

Submersible Motors

PAGE: 4-8
DATE: December 1, 2000
SUPERSEDES: 12-1-96

60 Hz • 4" High Thrust • Corrosion Resistant Motors



APPLICATIONS

These motors are designed for operation in severe environments where a standard water well motor may not be suitable.

Ni-Resist motors are intended for some salt water and other high pH applications.

316 Stainless Steel motors are designed for acid, low pH and seawater applications.

Do not use motor in swimming areas.

SPECIFICATIONS

Temperature and Time Rating: Continuous in 86°F (30°C) max. water temperature at 1/4 ft/sec. flow past motor.

Enclosure: Hermetically sealed stator, corrosion resistant materials.

Shaft: Splined, stainless steel.

Bearings: Water lubricated sleeve and Kingsbury-type thrust bearings.

Control Box: Single-phase controls available from Franklin Electric. ③ Three-phase controls not available from Franklin Electric. ①

Leads: Removable type, not furnished with motor. See "4-Inch Motor Leads" page for additional leads. ④

Protection: Manual reset thermal overload protection in single-phase control box. SPECIAL for three-phase. ① Single-phase motors equipped with built-in lightning arrestors. Three-phase motors equipped for use with Subtrol-Plus. ⑤

Rotation: Single-phase, CCW facing shaft end. Three-phase, electrically reversible.

MODIFICATIONS

Voltage, Hertz, and Hp ratings not listed here are available with a price adder. Consult factory for price and delivery.

SINGLE-PHASE, CAPACITOR START, CAPACITOR RUN, 3450 RPM

Control Box Required ③

HP	KW	DOWNWARD THRUST LBS	VOLTS	SERVICE FACTOR	NI-RESIST MODEL NUMBER	316 SS MODEL NUMBER	CONTROL BOX MODEL NUMBER
1.5	1.1	1500	230	1.30	224 300 73	224 300 74	282 300 81
2	1.5	1500	230	1.25	224 301 73	224 301 74	282 301 81
3	2.2	1500	230	1.15	224 302 73	224 302 74	282 302 81
5	3.7	1500	230	1.15	224 303 73	224 303 74	282 113 81

THREE-PHASE Special Controls Required ①

HP	KW	DOWNWARD THRUST LBS	VOLTS	SERVICE FACTOR	NI-RESIST MODEL NUMBER	316 SS MODEL NUMBER
1.5	1.1	1500	200	1.30	234 304 73	234 304 74
		1500	230	1.30	234 314 73	234 314 74
		1500	460/380 ②	1.30/1.0	234 324 73	234 324 74
		1500	575	1.30	234 334 73	234 334 74
2	1.5	1500	200	1.25	234 305 73	234 305 74
		1500	230	1.25	234 315 73	234 315 74
		1500	460/380 ②	1.25/1.0	234 325 73	234 325 74
		1500	575	1.25	234 335 73	234 335 74
3	2.2	1500	200	1.15	234 306 73	234 306 74
		1500	230	1.15	234 316 73	234 316 74
		1500	460/380 ②	1.15/1.0	234 326 73	234 326 74
		1500	575	1.15	234 336 73	234 336 74
5	3.7	1500	200	1.15	234 307 73	234 307 74
		1500	230	1.15	234 317 73	234 317 74
		1500	460/380 ②	1.15/1.0	234 327 73	234 327 74
		1500	575	1.15	234 337 73	234 337 74
7.5	5.5	1500	200	1.15	234 308 73	234 308 74
		1500	230	1.15	234 318 73	234 318 74
		1500	460/380 ②	1.15/1.0	234 328 73	234 328 74
		1500	575	1.15	234 338 73	234 338 74

FOOTNOTES

① Franklin does not manufacture three-phase controls. Standard three-phase magnetic starter with ambient compensated quick-trip overload protection in all three legs is required for positive motor protection. WARRANTY IS VOID where this protection is not employed.

② 60/50 Hz. 3450/2875 rpm.

③ Refer to page "Accessories" section for single-phase control box.

④ WARRANTY IS VOID if Franklin supplied leads or cables are not used.

⑤ See "Electronics" section for Subtrol-Plus.

