



Super Duck



LEESON Severe Duty, stainless frame, WASHGUARD® II motors are designed for superior extended service in severe environments. Typical applications include food processing areas requiring frequent sanitation procedures using high pressure cleaning with concentrated caustic solutions, areas of high humidity and in chemical environments.

Mechanical Protection Features
These motors have an *entirely paint free exterior* with 300 series stainless steel motor body, conduit box lid, shaft extension, hardware, fasteners and an etched motor data plate.

To enhance chemical and corrosion resistance, all surfaces of the endbells and conduit box are processed using a U.S.

Department of Agriculture approved technique. This proprietary process has been tested and qualified for more than 2,500 hours of salt spray endurance for external surfaces, and

1,000 hours for internal surfaces. This process has proven successful in food washdown applications and has shown excellent corrosion resistance.

Shaft seals, slingers and one-way stainless steel drains retard entrance of contaminants and water into the motor. Multiple, repositional drains provided for all angle mounting, release any water that does enter the motor from hose downs or condensation. Chemically resistant, tough nitrile gaskets and a threaded entrance for power connection also restrict entrance to the motor's interior. Nylon gaskets are used to seal bolt heads.

Bearings used are double sealed and prelubricated with moisture resistant Exxon POLYREX® EM high temperature lubricant.

Electrical Performance and Protection Features

Efficiencies meet EPACT mandates for *covered* motors when tested without shaft seals. High temperature, moisture resistant IRIS insulation system assures long life on inverter service. Windings are immersed and cured in polyester insulating compound.

Standards and Approvals

UL component recognized, file number E57948, guide number PRGY2. Energy efficiency ratings are verified by an independent testing laboratory.

CSA Energy Efficiency Verification Program, report number EEV 78720-1.

Construction is CSA Certified for safety report number LR33543.

WASHGUARD® II motors are certified to the Baking Industry Sanitation Standard #29 and listed under BISSC authorization number 769.

STAINLESS FRAME • TENV > • C FACE LESS BASE

HP	RPM 60 Hz	NEMA Frame	Catalog Number	App. Wgt. (lbs.)	Voltage	FL Amps 230V	% FL Eff.	"C" Dim. (Inches)
1/2	1725	56C	114394	30	208-230/460	1.6	78.5	11.06
3/4	1725	56C	114395	34	208-230/460	2.3	80.0	11.56
1	1725	56C	114437	44	208-230/460	3.0	81.5	12.06
	1725	143TC	121109	40	208-230/460	3.0	81.5	12.13
1 1/2	1725	56C	114581 >	45	208-230/460	4.4	84.0	12.69
	1725	145TC	121350 >	40	208-230/460	4.4	84.0	12.75
2	1725	56C	114582 >	51	208-230/460	6.0	84.0	14.19
	1725	145TC	121351 >	51	208-230/460	6.0	84.0	14.25

> All ratings TENV except 1 1/2 & 2 HP, which is TEFC with stainless steel fan cover and chemically inert fan.

CHEMICAL RESISTANCE RATING CHART

CHEMICAL	CONCENTRATION	COMPONENT-RESISTANCE	
		STAINLESS STEEL PARTS	ENDBELLS & CONDUIT BOX
WATER:			
De-Ionized Boiling	100%	Excellent	Excellent
Salt (Immersed)	30%	Excellent	Excellent
Salt (Spray)	5%	Excellent	Excellent
Tap - 250°F/120°C @ 10,000 PSI	100%	Excellent	Excellent
ACIDS:			
Hydrochloric	35%	Poor	Very Good
Sulfuric	25%	Poor	Excellent
Nitric	35%	Excellent	Good
Picric	Saturated Solution	Excellent	Very Good
BASE:			
Caustic	100%	Excellent	Excellent
Caustic	12.5 pH	Excellent	Excellent
Caustic - 125°F/50°C	9.5 pH	Excellent	Excellent
SOLVENTS:	--	Excellent	Excellent



Motors and Drives



WASHGUARD® ALL-STAINLESS MOTORS

ALL-STAINLESS • THREE PHASE



OHIO GEAR™

PREMIUM STAINLESS STEEL DUCK



For maximum service in the most critically clean or corrosive environments, nothing beats LEESON's new WASHGUARD® All-Stainless Motors.

Specifically designed to meet the demanding sanitation requirements of the pharmaceutical and food processing industries, these motors are also ideal in severe chemical-processing applications involving nitric acid and caustic lye. In fact, WASHGUARD® All-Stainless Motors include IEEE 841 severe-duty features right out of the box!

Mechanical Protection Features:

Exterior components are entirely of 300 series stainless steel, including frame, base, endshields, conduit box, box cover and hardware. Plus, the full-face etched stainless steel nameplate is blind riveted to the conduit box eliminating rivet holes in the frame as a source of entry for moisture. Nothing on the motor's exterior is painted or coated in any way.

Endshields are o-ring sealed to the frame. Double-lip shaft seals, o-rings, and gaskets are made from chemically resistant Viton® material. Hydrophobic breathers in the opposite shaft endbell and conduit box equalize pressure without allowing moisture to enter the motor. Double-sealed bearings are pre-lubricated with moisture-resistant high-temperature grease.



Electrical Performance and Protection Features

WASHGUARD® efficiencies meet EPACT mandates for non-exempt motors when tested without shaft seals. For extra moisture resistance, windings are immersed and cured in polyester insulating compound. And LEESON's exclusive IRIS™ Inverter-Rated Insulation System provided extra protection and long life, especially in inverter-fed applications.

Standards and Approvals



UL component recognized, file number E57948, guide number PRGY2. Energy efficiency ratings are verified by an independent testing laboratory.

CSA Energy Efficiency Verification Program, report number EEV 78720-1.

Construction is CSA Certified for safety report number LR33543 and listed under BISSC authorization number 769.

ALL-STAINLESS • TENV/TEFC • C FACE LESS BASE

HP	RPM 60 Hz	NEMA Frame	Catalog Number	App. Wgt. (lbs.)	Voltage	F.L. Amps 230V	% F.L. Eff.	"C" Dim. (Inches)
1/2	1750	56C	116166●	22	208-230/460	1.6	78.5	11.21
3/4	1750	56C	116168●	37	208-230/460	2.3	80.0	11.71
1	1750	56C	116170●	38	208-230/460	3.0	81.5	12.21
	1750	143TC	121523●	39	208-230/460	3.0	81.5	12.28
1½	1750	145TC	121525	46	208-230/460	4.4	84.0	13.69
2	1750	145TC	121527	47	208-230/460	6.0	87.5	14.19
3	1750	182TC	131923	67	208-230/460	8.2	87.5	14.87
5	1750	184TC	131924	79	208-230/460	13.0	87.5	15.37

●These motors are totally enclosed, non-ventilated — Others are fan cooled.

CHEMICAL RESISTANCE RATING CHART

CHEMICAL	CONCENTRATION	ALL STAINLESS COMPONENTS
WATER:		
De-Ionized Boiling	100%	Excellent
Salt (Immersed)	30%	Excellent
Salt (Spray)	5%	Excellent
Tap - 250°F/120°C @ 10,000 PSI	100%	Excellent
ACIDS:		
Hydrochloric	35%	Poor
Sulfuric	25%	Poor
Nitric	35%	Excellent
Picric	Saturated Solution	Excellent
BASE:		
Caustic	100%	Excellent
Caustic	12.5 pH	Excellent
Caustic - 125°F/50°C	9.5 pH	Excellent
SOLVENTS:	--	Excellent