1 CU. METER =	1000000	61023.4	1000	1056.7	908.08	264.17	227.02	35.314

English Metric System Equivalents

Area Equivalents

Unit	Cubic Centimeters	Cubic Inches	Liters	Quarts (Liquid)
1 SQUARE FOOT =	144	1	.1111	.09290
1 SQUARE YARD =	1296	9	1	.83613
1 SQUARE METER =	1550	10.7639	1.19599	1
1 SQUARE ROD =	39204	272.25	30.25	25.293
1 ARE =	155000	1076.39	119.599	100
1 ACRE =	6272640	43560	4840	4046.86
1 SQUARE MILE (640 ACRES) =	–	27878400	3097600	2589999
1 SQUARE KILOMETER =	–	10763867	1195985	1000000

Power Equivalents

Unit	BTU/Hour	Foot-Pound/Hour	Foot-Pound/ Minute	HP	HP (Metric)	Watt	Kilowatt
1 BTU/HR. =	1	778.1688	12.96948	.000393	.000398	.293071	.000293
1 FT.LB./HR. =	.001285	1	–	5.05×10^{-7}	5.12×10^{-7}	.0003766	3.766×10^{-7}
1 FT.LB./MIN. =	.077104	–	1	3.0303×10^{-5}	3.072×10^{-7}	.022597	2.26×10^{-5}
1 HP =	2544.43	1980000	33000	1	1.01387	745.699	.7457
1 HP MET. =	2509.622	1952914	32548.56	.986320	1	735.499	.735499
1 WATT =	3.41214	2655.224	44.2537	.0013410	.0013596	1	.001

NOTE: Foot-Pounds indicates energy.
Pound-Feet indicates torque (Page M-2).

Metric System

Length

1 meter (m) = 10 decimeters(dm); 100 centimeters(cm); 1,000 millimeters(mm)
1 dekameter (dkm) = 10 meters (m)
1 hectometer (hm) = 100 meters (m)
1 kilometer (km) = 1,000 meters (m)

Weight

1 gram (g) = 10 decigrams (dg); 100 centigrams (cg); 1,000 milligrams (mg)
1 dekagram (dkg) = 10 grams (g)
1 hectogram (hg) = 100 grams (g)
1 kilogram (kg = 1000 grams (g)
1 metric ton = 1000 kilograms (kg); 1,000,000 grams (g)

Volume & Capacity

1 liter (l) = 1 cubic decimeter(dm^3); 10 deciliters (dl); 100 centiliters(cl); 1,000 milliliters (ml); 1,000 cubic centimeters (cm^3 or cc)
1 dekaliter (dkl) = 10 liters (l)
1 hectoliter (hl) = 100 liters (l)
1 kiloliter (kl) = 1 cubic meter (m^3); 1 stere (s); 1,000 liters (l)

Area

1 centare (ca) = 1 square meter (m^2); 100 square decimeters (dm^2); 10,000 square centimeters (cm^2); 1,000,000 square millimeters (mm^2)
1 are (a) = 1 square dekameter (dkm^2); 100 square meters (m^2)
1 hectare (ha) = 100 ares (a); 10,000 square meters (m^2)
1 square kilometer (km^2) = 10 meters (m)

Other prefixes commonly used:

micro — one millionth
deca — 10 times (same as deka)
myria — 10,000 times
mega — 1,000,000 times

Engineering Formulas and Constants

Circle

Area = Square of Diameter × .7854
or square of Radius × 3.1416

Circumference = Diameter × 3.1416

Diameter = Circumference × .3183

Doubling diameter increases area four times; tripling diameter increases area nine times, etc.

Square

Area = Square of Side

Diagonal = Side × 1.4142

Side = Diagonal × .7071

Square Inscribed in Circle

Side of Square = Diameter of Circle × .7071
or Circumference of Circle × .2251

Diameter of Circle = Side of Square × 1.4142

Circumference of Circle = Side of Square × 4.4429

Square and Circle with Equal Area

Side of Square = Diameter of Circle × .8862

Diameter of Circle = Side of Square × 1.128

Circumference of Circle = Side of Square × 3.545

Rectangle

Area = Length × Width

Diagonal = Square root of sum of squares of width and length

Triangle

Area = Base × 1/2 of Perpendicular Height

Sphere

Area of Surface = Square of Diameter × 3.1416

Volume = Cube of Diameter × .5236

Cube

Area of Surface = Square of Side × 6

Volume = Cube of Side

Diagonal = Side × 1.732

Cylinder

Area of Curved Surface = Diameter × Length × 3.1416

Volume = Square of Diameter × Length × .7854

Cone

Area of Curved Surface = Diameter of Base × Slant Height × 1.5708

Volume = Diameter of Base Squared × Perpindicular Height × .2618 or Area of Base × 1/3 Perpendicular Height

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1 HP = 33,000 Foot-pounds of work per minute.

1 BTU = Heat required to raise 1 pound of water °F.

1 Kilowatt Hour = 3415 BTU

1 Radian = 57.296 degrees.

1 Register Ton = 100 cubic feet

1 U.S. Shipping Ton = 40 cubic feet

1 British Shipping Ton = 42 cubic feet

1 Cubic Foot/Minute = 471.9474 cubic cm/second

1 Cubic Foot/Minute = .1246753 gallons (U.S.)/second

1 Cubic Foot/Second = 2.2222 cubic yards/minute

1 Gallon (U.S.)/Minute = 8.020834 cubic feet/hour

1 Gallon (U.S.)/Minute = 3.785412 liter/minute

1 Liter/Minute = 2.118880 cubic feet/hour

1 Cubic Mitre/Minute = 264.1720 Gallons (U.S.)/Minute

1 Pound/Gallon (U.S.) = 7.480519 pound/cubic feet

1 Mile/Hour = 88 feet/minute

1 Foot/Minute = .01136364 miles/hour

1 Pound per Square Inch Pressure (PSI) = 144 pounds/square foot = 2.3095 feet fresh water at 62°F = 2.0355 inches mercury at 32°F = 2.0416 inches mercury at 62°F = .068 atmospheres.

Water Pressure (pounds per square inch) = .433 × height of water in feet (Fresh water at 62°F).

Weight of 1 cubic foot of fresh water = 62.355 pounds at 62°F = 59.76 pounds at 212°F.

Weight of 1 gallon (U.S.) water = 8.34 pounds

Weight of 1 cubic foot of Air at 14.7 lbs per square inch Pressure = .07608 pounds at 62°F = .08703 pounds at 32°F.

Watts = Amperes × Volts

1 Watt-Hour = 3.41214 BTU = 859.845 Calorie = 3600 Joule.

g = Acceleration due to gravity at Sea Level, Latitude 45° = 32.1726 Feet/Second squared.

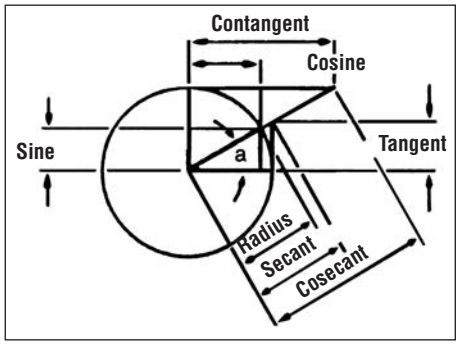
1 pound-foot (torque) = 1.355818 Newton-Metre

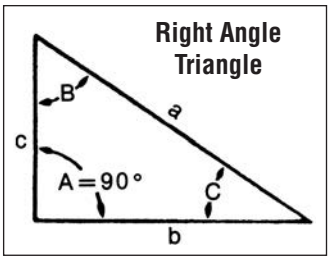
Area/Circumference Table

Circumferences and Areas of Circles (1 — 31 7/8 Diameters)

