



**DC MOTORS**

**NEMA & METRIC (IEC) FRAME • SCR RATED**

# PREMIUM STAINLESS STEEL DUCK



DC Motors

### General Specifications:

Designed specifically to meet the demanding sanitation requirements of the pharmaceutical, food processing, and beverage industries. These motors are also ideal in clean room and severe chemical-processing applications involving frequent washdown with 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:

- All exterior components are 300-series stainless steel
- Nothing on the exterior of the motor is painted or coated in any way
- All sealing components are Viton® for superior chemical resistance.
- Full fact nameplate is laser etched on the motor frame – no separately attached nameplate to trap dirt or contaminants
- Endshields are O-ring sealed to the frame
- Double lip shaft seals on both ends of TEFC motors (shaft end only on TENV motors)
- Removable hydrophobic breathers in opposite shaft endbell and conduit box equalize pressure without allowing moisture to enter
- Exterior fastener use minimized reducing the number of entry points for moisture. There are no holes in the frame for attaching a nameplate. Bearing lock screws are located inside the motor and the conduit box mounted screws have been eliminated.
- Double-sealed bearings are pre-lubricated with moisture-resistant high-temperature grease for long life.
- Interior coatings applied to armature and frame/magnet assemble protect against corrosion
- Brush tubes are sealed with Viton® O-rings to keep moisture out
- New conduit box mounting system provides optimum sealing
- Easy to clean construction is BISSC Certified for bakery applications.

### Electrical Performance and Protection Features:

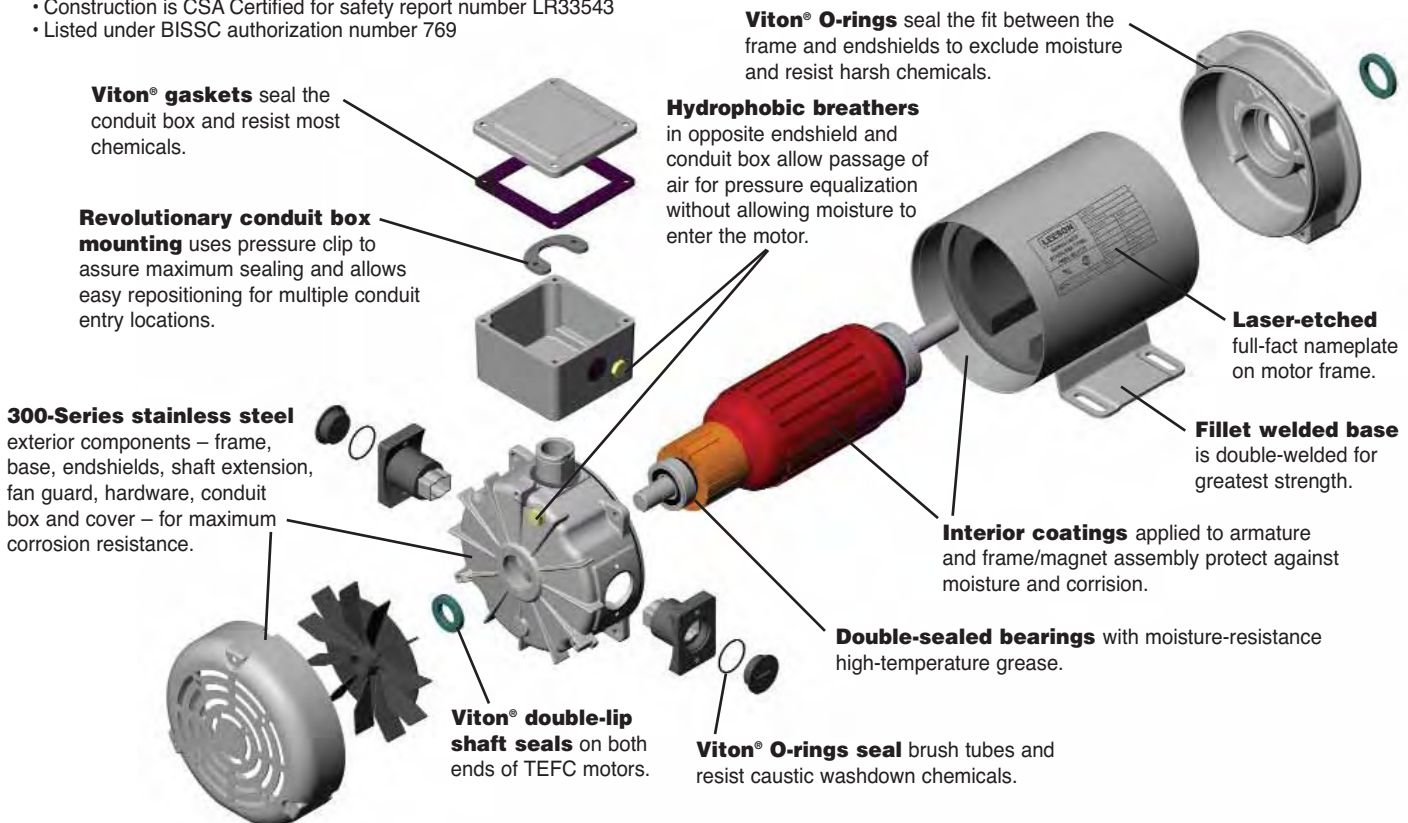
- Linear speed/torque characteristics over entire speed range.
- Armature windings are immersed and cured in a polyester insulating varnish for extra moisture-resistance
- High starting torque for hard to start loads.
- Use with LEESON SPEEDMASTER DC motor controllers for optimum performance.

