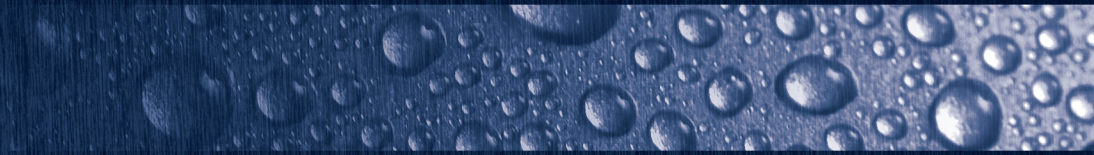


# Submersible Motors & Accessories Catalog



Franklin Electric

# **Commitment To Quality**

**Franklin Electric is committed to provide customers with defect free products through our program of continuous improvement. Quality shall, in every case, take precedence over quantity.**



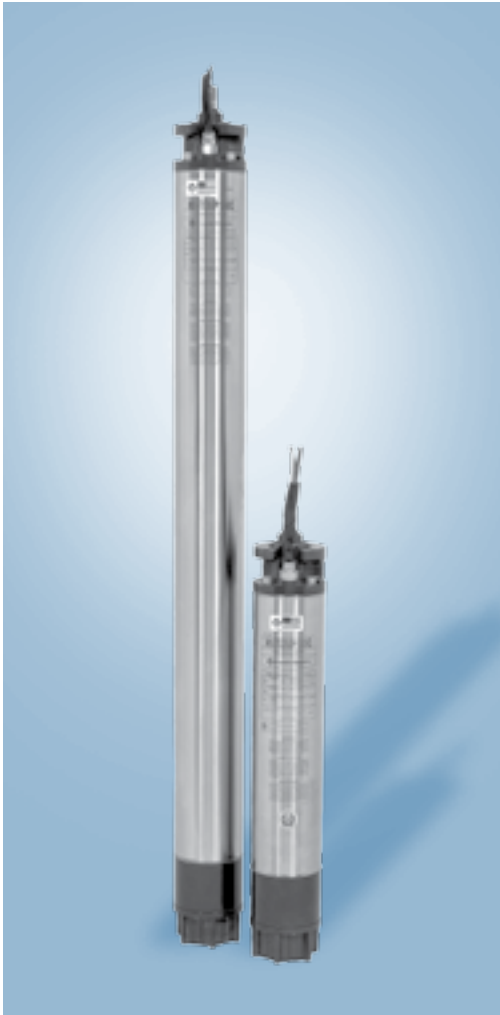
**Franklin Electric**

# Submersible Motors & Accessories Catalog





## 6" Submersible Motors Hi-Temp 90



### Applications

These motors are built for dependable operation in 6" diameter or larger water wells, in applications with higher temperature, high thrust or low flow.

### Basic Features

- Able to operate in water ambients up to 194 °F (90 °C)
- In 86 °F (30 °C) ambient or less they supply 25% more downthrust and 100% more upthrust than standard product
- No flow capable when submerged in lakes or wells 12" diameter or larger and water 86 °F or less
- Double flanged NEMA mounting design
- Stainless steel splined shaft
- StatorShield™ Franklin's six feature encapsulation system
- High Capacity Kingsbury type water lubricated thrust bearing
- Factory filled with Franklin's non-toxic water soluble fill solution
- Field replaceable lead using Franklin's exclusive Water Bloc™ Technology
- Full 3450 rpm 60 Hz design point
- External sand slinger on shaft
- Sand Fighter™ mechanical face seal system at shaft exit
- Copper bar rotor
- All models variable frequency drive (VFD) approved

### Special Options

- SubMonitor™ is a state-of-the-art electronic motor overload that is sold separately.
  - Mounts in the above ground panel requiring no additional wiring to the motor.
  - User friendly, field proven.
  - Protection monitors for balanced power, overload, underload, overheating, rapid cycling and more.
  - Can be used with or without a SubTrol™ heat sensor.
  - Supplies superior heat protection when manufactured with the SubTrol heat sensor.

Consult factory for other voltage, hertz and horsepower ratings not listed in this catalog.

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

# 6" Submersible Motors Hi-Temp 90

## 6-Inch Three-Phase Hi-Temp 90 Motor Specifications

Hz	Phase	Hp Range	kW Range	Poles	RPM	Max. Ambient Temp.	Duty Rating
60	3	5 - 40	3.7 - 30	2	3450	195 °F / 90 °C	Continuous at 0.5 ft/sec flow past motor*
50	3	5 - 40	3.7 - 30	2	2875	195 °F / 90 °C	Continuous at 0.5 ft/sec flow past motor*

\* Motors are also rated for continuous duty up to 86 °F (30 °C) water temperature with NO FLOW in lakes or in wells 12 inches or larger in diameter.

