# Submersible Motors

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**DATE:** December 1, 2000 **SUPERSEDES:** 6-1-97

# 60 Hz • 4" High Thrust • Oil Stripper Motors



## SINGLE-PHASE, CAPACITOR START, CAPACITOR RUN, 3450 RPM Control Box Required<sup>®</sup>

HF	kw	DOWNWARD THRUST LBS	VOLTS	SERVICE FACTOR	MOTOR MODEL NUMBER	CONTROL BOX MODEL NUMBER
2	1.5	1500	230	1.25	224 301 50	282 301 81
3	2.2	1500	230	1.15	224 302 50	282 302 81
5	3.7	1500	230	1.15	224 303 50	282 113 81

### THREE-PHASE Special Controls Required®

HP	KW	DOWNWARD THRUST LBS	VOLTS	SERVICE FACTOR	MOTOR MODEL NUMBER
2	1.5	1500 1500	230 460/380 <sup>©</sup>	1.25 1.25/1.0	234 315 50 234 325 50
3	2.2	1500 1500	230 460/380 <sup>©</sup>	1.15 1.15/1.0	234 316 50 234 326 50
5	3.7	1500 1500	230 460/380 <sup>©</sup>	1.15 1.15/1.0	234 317 50 234 327 50
7.5	5.5	1500 1500	230 460/380 <sup>©</sup>	1.15 1.15/1.0	234 318 50 234 328 50

#### **APPLICATIONS**

These motors are designed for secondary oil recovery operations 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.

Do not use motor in swimming areas.

#### **SPECIFICATIONS**

**Temperature and Time Rating:** Continuous in 167°F (75°C) max. water temperature at 1/4 ft/sec. flow past motor.

**Enclosure:** Hermetically sealed stator, corrosion resistant materials.

Shaft: Splined, stainless steel.

**Bearings:** Radial sleeve bearings, Kingsbury-type thrust bearings.

Control Box: Single-phase controls available from Franklin Electric. Three-phase controls not available from Franklin Electric.

**Protection:** Manual reset thermal overload protection in single-phase control box. SPECIAL for three-phase. Single-phase motors equipped with built-in lightning arrestors. Three-phase motors equipped for use with Subtrol-Plus.

**Rotation:** Single-phase, CCW facing shaft end. Three-phase, electrically reversible.

#### MODIFICATIONS

Voltage, Hertz, and Hp ratings not listed here are available with a price adder. Consult factory for price and delivery.

### **FOOTNOTES**

<sup>®</sup> Franklin does not manufacture three-phase controls. Standard three-phase magnetic starter with ambient compensated quick-trip overload protection in all three legs is required for positive motor protection. WARRANTY IS VOID where this protection is not employed.

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.



<sup>&</sup>lt;sup>2</sup> 60/50 Hz. 3450/2875 rpm.

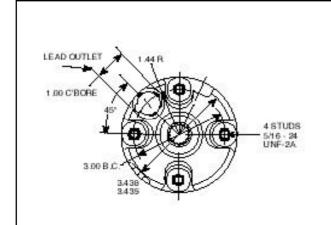
<sup>&</sup>lt;sup>®</sup> Refer to page "Accessories" section for single-phase control box.

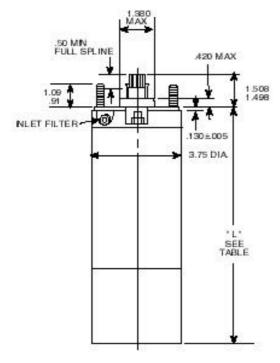
<sup>&</sup>lt;sup>®</sup> WARRANTY IS VOID if Franklin supplied leads or cables are not used.

<sup>&</sup>lt;sup>⑤</sup> See "Electronics" section for Subtrol-Plus.

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# 60 Hz • 4" High Thrust • Oil Stripper Motors





### **SPLINE DATA**

• 14 TEETH • 24/48 DIAMETRAL PITCH • 30½ PRESSURE ANGLE • FLAT ROOT, SIDE FIT SLIDING CLASS "A" FIT • ASA B5.15-1950

4" HIGH THRUST - SINGLE-PHASE **SHIPPING WEIGHT MOTOR CARTON** "L" HP LBS. KGS. **SIZE** 2 22.87 46 20.8 6" X 6" X 28" 3 25.87 24.5 6" X 6" X 34" 54 75 6" X 6" X 37" 5 31.87" 34.0

4" HIGH THRUST - THREE-PHASE						
μр	"L"	SHIPPIN	G WEIGHT	MOTOR CARTON		
HP		LBS.	KGS.	SIZE		
2	21.37"	42	19.0	6" X 6" X 25"		
3	22.87"	50	22.7	6" X 6" X 28"		
5	25.87"	58	26.3	6" X 6" X 34"		
7.5	31.87"	75	34.0	9" X 8" X 37"		

See "Accessories" section for control box weights and dimensions.

## **CONSTRUCTION MATERIALS**

Component	Oil Stripper			
Castings	Ni-Resist Type 1B			
Stator Shell	316 SS			
Stator Ends	316 SS			
Shaft Extension	17-4 SS			
Fasteners	316 SS			
Seal Cover	316 SS			
Seal	Viton®, Carbon, Ceramic Face Seal			
Diaphragm	Nitrile Rubber with extra capacity			
Diaphragm Spring	17-7 SS			
Diaphragm Cover	Ni-Resist Type 1B			
Slinger	Nitrile Rubber			
Lead Wire (or Cable)	Nitrile <sup>®</sup>			
Lead Potting	Ероху			
Lead Jam Nut	316 SS			
Filter	316 SS			

<sup>&</sup>lt;sup>①</sup>Removable type lead installed in motor.

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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