

4" Submersible Motors High Thrust



Application

These motors are built for dependable operation in 4" diameter or larger water wells.

Basic Features

- Corrosion-resistant construction
- Stainless steel splined shaft
- Hermetically-sealed windings
- StatorShield™ resin system
- Filter check valve
- Water lubrication
- Kingsbury-type thrust bearing
- Pressure-equalizing diaphragm
- Sand fighting slinger
- Built-in lightning arrestors (single-phase)
- New lead assembly
- Franklin-manufactured control boxes available for single-phase motors
- UL 778 recognized (North American voltages)
- CSA certified
- ANSI/NSF 61 certified
- Industry standard NEMA mounting dimensions

Special Options

- **316 SS Construction**
Special construction option for corrosive applications, including acids, low pH and seawater.
- **Sand Fighter™ Construction**
Special construction option for sandy water wells. Motors include Sand Fighter sealing system with silicon carbide mechanical shaft seal and are warranted against sand entry failure.
- **Coalbed Methane Construction**
Special construction option for coalbed methane wells. Includes Sand Fighter sealing system, reinforced diaphragm housing to resist damage from bottom tagging and protective filter to shield diaphragm from debris.
- **Oil Stripper Construction**
Special construction option for secondary oil recovery wells where there is a mixture of oil and water. They are also suitable for geothermal and other water well applications where high temperatures and/or high pH conditions exist. Three-phase Oil Stripper motors are equipped with Subtrol™ heat sensor for use with SubMonitor™ protection devices.

4" Submersible Motors High Thrust

4-Inch High Thrust Motor Specifications

Hz	Ph	Hp Range	kW Range	Poles	RPM	Max. Ambient Temp.	Duty Rating
60	1	1.5 - 5	1.1 - 3.7	2	3450	86 °F / 30 °C	Continuous at 0.25 ft/sec flow past motor
50	1	1.5 - 5	1.1 - 3.7	2	2875	86 °F / 30 °C	Continuous at 0.25 ft/sec flow past motor
60	3	1.5 - 10	1.1 - 7.5	2	3450	86 °F / 30 °C	Continuous at 0.25 ft/sec flow past motor
50	3	1.5 - 10	1.1 - 7.5	2	2875	86 °F / 30 °C	Continuous at 0.25 ft/sec flow past motor

NOTE: Not all ratings available in all construction options.

4-Inch High Thrust Construction Materials

Component	Construction Type		
	Standard Water Well	Coalbed Methane	Sand Fighter™
Top Castings	303 SS	303 SS	303 SS
Bottom Castings	303 SS Over Iron, Painted Cast Iron	303 SS Over Iron, Painted Cast Iron	303 SS Over Iron, Painted Cast Iron
Stator Shell	301 SS	301 SS	301 SS
Stator Ends	Low Carbon Steel	Low Carbon Steel	Low Carbon Steel
Shaft Extension	17-4 SS	17-4 SS	17-4 SS
Fasteners	300 Series SS	300 Series SS	300 Series SS
Seal Cover	Acetal	Sintered Bronze	Sintered Bronze
Seal	Nitrile Rubber Lip	Sand Fighter™ SiC/ SiC Mech Seal	Sand Fighter SiC/ SiC Mech Seal
Diaphragm	Nitrile Rubber	Nitrile Rubber	Nitrile Rubber
Diaphragm Cup	316 SS	316 SS	316 SS
Diaphragm Spring	316 SS	316 SS	316 SS
Diaphragm Cover	Gray Iron	Gray Iron	304 SS
Slinger	Nitrile Rubber	Nitrile Rubber	Nitrile Rubber
Lead Wire (or Cable)	XLPE*	XLPE*	XLPE*
Lead Potting	Epoxy	Epoxy	Epoxy
Lead Screws / Clamp	316 SS	316 SS	316 SS
Filter	Delrin & Polyester	Delrin & Polyester	Delrin & Polyester

Component	Construction Type	
	Chemical (316 STNLS)	Oil Stripper
Top Casting	316 SS	316 SS
Bottom Casting	316 SS	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	Sand Fighter SiC Mech Seal	Sand Fighter Viton®
Diaphragm	Nitrile Rubber	Viton®
Diaphragm Cup	316 SS	316 SS
Diaphragm Spring	316 SS	316 SS
Diaphragm Cover	316 SS	316 SS
Slinger	Nitrile Rubber	Viton®
Lead Wire (or Cable)	XLPE*	XLPE*
Lead Potting	Epoxy	Epoxy
Lead Screws / Clamp	316 SS	316 SS
Filter	316 SS Plug	316 SS Plug