## 6-Inch Hi-Temp 90 Construction Materials

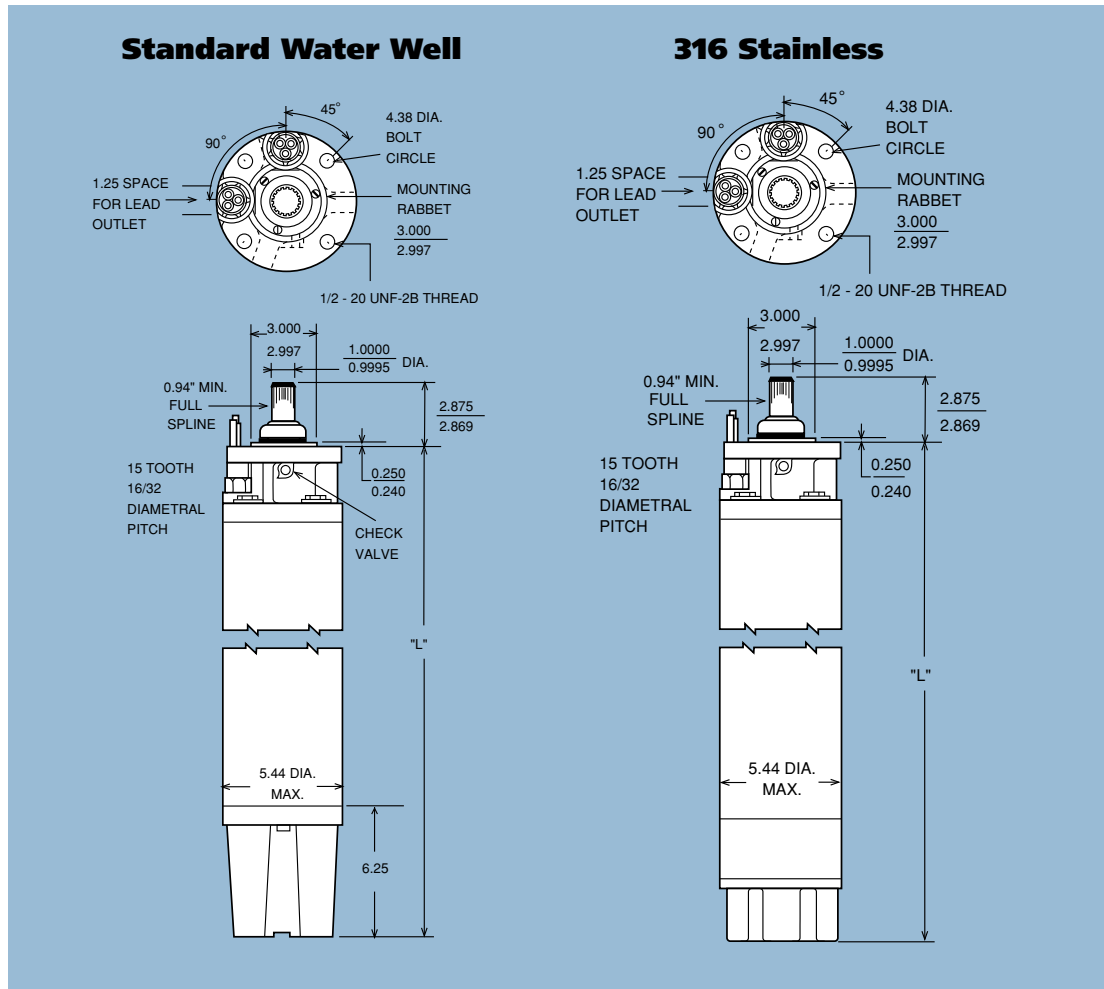
Component	Construction Type	
	Hi-Temp 90C (300 SS Series Shell)	Hi-Temp 90C (316 SS Construction)
UL Insulation Class Rating	Class F	Class F
Motor Ambient Temperature Rating	194 °F / 90 °C (5-40 hp)	194 °F / 90 °C (5-40 hp)
Stator Resin Type	FE Hi-Temp	FE Hi-Temp
Motor Fill Solution (Water Soluble/Non-Toxic)	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 SS Series	316 SS
Stator Ends	Carbon Steel	316 SS
Shaft Extension	300 SS Series (5-20 hp), 17-4 SS (25-40 hp)	17-4 SS
Bushing	Bronze	316 SS
Bushing Retainer	300 SS Series	316 SS
Seal Mechanical Seal	Sand Fighter™ Mechanical Seal System	Sand Fighter Mechanical Seal System
Mechanical Seal Rubber Compnents	Viton®	Viton®
Diaphragm Material	Viton®	Viton®
Diaphragm Plate	300 SS Series	316 SS
Diaphragm Spring	300 SS Series	25-6 MO SS
Shaft Slinger	Viton®	Viton®
Lead Wire	XLPO	XLPO
Lead Potting	Epoxy	Epoxy
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 Conneting System Ground To Motor	Ground Wire In Power Lead Connector	Ground Wire In Power Lead Connector

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

Viton® is a registered trademark of DuPont Dow Elastomers.

# 6" Submersible Motors Hi-Temp 90

## 6-Inch Hi-Temp Dimensions and Weights



### 304 SS Shell 3-Lead

HP	KW	"L" (inches)	SHIPPING WEIGHT		MOTOR CARTON SIZE (in inches)
			LBS	KG	
5	3.7	26.40	116	53	8.75 x 11.25 x 34.50
7.5	5.5	28.96	129	59	8.75 x 11.25 x 37.00
10	7.5	31.52	145	66	8.75 x 11.25 x 42.25
15	11	34.09	156	71	8.75 x 11.25 x 42.25
20	15	36.65	174	79	8.75 x 11.25 x 51.25
25	18.5	41.77	202	92	8.75 x 11.25 x 51.25
30	22	56.27	300	136	8.75 x 10.50 x 71.75
40	30	62.27	330	150	8.75 x 10.50 x 71.75

### 316 SS Shell 3-Lead

HP	KW	"L" (inches)	SHIPPING WEIGHT		MOTOR CARTON SIZE (in inches)
			LBS	KG	
5	3.7	26.40	116	53	8.75 x 11.25 x 34.50
7.5	5.5	28.96	129	59	8.75 x 11.25 x 37.00
10	7.5	31.52	145	66	8.75 x 11.25 x 42.25
15	11	34.09	156	71	8.75 x 11.25 x 42.25
20	15	36.65	174	79	8.75 x 11.25 x 51.25
25	18.5	41.77	202	92	8.75 x 11.25 x 51.25
30	22	56.27	300	136	8.75 x 10.50 x 71.75
40	30	62.27	330	150	8.75 x 10.50 x 71.75

6-Lead Y-Δ models available. (Add 5 lbs to shipping weight.)

# 6" Submersible Motors Hi-Temp 90

## Hi-Temp 90 6-Inch Models

HP (KW)	CONSTRUCTION	DESCRIPTION						MODEL	STOCK STATUS
		PH	VOLTS	HZ	S.F.	# LEADS	WIRE SIZE (AWG)		
5 hp 3.7 kW	WATER WELL WITH SAND FIGHTER SEAL	3P	200	60	1.15	3	#8 w/GND	276 650 00	
		3P	220	50	1.00	3	#8 w/GND	276 680 00	
		3P	220	50	1.00	6-90°	#8 w/GND	276 670 00	
		3P	230	60	1.15	3	#8 w/GND	276 600 00	
		3P	230	60	1.15	6-90°	#8 w/GND	276 720 00	
		3P	380	60	1.15	3	#8 w/GND	276 660 00	
		3P	380	60	1.15	6-90°	#8 w/GND	276 780 00	
		3P	415	50	1.00	3	#8 w/GND	276 690 00	
		3P	460/380-415	60/50	1.15/1.00	3	#8 w/GND	276 610 00	
		3P	460/380-415	60/50	1.15/1.00	6-90°	#8 w/GND	276 710 00	
		3P	575	60	1.15	3	#8 w/GND	276 620 00	
	316 SS	3P	200	60	1.15	3	#8 w/GND	276 650 30	
		3P	220	50	1.00	3	#8 w/GND	276 680 30	
		3P	220	50	1.00	6-90°	#8 w/GND	276 670 30	
		3P	230	60	1.15	3	#8 w/GND	276 600 30	
		3P	230	60	1.15	6-90°	#8 w/GND	276 720 30	
		3P	380	60	1.15	3	#8 w/GND	276 660 30	
		3P	380	60	1.15	6-90°	#8 w/GND	276 780 30	
		3P	415	50	1.00	3	#8 w/GND	276 690 30	
		3P	460/380-415	60/50	1.15/1.00	3	#8 w/GND	276 610 30	
3P	460/380-415	60/50	1.15/1.00	6-90°	#8 w/GND	276 710 30			
3P	575	60	1.15	3	#8 w/GND	276 620 30			
7.5 hp 5.5 kW	WATER WELL WITH SAND FIGHTER SEAL	3P	200	60	1.15	3	#8 w/GND	276 651 00	
		3P	220	50	1.00	3	#8 w/GND	276 681 00	
		3P	220	50	1.00	6-90°	#8 w/GND	276 671 00	
		3P	230	60	1.15	3	#8 w/GND	276 601 00	
		3P	230	60	1.15	6-90°	#8 w/GND	276 721 00	
		3P	380	60	1.15	3	#8 w/GND	276 661 00	
		3P	380	60	1.15	6-90°	#8 w/GND	276 781 00	
		3P	415	50	1.00	3	#8 w/GND	276 691 00	
		3P	460/380-415	60/50	1.15/1.00	3	#8 w/GND	276 611 00	
		3P	460/380-415	60/50	1.15/1.00	6-90°	#8 w/GND	276 711 00	
		3P	575	60	1.15	3	#8 w/GND	276 621 00	
	316 SS	3P	200	60	1.15	3	#8 w/GND	276 651 30	
		3P	220	50	1.00	3	#8 w/GND	276 681 30	
		3P	220	50	1.00	6-90°	#8 w/GND	276 671 30	
		3P	230	60	1.15	3	#8 w/GND	276 601 30	
		3P	230	60	1.15	6-90°	#8 w/GND	276 721 30	
		3P	380	60	1.15	3	#8 w/GND	276 661 30	
		3P	380	60	1.15	6-90°	#8 w/GND	276 781 30	
		3P	415	50	1.00	3	#8 w/GND	276 691 30	
		3P	460/380-415	60/50	1.15/1.00	3	#8 w/GND	276 611 30	
3P	460/380-415	60/50	1.15/1.00	6-90°	#8 w/GND	276 711 30			
3P	575	60	1.15	3	#8 w/GND	276 621 30			

