



DIRECT CURRENT (DC) MOTORS

FEBRUARY 2023 | NORTH AMERICA



HIGH STRENGTH AND HIGH TORQUE

DC MOTORS

FEATURES AND BENEFITS

- Motors can be used in conjunction with relatively simple solid state control devices to give variable speed and variable torque
- The speed of the motor is not dependent on the number of poles, therefore there is greater versatility for different speeds or variable speed requirements
- A magnetic field is produced by high strength permanent magnets which require no current from the power supply
- The magnets improve motor efficiency and reduce internal heating
- Longer life of batteries used as power supplies in mobile or remote applications
- Can be used with battery power supplies for mobile equipment
- Simple two-wire connection, making it easy to reverse
- Good speed regulation: (1%) of the rated speed
- Power matched controller and motor for torque control
- UL[®] recognition component listing and CSA[®] certification ensures the product is safe for use



Designed for heavy-duty service, our industrial strength DC motors are designed for reliability and long life in the toughest applications.



DC MOTOR OFFERING



NEMA® LOW VOLTAGE MOTOR

- 1/4 HP–2.0 HP
- 12, 24, 36, & 48 VDC
- 42C–56C Frame



NEMA SCR RATED MOTOR

- 1/4 HP–3 HP
- 90 & 180 VDC
- 42C–145TC Frame



SUBFRACTIONAL MOTOR

- 1/25 HP–1/4 HP
- 12 & 24 VDC
- 25–34 Frame (with 56C mounting)



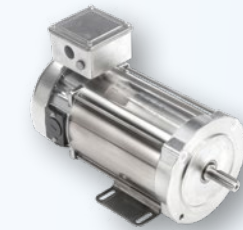
WASHGUARD® MOTOR

- 1/4 HP–1.5 HP
- 12 & 24 VDC
- Washguard Duty IP55
- 42C–56C Frame



EXPLOSION PROOF MOTOR

- 1/3 HP–3/4 HP
- 12 & 24 VDC
- 56C Frame



STAINLESS STEEL WASHGUARD® MOTOR

- 1/4 HP–1 HP, 90 & 180 VDC
- 56C NEMA and 80 IEC
- IP55



SUBFRACTIONAL WASHGUARD® MOTOR

- 1/8 HP–1/4 HP
- 90 VDC and 12 VDC
- 31–32 Frame (with 42C mounting)



METRIC IEC SUBFRACTIONAL MOTOR

- 1/12 HP–1/3 HP (0.06kW–0.25kW)
- 24 VDC and 180 VDC
- 56–63 IEC Frame
- B5 and B14 IEC Flange
- IP54



METRIC IEC MOTOR

- 1/3 HP–3 HP (0.25kW–2.2kW)
- 24 VDC and 180 VDC
- 71–112 IEC Frame
- B3 Rigid base kit available
- B5 and B14 IEC Flange kits available
- IP54

PERMANENT MAGNET, LOW VOLTAGE



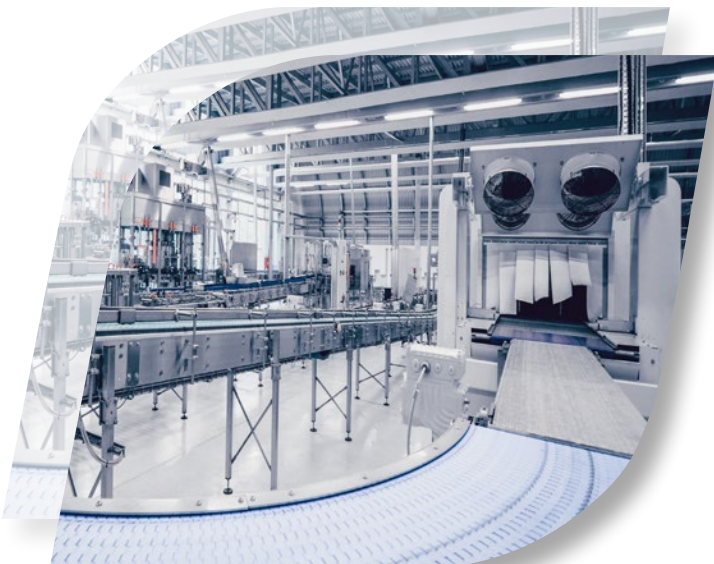
LOW VOLTAGE DC MOTORS

- Suitable for applications having battery, solar power, or generator-supplied low voltage DC
- Compatible with PWM or SCR-type controllers
- Applications range from portable pumps to electric carts
- High torque, continuous and intermittent duty designs
- Brush holder design provides easy access for motor maintenance
- Permanent magnet design ensures higher motor efficiency

SCR RATED DC MOTORS

Designed to withstand the additional heating produced by the pulsating direct current power output of unfiltered or filtered SCR adjustable speed controls.