Diameter	Circumference	Area	Diameter	Circumference	Area	Diameter	Circumference	Area	Diameter	Circumference	Area
1	3.1416	0.7854	5 1/2	17.2788	23.758	14	43.9823	153.94	23	72.2566	415.48
1 1/16	3.3379	0.8866	5 9/16	17.4751	24.301	14 1/8	44.3750	156.70	23 1/8	72.6493	420.00
1 1/8	3.5343	0.9940	5 5/8	17.6715	24.850	14 1/4	44.7677	159.48	23 1/4	73.0420	424.56
1 3/16	3.7306	1.1075	5 11/16	17.8678	25.406	14 3/8	45.1604	162.30	23 3/8	73.4347	429.13
1 1/4	3.9270	1.2272	5 3/4	18.0642	25.967	14 1/2	45.5531	165.13	23 1/2	73.8274	433.74
1 5/16	4.1233	1.3530	5 13/16	18.2605	26.535	14 5/8	45.9458	167.99	23 5/8	74.2201	438.36
1 3/8	4.3197	1.4849	5 7/8	18.4569	27.100	14 3/4	46.3385	170.87	23 3/4	74.6128	443.01
1 7/16	4.5160	1.6230	5 15/16	18.6532	27.688	14 7/8	46.7312	173.78	23 7/8	75.0055	447.69
1 1/2	4.7124	1.7671	6	18.8496	28.274	15	47.1239	176.71	24	75.3982	452.39
1 9/16	4.9087	1.9175	6 1/8	19.2423	29.465	15 1/8	47.5166	179.67	24 1/8	75.7909	457.11
1 5/8	5.1051	2.0739	6 1/4	19.6350	30.680	15 1/4	47.9093	182.65	24 1/4	76.1836	461.86
1 11/16	5.3014	2.2365	6 3/8	20.0277	31.919	15 3/8	48.3020	185.66	24 3/8	76.5763	466.64
1 3/4	5.4978	2.4053	6 1/2	20.4204	33.183	15 1/2	48.6947	188.69	24 1/2	76.9690	471.44
1 13/16	5.6941	2.5802	6 5/8	20.8131	34.472	15 5/8	49.0874	191.75	24 5/8	77.3617	476.26
1 7/8	5.8905	2.7612	6 3/4	21.2058	35.785	15 3/4	49.4801	194.83	24 3/4	77.7544	481.11
1 15/16	6.0868	2.9483	6 7/8	21.5984	37.122	15 7/8	49.8728	197.93	24 7/8	78.1471	485.98
2	6.2832	3.1416	7	21.9911	38.485	16	50.2655	201.06	25	78.5398	490.87
2 1/16	6.4795	3.3410	7 1/8	22.3838	39.871	16 1/8	50.6582	204.22	25 1/8	78.9325	495.79
2 1/8	6.6759	3.5466	7 1/4	22.7765	41.282	16 1/4	51.0509	207.39	25 1/4	79.3252	500.74
2 3/16	6.8722	3.7583	7 3/8	23.1692	42.718	16 3/8	51.4436	210.60	25 3/8	79.7179	505.71
2 1/4	7.0686	3.9761	7 1/2	23.5619	44.179	16 1/2	51.8363	213.82	25 1/2	80.1106	510.71
2 5/16	7.2649	4.2000	7 5/8	23.9546	45.664	16 5/8	52.2290	217.08	25 5/8	80.5033	515.72
2 3/8	7.4613	4.4301	7 3/4	24.3473	47.173	16 3/4	52.6217	220.35	25 3/4	80.9060	520.77
2 7/16	7.6576	4.6664	7 7/8	24.7400	48.707	16 7/8	53.0144	223.65	25 7/8	81.2887	525.84
2 1/2	7.8540	4.9087	8	25.1327	50.265	17	53.4071	226.98	26	81.6814	530.93
2 9/16	8.0503	5.1572	8 1/8	25.5254	51.849	17 1/8	53.7998	230.33	26 1/8	82.0741	536.05
2 5/8	8.2467	5.4119	8 1/4	25.9181	53.456	17 1/4	54.1925	233.71	26 1/4	82.4668	541.19
2 11/16	8.4430	5.6727	8 3/8	26.3108	55.088	17 3/8	54.5852	237.10	26 3/8	82.8595	546.35
2 3/4	8.6394	5.9396	8 1/2	26.7035	56.745	17 1/2	54.9779	240.53	26 1/2	83.2522	551.55
2 13/16	8.8357	6.2126	8 5/8	27.0962	58.426	17 5/8	55.3706	243.98	26 5/8	83.6449	556.76
2 7/8	9.0321	6.4918	8 3/4	27.4889	60.132	17 3/4	55.7633	247.45	26 3/4	84.0376	562.00
2 15/16	9.2284	6.7771	8 7/8	27.8816	61.862	17 7/8	56.1560	250.95	26 7/8	84.4303	567.27
3	9.4248	7.0686	9	28.2743	63.617	18	56.5487	254.47	27	84.8230	572.56
3 1/16	9.6211	7.3662	9 1/8	28.6670	65.397	18 1/8	56.9414	258.02	27 1/8	85.2157	577.87
3 1/8	9.8175	7.6699	9 1/4	29.0597	67.201	18 1/4	57.3341	261.59	27 1/4	85.6084	583.21
3 3/16	10.0138	7.9798	9 3/8	29.4524	69.029	18 3/8	57.7268	265.18	27 3/8	86.0011	588.57
3 1/4	10.2102	8.2958	9 1/2	29.8451	70.882	18 1/2	58.1195	268.80	27 1/2	86.3938	593.96
3 5/16	10.4065	8.6179	9 5/8	30.2378	72.760	18 5/8	58.5122	272.45	27 5/8	86.7865	599.37
3 3/8	10.6029	8.9462	9 3/4	30.6305	74.662	18 3/4	58.9049	276.12	27 3/4	87.1792	604.81
3 7/16	10.7992	9.2806	9 7/8	31.0232	76.589	18 7/8	59.2976	279.81	27 7/8	87.5719	610.27
3 1/2	10.9956	9.6211	10	31.4159	78.540	19	59.6903	283.53	28	87.965	615.75
3 9/16	11.1919	9.9678	10 1/8	31.8086	80.516	19 1/8	60.0830	287.27	28 1/8	88.357	621.26
3 5/8	11.3883	10.321	10 1/4	32.2013	82.516	19 1/4	60.4757	291.04	28 1/4	88.750	626.80
3 11/16	11.5846	10.680	10 3/8	32.5940	84.541	19 3/8	60.8684	294.83	28 3/8	89.143	632.36
3 3/4	11.7810	11.045	10 1/2	32.9867	86.590	19 1/2	61.2611	298.65	28 1/2	89.535	637.94
3 13/16	11.9773	11.416	10 5/8	33.3794	88.664	19 5/8	61.6538	302.49	28 5/8	89.928	643.55
3 7/8	12.1737	11.793	10 3/4	33.7721	90.763	19 3/4	62.0465	306.35	28 3/4	90.321	649.18
3 15/16	12.3700	12.177	10 7/8	34.1648	92.886	19 7/8	62.4392	310.24	28 7/8	90.713	654.84
4	12.5664	12.566	11	34.5575	95.033	20	62.8319	314.16	29	91.106	660.52
4 1/16	12.7627	12.962	11 1/8	34.9502	97.205	20 1/8	63.2246	318.10	29 1/8	91.499	666.23
4 1/8	12.9591	13.364	11 1/4	35.3429	99.402	20 1/4	63.6173	322.06	29 1/4	91.892	671.96
4 3/16	13.1554	13.772	11 3/8	35.7356	101.62	20 3/8	64.0100	326.05	29 3/8	92.284	677.71
4 1/4	13.3518	14.185	11 1/2	36.1283	103.87	20 1/2	64.4026	330.06	29 1/2	92.677	683.49
4 5/16	13.5481	14.607	11 5/8	36.5210	106.14	20 5/8	64.7953	334.10	29 5/8	93.070	689.30
4 3/8	13.7445	15.033	11 3/4	36.9137	108.43	20 3/4	65.1880	338.16	29 3/4	93.462	695.13
4 7/16	13.9408	15.466	11 7/8	37.3064	110.75	20 7/8	65.5807	342.25	29 7/8	93.855	700.98
4 1/2	14.1372	15.904	12	37.6991	113.10	21	65.9734	346.36	30	94.248	706.86
4 9/16	14.3335	16.349	12 1/8	38.0918	115.47	21 1/8	66.3661	350.50	30 1/8	94.640	712.70
4 5/8	14.5299	16.800	12 1/4	38.4845	117.86	21 1/4	66.7588	354.66	30 1/4	95.033	718.69
4 11/16	14.7262	17.257	12 3/8	38.8772	120.28	21 3/8	67.1515	358.84	30 3/8	95.426	724.64
4 3/4	14.9226	17.721	12 1/2	39.2699	122.72	21 1/2	67.5442	363.05	30 1/2	95.819	730.62
4 13/16	15.1189	18.190	12 5/8	39.6626	125.19	21 5/8	67.9369	367.28	30 5/8	96.211	736.62
4 7/8	15.3153	18.665	12 3/4	40.0553	127.68	21 3/4	68.3296	371.54	30 3/4	96.604	742.64
4 15/16	15.5116	19.147	12 7/8	40.4480	130.19	21 7/8	68.7223	375.83	30 7/8	96.997	748.69
5	15.7080	19.635	13	40.8407	132.73	22	69.1150	380.13	31	97.389	754.77
5 1/16	15.9043	20.129	13 1/8	41.2334	135.30	22 1/8	69.5077	384.46	311/8	97.782	760.87
5 1/8	16.1007	20.629	13 1/4	41.6261	137.89	22 1/4	69.9004	388.82	311/4	98.175	766.99
5 3/16	16.2970	21.135	13 3/8	42.0188	140.50	22 3/8	70.2931	393.20	313/8	98.567	773.14
5 1/4	16.4934	21.648	13 1/2	42.4115	143.14	22 1/2	70.6858	397.61	311/2	98.960	779.31
5 5/16	16.6897	22.166	13 5/8	42.8042	145.80	22 5/8	71.0785	402.04	315/8	99.353	785.51
5 3/8	16.8861	22.691	13 3/4	43.1969	148.49	22 3/4	71.4712	406.49	313/4	99.746	791.73
5 7/16	17.0824	23.221	13 7/8	43.5896	151.20	22 7/8	71.8639	410.97	317/8	100.138	797.98

Trigonometric Functions





(See pages that follow for functions)

Formulas for Finding Functions of Angles

$$\frac{\text{Side Opposite}}{\text{Hypotenuse}} = \text{Sine}$$

$$\frac{\text{Side Adjacent}}{\text{Hypotenuse}} = \text{Cosine}$$

$$\frac{\text{Side Opposite}}{\text{Side Adjacent}} = \text{Tangent}$$

$$\frac{\text{Side Adjacent}}{\text{Side Opposite}} = \text{Cotangent}$$

$$\frac{\text{Hypotenuse}}{\text{Side Adjacent}} = \text{Secant}$$

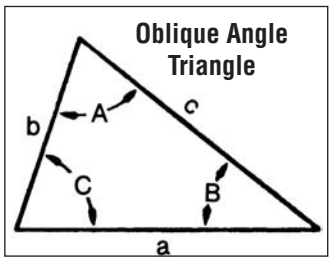
$$\frac{\text{Hypotenuse}}{\text{Side Opposite}} = \text{Cosecant}$$

Formulas for Finding Sides of Right Angle Triangles with an Angle and Side Known

To Find: Length of side opposite =
- Hypotenuse × Sine
- Hypotenuse ÷ Cosecant
- Side Adjacent × Tangent
- Side Adjacent ÷ Cotangent

To Find: Length of side adjacent =
- Hypotenuse × Cosine
- Hypotenuse ÷ Secant
- Side Opposite × Cotangent
- Side Opposite ÷ Tangent

To Find: Length of hypotenuse =
- Side Opposite × Cosecant
- Side Opposite ÷ Sine
- Side Adjacent × Secant
- Side Adjacent ÷ Cosine



To Find Angles and Sides of Right Angle Triangles

To Find Angles		To Find Sides		
To Find:	Formulas	To Find:	Formulas	
C	$\frac{c}{a}$ = sin C	a	$\sqrt{b^2 + c^2}$	—
C	$\frac{b}{a}$ = cos C	a	c × cosec C	$\frac{c}{\sin C}$
C	$\frac{c}{b}$ = tan C	a	c × sec B	$\frac{c}{\cos B}$
C	$\frac{b}{c}$ = cotan C	a	b × cosec B	$\frac{b}{\sin B}$
C	$\frac{a}{b}$ = sec C	a	b × sec C	$\frac{b}{\cos C}$
C	$\frac{a}{c}$ = cosec C	b	$\sqrt{a^2 + c^2}$	—
B	$\frac{b}{a}$ = cos B	b	a × sin B	$\frac{a}{\text{cosec } B}$
B	$\frac{c}{a}$ = cos B	b	c × cos C	$\frac{a}{\sec C}$
B	$\frac{b}{c}$ = tan B	b	c × tan B	$\frac{c}{\text{cotan } B}$
B	$\frac{c}{b}$ = cotan B	b	c × cot C	$\frac{c}{\tan C}$
B	$\frac{a}{c}$ = sec B	c	$\sqrt{a^2 + b^2}$	—
B	$\frac{a}{b}$ = cosec B	c	a × cos B	$\frac{a}{\sec B}$
		c	a × sin C	$\frac{a}{\text{cosec } C}$
		c	b × cot B	$\frac{b}{\tan B}$
		c	b × tan C	$\frac{b}{\text{cotan } C}$