# 6" Submersible Motors Hi-Temp 90

## Hi-Temp 90 6-Inch Models

HP (KW)	CONSTRUCTION	DESCRIPTION						MODEL	STOCK STATUS
		PH	VOLTS	HZ	S.F.	# LEADS	WIRE SIZE (AWG)		
<b>10 hp</b> <b>7.5 kW</b>	WATER WELL WITH SAND FIGHTER SEAL	3P	200	60	1.15	3	#8 w/GND	276 652 00	
		3P	220	50	1.00	3	#8 w/GND	276 682 00	
		3P	220	50	1.00	6-90°	#8 w/GND	276 672 00	
		3P	230	60	1.15	3	#8 w/GND	276 602 00	
		3P	230	60	1.15	6-90°	#8 w/GND	276 722 00	
		3P	380	60	1.15	3	#8 w/GND	276 662 00	
		3P	380	60	1.15	6-90°	#8 w/GND	276 782 00	
		3P	415	50	1.00	3	#8 w/GND	276 692 00	
		3P	460/380-415	60/50	1.15/1.00	3	#8 w/GND	276 612 00	YES
		3P	460/380-415	60/50	1.15/1.00	6-90°	#8 w/GND	276 712 00	
	3P	575	60	1.15	3	#8 w/GND	276 622 00		
	316 SS	3P	200	60	1.15	3	#8 w/GND	276 652 30	
		3P	220	50	1.00	3	#8 w/GND	276 682 30	
		3P	220	50	1.00	6-90°	#8 w/GND	276 672 30	
		3P	230	60	1.15	3	#8 w/GND	276 602 30	
		3P	230	60	1.15	6-90°	#8 w/GND	276 722 30	
		3P	380	60	1.15	3	#8 w/GND	276 662 30	
		3P	380	60	1.15	6-90°	#8 w/GND	276 782 30	
		3P	415	50	1.00	3	#8 w/GND	276 692 30	
		3P	460/380-415	60/50	1.15/1.00	3	#8 w/GND	276 612 30	
3P		460/380-415	60/50	1.15/1.00	6-90°	#8 w/GND	276 712 30		
3P	575	60	1.15	3	#8 w/GND	276 622 30			
<b>15 hp</b> <b>11 kW</b>	WATER WELL WITH SAND FIGHTER SEAL	3P	200	60	1.15	3	#8 w/GND	276 653 00	
		3P	220	50	1.00	3	#8 w/GND	276 683 00	
		3P	220	50	1.00	6-90°	#8 w/GND	276 673 00	
		3P	230	60	1.15	3	#8 w/GND	276 603 00	
		3P	230	60	1.15	6-90°	#8 w/GND	276 723 00	
		3P	380	60	1.15	3	#8 w/GND	276 663 00	
		3P	380	60	1.15	6-90°	#8 w/GND	276 783 00	
		3P	415	50	1.00	3	#8 w/GND	276 693 00	
		3P	460/380-415	60/50	1.15/1.00	3	#8 w/GND	276 613 00	YES
		3P	460/380-415	60/50	1.15/1.00	6-90°	#8 w/GND	276 713 00	
	3P	575	60	1.15	3	#8 w/GND	276 623 00		
	316 SS	3P	200	60	1.15	3	#8 w/GND	276 653 30	
		3P	220	50	1.00	3	#8 w/GND	276 683 30	
		3P	220	50	1.00	6-90°	#8 w/GND	276 673 30	
		3P	230	60	1.15	3	#8 w/GND	276 603 30	
		3P	230	60	1.15	6-90°	#8 w/GND	276 723 30	
		3P	380	60	1.15	3	#8 w/GND	276 663 30	
		3P	380	60	1.15	6-90°	#8 w/GND	276 783 30	
		3P	415	50	1.00	3	#8 w/GND	276 693 30	
		3P	460/380-415	60/50	1.15/1.00	3	#8 w/GND	276 613 30	
3P		460/380-415	60/50	1.15/1.00	6-90°	#8 w/GND	276 713 30		
3P	575	60	1.15	3	#8 w/GND	276 623 30			



