# Product Data



A complete line of single-phase control boxes is available from Franklin Electric.

## SUBTROL-PLUS® OVERLOAD OPTION FOR THREE-PHASE MOTORS

A field proven and contractor friendly premium motor protection system. It protects the motor against overload, underload, overheating 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.



## 6" ENCAPSULATED SUBMERSIBLE MOTORS

5 through 15 horsepower single-phase. 5 through 60 horsepower three-phase. 200 to 575 volts-60 and 50 hertz.

### APPLICATION DATA

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

### **BASIC 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<sup>™</sup> lead
- Double flange design
- Stainless steel shell
- Stainless steel splined shaft
- Kingsbury-type water lubicated thrust bearing
- Pressure equalizing diaphragm
- Sand slinger
- 3-lead & 6-lead (Wye Delta) configurations for 3-phase
- Copper bar rotor

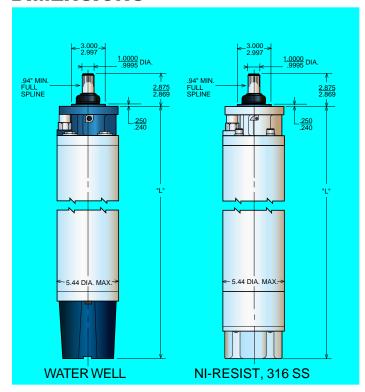
#### SPECIAL FEATURES

- Ni-Resist: Special construction option for some Salt Water and high pH applications. All Ni-Resist motors include a Subtrol-Plus heat sensor.
- 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 available for sandy wells.
- Mining And Offshore Application Motors available with flat jacketed nitrile lead and Sand Fighter™ sealing system, consult factory.



## 6-INCH SUBMERSIBLE MOTORS

## **DIMENSIONS**



## **AVAILABILITY**<sup>①</sup>

| Singl | ingle-Phase |              | Capacitor start, capacitor run (control box required) |       |          |          |          |  |
|-------|-------------|--------------|---|-------|----------|----------|----------|--|
|       |             |              | r Well  |       | , 316 SS |          | 6 SS     |  |
|       |             | " <b>L</b> " | Dim.  | "L" [ | Dim.     | Shipping | g Weight |  |
| hp    | kw          | ins          | cm  | ins   | cm       | lbs      | kgs      |  |
| 5     | 3.7         | 25.4         | 64.6  | 25.0  | 63.6     | 112      | 51       |  |
| 71/2  | 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      |              |   |       |          |          |          |  |
| 5     | 3.7         | 22.9         | 58.1  | 22.5  | 57.1     | 103      | 47       |  |
| 71/2  | 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    | 37.0        | 55.3         | 140.5   | 55.7  | 141.5    | 304      | 138      |  |
| 60    | 45.0        | 61.3         | 155.7   | 61.7  | 156.8    | 334      | 152      |  |

<sup>&</sup>lt;sup>①</sup> 60 Hz - Nominal 3,450 RPM 50 Hz - Nominal 2,875 RPM

## **CONSTRUCTION MATERIALS**

| Component                |                                   | Environment Type          |                           |  |
|--------------------------|-----------------------------------|---------------------------|---------------------------|--|
|                          | Standard Water Well               | Ni-Resist                 | 316 SS                    |  |
| 1. Castings              | Gray Iron                         | Ni-Resist Type 1B         | 316 SS                    |  |
| 2. Stator Shell          | 301 SS                            | 316 SS                    | 316 SS                    |  |
| 3. Stator Ends           | Low Carbon Steel                  | 316 SS                    | 316 SS                    |  |
| 4. Shaft Extension       | 303 SS, Except 17-4 SS On 40-60hp | 17-4 SS                   | 17-4 SS                   |  |
| 5. Fasteners             | 300 & 400 Series SS               | 316 SS                    | 316 SS                    |  |
| 6. Seal Cover            | 304 SS & Sintered Bronze          | 316 SS                    | 316 SS                    |  |
| 7. Seal                  | Carbon/Ceramic Face               | Sand Fighter™ Seal System | Sand Fighter™ Seal System |  |
| 8. Diaphragm             | Nitrile Rubber                    | Nitrile Rubber            | Nitrile Rubber            |  |
| 9. Diaphragm Plate       | 304 SS                            | 316 SS                    | 316 SS                    |  |
| 10. Diaphragm Spring     | 302 SS                            | 17-7 SS                   | 17-7 SS                   |  |
| 11. Slinger              | Nitrile Rubber                    | Type 100 Hydrin           | Type 100 Hydrin           |  |
| 12. Lead Wire (or Cable) | Hypalon 75°C                      | Hypalon 75°C              | Hypalon 75°C              |  |
| 13. Lead Potting         | Ероху                             | Ероху                     | Ероху                     |  |
| 14. Filter               | Delrin & Polyester                | 316 SS Plug               | 316 SS Plug               |  |
| 15. Insulation           | Class F                           | Class F                   | Class F                   |  |

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



## Franklin Electric

400 E. Spring Street, Bluffton, Indiana 46714 Tel: 219 824 2900 Fax: 219 824 2909 www.franklin-electric.com