To Find Angles and Sides of Oblique Angle Triangles

To Find	Known	Formulas	To Find	Known	Formulas
C	A, B	180° – (A + B)	A	B, C	180° – (B + C)
b	a, B, A	$\frac{a \times \sin B}{\sin A}$	cos A	a, b, c	$\frac{b^2 + c^2 - a^2}{2bc}$
c	a, A, C	$\frac{a \times \sin C}{\sin A}$	sin C	c, A, a	$\frac{c \times \text{Sin. } A}{a}$
tan A	a, C, b	$\frac{a \times \sin C}{b - (a \times \cos C)}$	cot B	a, C, b	$\frac{a \times \text{cosec } C}{b}$ – cot C
B	A, C	180° – (A + C)	c	b, C, B	b × sin C × cosec B
sin B	b, A, a	$\frac{b \times \text{cin } A}{a}$			

Trigonometric Functions

°	'	Sine	Tangent	Cotangent	Cosine	'	°	°	'	Sine	Tangent	Cotangent	Cosine	'	°
0	0	0.000000	0.000000	INFINITE	1.000000	0	90	11	0	0.190809	0.194380	5.1445540	0.981627	0	79
	10	0.002909	0.002909	343.77371	0.999996	50			10	0.913664	0.197401	5.0658352	0.981068	50	
	20	0.005818	0.005818	171.88540	0.999983	40			20	0.196517	0.200425	4.9894027	0.980500	40	
	30	0.008727	0.008727	114.58865	0.999962	30			30	0.199368	0.203452	4.9151570	0.979925	30	
	40	0.011635	0.011636	85.939791	0.999932	20			40	0.202218	0.206483	4.8430045	0.979341	20	
	50	0.014544	0.014545	68.750087	0.999894	10			50	0.205065	0.209518	4.7728568	0.978748	10	
1	0	0.017452	0.017455	57.289962	0.999848	0	89	12	0	0.207912	0.212557	4.7046301	0.978148	0	78
	10	0.020361	0.020365	49.103881	0.999793	50			10	0.210756	0.215599	4.6382457	0.977539	50	
	20	0.023269	0.023275	42.964077	0.999729	40			20	0.213599	0.218645	4.5736287	0.976921	40	
	30	0.026177	0.026186	38.188459	0.999657	30			30	0.216440	0.221695	4.5107085	0.976296	30	
	40	0.029085	0.029097	34.367771	0.999577	20			40	0.219279	0.224748	4.4494181	0.975662	20	
	50	0.031992	0.032009	31.241577	0.999488	10			50	0.222116	0.227806	4.3896940	0.975020	10	
2	0	0.034899	0.034921	28.636253	0.999391	0	88	13	0	0.224951	0.230868	4.3314759	0.974370	0	77
	10	0.037806	0.037834	26.431600	0.999285	50			10	0.227784	0.233934	4.2747066	0.973712	50	
	20	0.040713	0.040747	24.541758	0.999171	40			20	0.230616	0.237004	4.2193318	0.973045	40	
	30	0.043619	0.043661	22.903766	0.999048	30			30	0.233445	0.240079	4.1652998	0.927370	30	
	40	0.046525	0.046576	21.470401	0.998917	20			40	0.236273	0.243158	4.1125614	0.971687	20	
	50	0.049431	0.049491	20.205553	0.998778	10			50	0.239098	0.246241	4.0610700	0.970995	10	
3	0	0.052336	0.052408	19.081137	0.998630	0	87	14	0	0.241922	0.249328	4.0107809	0.970296	0	76
	10	0.055241	0.055325	18.074977	0.998473	50			10	0.244743	0.252420	3.9616518	0.969588	50	
	20	0.058145	0.058243	17.169337	0.998308	40			20	0.247563	0.255517	3.9136420	0.968872	40	
	30	0.061049	0.061163	16.349855	0.998135	30			30	0.250380	0.258618	3.8667131	0.968148	30	
	40	0.063952	0.064083	15.604784	0.997957	20			40	0.253195	0.261723	3.8208281	0.967415	20	
	50	0.066854	0.067004	14.924417	0.997763	10			50	0.256008	0.264834	3.7759519	0.966675	10	
4	0	0.069756	0.069927	14.300666	0.997564	0	86	15	0	0.258819	0.267949	3.7320508	0.965926	0	75
	10	0.072658	0.072851	13.726738	0.997357	50			10	0.261628	0.271069	3.6890927	0.965169	50	
	20	0.075559	0.075776	13.196888	0.997141	40			20	0.264434	0.274195	3.6470467	0.964404	40	
	30	0.078459	0.078702	12.706205	0.996917	30			30	0.267238	0.277325	3.6058835	0.963630	30	
	40	0.081359	0.081629	12.250505	0.996685	20			40	0.270040	0.280460	3.5655749	0.962849	20	
	50	0.084258	0.084558	11.826167	0.996444	10			50	0.272840	0.283600	3.5260938	0.962059	10	
5	0	0.087156	0.087489	11.430052	0.996195	0	85	16	0	0.275637	0.286745	3.4874144	0.961262	0	74
	10	0.090053	0.090421	11.059431	0.995937	50			10	0.278432	0.289896	3.4495120	0.960456	50	
	20	0.092950	0.093354	10.711913	0.995671	40			20	0.281225	0.293052	3.4123626	0.959642	40	
	30	0.095846	0.096289	10.385397	0.995396	30			30	0.284015	0.296214	3.3759434	0.958820	30	
	40	0.098741	0.099226	10.078031	0.995113	20			40	0.286803	0.299380	3.3402326	0.957990	20	
	50	0.101635	0.102164	9.7881732	0.994822	10			50	0.289589	0.302553	3.3052091	0.957151	10	
6	0	0.104528	0.105104	9.5143645	0.994522	0	84	17	0	0.292372	0.305731	3.2708526	0.956305	0	73
	10	0.107421	0.108046	9.2553035	0.994214	50			10	0.295152	0.308914	3.2371438	0.955450	50	
	20	0.110313	0.110990	9.0098261	0.993897	40			20	0.297930	0.312104	3.2040638	0.954588	40	
	30	0.113203	0.113936	8.7768874	0.993572	30			30	0.300706	0.315299	3.1715948	0.953717	30	
	40	0.116093	0.116883	8.5555468	0.993238	20			40	0.303479	0.318500	3.1397194	0.952838	20	
	50	0.118982	0.119833	8.3449558	0.922896	10			50	0.306249	0.321707	3.1084210	0.951951	10	
7	0	0.121869	0.122785	8.1443464	0.992546	0	83	18	0	0.309017	0.324920	3.0776835	0.951057	0	72
	10	0.124756	0.125738	7.9530224	0.992187	50			10	0.311782	0.328139	3.0474915	0.950154	50	
	20	0.127642	0.128694	7.7703506	0.991820	40			20	0.314545	0.331364	3.0178301	0.949243	40	
	30	0.130526	0.131653	7.5957541	0.991445	30			30	0.317305	0.334595	2.9886850	0.948324	30	
	40	0.133410	0.134613	7.4287064	0.991061	20			40	0.320062	0.337833	2.9600422	0.947397	20	
	50	0.136292	0.137576	7.2687255	0.990669	10			50	0.322816	0.341077	2.9318885	0.946462	10	
8	0	0.139173	0.140541	7.1153697	0.990268	0	82	19	0	0.325568	0.344328	2.9042109	0.945519	0	71
	10	0.142053	0.143508	6.9682335	0.989859	50			10	0.328317	0.347585	2.8769970	0.944568	50	
	20	0.144932	0.146478	6.8269437	0.989442	40			20	0.331063	0.350848	2.8502349	0.943609	40	
	30	0.147809	0.149451	6.6911562	0.959016	30			30	0.333807	0.354119	2.8239129	0.942641	30	
	40	0.150686	0.152426	6.5605538	0.988582	20			40	0.336547	0.357396	2.7980198	0.941666	20	
	50	0.153561	0.155404	6.4348428	0.988139	10			50	0.339285	0.360680	2.7725448	0.940684	10	
9	0	0.156434	0.158384	6.3137515	0.987688	0	81	20	0	0.342020	0.363970	2.7474774	0.939693	0	70
	10	0.159307	0.161368	6.1970279	0.987229	50			10	0.344752	0.367268	2.7228076	0.938694	50	
	20	0.162178	0.164354	6.0844381	0.986762	40			20	0.347481	0.370573	2.6985254	0.937687	40	
	30	0.165048	0.167343	5.9757644	0.986286	30			30	0.350207	0.373885	2.6746215	0.936672	30	
	40	0.167916	0.170334	5.8708042	0.985801	20			40	0.352931	0.377204	2.6510867	0.935650	20	
	50	0.170783	0.173329	5.7693688	0.985309	10			50	0.355651	0.380530	2.6279121	0.934619	10	
10	0	0.173648	0.176327	5.6712818	0.984808	0	80	21	0	0.358368	0.383864	2.6050891	0.933580	0	69
	10	0.176512	0.179328	5.5763786	0.984298	50			10	0.361082	0.387205	2.5826094	0.932534	50	
	20	0.179375	0.182332	5.4845052	0.983781	40			20	0.363793	0.390554	2.5604649	0.931480	40	
	30	0.182236	0.185339	5.3955172	0.983255	30			30	0.366501	0.393911	2.5386479	0.930418	30	
	40	0.185095	0.188359	5.3092793	0.982721	20			40	0.369206	0.397275	2.5171507	0.929348	20	
	50	0.187953	0.191363	5.2256647	0.982178	10	79		50	0.371908	0.400647	2.4959661	0.928270	10	68
°	'	Sine	Tangent	Cotangent	Cosine	'	°	°	'	Sine	Tangent	Cotangent	Cosine	'	°

NOTE: For functions from 45°-0' to 68° read from bottom of table upward.

