



4" SUPER STAINLESS SUBMERSIBLE MOTORS

1/3 - 1.5 HP, 2 WIRE: 1/3 - 3 HP 3 WIRE, SINGLE- & THREE-PHASE

APPLICATIONS

These motors are built for dependable operation in 4" diameter or larger water wells. Continuous rating in 86 °F (30 °C) water.

For further information, refer to Franklin Electric's "Submersible Motors: Application, Installation, Maintenance Manual."

FEATURES

- Corrosion-Resistant All Stainless Steel Exterior Construction
- Stainless Steel Splined Shaft
- Hermetically-Sealed Windings
- Anti-Track Self-Healing Resin System
- Water Lubrication
- Filter Check Valve
- Kingsbury-Type Thrust Bearing
- Pressure Equalizing Diaphragm
- Built-In Lightning Arrestors (all single-phase; 200 and 230 Volt three-phase)
- Removable "Water-Bloc" lead installed In North American 60 Hz water well motors. Consult factory for additional leads.
- UL 778 Recognized (North American Voltages)
- CSA Certified
- ANSI/NSF 61 Certified
- NEMA Mounting Dimensions
- Rotation: single-phase - CCW; three-phase electrically reversible

SPECIAL FEATURES

- No flow inducer sleeve required in water up to 86 °F (30 °C) for motors through 2 hp.
- Two-wire motors are split-phase designs with integral starting components and on-winding thermal overload protection, and do not require a control box. They feature Franklin's patented 2-wire BIAC starting switch which provides reverse impact torque to aid starting in adverse environments.
- Three-wire 60 Hz motors 1/3 - 1 hp use Franklin's exclusive 3-wire QD (Quick-Disconnect) Control Box with the patented QD Relay. This relay provides the ultimate in operational life.



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. Do not use motor in swimming areas.

4" SUPER STAINLESS SUBMERSIBLE MOTORS

AVAILABILITY

Single-Phase

2-Wire, Split-Phase, 60 Hz, 3450 RPM

HP	KW	Volts	"L" Dim Inches	Shipping Weight	
				LBS	KG
1/3	0.25	115 OR 230	8.78	16	7.2
1/2	0.37	115 OR 230	9.53	18	8.1
3/4	0.55	230	10.66	21	9.5
1	0.75	230	11.75	24	10.9
1.5	1.1	230	15.12	31	14.1

2-Wire, Split-Phase, 50 Hz, 2875 RPM

HP	KW	Volts	"L" Dim Inches	Shipping Weight	
				LBS	KG
1/2	0.37	220	9.53	18	8.1
3/4	0.55	220	10.66	21	9.5
1	0.75	220	11.75	24	10.9
1.5	1.1	220	15.12	31	14.1

3-Wire, Capacitor Start, 60 Hz, 3450 RPM ①

HP	KW	Volts	"L" Dim Inches	Shipping Weight	
				LBS	KG
1/3	0.25	115 OR 230	8.78	17	7.7
1/2	0.37	115 OR 230	9.53	19	8.6
3/4	0.55	230	10.66	21	9.5
1	0.75	230	11.75	24	10.9
1.5	1.1	230	13.62	28	12.7
2	1.5	230	15.12	33	15.0
3	2.2	230	19.06	41	18.6

3-Wire, Capacitor Start, 50 Hz, 2875 RPM ①

HP	KW	Volts	"L" Dim Inches	Shipping Weight	
				LBS	KG
1/3	0.25	220	8.78	17	7.7
1/2	0.37	220	9.53	19	8.6
3/4	0.55	220	10.66	21	9.5
1	0.75	220	11.75	24	10.9
1.5	1.1	220	13.62	28	12.7
2	1.5	220	15.12	33	15.0
3	2.2	220	19.06	41	18.6

Three-Phase

200, 230, 380, 460, 575, Volt-60 Hz; 220, 280 Volt-50 Hz

Consult factory for dimensional and weight data.