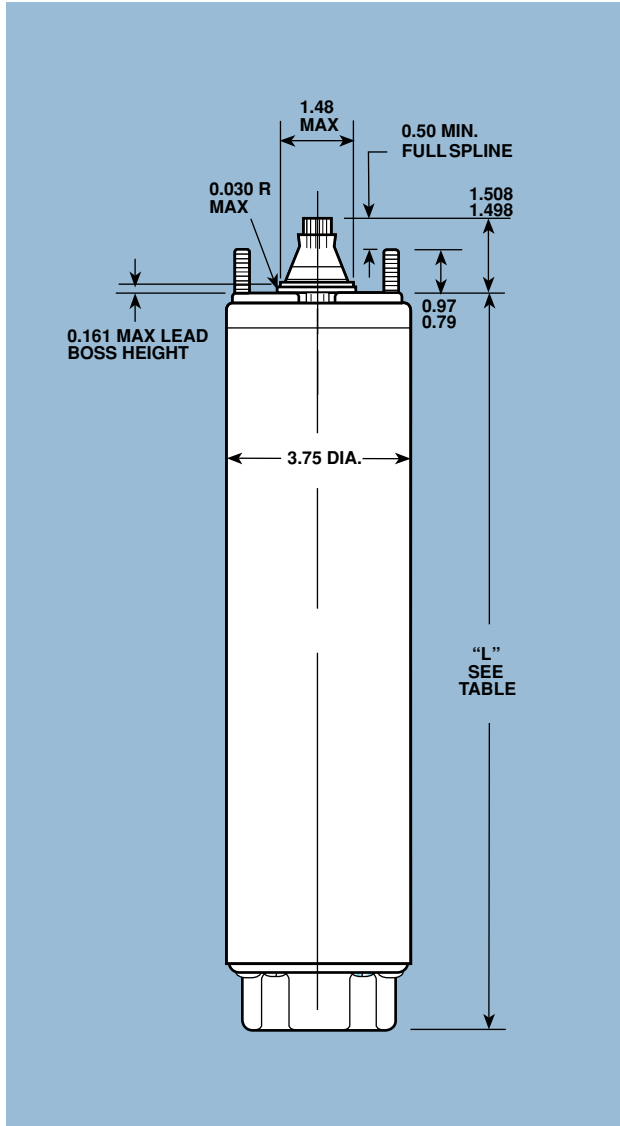
* Removable type, factory-installed in 60 Hz and dual frequency rated water well motors. Consult catalog for additional leads.

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

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4" Submersible Motors High Thrust

4-Inch High Thrust Dimensions and Weights



Single-Phase Motors*

HP	KW	"L" (inches)	SHIPPING WEIGHT		MOTOR CARTON SIZE (in inches)
			LBS	KG	
1.5	1.1	19.12	35	15.9	6 x 6 x 23
2	1.5	20.62	43	19.5	6 x 6 x 25
3	2.2	23.20	56	25.4	6 x 6 x 28
5	3.7	29.20	71	32.2	6 x 6 x 34

Single-Phase Motors - Oil Stripper

HP	KW	"L" (inches)	SHIPPING WEIGHT		MOTOR CARTON SIZE (in inches)
			LBS	KG	
2	1.5	22.87	46	20.9	6 x 6 x 28
3	2.2	23.20	56	25.4	6 x 6 x 34
5	3.7	29.20	71	32.2	6 x 6 x 37

Three-Phase Motors*

HP	KW	"L" (inches)	SHIPPING WEIGHT		MOTOR CARTON SIZE (in inches)
			LBS	KG	
1.5	1.1	18.00	37	16.8	6 x 6 x 23
2	1.5	19.12	44	20.0	6 x 6 x 23
3	2.2	20.20	44	20.0	6 x 6 x 25
4	3.0	23.20	56	25.4	6 x 6 x 28
5	3.7	23.20	56	25.4	6 x 6 x 28
5.5	4.0	25.68	63	28.6	6 x 6 x 28
7.5	5.5	29.20	71	32.2	6 x 6 x 34
10	7.5	32.20	77	34.9	6 x 6 x 34

Three-Phase Motors - Oil Stripper

HP	KW	"L" (inches)	SHIPPING WEIGHT		MOTOR CARTON SIZE (in inches)
			LBS	KG	
2	1.5	21.37	42	19.1	6 x 6 x 25
3	2.2	20.20	44	20.0	6 x 6 x 28
5	3.7	25.68	63	28.6	6 x 6 x 34
7.5	5.5	29.20	71	32.2	6 x 6 x 37

* Represents standard and Sand Fighter™ construction models. Consult factory for Coalbed Methane and 316 SS weights and dimensions.