Trigonometric Tables

Trigonometric Functions

°	'	Sine	Tangent	Cotangent	Cosine	'	°	°	'	Sine	Tangent	Cotangent	Cosine	'	°
22	0	0.374607	0.404026	2.4750869	0.927184	0	68	34	0	0.559193	0.674509	1.4825610	0.829038	0	56
	10	0.377302	0.407414	2.4545061	0.926090	50			10	0.561602	0.678749	1.4732983	0.827407	50	
	20	0.379994	0.410810	2.4342172	0.924980	40			20	0.564007	0.683007	1.4641147	0.825770	40	
	30	0.382683	0.414214	2.4142136	0.923880	30			30	0.566406	0.687281	1.4550090	0.824126	30	
	40	0.385369	0.417626	2.3944889	0.922762	20			40	0.568801	0.691573	1.4459801	0.822475	20	
	50	0.388052	0.421046	2.3750372	0.921638	10			50	0.571191	0.695881	1.4370268	0.820817	10	
23	0	0.390731	0.424475	2.3558524	0.920505	0	67	35	0	0.573576	0.700208	1.4281480	0.819152	0	55
	10	0.393407	0.427912	2.3369287	0.919364	50			10	0.575957	0.704552	1.4193427	0.817480	50	
	20	0.396080	0.431358	2.3182606	0.918216	40			20	0.578332	0.708913	1.4106098	0.815801	40	
	30	0.398749	0.434812	2.2998425	0.917060	30			30	0.580703	0.713293	1.4019483	0.814116	30	
	40	0.401415	0.438276	2.2816693	0.915896	20			40	0.583069	0.717691	1.3933571	0.812423	20	
	50	0.404078	0.441748	2.2637357	0.914725	10			50	0.585429	0.722108	1.3848355	0.810723	10	
24	0	0.406737	0.445229	2.2460368	0.913545	0	66	36	0	0.587785	0.726543	1.3763810	0.809017	0	54
	10	0.409392	0.448719	2.2285676	0.912358	50			10	0.590136	0.730996	1.3679959	0.807304	50	
	20	0.412045	0.452218	2.2113234	0.911164	40			20	0.592482	0.735469	1.3596764	0.805584	40	
	30	0.414693	0.455726	2.1942997	0.909961	30			30	0.594823	0.739961	1.3514224	0.803857	30	
	40	0.417338	0.459244	2.1774920	0.908751	20			40	0.597159	0.744472	1.3432331	0.802123	20	
	50	0.419980	0.462771	2.1608958	0.907533	10			50	0.599489	0.749003	1.3351075	0.800383	10	
25	0	0.422618	0.466308	2.1445069	0.906308	0	65	37	0	0.601815	0.753554	1.3270448	0.798636	0	53
	10	0.425253	0.469854	2.1283213	0.905075	50			10	0.604136	0.758125	1.3190441	0.796882	50	
	20	0.427884	0.473410	2.1123348	0.903834	40			20	0.606451	0.762716	1.3111046	0.795121	40	
	30	0.430511	0.476976	2.0965436	0.902585	30			30	0.608761	0.767327	1.3032254	0.793353	30	
	40	0.433125	0.480551	2.0809438	0.901329	20			40	0.611067	0.771959	1.2954057	0.791579	20	
	50	0.435755	0.484137	2.0655318	0.900065	10			50	0.613367	0.776612	1.2876447	0.789798	10	
26	0	0.438371	0.487733	2.0503038	0.898794	0	64	38	0	0.615661	0.781286	1.2799416	0.788011	0	52
	10	0.440984	0.491339	2.0352565	0.897515	50			10	0.617951	0.785981	1.2722957	0.786217	50	
	20	0.443593	0.494955	2.0203862	0.896229	40			20	0.620235	0.790698	1.2647062	0.784416	40	
	30	0.446197	0.498582	2.0056897	0.894934	30			30	0.622515	0.795436	1.2571723	0.782608	30	
	40	0.448799	0.502219	1.9911637	0.893633	20			40	0.624789	0.800196	1.2496933	0.780794	20	
	50	0.451397	0.505867	1.9768050	0.892323	10			50	0.627057	0.804980	1.2422685	0.778973	10	
27	0	0.453990	0.509525	1.9626105	0.891007	0	63	39	0	0.692320	0.809784	1.2348972	0.777146	0	51
	10	0.456580	0.513195	1.9485772	0.889682	50			10	0.631578	0.814612	1.2275786	0.775312	50	
	20	0.459166	0.516876	1.9347020	0.888350	40			20	0.633831	0.819463	1.2203121	0.773472	40	
	30	0.461749	0.520567	1.9209821	0.887011	30			30	0.636078	0.824336	1.2130970	0.771625	30	
	40	0.464327	0.524270	1.9074147	0.885664	20			40	0.638320	0.829234	1.2059327	0.769771	20	
	50	0.466901	0.527984	1.8939971	0.884309	10			50	0.640557	0.834155	1.1988184	0.767911	10	
28	0	0.469472	0.531709	1.8807265	0.882948	0	62	40	0	0.642788	0.839100	1.1917536	0.766044	0	50
	10	0.472038	0.535547	1.8676003	0.881578	50			10	0.645013	0.844069	1.1847376	0.764171	50	
	20	0.474600	0.539195	1.8546159	0.880201	40			20	0.647233	0.849062	1.1777698	0.762292	40	
	30	0.477149	0.542956	1.8417709	0.878817	30			30	0.649448	0.854081	1.1708496	0.760406	30	
	40	0.479713	0.546728	1.8290628	0.877425	20			40	0.651657	0.859124	1.1639763	0.758514	20	
	50	0.482263	0.550515	1.8164892	0.876026	10			50	0.653861	0.864193	1.1571495	0.756615	10	
29	0	0.484810	0.554309	1.8040478	0.874620	0	61	41	0	0.656059	0.869287	1.1503684	0.754710	0	49
	10	0.487352	0.558118	1.7917362	0.873206	50			10	0.658252	0.874407	1.1436326	0.752798	50	
	20	0.489890	0.561939	1.7795524	0.871784	40			20	0.660439	0.879553	1.1369414	0.750880	40	
	30	0.492424	0.565773	1.7674940	0.870356	30			30	0.662620	0.884725	1.1302944	0.748956	30	
	40	0.494953	0.569619	1.7555590	0.868920	20			40	0.664796	0.889924	1.1236909	0.747025	20	
	50	0.497479	0.573478	1.7437453	0.867476	10			50	0.666966	0.895151	1.1171305	0.745088	10	
30	0	0.500000	0.577350	1.7320508	0.866025	0	60	42	0	0.669131	0.900404	1.1106125	0.743145	0	48
	10	0.502517	0.581235	1.7204736	0.864567	50			10	0.671289	0.905685	1.1041365	0.741195	50	
	20	0.505030	0.585134	1.7090116	0.863102	40			20	0.673443	0.910994	1.0977020	0.739239	40	
	30	0.507538	0.589045	1.6976631	0.861629	30			30	0.675590	0.916331	1.0913085	0.737277	30	
	40	0.510043	0.592970	1.6864261	0.860149	20			40	0.677732	0.921697	1.0849554	0.735309	20	
	50	0.512543	0.596908	1.6752988	0.858662	10			50	0.679868	0.927021	1.0786423	0.733335	10	
31	0	0.515038	0.600861	1.6642795	0.857167	0	59	43	0	0.681998	0.932515	1.0723687	0.731354	0	47
	10	0.517529	0.604827	1.6533663	0.855665	50			10	0.684123	0.937968	1.0661341	0.729367	50	
	20	0.520016	0.608807	1.6425576	0.854156	40			20	0.686242	0.943451	1.0599381	0.727374	40	
	30	0.522499	0.612801	1.6318517	0.852640	30			30	0.688355	0.948965	1.0537801	0.725374	30	
	40	0.524977	0.616809	1.6212469	0.851117	20			40	0.690462	0.954508	1.0476598	0.723369	20	
	50	0.527450	0.620832	1.6107417	0.849586	10			50	0.692563	0.960083	1.0415767	0.721357	10	
32	0	0.529919	0.624869	1.6003345	0.848048	0	58	44	0	0.694658	0.965689	1.0355303	0.719340	0	46
	10	0.532384	0.628921	1.5900238	0.846503	50			10	0.696748	0.971326	1.0295203	0.717316	50	
	20	0.534844	0.632988	1.5798079	0.844951	40			20	0.698832	0.976996	1.0235461	0.715286	40	
	30	0.537300	0.637079	1.5696856	0.843391	30			30	0.700909	0.982697	1.0176074	0.713251	30	
	40	0.539751	0.641167	1.5596552	0.841825	20			40	0.702981	0.988432	1.0117088	0.711209	20	
	50	0.542197	0.645280	1.4597155	0.840251	10			50	0.705047	0.994199	1.0058348	0.709161	10	
33	0	0.544639	0.649408	1.5398650	0.838671	0	57	45	0	0.707107	1.000000	1.0000000	0.707107	0	45
	10	0.547076	0.653551	1.5301025	0.837083	50			—	—	—	—	—	—	
	20	0.549509	0.657710	1.5204261	0.835488	40			—	—	—	—	—	—	
	30	0.551937	0.661886	1.5108352	0.833886	30			—	—	—	—	—	—	
	40	0.554360	0.666077	1.5013282	0.832277	20			—	—	—	—	—	—	
	50	0.556769	0.670285	1.4919039	0.830661	10	56	—	—	—	—	—	—	—	
°	'	Sine	Tangent	Cotangent	Cosine	'	°	°	'	Sine	Tangent	Cotangent	Cosine	'	°

NOTE: For functions from 45°-0' to 68° read from bottom of table upward.

