



Washguard
Industrial-Duty
Electric Motors



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The motor line that stands up
to washdown.

Nothing sheds water like a duck.

LEESON Washguard Industrial-Duty Motors.

LEESON Washguard motors deliver something most motors can't—the confidence to know your applications will be up and running no matter what you throw at them. Whether you need a motor that handles an occasional splash, or a solution that handles continuous washdown 24/7, LEESON's broad range of Washguard industrial-duty motors can take it.

Choose a solution that's USDA approved, FDA approved, BISSC Certified, or a motor with IP55 enclosure protection—to name just a few. If you're looking for answers to tough application issues, LEESON is ready when you bring it on.





Suited for an occasional washdown, White Duck is the LEESON Washguard Series that started it all. Choose AC and DC ratings, 1/3–15HP.

RATINGS:

IP55 enclosure protection
USDA-approved white epoxy finish

The White Duck series is geared for applications exposed to an occasional washdown. Coated in a high-gloss, high-durability, FDA-approved white epoxy finish, White Duck Washguard Motors find a perfect fit in conveying, bottling, food packaging, pumping and fan applications—wherever batch or process requirements demand reliable performance.

BENEFITS:

- Durable white epoxy finish for superior protection
- Stainless steel shaft, hardware, conduit box, cover and nameplate
- Buna-N gaskets and Viton® shaft seals on both ends of TEFC designs
- Drains for all mounting orientations enable flexible installation
- NEMA Premium—140 Frame and higher
- Moisture-resistant interior coating inhibits corrosion
- Inverter-rated IRIS™ insulation system—1HP and higher
- Single-phase motors feature an electronic solid-state switch for worry-free starting in high-vibration installations



Jet Pump & JM Pump

- 3/4–3HP designs
- 1–15HP JM Pump designs
- C-Face, with and without base
- EPACT efficient



Brakemotor Designs

- 1/2–2HP designs
- 208–230/460 three-phase
- Stearns® brakes
- Optional washdown brake kits



NEMA Three-Phase Designs

- 1/4–15HP designs
- 230/460 and 575 Volts
- Rigid base and C-Face designs
- EPACT and Premium efficient
- Inverter rated



DC Gearmotor Designs

- P300, PE350 and Right-angle Series
- 90 and 12 volt designs
- Stainless steel exterior hardware
- Precision-machined gears



NEMA Single-Phase Designs

- 1/3–2HP designs
- C-Face, with and without base
- Solid-state starting switch



AC Gearmotors

- P240 and Right-angle Series
- 115/230 single-phase designs
- 230 three-phase designs
- 304 Series stainless output shafts
- Needle bearings for high-output torque



NEMA DC Designs

- 1–1.5HP designs
- 90 and 180 volts
- Removable base
- IEC B5 flange ratings available
- 1/8–1/4HP 12V designs



The Super Duck Series is an ideal solution for conveying applications in bakeries and food-processing plants with its paint-free finish. AC ratings from 1/2–2HP.

RATINGS:

IP55 enclosure protection

BISSC certified for the baking industry, authorization no. 769

Tested and approved to handle 2,500 hours of diluted salt spray, the Super Duck Washguard II Series—with its paint-free design—is well suited for the demanding environments of bakeries and food processing facilities, as well as conveying.

BENEFITS:

- Paint-free exterior
- Moisture-resistant interior coating inhibits corrosion
- IRIS™ insulation system—1HP and higher
- Stainless steel shaft, hardware, conduit box, cover, nameplate and fan guard
- Specially-processed endshields and conduit box housing
- Buna-N gaskets and Viton® shaft seals
- Drains for all mounting orientations enable flexible installation



Three-phase Designs

- Three-phase C-Face motors with base, 1/2–2HP
- Three-phase C-Face motors less base, 1/2–2HP
- TENV designs
- Inverter rated



When a paint-free motor is needed for ultra-clean operations in the food processing, bottling and pharmaceutical industries, count on LEESON SST Duck motors to meet the need—at a price that defines value.

