

Submersible Motors

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DATE: December 1, 2000
SUPERSEDES: 7-1-96

3-Wire • 4" Water Well • Super Stainless Motors



APPLICATIONS

These motors are built for dependable operation in 4" diameter or larger water wells. They are high starting torque, capacitor start designs, and are used with above ground controls. **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, stainless steel outer shell

Shaft: Splined, stainless steel

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

Control Box: Separate for single-phase 3-wire motors

End Bells: Stainless steel jacketed iron casting

Leads: Removable type, factory installed in 60 Hz and dual-frequency rated water well motors only. See "4-Inch Motor Leads" page for additional leads.®

Protection: 1/3 thru 1 HP - Automatic reset thermal overload protection (in motor for 60 Hz, in control box for 50 Hz). 1 1/2 thru 3 HP - manual reset thermal overload protection in control box. Motors equipped with built-in lightning arrestors.

Rotation: CCW facing shaft end

PACKAGING

Pallet packaging is available for shipment of 40 units of one motor model only. Quantities of less than 40 units will be individually boxed and have a price adder.

FOOTNOTES:

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

60 HZ, SINGLE-PHASE, 3-WIRE, CAPACITOR START, 3450 RPM

HP	KW	DOWNWARD THRUST LBS	VOLTS	SERVICE FACTOR	MOTOR MODEL NUMBER	CONTROL BOX MODEL NUMBER
1/3	.25	300	115	1.75	214 502 90	280 102 49
		300	230	1.75	214 503 90	280 103 49
1/2	.37	300	115	1.60	214 504 90	280 104 49
		300	230	1.60	214 505 90	280 105 49
3/4	.55	300	230	1.50	214 507 90	280 107 49
1	.75	650	230	1.40	214 508 90	280 108 49
1 1/2	1.1	650	230	1.30	224 300 92	282 300 81
2	1.5	650	230	1.25	224 301 92	282 301 81
3*	2.2	900*	230	1.15	224 302 26	282 302 81

50 HZ, SINGLE-PHASE, 3-WIRE, CAPACITOR START, 2875 RPM

HP	KW	DOWNWARD THRUST LBS	VOLTS	SERVICE FACTOR	MOTOR MODEL NUMBER	CONTROL BOX MODEL NUMBER
1/3	.25	300	220	1.0	214 553 41	280 353 01
1/2	.37	300	220	1.0	214 555 41	280 355 01
3/4	.55	300	220	1.0	214 557 41	280 357 01
1	.75	650	220	1.0	214 558 19	280 358 01
1 1/2	1.1	650	220	1.0	224 350 19	282 350 81
2	1.5	650	220	1.0	224 351 19	282 351 81
3*	2.2	900*	220	1.0	224 352 25	282 352 81

* 1500 LBS downward thrust motors available, see "4-Inch High Thrust" pages.

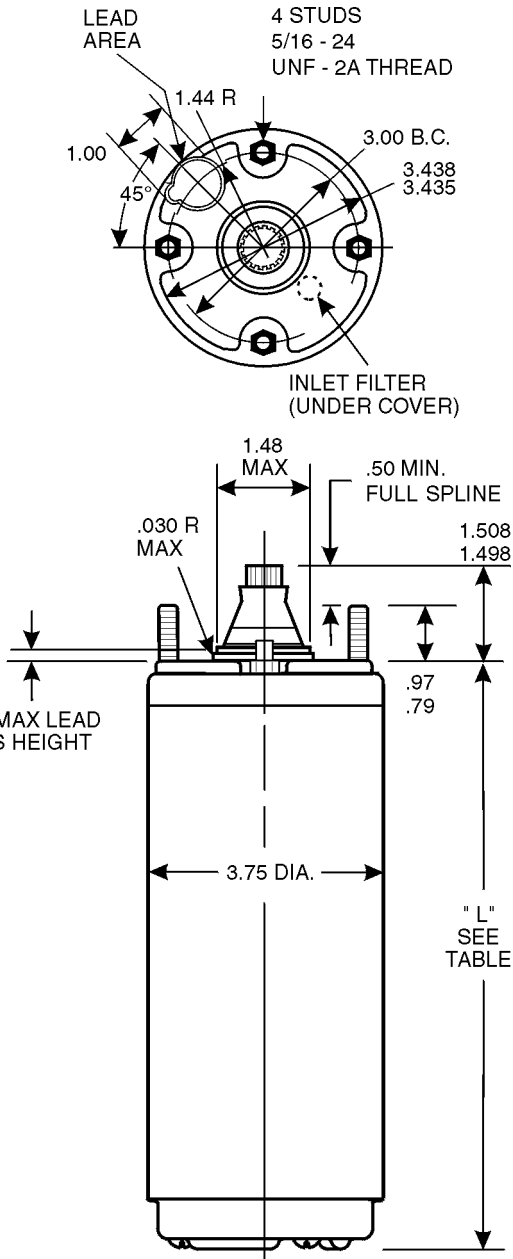
WARNING: Serious or fatal electrical shock or fire hazard may result from failure to follow the instructions for proper installation and use which accompany this equipment.

FOR MOUNTING DIMENSIONS SEE OPPOSITE SIDE.



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SPLINE DATA

- 14 TEETH • 24/48 DIAMETRICAL PITCH
- 30° PRESSURE ANGLE • FLAT ROOT, SIDE FIT
- SLIDING CLASS "A" FIT • ASA B5.15-1950

3-WIRE, 60/50 HZ SINGLE PHASE		SINGLE PACK MOTOR		
HP	"L"	SHIPPING WEIGHT		MOTOR CARTON SIZE
		LBS.	KGS.	
1/3	8.78"	17	7.7	4"X4-3/8"X16"
1/2	9.53"	19	8.6	4"X4-3/8"X16"
3/4	10.66"	21	9.5	4"X4-3/8"X19"
1	11.75"	24	10.9	4"X4-3/8"X19"
1 1/2	13.62"	28	12.7	4"X4-3/8"X21"
2	15.12"	33	15.0	4"X4-3/8"X21"
3	19.06"	41	18.6	4"X4-3/8"X23"

SINGLE PACK 60/50 HZ CONTROL BOX					
HP	SHIPPING WEIGHT				CARTON W X H X L
	LBS.		KGS.		
	60 HZ	50 HZ	60 HZ	50 HZ	
1/3	3	4	1.4	1.8	5 5/16" X 3 1/4" X 8 7/8"
1/2	3	4	1.4	1.8	5 5/16" X 3 1/4" X 8 7/8"
3/4	3	4	1.4	1.8	5 5/16" X 3 1/4" X 8 7/8"
1	3	4	1.4	1.8	5 5/16" X 3 1/4" X 8 7/8"
1 1/2	7	7	3.2	3.2	8 3/4" X 6 1/4" X 11 1/4"
2	7	7	3.2	3.2	8 3/4" X 6 1/4" X 11 1/4"
3	7	7	3.2	3.2	8 3/4" X 6 1/4" X 11 1/4"

CONSTRUCTION MATERIALS

Component	Standard Water Well
Castings	304 SS Over Iron
Stator Shell	301 SS
Shaft Extension	303 SS or 17-4 SS
Fasteners	305 SS or 302 SS
Seal Cover	Acetal
Seal	Nitrile Rubber Lip
Diaphragm	Nitrile Rubber
Diaphragm Cover	Nickel Plated CRS
Slinger	Nitrile Rubber
Lead Wire (or Cable)	XLPE [®]
Lead Potting	Epoxy
Lead Jam Nut	303 SS

[®]Removable type, factory installed in 60 Hz and dual-frequency rated water-well motors only. 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.



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