Conversion Tables

Given	Multiply	By
ABAMPERE	10	AMPERE
ACRES	0.4046856	HECTARE
ACRES	43560	SQUARE FEET
ACRES	4046.8564	SQUARE METERS
ACRES	1.562×10^{-3}	SQUARE MILES
ARE	1076.391	SQUARE FEET
ATMOSPHERES	76	CMS. OF MERCURY
ATMOSPHERES	33.89854	FEET OF WATER
ATMOSPHERES	29.92	INCHES OF MERCURY
ATMOSPHERES	14.69595	POUNDS/SQUARE INCH
BAGS - CEMENT	94	POUNDS - CEMENT
BARRELS - OIL	5.614583	CUBIC FOOT
BARRELS - OIL	158.9873	LITER
BARRELS - OIL	42	GALLONS - OIL
BARRELS (US DRY)	3.281219	BUSHELS (US)
BARRELS (US DRY)	4.083333	CUBIC FEET
BARRELS (US DRY)	115.6271	LITER
BARRELS (US LIQ.)	4.2109375	CUBIC FEET
BARRELS (US LIQ.)	0.1192405	CUBIC METERS
BARRELS (US LIQ.)	26.22925	GALLONS (BRIT.)
BARRELS (US LIQ.)	31.5	GALLONS (US)
BARRELS – CEMENT	376	POUNDS – CEMENT
BTU	251.996	CALORIE
BTU	778.169	FOOT – POUNDS – FORCE
BTU	3.9302×10^{-4}	HORSEPOWER – HOURS
BTU	0.252	KILOGRAM – CALORIES
BTU	107.586	KILOGRAM - METERS
BTU	2.9307×10^{-4}	KILOWATT - HOURS
BTU	1055.056	JOULE
BTU/MIN.	12.96	FOOT - POUNDS/SEC.
BTU/MIN.	0.0235809	HORSEPOWER
BTU/MIN.	0.0175843	KILOWATTS
BTU/MIN.	17.5796	WATTS
BUSHELS (BRIT.)	1.032057	BUSHELS (US)
BUSHELS (BRIT.)	8	GALLONS (BRIT.)
BUSHELS (US)	0.3047647	BARRELS (US DRY)
BUSHELS (US)	1.244456	CUBIC FEET
BUSHELS (US)	9.309177	GALLONS (US LIQ.)
CALORIE	4.1868	JOULE
CALORIE	3.96832×10^{-3}	BTU
CALORIE	3.08803	FOOT - POUND - FORCE
CENTARES (CENTIARES)	1	SQUARE METERS
CENTIMETERS	0.3937008	INCHES
CENTIMETERS	0.3937008	INCH
CENTIMETERS	0.01	METERS
CENTIMETERS	10	MILLIMETERS
CENTIMTRS. OF MERCURY	0.01316	ATMOSPHERES
CENTIMTRS. OF MERCURY	0.4461	FEET OF WATER
CENTIMTRS. OF MERCURY	136	KGS./SQUARE METER
CENTIMTRS. OF MERCURY	27.85	POUNDS/SQUARE FT.
CENTIMTRS. OF MERCURY	0.1934	POUNDS/SQUARE INCH
CENTIPOISE	0.001	PASCAL - SECOND
CHAIN (RAMSDEN'S)	100	FEET
CHAIN (GUNTER'S)	66	FEET
CORD	128	CUBIC FEET
CORD	3.624	STERE
COULOMB	1	AMPERE - SECOND
CUBIC CENTIMETER	0.06102	CUBIC INCHES
CUBIC CENTIMETER	0.001	LITER
CUBIC CENTIMETER	1	MILLILETER
CUBIC DECIMETER	0.0353	CUBIC FEET
CUBIC FEET	12	BOARD FEET
CUBIC FEET	0.803564	BUSHELS (US)
CUBIC FEET	1728	CUBIC INCHES
CUBIC FEET	0.0283168	CUBIC METERS
CUBIC FEET	28.317	CUBIC DECIMETERS
CUBIC FEET	0.037037	CUBIC YARD
CUBIC FEET	6.228835	GALLONS (BRIT.)
CUBIC FEET	7.480519	GALLONS (US)
CUBIC FEET	28.316847	LITERS
CUBIC FEET	25.71405	QUARTS (US DRY)
CUBIC FEET/HOUR	7.865791	CUBIC CM./SEC.
CUBIC FEET/HOUR	0.4719474	LITER/MIN.
CUBIC FEET/MIN.	0.1246753	GALLONS (US)/SEC.
CUBIC FEET/POUND	0.0624279	CUBIC METER/KILOGRAM
CUBIC METER	8.64849	BARREL (US DRY)
CUBIC METER	8.386414	BARREL (US LIQ.)
CUBIC METER	35.31467	CUBIC FEET
CUBIC METER	1.307951	CUBIC YARDS
CUBIC METER	264.1721	GALLONS (US)
CUBIC METER	1000	LITER
CUBIC YARDS	27	CUBIC FEET

Given	Multiply	By
CUBIC YARDS	0.7645548	CUBIC METER
CUBIC YARDS	201.974	GALLONS (US)
CUBIC YARDS/MIN.	0.45	CUBIC FEET/SEC.
CUBIC YARDS/MIN.	3.366234	GALLONS (US)/SEC.
CUBIT	18	INCH
CUP	236.588	MILLILITER
CUP (METRIC)	200	MILLILITER
DEGREE	0.017453	RADIAN
DEGREE/SEC.	0.166667	REVOLUTION/MIN.
DENIER	0.11111(1/9)	TEX
DRACHM (BRIT. FLUID)	0.9607599	DRAM (U.S. FLUID)
DRAM (APOTH)	60	GRAINS
DRAM (AVOIR)	27.34375	GRAINS
DRAM (U.S. FLUID)	0.2255859	CUBIC INCHES
ELL	45	INCH
ERG	1×10^{-7}	JOULE
FATHOM	6	FEET
FEET OF WATER	0.0295	ATMOSPHERES
FEET OF WATER	0.8826	INCHES OF MERCURY
FEET OF WATER	304.8	KGS./SQUARE METER
FEET OF WATER	62.43	POUNDS/SQUARE FT.
FEET OF WATER	0.4335	POUNDS/SQUARE INCH
FEET/MIN.	0.508	CENTIMETERS/SEC.
FEET/MIN.	0.01667	FEET/SEC.
FEET/MIN.	0.01829	KILOMETERS/HOUR
FEET/MIN.	0.3048	METERS/MIN
FEET/MIN.	0.01136	MILES/HOUR
FEET/SEC.	30.48	CENTIMETERS/SEC.
FEET/SEC.	1.097	KILOMETERS/HOUR
FEET/SEC.	0.5921	KNOTS
FEET/SEC.	18.29	METERS/MIN.
FEET/SEC.	0.6818	MILES/HOUR
FEET/SEC.	0.01136	MILES/MIN.
FERKIN (US)	9	GALLONS (US) DRY
FOOT	30.48	CENTIMETER
FOOT	12	INCH
FOOT/MINUTE	0.3048	METER
FOOT/MINUTE	0.018288	KILOMETER/HOUR
FOOT/SECOND	0.01136364	MILE/HOUR
FOOT/SECOND	0.3048	METER/SECOND
FOOT - POUNDS - FORCE	0.6818182	MILE/HOUR
FOOT - POUNDS - FORCE	5.050×10^{-7}	HORSEPOWER - HOURS
FOOT - POUNDS - FORCE	1.35582	JOULES
FOOT - POUNDS - FORCE	3.241×10^{-4}	KILOGRAM - CALORIES
FOOT - POUNDS - FORCE	0.1383	KILOGRAM - METERS
FOOT - POUNDS - FORCE	$.766\times10^{-5}$	KILOWATT - HOURS
FOOT - POUNDS - FORCE	1.286×10^{-3}	BTU
FOOT - POUNDS/MIN.	1.286×10^{-3}	BTU/MIN.
FOOT - POUNDS/MIN.	0.01667	FOOT - POUNDS/SEC.
FOOT - POUNDS/MIN.	3.030×10^{-4}	HORSEPOWER
FOOT - POUNDS/MIN.	3.241×10^{-4}	KG. - CALORIES/MIN.
FOOT - POUNDS/MIN.	2.260×10^{-5}	KILOWATTS
FOOT - POUNDS/SEC.	7.717×10-2	BTU/MIN.
FOOT - POUNDS/SEC.	1.818×10^{-3}	HORSEPOWER
FOOT - POUNDS/SEC.	1.945×10-2	KG. - CALORIES/MIN.
FOOT - POUNDS/SEC.	1.355818	WATTS
FURLONG	660	FEET
FURLONG	10	CHAIN
GALLON (BRIT.)	9.632619	CUBIC FT./HOUR
GALLON (BRIT.)	0.2727654	CUBIC METER/HOUR
GALLONS (US)/MIN.	8.020834	CUBIC FEET/HOUR
GALLONS (US)/MIN.	0.2271247	CUBIC METER/HOUR
GALLON (DRY)	268.8025	CUBIC INCH
GALLONS (LIQ.)	3785.412	CUBIC CENTIMETERS
GALLONS (LIQ.)	0.1336805	CUBIC FEET
GALLONS (LIQ.)	231	CUBIC INCHES
GALLONS (LIQ.)	3.785×10^{-3}	CUBIC METERS
GALLONS (LIQ.)	4.951×10^{-3}	CUBIC YARDS
GALLONS (LIQ.)	0.8326742	GALLONS (BRIT.)
GALLONS (LIQ.)	3.785412	LITERS
GALLONS (LIQ.)	8	PINTS (LIQ.)
GALLONS (LIQ.)	4	QUARTS (LIQ.)
GALLONS WATER	8.3453	POUNDS OF WATER
GALLONS WATER/MIN.	6.0086	TONS WATER/24 HOURS
GALLONS - IMPERIAL	1.20095	U.S. GALLONS
GALLONS - U.S.	0.83267	IMPERIAL GALLONS
GALLONS (US)/MIN.	2.228×10^{-3}	CUBIC FEET/SEC.
GALLONS (US)/MIN.	8.020834	CUBIC FEET/HOUR
GALLONS (US)/MIN.	0.06308	Litros/SEC.
GILL	7.21875	CUBIC INCH
GILL	4	OUNCE (U.S.)
GILL (BRIT.)	1.20095	GILL (U.S.)