BENEFITS:

- All stainless steel exterior
- Moisture-resistant interior coating inhibits corrosion
- IRIS™ insulation system—1HP and higher
- Full-fact nameplate is laser etched in the motor frame
- Buna-N gaskets and Viton® shaft seals on both ends
- Drains for all mounting orientations enable flexible installation



Single-phase Designs

- 1/2–2 HP single-phase C-Face with base
- 1/2–2 HP single-phase C-Face less base
- High starting torque



Three-phase Designs

- 1/3–3HP three-phase C-Face with base
- 1/3–3HP three-phase C-Face less base
- Inverter rated
- 10:1 constant torque

The SST Duck Series is our value line of stainless steel motors that is appropriate for use in food processing, pharmaceutical, conveying and bottling applications. 1/3–3HP single- and three-phase designs.

RATINGS:

IP55 enclosure protection

Inverter rated
10:1 constant torque





Premium Stainless Duck



Our Premium Stainless Duck motor line meets IEEE-841 severe duty requirements and passes IP56 test requirements. These motors are proven performers in frequent washdown applications. AC and DC ratings available.

RATINGS:

IP56 enclosure protection
300 series stainless steel
3-year warranty—Premium efficiency

Look to the Premium Stainless Duck Series for proven durability in frequent washdown applications that you may find in food processing, pharmaceutical, dairy, chemical-processing and beverage and bottling industries.

BENEFITS:

- All exterior components are 300-series stainless steel
- Full-fact nameplate is laser etched in the motor frame
- Endshields are O-ring sealed to motor frame
- Double lipped Viton® shaft seals
- Interior components are coated to protect against corrosion
- Hydrophobic breather plugs are used on AC designs
- Inverter-rated IRIS™ insulation system—AC designs
- IP56 enclosure protection
- 3-year warranty—Premium efficient models



General Purpose Premium Stainless

- Three-Phase, C-Face with base, 1/2–10HP
- Three-Phase, C-Face less base, 1/2–5HP
- Single-Phase, C-Face with base, 1/3–2HP
- Single-Phase, C-Face less base, 1/3–2HP



IEC Stainless

- B5 Flange: Round Body, 0.25KW (1/3HP)–1.5KW (2HP) 71 Frame, 80 Frame and 90 Frame
- B5 Flange: Rigid Base, 0.25KW (1/3HP)–0.55KW (3/4HP), 80 Frame
- B14 Flange: Round Body, 0.25KW (1/3HP)–0.55KW (3/4HP), 71 Frame and 80 Frame
- B14 Flange: Round Body, 0.25KW (1/3HP)–0.55KW (3/4HP), 80 Frame



Stainless Brake Motor

- Three-Phase, TENV, C-Face with base, 1/2–2 HP
- Stearns® stainless steel brakes, 3- and 6-ft lb. rated



Stainless JP Pump Motors

- Three-phase, TEFC, 1–10HP
- 1800 and 3600 RPMs
- EPACT efficient



ExtremeDuck



Our Extreme Duck stainless steel motors take washdown motor solutions to a whole new level. The encapsulated design of these motors was built using “voice of the customer” criteria to withstand severe washdown and sanitation requirements.

RATINGS:

IP56 enclosure protection
Maximum interior encapsulation
Minimal exterior hardware
3-year warranty

Our Hydro Sealed System HS² protects from the “outside-in” by reducing entrance points of contaminants. The innovative design eliminates the needs for drain plugs or breathers. This design also minimizes exterior hardware and reduces surfaces that may trap application elements. Put Extreme Duck motors to work in food processing and pharmaceutical applications, as well as sewage treatment plants, beverage and bottling industries.

BENEFITS:

- Maximum interior encapsulation eliminates contamination of windings
- Rotor/Cartridge, “Q-CAR”™ design for quick access to motor interior
- Protech bearing isolator used for output shaft seal
- Full-fact nameplate is laser etched in the motor frame
- O-ring sealed, screw-on conduit box covers
- IP56 enclosure protection
- 3-year warranty



Three-phase Designs

- 1/3–3HP three-phase C-Face with base
- 1/3–3HP three-phase C-Face less base
- Inverter rated
- 10:1 constant torque










There's a LEESON Washguard Motor for every location in your facility.