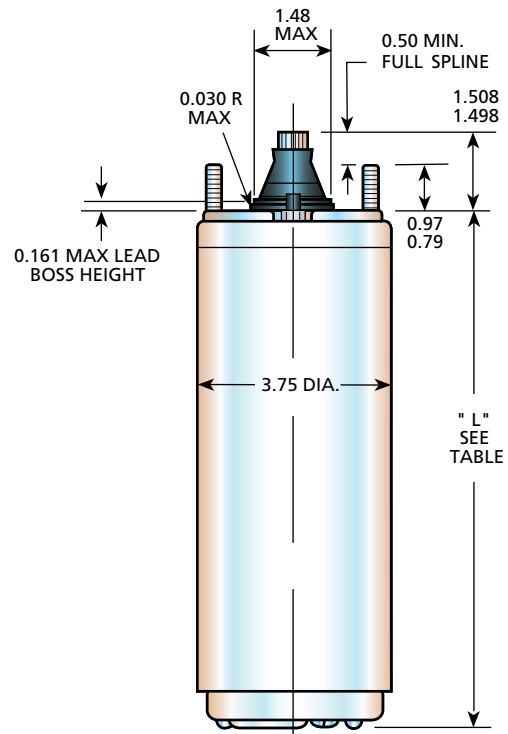
CONSTRUCTION MATERIALS

Component	Standard Water Well
1 Casting	304 SS Over Iron
2 Stator Shell	301 SS
3 Shaft Extension	17-4 SS
4 Fasteners	305 SS or 302 SS
5 Seal Cover	Acetal
6 Seal	Nitrile Rubber Lip
7 Diaphragm	Nitrile Rubber
8 Diaphragm Cover	301 SS
9 Slinger	Nitrile Rubber
10 Lead Wire (or Cable)	XLPE ②
11 Lead Potting	Expoxy
12 Lead Jam Nut	303 SS

① Franklin Electric control box required.

② Removable type installed in North American 60 Hz rated water well motors. Consult factory for additional leads

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





6" ENCAPSULATED SUBMERSIBLE MOTORS

SINGLE-PHASE 5-15 HP AND THREE-PHASE 50-60 HP

200-575 VOLTS 60 AND 50 HZ

APPLICATIONS

These motors are built for dependable operation in 6-inch diameter or larger water wells. Temperature and time ratings are continuous in 86 °F (30 °C) water at 1/2 ft./sec. flow past the motor. Rotation: single-phase, CCW facing shaft end; three-phase, electrically reversible.

FEATURES

- Full 3450 RPM design point
- Maximum temperature winding wire NEMA class 200
- Anti-track, self-healing resin system
- Hermetically-sealed windings
- Removable Water-Bloc™ lead
- Double-flange design
- Over-molded lead for cable resilience.
- Stainless steel shell
- Kingsbury-type water lubricated thrust bearing
- Pressure-equalizing diaphragm
- Sand slinger
- 3-lead and 6-lead (Wye Delta) configurations for 3-phase
- Copper bar rotor

SPECIAL FEATURES

- **316 Stainless Steel:** Special construction option for acid, low pH, and seawater applications. All 316 SS motors include a SubTrol-Plus™ heat sensor.
- **Sand Fighter®** models include SubTrol-Plus™ heat sensor on 40, 50, and 60 hp models.

SUBMONITOR™ OVERLOAD OPTION FOR THREE-PHASE MOTORS

A field proven and contractor friendly premium motor protection system. It protects the motor against overload, underload, excessive winding temperature, and rapid cycling. It also extends the motor warranty to a full three years.* The motor must be manufactured with a SubTrol-Plus heat sensor.

*Contact factory for warranty details.



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. Do not use motor in swimming areas.