Conversion Tables

Given	Multiply	By
GRAINS (TROY)	0.0648	GRAMS
GRAINS/U.S. GAL.	17.118	PARTS/MILLION
GRAINS/U.S. GAL.	142.86	POUNDS/MILLION GAL.
GRAINS/U.S. GAL.	14.254	PARTS/MILLION
GRAMS	980.7	DYNES
GRAMS	15.432358	GRAINS
GRAMS	10^{-3}	KILOGRAMS
GRAMS	10^{3}	MILLIGRAMS
GRAMS	0.0352739	OUNCES
GRAMS	0.03215	OUNCES (TROY)
GRAMS	2.205×10^{-3}	POUNDS
GRAMS	0.7716179	SCRUPLE
GRAMS (TROY)	2.0833×10^{-3}	OUNCES (TROY)
GRAMS/CM.	5.600×10^{-3}	POUNDS/INCH
GRAMS/CU. CM.	62.43	POUNDS/CUBIC FOOT
GRAMS/CU. CM.	0.03613	POUNDS/CUBIC INCH
GRAMS/LITER	58.417	GRAINS/GAL.
GRAMS/LITER	8.345	POUNDS/1000 GALS.
GRAMS/LITER	0.062427	POUNDS/CUBIC FOOT
GRAMS/LITER	1000	PARTS/MILLION
GROSS	12	DOZEN
HAND	4	INCH
HECTARE	2.471054	ACRE
HECTARE	107639.1	SQUARE FT.
HOGSHEAD	63	GALLONS
HORSEPOWER	42.4072	BTU/MIN.
HORSEPOWER	33000	FOOT – POUNDS/MIN.
HORSEPOWER	550	FOOT – POUNDS/SEC.
HORSEPOWER	1.014	HORSEPOWER (METRIC)
HORSEPOWER	10.7	KG. – CALORIES/MIN.
HORSEPOWER	0.7457	KILOWATTS
HORSEPOWER	745.7	WATTS
HORSEPOWER (BOILER)	33479	BTU/HOUR
HORSEPOWER (BOILER)	9.8095	KILOWATT
HORSEPOWER – HOURS	2547	BTU
HORSEPOWER – HOURS	1.98×10^{6}	FOOT – POUNDS
HORSEPOWER – HOURS	641.7	KILOGRAM – CALORIES
HORSEPOWER – HOURS	2.737×10^{5}	KILOGRAM – METERS
HORSEPOWER – HOURS	0.7457	KILOWATT – HOURS
INCH	1000	MILS
INCH	25.4	MILLIMETERS
INCHES OF MERCURY	0.03342	ATMOSPHERES
INCHES OF MERCURY	1.133	FEET OF WATER
INCHES OF MERCURY	345.3	KGS./SQUARE METER
INCHES OF MERCURY	70.73	LBS./SQUARE FT.
INCHES OF MERCURY	0.4912	LBS./SQUARE INCH
INCHES OF WATER	0.002458	ATMOSPHERES
INCHES OF WATER	0.07355	INCHES OF MERCURY
INCHES OF WATER	25.4	KGS./SQUARE METER
INCHES OF WATER	0.5781	OUNCES/SQUARE INCH
INCHES OF WATER	5.202	POUNDS/SQUARE FOOT
INCHES OF WATER	0.03613	POUNDS/SQUARE INCH
JOULE	0.000948	BTU
JOULE	0.238846	CALORIE
KILOGRAMS	980665	DYNES
KILOGRAMS	2.2046226	POUNDS
KILOGRAMS	1.102×10^{-3}	TONS (SHORT)
KILOGRAMS	103	GRAMS
KILOGRAMS – CALORIES	3.968	BTU
KILOGRAMS – CALORIES	3086	FOOT – POUNDS
KILOGRAMS – CALORIES	1.558×10^{-3}	HORSEPOWER – HOURS
KILOGRAMS – CALORIES	1.162×10^{-3}	KILOWATT – HOURS
KILOMETERS	105	CENTIMETERS
KILOMETERS	3280.84	FEET
KILOMETERS	103	METERS
KILOMETERS	0.6213712	MILES
KILOMETROS	1094	YARDS
KILOMETERS/HOUR	27.78	CENTIMETERS/SEC.
KILOMETERS/HOUR	54.68	FEET/MIN.
KILOMETERS/HOUR	0.9113	FEET/SEC.
KILOMETERS/HOUR	0.5396	KNOTS
KILOMETERS/HOUR	16.67	METERS/MIN.
KILOMETROS/HOUR	0.6214	MILES/HOUR
KILOWATT – HOURS	3415	BTU
KILOWATT – HOURS	2.655×10^{6}	FOOT – POUNDS
KILOWATT – HOURS	1.341	HORSEPOWER – HOURS
KILOWATT – HOURS	3.6×10^{6}	JOULE
KILOWATT – HOURS	860.5	KILOGRAM – CALORIES
KILOWATT – HOURS	3.671×10^{5}	KILOGRAM – METERS
KILOWATTS	56.869	BTU/MIN.
KILOWATTS	44253.7	FOOT – POUNDS/MIN.
KILOWATTS	737.6	FOOT – POUNDS/SEC.

Given	Multiply	By
KILOWATTS	1.34102	HORSEPOWER
KILOWATTS	14.3308	KG. – CALORIES/MIN.
KILOWATTS	10^{-3}	WATTS
KNOTS	1.150779	MILES (STATUTE)/HOUR
LEAGUE (STATUTE)	3	MILES (STATUTE)
LIGHT YEAR	5.8785×10^{12}	MILES
LINK	0.01	CHAIN
LINK	7.92	INCHES
LITERS	103	CUBIC CENTIMETERS
LITERS	0.03531	CUBIC FEET
LITERS	61.02	CUBIC INCHES
LITERS	10^{-3}	CUBIC METERS
LITERS	1.308×10^{-3}	CUBIC YARDS
LITERS	0.2642	GALLONS
LITERS	2.113	PINTS (LIQ.)
LITERS	0.908	QUARTS (DRY)
LITERS	1.0567	QUARTS (LIQ.)
LITERS/MIN.	5.886×10^{-4}	CUBIC FT./SEC.
LITERS/MIN.	13.19815	GALLON (BRIT.)/HOUR
LITERS/MIN.	4.403×10^{-3}	GALLONS/SEC.
LITERS/SEC.	2.11888	CUBIC FT./MIN.
METERS	100	CENTIMETERS
METERS	3.2808399	FEET
METERS	39.37	INCHES
METERS	10^{-3}	KILOMETROS
METERS	10^{3}	MILLIMETERS
METERS	1.093613	YARDS
METERS/MIN.	1.667	CENTIMETERS/SEC.
METERS/MIN.	3.281	FEET/MIN.
METERS/MIN.	0.05468	FEET/SEC.
METERS/MIN.	0.06	KILOMETROS/HOUR
METERS/MIN.	0.03728	MILES/HOUR
METERS/SEC.	196.8	FEET/MIN.
METERS/SEC.	3.281	FEET/SEC.
METERS/SEC.	3.6	KILOMETER/HOUR
METERS/SEC.	0.06	KILOMETROS/MIN.
METERS/SEC.	2.236936	MILES/HOUR
METERS/SEC.	0.03728	MILES/MIN.
MIL	0.001	INCH
MIL	0.0254	MILLIMETER
MILES	320	ROD
MILES	1.609×10^{5}	CENTIMETERS
MILES	5280	FEET
MILES	1.609	KILOMETROS
MILES	1760	YARDS
MILES/HOUR	44.7	CENTIMETERS/SEC.
MILES/HOUR	88	FEET/MIN.
MILES/HOUR	1.467	FEET/SEC.
MILES/HOUR	1.609	KILOMETROS/HOUR
MILES/HOUR	0.8684	KNOTS
MILES/HOUR	26.82	Metros/MIN.
MILES/HOUR	1.609344	KILOMETROS/HOUR
MILES/HOUR	0.8689762	KNOTS
MILES/MIN.	2682	CENTIMETERS/SEC.
MILES/MIN.	88	FEET/SEC.
MILES/MIN.	1.609	KILOMETROS/MIN.
MILES/MIN.	60	MILES/HOUR
MILLIGRAMS	10^{-3}	GRAMS
MILLIGRAMS/LITER	1	PARTS/MILLION
MILLILITERS	0.0610237	CUBIC INCH
MILLILITERS	0.0338142	FLUID OUNCES
MILLILITERS	10^{-3}	LITERS
MILLIMETERS	0.1	CENTIMETERS
MILLIMETERS	0.03937	INCHES
MILLION GALS./DAY	1.54723	CUBIC FT./SEC.
MINER'S INCHES	1.5	CUBIC FT./MIN.
MINUTES (ANGLE)	2.909×10^{-4}	RADIANS
NEWTON – METER	0.737562	FOOT – POUNDS – FORCE
OUNCES	16	DRAMS
OUNCES	437.5	GRAINS
OUNCES	0.0625	POUNDS
OUNCES	28.349527	GRAMS
OUNCES	0.9115	OUNCES (TROY)
OUNCES	2.790×10^{-5}	TONS (LONG)
OUNCES	2.835×10^{-5}	TONS (METRIC)
OUNCES (FLUID)	1.805	CUBIC INCHES
OUNCES (FLUID)	0.02957	LITERS
OUNCES (FLUID)	30	MILLILITERS
OUNCES (FLUID)	1.040843	OUNCES (BRIT. FLUID)
OUNCES (TROY)	480	GRAINS
OUNCES (TROY)	20	PENNYWEIGHTS (TROY)
OUNCES (TROY)	0.08333	POUNDS (TROY)