# 6" Submersible Motors Hi-Temp 90

## Hi-Temp 90 6-Inch Models

HP (KW)	CONSTRUCTION	DESCRIPTION						MODEL	STOCK STATUS
		PH	VOLTS	HZ	S.F.	# LEADS	WIRE SIZE (AWG)		
20 hp 15 kW	WATER WELL WITH SAND FIGHTER SEAL	3P	200	60	1.15	3	#8 w/GND	276 654 00	
		3P	220	50	1.00	3	#8 w/GND	276 684 00	
		3P	220	50	1.00	6-90°	#8 w/GND	276 674 00	
		3P	230	60	1.15	3	#8 w/GND	276 604 00	
		3P	230	60	1.15	6-90°	#8 w/GND	276 724 00	
		3P	380	60	1.15	3	#8 w/GND	276 664 00	
		3P	380	60	1.15	6-90°	#8 w/GND	276 784 00	
		3P	415	50	1.00	3	#8 w/GND	276 694 00	
		3P	460/380-415	60/50	1.15/1.00	3	#8 w/GND	276 614 00	YES
		3P	460/380-415	60/50	1.15/1.00	6-90°	#8 w/GND	276 714 00	
	3P	575	60	1.15	3	#8 w/GND	276 624 00		
	316 SS	3P	200	60	1.15	3	#8 w/GND	276 654 30	
		3P	220	50	1.00	3	#8 w/GND	276 684 30	
		3P	220	50	1.00	6-90°	#8 w/GND	276 674 30	
		3P	230	60	1.15	3	#8 w/GND	276 604 30	
		3P	230	60	1.15	6-90°	#8 w/GND	276 724 30	
		3P	380	60	1.15	3	#8 w/GND	276 664 30	
		3P	380	60	1.15	6-90°	#8 w/GND	276 784 30	
		3P	415	50	1.00	3	#8 w/GND	276 694 30	
		3P	460/380-415	60/50	1.15/1.00	3	#8 w/GND	276 614 30	
3P		460/380-415	60/50	1.15/1.00	6-90°	#8 w/GND	276 714 30		
3P	575	60	1.15	3	#8 w/GND	276 624 30			
25 hp 18.5 kW	WATER WELL WITH SAND FIGHTER SEAL	3P	200	60	1.15	3	#8 w/GND	276 655 01	
		3P	220	50	1.00	3	#8 w/GND	276 685 01	
		3P	220	50	1.00	6-90°	#8 w/GND	276 675 01	
		3P	230	60	1.15	3	#8 w/GND	276 605 01	
		3P	230	60	1.15	6-90°	#8 w/GND	276 725 01	
		3P	380	60	1.15	3	#8 w/GND	276 665 01	
		3P	380	60	1.15	6-90°	#8 w/GND	276 785 01	
		3P	415	50	1.00	3	#8 w/GND	276 695 01	
		3P	460/380-415	60/50	1.15/1.00	3	#8 w/GND	276 615 01	YES
		3P	460/380-415	60/50	1.15/1.00	6-90°	#8 w/GND	276 715 01	
	3P	575	60	1.15	3	#8 w/GND	276 625 01		
	316 SS	3P	200	60	1.15	3	#8 w/GND	276 655 31	
		3P	220	50	1.00	3	#8 w/GND	276 685 31	
		3P	220	50	1.00	6-90°	#8 w/GND	276 675 31	
		3P	230	60	1.15	3	#8 w/GND	276 605 31	
		3P	230	60	1.15	6-90°	#8 w/GND	276 725 31	
		3P	380	60	1.15	3	#8 w/GND	276 665 31	
		3P	380	60	1.15	6-90°	#8 w/GND	276 785 31	
		3P	415	50	1.00	3	#8 w/GND	276 695 31	
		3P	460/380-415	60/50	1.15/1.00	3	#8 w/GND	276 615 31	
3P		460/380-415	60/50	1.15/1.00	6-90°	#8 w/GND	276 715 31		
3P	575	60	1.15	3	#8 w/GND	276 625 31			

# 6" Submersible Motors Hi-Temp 90

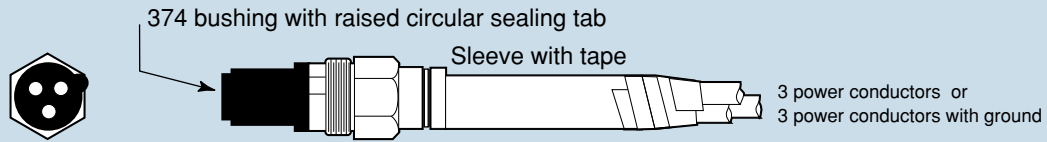
## Hi-Temp 90 6-Inch Models

HP (KW)	CONSTRUCTION	DESCRIPTION						MODEL	STOCK STATUS
		PH	VOLTS	HZ	S.F.	# LEADS	WIRE SIZE (AWG)		
<b>30 hp</b> <b>22 kW</b>	WATER WELL WITH SAND FIGHTER SEAL	3P	200	60	1.15	3	#8 w/GND	276 656 01	
		3P	220	50	1.00	3	#8 w/GND	276 686 01	
		3P	220	50	1.00	6-90°	#8 w/GND	276 676 01	
		3P	230	60	1.15	3	#8 w/GND	276 606 01	
		3P	230	60	1.15	6-90°	#8 w/GND	276 726 01	
		3P	380	60	1.15	3	#8 w/GND	276 666 01	
		3P	380	60	1.15	6-90°	#8 w/GND	276 786 01	
		3P	415	50	1.00	3	#8 w/GND	276 696 01	
		3P	460/380-415	60/50	1.15/1.00	3	#8 w/GND	276 616 01	YES
		3P	460/380-415	60/50	1.15/1.00	6-90°	#8 w/GND	276 716 01	
	3P	575	60	1.15	3	#8 w/GND	276 626 01		
	316 SS	3P	200	60	1.15	3	#8 w/GND	276 656 31	
		3P	220	50	1.00	3	#8 w/GND	276 686 31	
		3P	220	50	1.00	6-90°	#8 w/GND	276 676 31	
		3P	230	60	1.15	3	#8 w/GND	276 606 31	
		3P	230	60	1.15	6-90°	#8 w/GND	276 726 31	
		3P	380	60	1.15	3	#8 w/GND	276 666 31	
		3P	380	60	1.15	6-90°	#8 w/GND	276 786 31	
		3P	415	50	1.00	3	#8 w/GND	276 696 31	
3P		460/380-415	60/50	1.15/1.00	3	#8 w/GND	276 616 31		
3P		460/380-415	60/50	1.15/1.00	6-90°	#8 w/GND	276 716 31		
3P	575	60	1.15	3	#8 w/GND	276 626 31			
<b>40 hp</b> <b>30 kW</b>	WATER WELL WITH SAND FIGHTER SEAL	3P	380	60	1.15	3	#8 w/GND	276 667 01	
		3P	380	60	1.15	6-90°	#8 w/GND	276 787 01	
		3P	415	50	1.00	3	#8 w/GND	276 697 01	
		3P	460/380-415	60/50	1.15/1.00	3	#8 w/GND	276 617 01	YES
		3P	460/380-415	60/50	1.15/1.00	6-90°	#8 w/GND	276 717 01	
		3P	575	60	1.15	3	#8 w/GND	276 627 01	
	316 SS	3P	380	60	1.15	3	#8 w/GND	276 667 31	
		3P	380	60	1.15	6-90°	#8 w/GND	276 787 31	
		3P	415	50	1.00	3	#8 w/GND	276 697 31	
		3P	460/380-415	60/50	1.15/1.00	3	#8 w/GND	276 617 31	
		3P	460/380-415	60/50	1.15/1.00	6-90°	#8 w/GND	276 717 31	
3P	575	60	1.15	3	#8 w/GND	276 627 31			

### NOTES:

1. All models listed above include leads (13 ft).
2. 6-Lead wye-delta models available in additional voltage ratings. Consult factory for availability.