LEESON offers more than 200 off-the-shelf solutions to everyday washdown motor needs. What's more, LEESON offers washdown-rated gear reducers and AC and DC controls to compliment our washdown motor line. And, when you need a specially engineered custom solution to your washdown application, think LEESON. Our flexible manufacturing processes enable custom products to be manufactured in small or large quantities.

Washdown Motor Features Comparison

					
Feature	White Duck	Super Duck	SST Duck	Stainless Duck	Extreme Duck
Sealed Bearings	■	■	■	■	■
Potted Lead Entrance					■
Complete Motor Encapsulation					■
Nameplate Etched in Frame	■	■	■	■	■
Interior Corrosion Protected	■	■	■	■	
Motor Breathe Plugs/Drain Plugs	■	■	■	■	Not Needed for total encapsulation
Internally Locked Shaft-End Bearing	■	■	■	■	■
Shaft Seals on Both Ends of TEFC Motors	■	■	■	■	■
Viton® Seals Between Endbells and Frame				■	■
UL, CSA Listed	■	■	■	■	■
60Hz and 50Hz Data on Nameplate	■	■	■	■	■
CE Mark on Nameplate	■	■	■	■	■
O-Ring Sealed Openings				■	■
Standard Motors Include Inverter-Rated Insulation System and Marked on Nameplate—1HP and Higher	■	■	■	■	■
Local Inventory Support	■	■	■	■	
Rotor Cartridge Change-Out				■①	■
BISSC Approved		■			■
3-Year Warranty	■②	■②	■②	■②	■
Screw On Conduit Box Cover				■①	■
Pump Motor Designs	■			■	
Breakmotor Designs	■			■	
DC Motors Available	■			■	
Metric Designs Available				■	

① 56/143/145T Frame Ratings ② Premium Efficient Motors

Chemical Resistance Comparison

Chemical Name	% Concentration	Exposure	White Epoxy	Stainless Steel
Fresh Water	100	Continuous	Excellent	Excellent
Salt Water	5	Continuous	Excellent	Excellent
Salt Brine	Dilute	Continuous	Fair	Good
Ammonium Hydroxide	Dilute	Continuous	Good	Excellent
Calcium Hydroxide (Lime)	100	Intermittent	Good	Excellent
Citric Acid	10	Continuous	Good	Excellent
Ethylene Glycol	100	Continuous	Excellent	Excellent
Hydrochloric Acid	37	Intermittent	Good	Poor
Lactic Acid	Dilute	Intermittent	Excellent	Excellent
Lactic Acid	100	Intermittent	Fair	Fair
Mineral Spirits	100	Continuous	Excellent	Excellent
Potassium Hydroxide	50	Intermittent	Fair	Fair
Sodium Hydroxide	5	Continuous	Fair	Excellent
Sodium Hydroxide	20	Continuous	Fair	Excellent
Sodium Hydroxide	50	Continuous	Excellent	Excellent
Sodium Hypochlorite (Bleach)	15	Intermittent	Excellent	Excellent
Sulfuric Acid	10	Intermittent	Fair	Fair
Toluene	100	Continuous	Fair	Fair
Animal Fats	NA	Continuous	Excellent	Excellent
Mineral Oils	NA	Continuous	Excellent	Excellent
Vegetable Oils	NA	Continuous	Excellent	Excellent
Cutting Oils	NA	Continuous	Excellent	Excellent
Detergents	NA	Continuous	Excellent	Excellent
Gasoline	NA	Continuous	Fair	Fair
Hydraulic Fluid	NA	Continuous	Excellent	Excellent
Lubricating Oils	NA	Continuous	Excellent	Excellent
General Weathering	NA	Continuous	Fair	Excellent
Mold/Mildew	NA	Continuous	Excellent	Excellent
Light Abrasion	NA	Continuous	Excellent	Excellent
Heavy Abrasion	NA	Continuous	Fair	Excellent