

# 4" Encapsulated Motors



## 4" Super Stainless 1~ PSC



### Submersible Motors Quality in the Well

Franklin Electric 4" encapsulated PSC Motors, manufactured to ISO 9001, for operation with permanent split capacitor and overload.

This motor is built for dependable operation in 4" diameter or larger water wells, with excellent low voltage behavior and a high starting torque. It is fitted with water lubricated radial and thrust bearings for maintenance-free operation. The motor is filled with a special FES93 fluid, providing frost protection down to -15°C storage temperature.

A special diaphragm ensures pressure compensation inside the motor.

### Product advantages:

- Hermetically sealed stator. Anti track, self healing stator resin prevents motor burn out
- High efficiency electrical design (low operation cost, cooler winding temperature)
- Removable "Water bloc" lead connector
- Cable material in accordance with regulations for drinking water (KTW approved)
- Water lubricated radial and thrust bearings
- All motors pre-filled and 100% tested. Non contaminating, FES93-filled design.

### Technical Specifications Standard Motor:

- 4" NEMA flange
- Rotation: CCW facing shaft end
- Degree of protection: IP 68
- Insulation: Cl. B
- Rated Ambient temp.: 30°C
- Cooling flow: min. 8cm/s
- Starts / h: 20
- Mounting: vertical/horizontal
- Voltage tolerance: +6% / -10% UN
- Motor protection: Select thermal overloads according to EN 60947-4-1. Trip time  $\leq 10$  s at  $5 \times I_N$

### Options

- Motor cable VDE, KTW approved ( 1,5m; special lengths available)
- Built-in lightning arrestor
- Built-in overload protection(0,25 ... 1,50 kW)

| 4"<br>1~ PSC / 220-230 V / 50 Hz |                      |                       |                           |                       |                       |               |               |                         |                                 |     |           |           |
|----------------------------------|----------------------|-----------------------|---------------------------|-----------------------|-----------------------|---------------|---------------|-------------------------|---------------------------------|-----|-----------|-----------|
| P <sub>N</sub><br>[kW]           | Charge<br>Ax.<br>[N] | U <sub>N</sub><br>[V] | N <sub>N</sub><br>[min-1] | I <sub>N</sub><br>[A] | I <sub>A</sub><br>[A] | $\eta$<br>[%] | cos $\varphi$ | C<br>450V<br>[ $\mu$ F] | T <sub>A</sub> / T <sub>N</sub> |     | L<br>[mm] | m<br>[kg] |
|                                  |                      |                       |                           |                       |                       |               |               |                         |                                 |     |           |           |
| 0,25                             | 1500                 | 220                   | 2860                      | 2,3                   | 7,0                   | 54            | 0,94          | 12,5                    | 1,0                             | 1,1 | 223,0     | 7,3       |
|                                  |                      | 230                   | 2860                      | 2,2                   | 8,4                   | 50            | 0,95          |                         |                                 |     |           |           |
| 0,37                             | 1500                 | 220                   | 2850                      | 3,2                   | 10,7                  | 56            | 0,97          | 16                      | 0,8                             | 0,8 | 242,1     | 8,3       |
|                                  |                      | 230                   | 2860                      | 3,0                   | 11,2                  | 53            | 0,95          |                         |                                 |     |           |           |
| 0,55                             | 1500                 | 220                   | 2840                      | 4,2                   | 15,4                  | 64            | 0,97          | 20                      | 0,7                             | 0,8 | 270,8     | 9,6       |
|                                  |                      | 230                   | 2830                      | 4,1                   | 16,1                  | 63            | 0,98          |                         |                                 |     |           |           |
| 0,75                             | 1500                 | 220                   | 2840                      | 5,8                   | 20,2                  | 61            | 0,99          | 30                      | 0,8                             | 0,9 | 298,5     | 10,8      |
|                                  |                      | 230                   | 2835                      | 5,4                   | 21,1                  | 60            | 0,99          |                         |                                 |     |           |           |
| 1,10                             | 3000                 | 220                   | 2840                      | 8,4                   | 30,1                  | 64            | 0,97          | 40                      | 0,8                             | 0,8 | 327,2     | 12,1      |
|                                  |                      | 230                   | 2830                      | 8,0                   | 31,5                  | 62            | 0,98          |                         |                                 |     |           |           |
| 1,50                             | 3000                 | 220                   | 2805                      | 10,6                  | 33,9                  | 67            | 0,99          | 50                      | 0,7                             | 0,7 | 355,9     | 13,5      |
|                                  |                      | 230                   | 2810                      | 10,3                  | 35,4                  | 66            | 0,99          |                         |                                 |     |           |           |
| 2,20                             | 4000                 | 220                   | 2810                      | 16                    | 54,2                  | 65            | 0,99          | 70                      | 0,6                             | 0,7 | 460,4     | 18        |
|                                  |                      | 230                   | 2815                      | 15,5                  | 56,7                  | 66            | 0,99          |                         |                                 |     |           |           |