# 6" Submersible Motors Leads



## 6" Lead Construction Material

Component	Material
Wire	XLPE 125 °C
Sleeve	Brass or 316 SS
Potting	Epoxy
Jam Nut	Brass or 316 SS

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

## Standard XLPE 125 °C Lead

Excellent resistance to ozone, abrasion, heat, and oxidizing chemicals.

# 6" Submersible Motors Leads

## Standard XLPE 125 °C Lead

FITS FE MOTOR RATING	JAM NUT MATERIAL	LEAD LENGTH		WIRE SIZE (AWG)	POWER WIRES	FE PART NUMBER	REPLACEMENT KIT NUMBER
		FT	M				
<b>All 6" Ratings</b>	Brass	13	4	#8	3 w/GND	152 671 901	305 517 901
	Brass	26	8	#8	3 w/GND	152 671 902	305 517 902
	316 SS	13	4	#8	3 w/GND	152 671 951	305 517 951
	316 SS	26	8	#8	3 w/GND	152 671 952	305 517 952
<b>5-30 hp 3.7-22 kW</b>	316 SS	50	15	#10	3 w/GND	152 672 955	305 518 955
	316 SS	75	23	#10	3 w/GND	152 672 957	305 518 957
	316 SS	100	30	#10	3 w/GND	152 672 960	305 518 960
	316 SS	125	38	#10	3 w/GND	152 672 962	305 518 962
	316 SS	150	45	#10	3 w/GND	152 672 965	305 518 965
	316 SS	50	15	#8	3 w/GND	152 671 955	305 517 955
	316 SS	75	23	#8	3 w/GND	152 671 957	305 517 957
	316 SS	100	30	#8	3 w/GND	152 671 960	305 517 960
	316 SS	125	38	#8	3 w/GND	152 671 962	305 517 962
	316 SS	150	45	#8	3 w/GND	152 671 965	305 517 965

### NOTES:

1. Refer to Franklin Application Installation Maintenance (AIM) Manual for accurate cable sizing.
2. Nitrile cable uses lead sleeve 1" longer than standard.
3. MOTOR WARRANTY IS VOID if Franklin-supplied leads are not used.
4. Replacement leads are available in 25 ft. increments up to 150 ft. Special-cut lengths may be available at an additional charge. Consult factory for price and availability.

## XLPO 125 °C - Hi-Temp 90 Motors

FITS FE MOTOR RATING	JAM NUT MATERIAL	LEAD LENGTH		WIRE SIZE	POWER WIRES	FE PART NUMBER	REPLACEMENT KIT NUMBER
		FT	M				
<b>All 6" Ratings</b>	316 SS	13	4	#8	3 w/GND	152 683 951	305 519 951
	316 SS	26	8	#8	3 w/GND	152 683 952	305 519 952
	316 SS	50	15	#8	3 w/GND	152 683 955	305 519 955
<b>5-30 hp 3.7-22 kW</b>	316 SS	75	23	#8	3 w/GND	152 683 957	305 519 957
	316 SS	100	30	#8	3 w/GND	152 683 960	305 519 960
	316 SS	125	38	#8	3 w/GND	152 683 962	305 519 962
	316 SS	150	45	#8	3 w/GND	152 683 965	305 519 965

### NOTES:

1. Refer to Franklin Application Installation Maintenance (AIM) Manual for accurate cable sizing.
2. MOTOR WARRANTY IS VOID if Franklin-supplied leads are not used.



## 8" Submersible Motors Hi-Temp 75



### Applications

These motors are built for dependable operation in vertical 8" diameter or larger wells, in applications with higher temperature, higher thrust or low flow.

### Basic Features

- Able to operate in water temperatures up to 167 °F (75 °C)
- In 86 °F (30 °C) ambient or less they supply 25% more downthrust and upthrust than standard product
- No flow capable when submerged in lakes or wells 14" diameter or larger and water 86 °F or less
- Double flanged NEMA mounting design
- Stainless steel splined shaft
- StatorShield™ Franklin's six feature encapsulation system
- High capacity Kingsbury type water lubricated thrust bearing
- Factory filled with Franklin's non-toxic water soluble fill solution
- Field replaceable lead using Franklin's exclusive Water Bloc™ technology
- Full 3525 rpm 60 Hz design point
- External sand slinger on shaft
- Sand Fighter™ mechanical face seal system at shaft exit
- Copper bar rotor
- All models variable frequency drive (VFD) approved

### Special Options

- SubMonitor™ is a state-of-the-art electronic motor overload that is sold separately.
  - Mounts in the above ground panel requiring no additional wiring to the motor.
  - User friendly, field proven.
  - Protection monitors for balanced power, overload, underload, overheating, rapid cycling and more.
  - Can be used with or without a SubTrol™ heat sensor.
  - Supplies superior heat protection when manufactured with the SubTrol heat sensor.

Consult factory for other voltage, hertz and horsepower ratings not listed in this catalog. Specifications are subject to change without notice. Contact Franklin Electric if current materials are required for bid specifications.

# 8" Submersible Motors Hi-Temp 75

## Hi-Temp 75 8-Inch Three-Phase Motor Specifications

Hz	Phase	Hp Range	kW Range	Poles	RPM	Max. Ambient Temp.	Duty Rating
60	3	40 - 150	30 - 110	2	3525	167 °F / 75 °C	Continuous at 0.5 ft/sec flow past motor*
50	3	40 - 150	30 - 110	2	2900	167 °F / 75 °C	Continuous at 0.5 ft/sec flow past motor*

\* Motors are also rated for continuous duty in 86 °F (30 °C) maximum water temperature with NO FLOW in lakes or in wells 14 inches or larger in diameter.

## Hi-Temp 75 8-Inch Construction Materials

Component	Construction Type	
	Hi-Temp 75 (300 SS Series Shell)	Hi-Temp 75 (316 SS Construction)
UL Insulation Class Rating	Class F	Class F
Motor Ambient Temperature Rating	167 °F / 75 °C	167 °F / 75 °C
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
SubTrol™ heat sensor (Mounted On Winding)	No	No
Stator Shell	300 SS Series	316 SS
Stator Ends	Carbon Steel	316 SS
Shaft Extension	17-4 SS	17-4 SS
Bushing	Bronze	316 SS
Bushing Retainer	300 SS Series	316 SS
Shaft Mechanical Seal	Sand Fighter™ Seal System	Sand Fighter Seal System
Mechanical Seal Rubber Components	Viton®	Viton®
Diaphragm Material	Viton®	Viton®
Diaphragm Plate	316 SS	316 SS
Diaphragm Spring	316 SS	316 SS
Shaft Slinger	Viton®	Viton®
Lead Wire	XLPO	XLPO
Lead Potting	Epoxy	Epoxy
Lead Jam Nut or Compression Plate	316 SS Plate (150-200 hp)	316 SS Plate (150-200 hp)
Thrust Bearing Rating (86 °F / 30 °C)	12,500 lbs (86 °F / 30 °C) 10,000 lbs (167 °F / 75 °C)	12,500 lbs (86 °F / 30 °C) 10,000 lbs (167 °F / 75 °C)
Method Of Connecting System Ground To Motor	Ground Lug On Top End Bell	Ground Lug On Top End Bell