- Brush holder design provides easy access to brushes
- Removable bolt-on base
- Can be used with pulse width modulated (PWM) type DC drives
- Rated for higher output when used with PWM type DC drives
- Permanently lubricated sealed bearings
- Permanent magnet design ensures higher motor efficiency



HIGH STRENGTH AND GREATER FLEXIBILITY



SUBFRACTIONAL DC MOTORS

- Compact and space-saving design
- Double-shielded ball bearings provide longer service life
- External access to brushes supports easy replacement for prolonged motor life
- Reversible rotation allows greater flexibility within the application
- High starting torque on start-up, to achieve a higher starting load required in sub-fractional applications

METRIC IEC DC MOTORS

- Easy brush access for field service
- High-strength rolled steel frame
- Double-shielded ball bearings provide longer service life
- Permanently lubricated sealed ball bearings
- Oversized brushes extend motor life
- Reversible rotation allows greater flexibility within the application



WASHGUARD® DC MOTORS



THE ANSWER TO YOUR TOUGH WASHDOWN APPLICATIONS

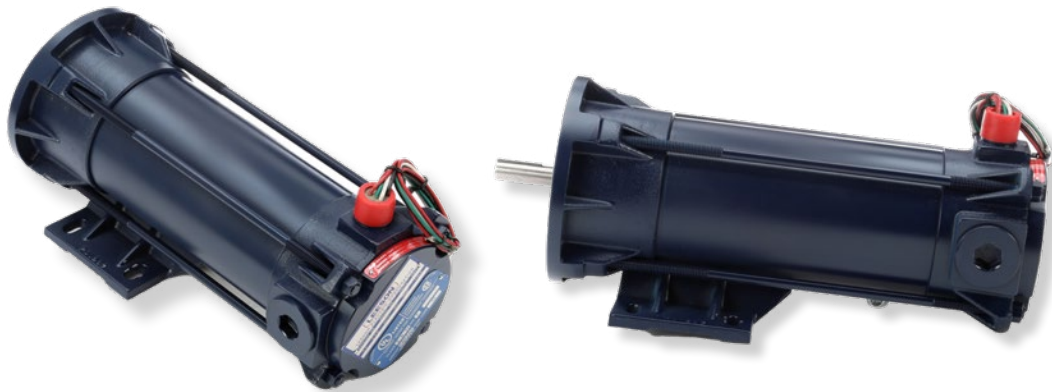
Whether you need a motor that withstands an occasional splash or a continuous washdown, LEESON® DC Washguard® motors offer the solution. A complete line of options to meet rigorous industry standards, including our IP55 certified washdown motors. Where tough applications require reliable performance, we have options available for you.



Whether you need a motor that handles an occasional splash, or a solution that handles water jet washdown, our broad range of LEESON DC Washguard motors can take it.



HIGHLY EFFICIENT AND DEPENDABLE



EXPLOSION PROOF DC MOTORS

- Approved for applications in hazardous environments
- Rugged mechanical construction
- Thermostats rated for continuous duty with full wave SCR controls, pilot duty connected to SCR control
- Double shielded, pre-lubricated ball bearings
- Easy brush access for field service



DC MOTOR CONTROLS

- Provide smooth variable speed capability for mobile equipment
- Inhibit terminal permits optional start-stop without breaking battery lines
- Increase range OR running time of battery-operated equipment through high efficiency
- Automatic current limit foldback decreases current limit to 50% of setpoint when heatsink temperatures reach 80° C, providing protection from overheating



**Commercial Systems
Regal Rexnord***

US Customer Service: 262-377-8810

Canada Customer Service: 905-670-4770

regalrexnord.com

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offering