Conversion Tables

Given	Multiply	By
OUNCES (TROY)	31.103481	GRAMS
OUNCES (TROY)	1.09714	OUNCES (AVOIR.)
OUNCES/SQUARE INCH	0.0625	POUNDS/SQUARE INCH
PACE	2.5	FEET
PALM	3	INCH
PARTS/MILLION	0.0584	GRAINS/U.S. GAL.
PARTS/MILLION	0.07016	GRAINS/IMP. GAL.
PARTS/MILLION	8.345	POUNDS/MILLION GAL.
PASCAL	0.0208854	POUNDS – FORCE/SQ. FT.
PECK (BRIT.)	2	GALLON (BRIT)
PECKS (US)	8	QUARTS (US DRY)
PENNYWEIGHTS (TROY)	24	GRAINS
PENNYWEIGHTS (TROY)	1.55517	GRAMS
PENNYWEIGHTS (TROY)	0.05	OUNCES (TROY)
PENNYWEIGHTS (TROY)	4.1667×10^{-3}	POUNDS (TROY)
PERCH (MASONRY)	24.75	CUBIC FEET
POINT (U.S.-PRINT)	0.013837	INCH
POLE (BRIT.)	16.5	FEET
POTTLE (BRIT.)	.5	GALLONS
POUNDS	16	OUNCES
POUNDS	256	DRAMS
POUNDS	7000	GRAINS
POUNDS	0.0005	TONS (SHORT)
POUNDS	453.5924	GRAMS
POUNDS	1.21528	POUNDS (TROY)
POUNDS	14.5833	OUNCES (TROY)
POUNDS OF WATER	0.01602	CUBIC FEET
POUNDS OF WATER	27.68	CUBIC INCHES
POUNDS OF WATER	0.1198	GALLONS
POUNDS OF WATER/MIN.	2.670×10^{-4}	CUBIC FT./SEC.
POUNDS (TROY)	5760	GRAINS
POUNDS (TROY)	140	PENNYWEIGHTS (TROY)
POUNDS (TROY)	12	OUNCES (TROY)
POUNDS (TROY)	373.24177	GRAMS
POUNDS (TROY)	0.822857	POUNDS (AVOIR.)
POUNDS (TROY)	13.1657	OUNCES (AVOIR.)
POUNDS (TROY)	3.6735×10^{-4}	TONS (LONG)
POUNDS (TROY)	4.1143×10^{-4}	TONS (SHORT)
POUNDS (TROY)	4.1667×10^{-3}	TONS (METRIC)
POUNDS/CUBIC FOOT	0.01602	GRAMS/CUBIC CM.
POUNDS/CUBIC FOOT	16.02	KGS./CUBIC METERS
POUNDS/CUBIC FOOT	5.787×10^{-4}	POUNDS/CUBIC INCH
POUNDS/CUBIC INCH	27.68	GRAMS/CUBIC CM.
POUNDS/CUBIC INCH	2.768×10^{4}	KGS./CUBIC METER
POUNDS/CUBIC INCH	1728	POUNDS/CUBIC FOOT
POUNDS/FOOT	1.488	KGS./METER
POUNDS/INCH	178.6	GRAMS/CM.
POUNDS/SQUARE FOOT	0.01602	FEET OF WATER
POUNDS/SQUARE FOOT	4.883	KGS./SQUARE METER
POUNDS/SQUARE FOOT	6.945×10^{-3}	POUNDS/SQUARE INCH
POUNDS/SQUARE INCH	0.068046	ATMOSPHERES
POUNDS/SQUARE INCH	2.307	FEET OF WATER
POUNDS/SQUARE INCH	2.03602	INCHES OF MERCURY
POUNDS/SQUARE INCH	703.1	KGS./SQUARE METER
PSI	1	POUND – FORCE/SQ. IN.
PUNCHEON	84	GALLONS
PUNCHEON (BRIT.)	70	GALLON (BRIT.)
QUARTS (DRY)	0.03125	BUSHEL
QUARTS (DRY)	67.200625	CUBIC INCHES
QUARTS (DRY)	1.101	LITERS
QUARTS (LIQ)	57.75	CUBIC INCHES
QUARTS (LIQ)	0.9463	LITER
QUARTS (LIQ)	0.8326742	QUART (BRIT.)
QUARTS (LIQ)	0.859367	QUART (DRY)
QUINTAL, ARGENTINE	101.28	POUNDS
QUINTAL, BRAZIL	129.54	POUNDS
QUINTAL, CASTILE, PERU	101.43	POUNDS
QUINTAL, CHILE	101.41	POUNDS
QUINTAL, METRIC	220.46	POUNDS
QUINTAL, MEXICO	101.47	POUNDS
RADIANS	57.29578	DEGREES
RADIANS	3437.747	MINUTES
RADIANS	0.63662	QUADRANTS
RADIANS/SEC.	57.3	DEGREES/SEC.
RADIANS/SEC.	0.1592	REVOLUTIONS/SEC.
RADIANS/SEC.	9.549297	REVOLUTIONS/MIN.
REAMS	500	SHEETS
REVOLUTIONS	360	DEGREES
REVOLUTIONS	4	QUADRANTS
REVOLUTIONS	6.283	RADIANS
REVOLUTIONS/MIN.	6	DEGREES/SEC.
REVOLUTIONS/MIN.	0.1047	RADIANS/SEC.

Given	Multiply	By
REVOLUTIONS/MIN.	0.01667	REVOLUTIONS/SEC.
REVOLUTIONS/SEC.	360	DEGREES/SEC.
REVOLUTIONS/SEC.	6.283	RADIANS/SEC.
REVOLUTIONS/SEC.	60	REVOLUTIONS/MIN.
RODS	16.5	FEET
ROPE	20	FEET
SCRUPLE	20	GRAINS
SEAM (BRIT.)	64	GALLON (BRIT.)
SLUG	14.5939	KILOGRAMS
SPAN	9	INCHES
SQUARE CM.	10^{-4}	SQUARE METERS
SQUARE CM.	100	SQUARE MILLIMETERS
SQUARE FEET	2.296×10^{-5}	ACRES
SQUARE FEET	929	SQUARE CENTIMETERS
SQUARE FEET	144	SQUARE INCHES
SQUARE FEET	0.0929	SQUARE METERS
SQUARE FEET	3.587×10^{-3}	SQUARE MILES
SQUARE FEET	1/9	SQUARE YARDS
SQUARE INCHES	6.452	SQUARE CENTIMETERS
SQUARE INCHES	6.944×10^{-3}	SQUARE FEET
SQUARE INCHES	645.2	SQUARE MILLIMETERS
SQUARE KILOMETERS	247.1	ACRES
SQUARE KILOMETERS	10.76×10^{6}	SQUARE FEET
SQUARE KILOMETERS	10^{6}	SQUARE METERS
SQUARE KILOMETERS	0.3861	SQUARE MILES
SQUARE KILOMETERS	1.196×10^{6}	SQUARE YARDS
SQUARE METERS	2.471×10^{-4}	ACRES
SQUARE METERS	10.76	SQUARE FEET
SQUARE METERS	3.861×10^{-7}	SQUARE MILES
SQUARE METERS	1.196	SQUARE YARDS
SQUARE MILES	640	ACRES
SQUARE MILES	27.88×10^{6}	SQUARE FEET
SQUARE MILES	2.59	SQUARE KILOMETERS
SQUARE MILES	3.098×10^{6}	SQUARE YARDS
SQUARE MILLIMETERS	0.01	SQUARE CENTIMETERS
SQUARE MILLIMETERS	1.550×10^{-3}	SQUARE INCHES
SQUARE YARDS	2.066×10^{-4}	ACRES
SQUARE YARDS	9	SQUARE FEET
SQUARE YARDS	0.8361	SQUARE METERS
SQUARE YARDS	3.228×10^{-7}	SQUARE MILES
STERE	1	CUBIC METER
STERE	0.2759	CORD
STONE	14	POUNDS
TABLESPOON	14.79	MILLILITERS
TEASPOON	5	MILLILITERS
TEMP.(°C.)+17.78	1.8	TEMP.(°F.)
TEMP.(°F)-32	.555	TEMP.(°C.)
THERM	100,000	BTU
TONS OF WATER/24 HRS.	83.333	POUNDS WATER/HOUR
TONS OF WATER/24 HRS.	0.16643	GALLONS/MIN.
TONS OF WATER/24 HRS.	1.3349	CUBIC FT./HOUR
TONS (LONG)	1016.0469	KILOGRAMS
TONS (LONG)	1.016047	TONS (METRIC)
TONS (LONG)	2240	POUNDS
TONS (LONG)	1.12	TONS (SHORT)
TONS (METRIC)	103	KILOGRAMS
TONS (METRIC)	2205	POUNDS
TONS (SHORT)	2000	POUNDS
TONS (SHORT)	32000	OUNCES
TONS (SHORT)	907.18486	KILOGRAMS
TONS (SHORT)	2430.56	POUNDS (TROY)
TONS (SHORT)	0.89287	TONS (LONG)
TONS (SHORT)	29166	OUNCES (TROY)
TONS (SHORT)	0.90718	TONS (METRIC)
WATT – HOUR	3600	JOULE
WATTS	0.05692	BTU/MIN.
WATTS	44.26	FOOT – POUNDS/MIN.
WATTS	0.7376	FOOT – POUNDS/SEC.
WATTS	1.341×10^{-3}	HORSEPOWER
WATTS	0.01434	KG. – CALORIES/MIN.
WATTS	10-3	KILOWATTS
WATTS – HOURS	3.41214	BTU
WATTS – HOURS	2655	FOOT – POUNDS – FORCE
WATTS – HOURS	1.341×10^{-3}	HORSEPOWER – HOURS
WATTS – HOURS	3600	JOULES
WATTS – HOURS	0.8605	KILOGRAM – CALORIES
WATTS – HOURS	367.1	KILOGRAM – METROS
WATTS – HOURS	10-3	KILOWATT – HOURS
YARDS	91.44	CENTIMETERS
YARDS	36	INCHES
YARDS	0.9144	METROS

Notes

Terms & Conditions of Sale



These Terms and Conditions of Sale, along with Seller's Standard Limited Warranty, the contents of Seller's written acknowledgement, if any, to a purchase order or any other writing submitted by Purchaser to Seller;Seller's written proposal, if any, submitted by Seller to Purchaser; and the contents of any invoice submitted by Seller to Purchaser shall establish the commercial terms of the contract (the"Order") under which Martin Sprocket & Gear, Inc. ("Seller ") agrees to sell parts and equipment ("Products") to the purchaser (the "Purchaser") and Purchaser agrees to purchase Products from Seller.

1. **AGREEMENT:** Notwithstanding any additional, differing, or conflicting terms in a purchase order or any other writing submitted by Purchaser to Seller, the terms of the Order shall constitute the entire agreement between Seller and Purchaser. Writings transmitted from Purchaser to Seller, such as a purchaser order, that contain additional, conflicting, or differing terms from the Order shall not apply or in any way modify or alter the terms and conditions of the Order. Furthermore, writings with terms and/or conditions different from, or in addition to, the terms and conditions appearing in the Order, including any additional or differing terms and conditions contained in any purchase order submitted by the Purchaser, are expressly rejected. Purchaser's submission to Seller of an offer to purchaser Products or Purchaser's acceptance of Seller's offer to sell Products, by whatever means, constitutes Purchaser's agreement that the Order contains the entire agreement between Purchaser and Seller. Purchaser's acceptance of the Order is expressly limited to the terms and conditions of the Order. Purchaser understands and acknowledges that the price Seller quoted for the Products is based upon Purchaser's acceptance of the terms and conditions of the Order and that the price for the Products would be different if other terms and conditions of sale were to apply.

2. **ACCEPTANCE:** If Seller is making an offer to sell Products, Purchaser may accept Seller's offer only on the terms and conditions set forth in the Order. If the Purchaser is making an offer to purchase Products from Seller, Seller's acceptance of Purchaser's offer is expressly conditioned on Purchaser's assent to the terms and conditions of the Order, and any commencement of performance by Purchaser shall be deemed to constitute such assent. Any additional and/or different terms and conditions proposed by Purchaser and/or any attempt by Purchaser to vary any of the terms and conditions of the Order shall be deemed a material alteration and is hereby objected to and rejected. Seller's shipment of any Products in response to a writing that attempts to vary any of the terms and conditions of the Order or Seller's acceptance of any payment by Purchaser shall not be deemed to constitute such as sent to any additional and/or different terms and conditions proposed by Purchaser.