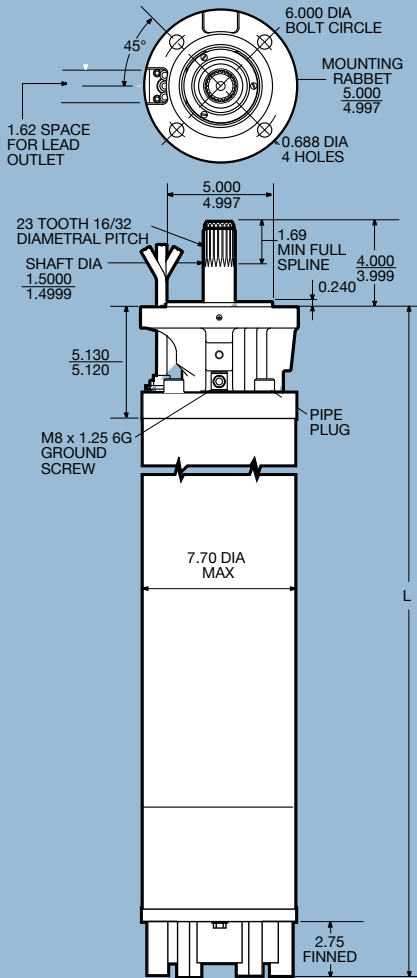
Specifications subject to change without notice. Contact Franklin Electric if current material types are required for bid specifications.

Viton® is a registered trademark of DuPont Dow Elastomers.

# 8" Submersible Motors Hi-Temp 75

## 8-Inch Hi-Temp 75 Dimensions and Weights

### 40 hp to 150 hp Type 1.0



### Three-Phase Motors

HP	KW	"L" (inches)	SHIPPING WEIGHT		MOTOR CARTON SIZE (in inches)
			LBS	KG	
40	30	44.8	400	181	17 x 9.25 x 51
50	37	49.8	455	206	17 x 9.25 x 64
60	45	57.3	555	252	17 x 9.25 x 64
75	55	68.8	700	318	17 x 9.25 x 79
100	75	77.8	840	382	17 x 9.25 x 96
125	93	85.8	945	430	17 x 9.25 x 96
150	110	94.8	1040	473	17 x 9.25 x 108

# 8" Submersible Motors Hi-Temp 75

## 8-Inch Hi-Temp 75 Models

HP (KW)	CONSTRUCTION	DESCRIPTION							MODEL	STOCK STATUS
		PH	VOLTS	HZ	SUBTROL HEAT SENSOR	S.F.	# LEADS	WIRE SIZE		
40 hp 30 kW	WATER WELL WITH SAND FIGHTER SEAL	3P	380	60	Not Available	1.15	3	#2 w/o GND	279 160 90	
		3P	380	60	Not Available	1.15	6-90°	#2 w/o GND	279 180 90	
		3P	415	50	Not Available	1.00	3	#2 w/o GND	279 360 90	
		3P	460/380-415	60/50	Not Available	1.15/1.00	3	#2 w/o GND	279 100 90	
		3P	460/380-415	60/50	Not Available	1.15/1.00	6-90°	#2 w/o GND	279 120 90	
		3P	575	60	Not Available	1.15	3	#2 w/o GND	279 110 90	
	316 SS	3P	380	60	Not Available	1.15	3	#2 w/o GND	279 160 92	
		3P	380	60	Not Available	1.15	6-90°	#2 w/o GND	279 180 92	
		3P	415	50	Not Available	1.00	3	#2 w/o GND	279 360 92	
		3P	460/380-415	60/50	Not Available	1.15/1.00	3	#2 w/o GND	279 100 92	
		3P	460/380-415	60/50	Not Available	1.15/1.00	6-90°	#2 w/o GND	279 120 92	
		3P	575	60	Not Available	1.15	3	#2 w/o GND	279 110 92	
50 hp 37 kW	WATER WELL WITH SAND FIGHTER SEAL	3P	380	60	Not Available	1.15	3	#2 w/o GND	279 161 90	
		3P	380	60	Not Available	1.15	6-90°	#2 w/o GND	279 181 90	
		3P	415	50	Not Available	1.00	3	#2 w/o GND	279 361 90	
		3P	460/380-415	60/50	Not Available	1.15/1.00	3	#2 w/o GND	279 101 90	
		3P	460/380-415	60/50	Not Available	1.15/1.00	6-90°	#2 w/o GND	279 121 90	
		3P	575	60	Not Available	1.15	3	#2 w/o GND	279 111 90	
	316 SS	3P	380	60	Not Available	1.15	3	#2 w/o GND	279 161 92	
		3P	380	60	Not Available	1.15	6-90°	#2 w/o GND	279 181 92	
		3P	415	50	Not Available	1.00	3	#2 w/o GND	279 361 92	
		3P	460/380-415	60/50	Not Available	1.15/1.00	3	#2 w/o GND	279 101 92	
		3P	460/380-415	60/50	Not Available	1.15/1.00	6-90°	#2 w/o GND	279 121 92	
		3P	575	60	Not Available	1.15	3	#2 w/o GND	279 111 92	
60 hp 45 kW	WATER WELL WITH SAND FIGHTER SEAL	3P	380	60	Not Available	1.15	3	#2 w/o GND	279 162 90	
		3P	380	60	Not Available	1.15	6-90°	#2 w/o GND	279 182 90	
		3P	415	50	Not Available	1.00	3	#2 w/o GND	279 362 90	
		3P	460/380-415	60/50	Not Available	1.15/1.00	3	#2 w/o GND	279 102 90	YES
		3P	460/380-415	60/50	Not Available	1.15/1.00	6-90°	#2 w/o GND	279 122 90	
		3P	575	60	Not Available	1.15	3	#2 w/o GND	279 112 90	
	316 SS	3P	380	60	Not Available	1.15	3	#2 w/o GND	279 162 92	
		3P	380	60	Not Available	1.15	6-90°	#2 w/o GND	279 182 92	
		3P	415	50	Not Available	1.00	3	#2 w/o GND	279 362 92	
		3P	460/380-415	60/50	Not Available	1.15/1.00	3	#2 w/o GND	279 102 92	
		3P	460/380-415	60/50	Not Available	1.15/1.00	6-90°	#2 w/o GND	279 122 92	
		3P	575	60	Not Available	1.15	3	#2 w/o GND	279 112 92	