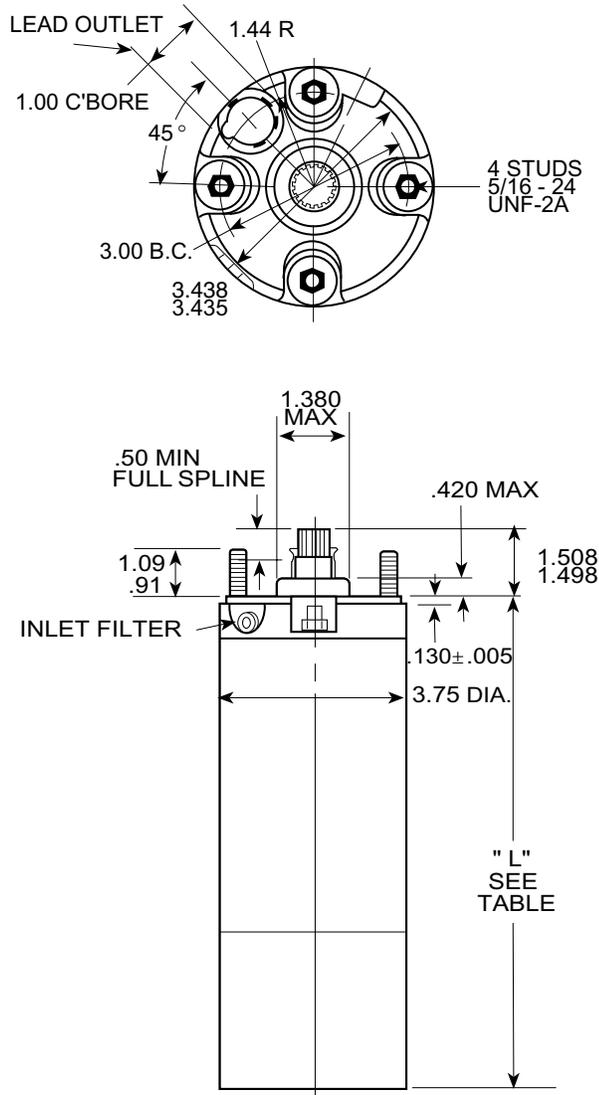
WARNING: Serious or fatal electrical shock or fire hazard may result from failure to follow the instructions for proper installation and use which accompany this equipment.

FOR MOUNTING DIMENSIONS SEE OPPOSITE SIDE.



Submersible Motors

60 Hz • 4" High Thrust • Corrosion Resistant Motors



SPLINE DATA

- 14 TEETH • 24/48 DIAMETRAL PITCH
- 30½ PRESSURE ANGLE • FLAT ROOT, SIDE FIT
- SLIDING CLASS "A" FIT • ASA B5.15-1950

4" HIGH THRUST - SINGLE-PHASE

HP	"L"	SHIPPING WEIGHT		MOTOR CARTON SIZE
		LBS.	KGS.	
1.5	19.12"	35	15.9	6" X 6" X 23"
2	20.62"	43	19.5	6" X 6" X 25"
3	23.62"	54	24.5	6" X 6" X 28"
5	29.62"	70	31.7	6" X 6" X 34"

4" HIGH THRUST - THREE-PHASE

HP	"L"	SHIPPING WEIGHT		MOTOR CARTON SIZE
		LBS.	KGS.	
1.5	18.00"	37	16.8	6" X 6" X 23"
2	19.12"	44	19.9	6" X 6" X 23"
3	20.62"	44	19.9	6" X 6" X 25"
5	23.62"	55	24.9	6" X 6" X 28"
7.5	29.62"	71	32.2	6" X 6" X 34"

See "Accessories" section for control box weights and dimensions.

CONSTRUCTION MATERIALS

Component	Ni-Resist	316 SS
Castings	Ni-Resist Type 1B	316 SS
Stator Shell	316 SS	316 SS
Stator Ends	316 SS	316 SS
Shaft Extension	17-4 SS	17-4 SS
Fasteners	316 SS	316 SS
Seal Cover	316 SS	316 SS
Seal	*	*
Diaphragm	Type 200 Hydrin	Type 200 Hydrin
Diaphragm Plate	304 SS	304 SS
Diaphragm Spring	302 SS	302 SS
Diaphragm Cover	316 SS	316 SS
Slinger	Nitrile Rubber	Nitrile Rubber
Lead Wire (or Cable)	Nitrile [Ⓞ]	Nitrile [Ⓞ]
Lead Potting	Epoxy	Epoxy
Lead Jam Nut	316 SS	316 SS
Filter	316 SS Plug	316 SS Plug

* Viton[®] Carbon, Ceramic Face Seal

[Ⓞ] Removable type leads not furnished with motor. See "4-Inch Motor Leads" page for additional leads.

NOTE: All dimensions shown in inches.

Specifications subject to change without notice. Contact Franklin Electric if current material types are required for bid specifications.



Franklin Electric

400 East Spring Street
Bluffton, Indiana 46714
Tel: 219.824.2900 Fax: 219.824.2909
www.franklin-electric.com