6" ENCAPSULATED SUBMERSIBLE MOTORS

AVAILABILITY

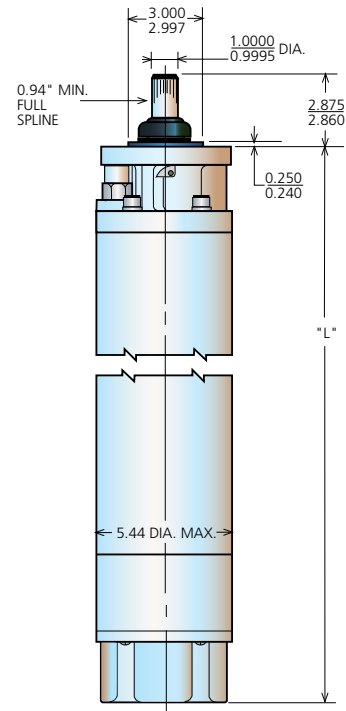
Single-Phase Capacitor start, Capacitor run (Control box required)

HP	KW	"L" Dim		316 SS "L" Dim		Shipping Weight	
		IN	CM	IN	CM	LBS	KG
5	3.7	25.4	64.6	25.0	63.6	112	51
7.5	5.5	28.0	71.1	27.6	70.1	125	57
10	7.5	30.6	77.7	30.2	76.6	143	65
15	11.0	33.1	84.2	32.7	83.1	156	71

Three-Phase

HP	KW	"L" Dim		316 SS "L" Dim		Shipping Weight	
		IN	CM	IN	CM	LBS	KG
5	3.7	22.9	58.1	22.5	57.1	103	47
7.5	5.5	24.2	61.4	23.8	60.4	110	50
10	7.5	25.4	64.6	25.0	63.6	118	54
15	11.0	28.0	71.1	27.6	70.1	131	60
20	15.0	30.6	77.6	30.2	76.6	147	67
25	18.5	33.1	84.2	32.7	83.1	158	72
30	22.0	35.7	90.7	35.3	89.6	176	80
40	30.0	40.8	103.7	40.4	102.6	206	94
50	37	55.3	140.5	54.9	139.4	300	136
60	45	61.3	155.7	60.9	152.1	330	150

Note: 60 Hz - 3,450 RPM 50 Hz - 2,875 RPM



CONSTRUCTION MATERIALS

Component	Construction Type	
	Sand Fighter	Corrosion Resistant (316 SS)
UL Insulation Class Rating	Class F	Class F
Motor Ambient Temp. Rating	86 °F/30 °C	86 °F/30 °C
Stator Resin Type	Standard	Standard
Motor Fill Solution (Water Soluble/Non-Toxic)	FES91	FES91
Top End Bell and Thrust Housing	Epoxy-coated Gray Iron	316 SS
Stator Shell	300 Series SS	316 SS
Stator Ends	Carbon Steel	316 SS
Shaft Extension	300 Series SS	17-4 SS
Bushing	316 SS	316 SS
Bushing Retainer	300 Series SS	316 SS
Shaft Mechanical Seal	Sand Fighter Seal System	Sand Fighter Seal System
Mechanical Seal/Rubber Components	Nitrile	Nitrile
Diaphragm Material		
Diaphragm Plate	300 Series SS	316 SS
Diaphragm Spring	300 Series SS	25-6 MO SS
Shaft Slinger	Nitrile	Nitrile
Lead Wire	Overmolded	Overmolded
Lead Potting	Epoxy	Epoxy
Lead Jam Nut	Brass	316 SS
Thrust Bearing Rating (86°F/30°C)	3500 lbs (7.5-30 hp) 6000 lbs (40-60 hp)	3500 lbs (7.5-30 hp) 6000 lbs (40-60 hp)
Method Of Connecting System Ground to Motor	Ground wire in power lead connector	Ground wire in power lead connector

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



8" ENCAPSULATED 30 °C SUBMERSIBLE MOTORS

40 - 200 HP, THREE-PHASE 380 - 575 VOLTS 60 AND 50 HZ

APPLICATION DATA:

These motors are built for vertical operation in 8" diameter or larger water wells. Temperature and time rating are continuous in 30 °C (86 °F) water at 0.5 ft./sec. flow past motor. Rotation is electrically reversible.

