

6" HI-TEMP 90C SUBMERSIBLE MOTORS

THREE-PHASE 5-40 HP

APPLICATIONS

Some pumping applications require more – and Franklin's Hi-Temp Motor line delivers just that. The Hi-Temp motor was designed and built in response to many requests for a motor that operates dependably in wells with high temperatures and/or low flow conditions.

The 6-inch Hi-Temp 90C motor utilizes a new, premium encapsulation process and new water soluble coolant to allow continuous operation in water temperatures of up to 90 ºC.* In addition, this design is capable of handling thrust loads 25% higher than a standard motor without using oil.

Franklin's Hi-Temp 90C is the right choice for your demanding, high temperature well applications.

* Provided minimum allowable rates of flow past the motor are maintained



FEATURES

- Up to 194 °F (90 °C) ambient temperature
- 100% increase in upthrust capability at 30 °C
- 25% increase in downthrust capability at 30 °C
- Wet Well, Reservoir, Low Flow approved in 12" diameter or larger wells with ambient water up to 87 °F (30 °C)
- High temperature leads
- Hermetically sealed stator
- Innovative high temperature winding encapsulation system
- FES92 exclusive water soluble, high temperature bearing lubrication
- Double-flange NEMA mounting for ease of handling and pump mounting
- Stainless steel splined shaft for maximum shaft/coupling contact
- Full 3450 RPM 60Hz design point for superior pump performance
- Sand Fighter™ Sealing System
- Franklin Electric's exclusive Water-Bloc™ lead connection
- 316 SS and Y-Δ - consult factory
- Extended warranty available when used with FE Submonitor overload protection

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.

Franklin Electric

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AVAILABILITY

Three-Phase, 60 Hz - 3450 RPM, 50 Hz - 2875 RPM

HP	KW	Downward Thrust @ 30 °C	Volts	HZ	Service Factor
5	3.7	4500 lbs. (20000 N)	200	60	1.15
			230	60	1.15
			380	60	1.15
			460/380	60/50	1.15/1.0
			575	60	1.15
7.5	5.5	4500 lbs. (20000 N)	200	60	1.15
			230	60	1.15
			380	60	1.15
			460/380	60/50	1.15/1.0
			575	60	1.15
10	7.5	4500 lbs. (20000 N)	200	60	1.15
			230	60	1.15
			380	60	1.15
			460/380	60/50	1.15/1.0
			575	60	1.15
15	11	4500 lbs. (20000 N)	200	60	1.15
			230	60	1.15
			380	60	1.15
			460/380	60/50	1.15/1.0
			575	60	1.15
20	15	4500 lbs. (20000 N)	200	60	1.15
			230	60	1.15
			380	60	1.15
			460/380	60/50	1.15/1.0
			575	60	1.15

HP	KW	Downward Thrust @ 30 °C	Volts	HZ	Service Factor
25	18.5	7500 lbs. (33000 N)	200	60	1.15
			230	60	1.15
			380	60	1.15
			460/380	60/50	1.15/1.0
			575	60	1.15
30	22	10000 lbs. (45000 N)	200	60	1.15
			230	60	1.15
			380	60	1.15
			460/380	60/50	1.15/1.0
			575	60	1.15
40	30	10000 lbs. (45000 N)	380	60	1.15
			460/380	60/50	1.15/1.0
			575	60	1.15

CONSTRUCTION MATERIALS

Component	Hi-Temp 90 °C (300 SS Shell)	Hi-Temp 90 °C (316 SS)
UL Insulation Class Rating	Class F	Class F
Motor Ambient Temp. Rating	194 °F / 90 °C (5-40 hp)	194 °F / 90 °C (5-40 hp)
Stator Resin Type	FE Hi-Temp	FE Hi-Temp
Motor Fill Solution (Water Soluble/Non-Toxic)	FES92	FES92
Top End Bell & Thrust Housing	Epoxy-coated gray iron	316 SS
On Winding SubTrol™ heat sensor	Not Available	Not Available
Stator Shell	300 series SS	316 SS
Stator Ends	Carbon steel	316 SS
Shaft Extension	300 SS (5-20 hp), 17-4 SS (25-40 hp)	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	FKM	FKM
Diaphragm Material	FKM	FKM
Diaphragm Plate	300 series SS	316 SS
Diaphragm Spring	300 series SS	25-6 MO SS
Shaft Slinger	FKM	FKM
Lead Wire	Individual Hi-Temp XLPO	Individual Hi-Temp XLPO
Lead Construction	Potted	Potted
Lead Jam Nut	Brass	316 SS
Thrust Bearing Rating (86 °F / 30 °C)	Standard 5-20 hp • 4,500 lbs Standard 25-40 hp • 7,500 lbs	Standard 5-20 hp • 4,500 lbs Standard 25-40 hp • 7,500 lbs
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