3. **RISK OF LOSS:** Unless a specific term of the Order provides otherwise, all shipments shall be shipped F.O.B. Seller's facility and risk of loss as to such Products shall pass and remain with Purchaser once Products depart Seller's facility.

4. **SPECIFICATIONS:** Seller shall furnish all stock Products as specified in the Order. Made-to-order Products shall be furnished in accordance with the specifications, details, requirements and/or drawings supplied by Purchaser, or prepared by Seller at Purchaser's direction. Any drawings, specifications, and calculations submitted by Seller to Purchaser shall be reviewed and approved by Purchaser. Seller warrants that all Products covered by the Order will conform to the specifications, drawings, samples or other descriptions furnished to Seller or adopted by the Purchaser. If it is determined that the Products delivered under the Order fail to meet the specifications, then Purchaser will contact Seller and Seller shall make corrections in accordance with Seller's Limited Warranty.

5. **LIMITED WARRANTY:** Seller's Standard Limited Warranty is attached hereto and incorporated herein for all purposes.

6. **PRICING, PACKAGING, DELIVERY AND PAYMENT:** All Products shall be sold on the terms, conditions and at the price quoted in the Order. All terms of pricing, packaging, shipment, delivery and payment are included in the Order.

7. **INSPECTION:** Purchaser shall have reasonable time after delivery to inspect the Products covered by the Order. Purchaser shall accept or reject the Products promptly after inspection. Payment by Purchaser prior to its inspection will not constitute acceptance of items covered by the Order.

8. **INDEMNIFICATION:**

   8.1 Seller agrees to indemnify and hold harmless the Purchaser, its successors and assigns against any and all liabilities, loss and expense (including attorney's fees) arising out of a third party product liability claim that results in a judicially determined, final, and non-appealable order finding that the Products were defective provided that no indemnification shall be provided for any loss (or any portion of any loss) determined to have resulted from the acts or omissions of the party seeking indemnification. Seller agrees to carry adequate product liability insurance to support this obligation and agrees to provide certificate(s) of insurance showing such coverage, as requested by Purchaser.

   8.2 Notwithstanding any of the other provisions in this Section 8., Seller's obligation to indemnify the Purchaser is limited to the extent of Seller's product liability insurance and the coverages and exclusions provided for thereunder. In the event Seller's product liability insurance will not cover any of the claims described in Section 8.1., then Seller shall have no obligation to indemnify Purchaser. Seller's obligation to pay any judgment, award, or settlement is likewise limited by the product liability insurance coverage amounts and policy limits provided for under Seller's liability insurance policies. Seller's obligation to indemnify Purchaser shall not apply to any Product which Purchaser (or Purchaser's employees, contractors, customers, or assigns) have altered, tampered with, misused or neglected, or for which Seller's operating instructions and warnings have been ignored or removed or to the extent of the negligence or legal fault of any party other than Seller. Indemnification provided herein is conditioned upon Purchaser providing Seller prompt notice of any claim and allowing Seller, or its insurance company, control over the defense and/or settlement of any such claim.

   8.3 Seller shall defend any suit or proceeding brought against Purchaser to the extent such suit or proceeding is based on a claim that any Product or part thereof (not developed, proposed or specifically mandated by Purchaser), constitutes an infringement of any patent. In the event that the sale or use of such Product, or any part thereof, is enjoined, Seller shall, at its own expense and its option, either: (a) procure for Purchaser, the right to continue using said Product; (b) replace same with a non-infringing Product; or (c) modify same so that it becomes non-infringing.

   8.4 The obligations of Seller with respect to indemnification for third party product liability claims and patent infringement are solely and exclusively as stated herein. **THE INDEMNITY OBLIGATIONS RECITED ABOVE ARE IN LIEU OF ALL OTHER INDEMNITIES WHATSOEVER, WHETHER ORAL, WRITTEN, EXPRESS, OR IMPLIED.**

9. **TERMINATION:**

   9.1 Termination for Convenience: Purchaser, by written notice, shall have the right to terminate the Order, in whole or in part, at any time for its convenience. Upon receipt of written notice, Seller and any subcontractors and suppliers shall immediately cease all work with respect to the Products. Within thirty (30) days of Seller's receipt of any termination notice, Seller shall submit its claim for its costs of performance to the date of termination. The termination charges shall consist of a percentage of the contract price of the Products reflecting the percentage of the work performed prior to the date of termination, plus any additional direct costs reasonably incurred as a result of the termination. Percentage of work performed and other charges must be verifiable by Purchaser. Upon payment of the termination charges, title to all Products for which Seller has been paid shall be vested in Purchaser.

   9.2 Termination for Default: The Purchaser may terminate the whole or any part of the Seller's performance under the Order in any one of the following circumstances: (1) if the Seller fails to make delivery of the Products or to perform within the time specified herein or any extension thereof;(2) if the Seller delivers Products which do not conform to the specifications; or (3) if the Seller fails to perform any of the other provisions of the Order in accordance with its terms or so fails to make progress as to endanger performance hereunder. In the event of any such failure, Purchaser will provide Seller with written notice of the nature of the failure and Purchaser's intention to terminate for default. Such notice shall provide Seller a commercially reasonable opportunity to cure such failure. In the event Seller does not cure such failure within a commercially reasonable time of such notice, Purchaser may provide Seller with a written Notice of Termination for Default. In the event the Purchaser terminates the Order for default, as provided in this clause, the Purchaser's exclusive remedy for such default is to (i) receive a refund of the price actually paid to Seller upon the return of the Products to Seller's facility from which the Products were originally shipped or (ii) accept the Product as delivered with a mutually agreed to adjustment to the price.

10. **CONFIDENTIAL INFORMATION:**

    10.1 In the performance of its obligations under the Order, Seller may have access to trade secrets and other confidential information, including but not limited to, drawings, data, costs, operating procedures, customers and methods of doing business, which may be owned or controlled by Purchaser and its affiliates ("Confidential Information'). If Seller does in fact have access to any of the Purchaser's Confidential Information in connection with the Order, Seller agrees that any such Confidential Information shall at all times remain the exclusive property of Purchaser and shall be used by Seller and its authorized employees, agents or subcontractors solely for the purpose of performing its obligations hereunder. Seller agrees to keep such Confidential Information in confidence and not to copy or permit others to copy the Confidential Information or disclose the same to unauthorized persons for a period of three (3) years, or for any trade secret for the period of time during which such item is considered a trade secret under applicable law.

    10.2 If Seller is required to disclose the Confidential Information pursuant to any legal proceeding, Seller shall notify Purchaser in writing and allow Purchaser to seek appropriate judicial relief.

    10.3 Notwithstanding the foregoing, nothing herein shall limit the Seller's right to disclose any information which: (1) was in or enters the public domain without fault of the Seller; (2) is received by Seller from a third party without restriction or breach of any duty of confidentiality; (3) was known to Seller prior to receipt and such prior knowledge is demonstrated by competent evidence; or (4) is required to be disclosed pursuant to government process, law, order, rule or regulation.

11. **FORCE MAJEURE:** Neither Purchaser nor Seller shall be deemed to have breached the Order as a result of delays in performance where such delays result from acts of God, fires, strikes, pandemic, or occurrences, beyond the control, and without the fault, of the party seeking excuse. Any party seeking excuse under Section 11 shall promptly notify the other party in writing and take all reasonable steps to mitigate the effect of such delay on the other party. The time for performance by Seller shall be extended by a period equal to the length of any such excused delay. If any event of delay as identified in Section 11 is encountered by Seller and continues for more than ninety (90) days, the Purchaser shall have the right, but not the obligation, to terminate the Agreement for its Convenience in accordance with Section 9.1. entitled, "Termination For Convenience."

12. **COMPLIANCE WITH LAWS:** Seller certifies that its operations are in compliance with all applicable laws, executive orders, rules and regulations relating to Equal Employment Opportunity.

13. **INSURANCE:** Seller shall not insure the Product's for Purchaser's account, unless otherwise indicated in the Order.

14. **ASSIGNMENT:** The Order may not be assigned by either party without the written consent of the other party.

15. **GOVERNING LAW:** All disputes relating to the execution, interpretation, construction, performance, or enforcement of the Order and the rights and obligations of the parties shall be governed by the laws of, and resolved in the State or Federal courts in, the State of Texas. Purchaser hereby consents to and waives any objection to venue and jurisdiction in such courts.

16. **CUMULATIVE REMEDIES:** SELLER SHALL IN NO EVENT BE LIABLE TO PURCHASER, ANY PERSON WHO SHALL PURCHASE FROM PURCHASER, OR ANY PERSON THAT USES ANY PRODUCTS SOLO PURSUANT TO THE ORDER FOR DAMAGES OF ANY KIND, INCLUDING, BUT NOT LIMITED TO, DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES OR LOSS OF PRODUCTION OR LOSS OF PROFITS RESULTING FROM ANY CAUSE WHATSOEVER, INCLUDING, BUT NOT LIMITED TO, ANY DELAY, ACT, ERROR, OR OMISSION OF SELLER, OR ANY DEFECT, FAILURE, OR MALFUNCTION OF THE PRODUCTS, AND SELLER'S SOLE LIABILITY SHALL BE TO REPAIR OR REPLACE ANY PRODUCTS COVERED BY THE ORDER F.O.B. SELLER'S FACILITY, WHETHER THE CLAIM FOR SUCH DAMAGES IS BASED UPON WARRANTY, CONTRACT, NEGLIGENCE, OR OTHERWISE.

17. **SEVERABILITY:** The terms and conditions of the Order are subject to all applicable laws and regulations. The unenforceability or invalidity of any provision of any of the writings that collectively constitute the Order shall not affect the validity or enforceability of the remaining provisions thereof,but such remaining provisions shall be construed and interpreted in such a manner as to carry out fully the intent of the parties.

18. **DISPUTE RESOLUTION:** The parties agree to attempt to resolve disputes prior to submitting such disputes to determination by litigation by good-faith negotiations between knowledgeable, responsible representatives of each party who are fully authorized to settle any such dispute.

19. **WAIVER:** Seller's failure to insist on performance of any term, condition, or instruction, or failure to exercise any right or privilege, or its waiver of any breach, shall not thereafter waive any such term, condition, instruction, right, or privilege.



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