# 8" Submersible Motors Hi-Temp 75

## 8-Inch Hi-Temp 75 Models

HP (KW)	CONSTRUCTION	DESCRIPTION							MODEL	STOCK STATUS
		PH	VOLTS	HZ	SUBTROL HEAT SENSOR	S.F.	# LEADS	WIRE SIZE		
75 hp 55 kW	WATER WELL WITH SAND FIGHTER SEAL	3P	380	60	Not Available	1.15	3	#2 w/o GND	279 163 90	
		3P	380	60	Not Available	1.15	6-90°	#2 w/o GND	279 183 90	
		3P	415	50	Not Available	1.00	3	#2 w/o GND	279 363 90	
		3P	460/380-415	60/50	Not Available	1.15/1.00	3	#2 w/o GND	279 103 90	YES
		3P	460/380-415	60/50	Not Available	1.15/1.00	6-90°	#2 w/o GND	279 123 90	
		3P	575	60	Not Available	1.15	3	#2 w/o GND	279 113 90	
	316 SS	3P	380	60	Not Available	1.15	3	#2 w/o GND	279 163 92	
		3P	380	60	Not Available	1.15	6-90°	#2 w/o GND	279 183 92	
		3P	415	50	Not Available	1.00	3	#2 w/o GND	279 363 92	
		3P	460/380-415	60/50	Not Available	1.15/1.00	3	#2 w/o GND	279 103 92	
		3P	460/380-415	60/50	Not Available	1.15/1.00	6-90°	#2 w/o GND	279 123 92	
		3P	575	60	Not Available	1.15	3	#2 w/o GND	279 113 92	
100 hp 75 kW	WATER WELL WITH SAND FIGHTER SEAL	3P	380	60	Not Available	1.15	3	#2 w/o GND	279 164 90	
		3P	380	60	Not Available	1.15	6-90°	#2 w/o GND	279 184 90	
		3P	415	50	Not Available	1.00	3	#2 w/o GND	279 364 90	
		3P	460/380-415	60/50	Not Available	1.15/1.00	3	#2 w/o GND	279 104 90	YES
		3P	460/380-415	60/50	Not Available	1.15/1.00	6-90°	#2 w/o GND	279 124 90	
		3P	575	60	Not Available	1.15	3	#2 w/o GND	279 114 90	
	316 SS	3P	380	60	Not Available	1.15	3	#2 w/o GND	279 164 92	
		3P	380	60	Not Available	1.15	6-90°	#2 w/o GND	279 184 92	
		3P	415	50	Not Available	1.00	3	#2 w/o GND	279 364 92	
		3P	460/380-415	60/50	Not Available	1.15/1.00	3	#2 w/o GND	279 104 92	YES
		3P	460/380-415	60/50	Not Available	1.15/1.00	6-90°	#2 w/o GND	279 124 92	
		3P	575	60	Not Available	1.15	3	#2 w/o GND	279 114 92	
125 hp 93 kW	WATER WELL WITH SAND FIGHTER SEAL	3P	380	60	Not Available	1.15	3	#2 w/o GND	279 165 90	
		3P	380	60	Not Available	1.15	6-90°	#2 w/o GND	279 185 90	
		3P	415	50	Not Available	1.00	3	#2 w/o GND	279 365 90	
		3P	460/380-415	60/50	Not Available	1.15/1.00	3	#2 w/o GND	279 105 90	YES
		3P	460/380-415	60/50	Not Available	1.15/1.00	6-90°	#2 w/o GND	279 125 90	
		3P	575	60	Not Available	1.15	3	#2 w/o GND	279 115 90	
	316 SS	3P	380	60	Not Available	1.15	3	#2 w/o GND	279 165 92	
		3P	380	60	Not Available	1.15	6-90°	#2 w/o GND	279 185 92	
		3P	415	50	Not Available	1.00	3	#2 w/o GND	279 365 92	
		3P	460/380-415	60/50	Not Available	1.15/1.00	3	#2 w/o GND	279 105 92	YES
		3P	460/380-415	60/50	Not Available	1.15/1.00	6-90°	#2 w/o GND	279 125 92	
		3P	575	60	Not Available	1.15	3	#2 w/o GND	279 115 92	

# 8" Submersible Motors 316SS Booster

## 8-Inch Hi-Temp 75 Models

HP (KW)	CONSTRUCTION	DESCRIPTION							MODEL	STOCK STATUS
		PH	VOLTS	HZ	SUBTROL HEAT SENSOR	S.F.	# LEADS	WIRE SIZE		
<b>150 hp 110 kW</b>	WATER WELL WITH SAND FIGHTER SEAL	3P	380	60	Not Available	1.15	3	#2 w/o GND	279 166 90	
		3P	380	60	Not Available	1.15	6-90°	#2 w/o GND	279 186 90	
		3P	415	50	Not Available	1.00	3	#2 w/o GND	279 366 90	
		3P	460/380-415	60/50	Not Available	1.15/1.00	3	#2 w/o GND	279 106 90	YES
		3P	460/380-415	60/50	Not Available	1.15/1.00	6-90°	#2 w/o GND	279 126 90	
		3P	575	60	Not Available	1.15	3	#2 w/o GND	279 116 90	
	316 SS	3P	380	60	Not Available	1.15	3	#2 w/o GND	279 166 92	
		3P	380	60	Not Available	1.15	6-90°	#2 w/o GND	279 186 92	
		3P	415	50	Not Available	1.00	3	#2 w/o GND	279 366 92	
		3P	460/380-415	60/50	Not Available	1.15/1.00	3	#2 w/o GND	279 106 92	
		3P	460/380-415	60/50	Not Available	1.15/1.00	6-90°	#2 w/o GND	279 126 92	
		3P	575	60	Not Available	1.15	3	#2 w/o GND	279 116 92	

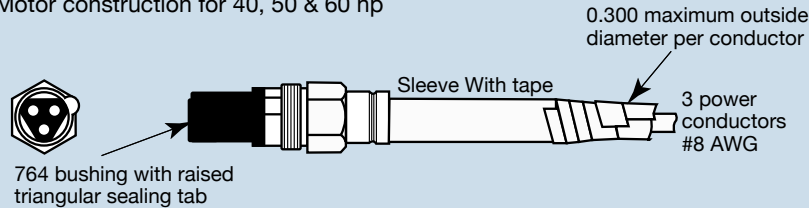
**NOTES:**

1. All models listed above include leads (13 ft).
2. Motor leads do not include ground.

# 8" Submersible Motors Leads

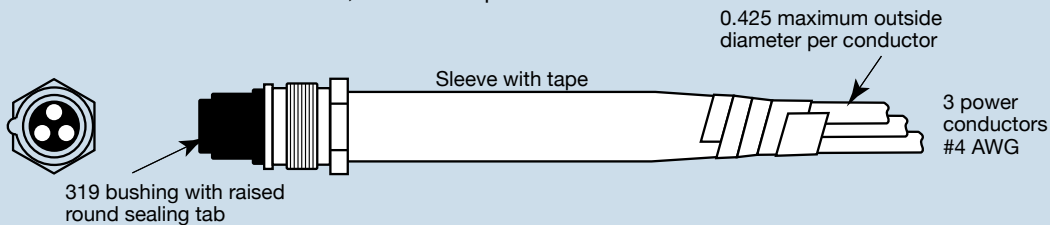
**FIGURE 1: Standard XLPE 125 °C Lead**

Motor construction for 40, 50 & 60 hp



**FIGURE 2: Standard Hypalon 75 °C Lead**

Motor construction for 75, 100 & 125 hp



**FIGURE 3: Standard Hypalon 75 °C Lead**

Motor construction for 150, 175 & 200 hp lead clamping plate is a separate part and can be reused