BASIC FEATURES:

- Full 3525 rpm design point for superior pump head & flow yield
- Winding encapsulated in anti-tracking resin
- Hermetically-sealed stator area
- Kingsbury-type water lubricated thrust bearing
- FES91 exclusive water based bearing lubrication
- Water Bloc removable lead connection
- Double flanged design for ease of handling and pump mounting
- Spline shaft for maximum shaft and coupling contact
- Copper bar rotor provides consistent design performance
- Pressure equalizing diaphragm
- Subtrol™ heat sensors standard on all 8" encapsulated 30 °C motors

OPTIONS

- 6-Lead (Y-D) Designs
- 316 Stainless Steel Designs
- Sand Fighter™ shaft seal standard on 150-200 hp and is an available option on 40-125 hp. All 316 SS motors have Sand Fighter™ shaft seal as standard
- Other voltage and Hz design points available

**EXTEND MOTOR WARRANTY TO 3 YEARS* WITH FRANKLIN ELECTRIC
CONTROL SOLUTIONS FOR OVERLOAD PROTECTION**

* Contact a Franklin Electric representative for more details.



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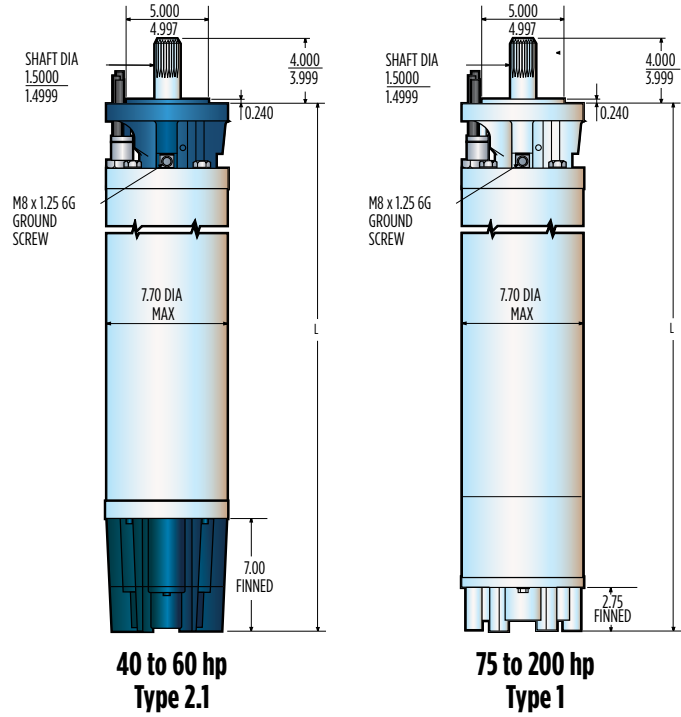
AVAILABILITY

8-INCH PUMP FLANGE (5" RABBET & 6" BOLT CIRCLE)

HP	KW	"L" DIM		SHIPPING WEIGHT	
		INS	CM	LBS	KGS
40	030	36.4	92.5	320	145
50	037	39.4	100.0	345	157
60	045	42.4	107.7	375	170
75	055	49.8	126.5	485	220
100	075	57.3	145.5	585	266
125	093	68.8	174.8	700	318
150	110	77.8	197.6	840	381
175	130	85.8	217.9	925	420
200	150	94.8	240.8	1,040	473

60 Hz - Nominal 3,525 rpm

50 Hz - Nominal 2,900 rpm



CONSTRUCTION MATERIALS

Component	Standard Water Well	Corrosion Resistant (316 SS)
Castings	Gray Iron	316 SS
Stator Shell	304 SS	316 SS
Stator Ends	Carbon Steel	316 SS
Shaft Extensions	17-4 SS	17-4 SS
Fasteners	300 Series SS	316 SS
Seal Cover	304 SS & Sintered Bronze	316 SS
Seal	40-125 hp - Carbon/Ceramic Face; 50-200 hp - Sand Fighter™	Sand Fighter™
Diaphragm	Nitrile	Nitrile
Diaphragm Plate	304 SS	316 SS
Diaphragm Spring	302 SS	316 SS
Slinger	Nitrile	Nitrile
Lead Wire (or Cable)	RHW	RHW
Lead Sleeve	316 SS	316 SS
Lead Potting	Epoxy	Epoxy
Lead Jam Nut	Brass	316 SS
Filter	Delrin & Polyester	316 SS Plug

Note: All dimensions shown in inches unless otherwise noted.

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