### Standards and Approvals:

- DC motors are UL component recognized - file number E57948, guide number PRGY2
- Construction is CSA Certified for safety report number LR33543
- Listed under BISSC authorization number 769

### CHEMICAL RESISTANCE RATING CHART

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



# WASHGUARD ALL-STAINLESS DC MOTORS

NEMA & IEC FRAME • SCR RATED



## PREMIUM STAINLESS STEEL DUCK

### NEMA FRAME ALL-STAINLESS PMDC MOTORS



#### TEFC • SCR RATED 90 & 180V • NEMA ALL-STAINLESS STEEL • C-FACE WITH BASE\*

HP	RPM 60 Hz	NEMA Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Arm. Volts DC	Control Volts AC Input	F.L. Amps DC	"C" Dim. (Inches)
1/4	1750	S56C	109065●	\$1057	A	38	90	115	3.1	11.81
1/3	1750	S56C	109066●	1118	A	44	90	115	3.8	12.81
		S56C	109067●	1118	A	44	180	230	1.9	12.81
1/2	1750	S56C	109069	1306	A	46	90	115	5.2	13.87
		S56C	109070	1306	A	46	180	230	2.7	13.87
3/4	1750	S56C	109072	1590	A	47	90	115	7.5	15.37
		S56C	109073	1590	A	48	180	230	3.7	15.37
1	1750	S56C	109075	1846	A	51	90	115	9.5	16.37
		S56C	109076	1846	A	50	180	230	5.0	16.37

- These motors are totally enclosed non-ventilated, others are TEFC.
- \* Base is welded to frame and not removable.

### METRIC (IEC) FRAME PMDC MOTORS

#### TEFC • SCR RATED 90 & 180V • METRIC (IEC) ALL-STAINLESS STEEL • C-FACE WITH BASE\*

HP	Kw	RPM 60 Hz	IEC Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Arm. Volts DC	Control Volts AC Input	F.L. Amps DC	"C" Dim. (Inches)
1/3	0.25	1750	80D	109068●	\$1118	A	44	180	230	1.9	12.81
1/2	0.37	1750	80D	109071	1306	A	46	180	230	2.7	13.87
3/4	0.55	1750	80D	109074	1590	A	48	180	230	3.7	15.37
1	0.75	1750	80D	109077	1846	A	50	180	230	5.0	16.37

- These motors are totally enclosed non-ventilated, others are TEFC.
- \* Base is welded to frame and not removable.

#### TEFC • SCR RATED 90 & 180V • METRIC (IEC) ALL-STAINLESS STEEL • C-FACE LESS BASE

HP	Kw	RPM 60 Hz	IEC Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Arm. Volts DC	Control Volts AC Input	F.L. Amps DC	"C" Dim. (Inches)
1/3	0.25	1750	80D	109081●	\$1093	A	44	180	230	1.9	12.81
1/2	0.37	1750	80D	109084	1282	A	46	180	230	2.7	13.87
3/4	0.55	1750	80D	109087	1566	A	48	180	230	3.7	15.37
1	0.75	1750	80D	109090	1822	A	50	180	230	5.0	16.37

- These motors are totally enclosed non-ventilated, others are TEFC.

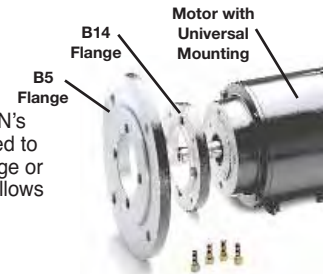
#### TEFC • SCR RATED 90 & 180V • NEMA ALL-STAINLESS STEEL • C-FACE LESS BASE

HP	RPM 60 Hz	NEMA Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Arm. Volts DC	Control Volts AC Input	F.L. Amps DC	"C" Dim. (Inches)
1/4	1750	S56C	109078●	\$1032	A	38	90	115	3.1	11.81
1/3	1750	S56C	109079●	1093	A	44	90	115	3.8	12.81
		S56C	109080●	1093	A	44	180	230	1.9	12.81
1/2	1750	S56C	109082	1282	A	46	90	115	5.2	13.87
		S56C	109083	1282	A	46	180	230	2.7	13.87
3/4	1750	S56C	109085	1566	A	47	90	115	7.5	15.37
		S56C	109086	1566	A	48	180	230	3.7	15.37
1	1750	S56C	109088	1822	A	51	90	115	9.5	16.37
		S56C	109089	1822	A	50	180	230	5.0	16.37

- These motors are totally enclosed non-ventilated, others are TEFC.

#### FLANGE AND FACE KITS FOR DC METRIC (IEC) FRAME MOTORS

The modular design concept of LEESON's other metric DC motors has been applied to the all-stainless metric motors. Any flange or face kit can mount on any motor. This allows the greatest flexibility from the smallest inventory of motors.



#### B5 FLANGE KITS (For Stainless DC Metric Motors)

IEC Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	BD Flange Dia. (mm)	AK Register (mm)	BF Hole (mm)	AJ Bolt Circle (mm)
71	175593	\$141	A	2	160	110	9	130
80	175594	169	A	3	200	130	12	165
90S/90L	175594	169	A	3	200	130	12	165
100L/112M	175595	265	A	5	250	180	15	215

#### B14 FLANGE KITS (For Stainless DC Metric Motors)

IEC Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	BD Flange Dia. (mm)	AK Register (mm)	BF Tap (mm)	AJ Bolt Circle (mm)
71	175596	\$107	A	1	105	70	6	85
80	175597	107	A	1	120	80	6	100
90S/90L	175598	292	A	1	140	95	6	115
100L/112M	175599	265	A	2	160	110	6	130