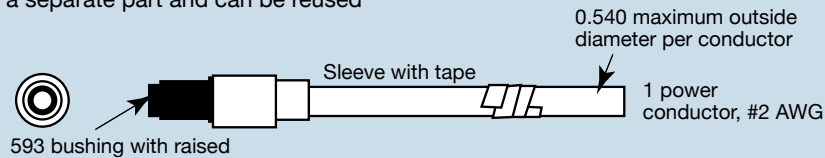


FIGURE	FITS FE MOTOR RATING	JAM NUT MATERIAL	LEAD LENGTH		WIRE SIZE (AWG)	POWER CONDUCTOR PER CONNECTOR	FE PART NUMBER	REPLACEMENT KIT NUMBER
			FT	M				
1	40-60 hp 30-45 kW	Brass	13	4	#8	3 (1 Shipped) No Ground	152 698 901	305 516 901
		Brass	26	8	#8	3 (1 Shipped) No Ground	152 698 902	305 516 902
		316 SS	13	4	#8	3 (1 Shipped) No Ground	152 698 950	305 516 950
		316 SS	26	8	#8	3 (1 Shipped) No Ground	152 698 951	305 516 951
2	75-125 hp 55-93 kW	Brass	13	4	#4	3 (1 Shipped) No Ground	165 238 901	305 210 901
		Brass	26	8	#4	3 (1 Shipped) No Ground	165 238 924	305 210 924
		316 SS	13	4	#4	3 (1 Shipped) No Ground	165 238 903	305 210 903
		316 SS	26	8	#4	3 (1 Shipped) No Ground	165 238 928	305 210 928
3	150-200 hp 110-150 kW	316 SS	13	4	#2	1 (3 shipped) No Ground	165 617 901	305 315 901
		316 SS	26	8	#2	1 (3 shipped) No Ground	165 617 902	305 315 902

# 8" Submersible Motors Leads

## 8-Inch 125 °C XLPO Hi-Temp 75C and Booster Motor Leads

FITS FE MOTOR RATING	JAM NUT MATERIAL	LEAD LENGTH		WIRE SIZE (AWG)	POWER WIRES	FE PART NUMBER	REPLACEMENT KIT NUMBER
		FT	M				
<b>All Ratings</b>	316 SS	13	4	#2	1 (3 shipped) No Ground	165 617 901	305 315 901
	316 SS	26	8	#2	1 (3 shipped) No Ground	165 617 902	305 315 902

## 8-Inch Lead Construction Materials

Component	Material
Wire	RHW Hypalon 75°, or XLPO 125 °C
Sleeve	Brass or 316 SS
Potting	Epoxy
Jam Nut or Clamp Plate	Brass or 316 SS

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



**ATTENTION!**  
**IMPORTANT INFORMATION FOR INSTALLERS OF THIS EQUIPMENT!**

This equipment is intended for installation by technically qualified personnel. Failure to install it in compliance with national and local electrical codes, and within Franklin Electric recommendations, may result in electrical shock or fire hazard, unsatisfactory performance, and equipment failure. Franklin installation information is available from pump manufacturers and distributors, and directly from Franklin Electric. Call Franklin toll free 800-348-2420 for information.

**WARNING**

Serious or fatal electrical shock may result from failure to connect the motor, control enclosures, metal plumbing, and all other metal near the motor or cable, to the power supply ground terminal using wire no smaller than motor cable wires. To reduce risk of electrical shock, disconnect power before working on or around the water system. Do not use motor in swimming areas.

**ATTENTION!**  
**INFORMATIONS IMPORTANTES POUR L'INSTALLATEUR DE CET EQUIPEMENT.**

Cet équipement doit être installé par un technicien qualifié. Si l'installation n'est pas conforme aux lois nationales ou locales ainsi qu'aux recommandations de Franklin Electric, un choc électrique, le feu, une performance non acceptable, voire même le non-fonctionnement peuvent survenir. Un guide d'installation de Franklin Electric est disponible chez les fabricants de pompes, les distributeurs, ou directement chez Franklin. Pour de plus amples renseignements, appelez sans frais le 800-348-2420.

**AVERTISSEMENT**

Un choc électrique sérieux ou même mortel est possible, si l'on néglige de connecter le moteur, la plomberie métallique, boîtes de contrôle et tout métal proche du moteur à un câble allant vers une alimentation d'énergie avec borne de mise à la terre utilisant au moins le même calibre que les fils du moteur. Pour réduire le risque de choc électrique. Couper le courant avant de travailler près ou sur le système d'eau. Ne pas utiliser ce moteur dans une zone de baignade.

**ATENCION!**  
**INFORMACION PARA EL INSTALADOR DE ESTE EQUIPO.**

Para la instalación de este equipo, se requiere de personal técnico calificado. El no cumplir con las normas eléctricas nacionales y locales, así como con las recomendaciones de Franklin Electric durante su instalación, puede ocasionar, un choque eléctrico, peligro de un incendio, operación defectuosa e incluso la descompostura del equipo. Los manuales de instalación y puesta en marcha de los equipos, están disponibles con los distribuidores, fabricantes de bombas o directamente con Franklin Electric. Puede llamar gratuitamente para mayor información al teléfono 800-348-2420.

**ADVERTENCIA**

Puede ocurrir un choque eléctrico, serio o fatal debido a una errónea conexión del motor, de los tableros eléctricos, de la tubería, de cualquier otra parte metálica que está cerca del motor o por no utilizar un cable para tierra de calibre igual o mayor al de la alimentación. Para reducir el riesgo de choque eléctrico, desconectar la alimentación eléctrica antes de iniciar a trabajar en el sistema hidráulico. No utilizar este motor en albercas o áreas en donde se practique natación.

**TOLL FREE HELP FROM A FRIEND**

**1.800.348.2420**

**1.260.827.5102 (FAX)**



**Franklin Electric**

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[www.franklin-electric.com](http://www.franklin-electric.com)