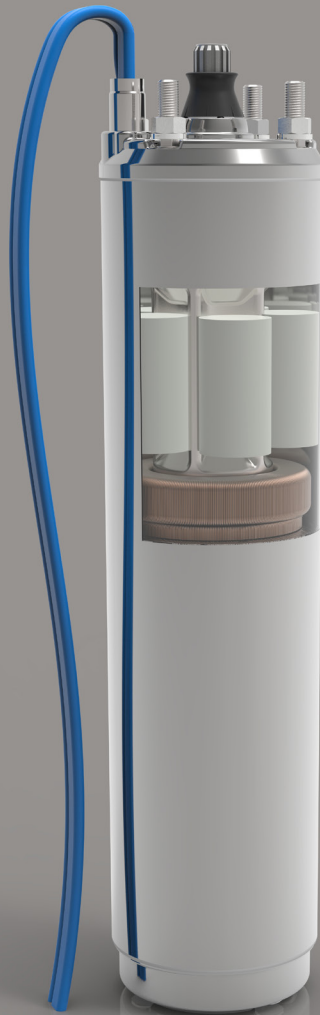


# 4W M2W

50 Hz - 60 Hz



**BUILT-IN CAPACITOR  
AND THERMAL  
PROTECTION**

**4" SINGLE-PHASE 2-WIRE WATER COOLED  
SUBMERSIBLE MOTORS, CANNED TYPE**



**Made in Italy**



## TECHNICAL SPECIFICATIONS

**MOTORS WITH AIRTIGHT SEALED AND RESIN ENCAPSULATED STATOR**

**MOTOR/PUMP FLANGE**  
4" NEMA STANDARD

**POWERS**  
Single-phase: from 0,5 to 1,5 Hp

**VOLTAGE**  
Single-phase:  
2-wire PSC type 230 V / 50 Hz  
2-wire PSC type 115;230 V / 60 Hz

**THRUST LOAD**  
50 Hz from 0,5 to 1 Hp: 2000 N  
1,5 Hp: 3000 N  
60 Hz from 0,5 to 0,75 Hp: 2000 N  
from 1 to 1,5 Hp: 3000 N

## CONSTRUCTION FEATURES

**BUILT-IN CAPACITOR AND THERMAL PROTECTION**, which allow an immediate use of the motor without needing to install an electrical control panel of protection.

**PARTS IN CONTACT WITH WATER** all made in AISI 304 stainless steel which ensures resistance to corrosion even in the most extreme conditions of use. External sleeve made in AISI 304L (Low Carbon) for a greater resistance to corrosion.

**STATOR** with 24 slots, specifically developed to achieve maximum electrical performance. Airtight sealed and resin encapsulated. A solution which ensures excellent heat exchange and extremely high mechanical resistance with high pressure, something typical of very deep immersions.

**REMOVABLE POWER CABLE-CONNECTOR** to ensure a perfect sealing, also in the most critical conditions, and to aid maintenance operations. The power cable complies with all major standards on the use in drinking water (KTW, ACS, WRAS).

**FILLING LIQUID** is a mixture of water and propylene glycol to ensure adequate lubrication of the thrust bearing system and to lower the freezing point when stored in very cold places.

**RESTORE LIQUID VALVE** which allows water in to restore internal level.

**SHAFT** made in carbon-steel alloys in the rotor area, to foster electrical features. AISI 304 stainless steel projection.



**THRUST BEARING SYSTEM** King-sbury-type with stainless steel thrust bearing runners oscillating on a self-aligning system. A specific runner lapping process makes this system extremely reliable and efficient.

**100% TESTED**, all motors are tested at the end of the line. Seal and electrical checks are carried out on all motors.

## VERSIONS UPON REQUEST

Different voltage

## OPERATING LIMITS

**DEGREE OF PROTECTION**  
IP 68

**INSULATION CLASS**  
F

**VOLTAGE TOLERANCE**  
-10% / +10%

**PUMPED LIQUID TEMPERATURE**  
0°C - 35°C

**MIN. COOLING FLOW**  
0,1 m/s

**MAX. STARTS / HOUR**  
30

**MOUNTING**  
Vertical and/or horizontal

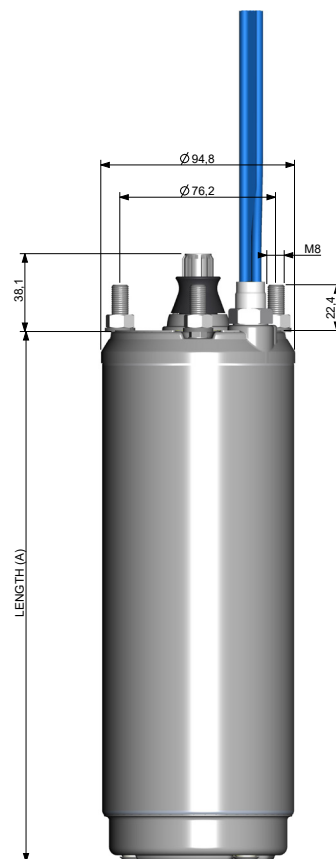
**MAX. IMMERSION DEPTH**  
300 m

**SINGLE-PHASE VERSION**  
2-wire PSC type from 0,5 to 1,5 Hp

## ACCESSORIES

Cable lengths: 20 m or 30 m

## DIMENSIONS



## ELECTRICAL DATA 4WM2W - 50Hz

| Type                           | P <sub>2</sub> [Hp] | P <sub>2</sub> [kW] | Voltage [V] | Ph | I <sub>n</sub> [A] | I <sub>avv</sub> [A] | rpm  | cos φ | η [%] | Capacitor [μF] | Thrust Load [N] | Length A [mm] | Weight [kg] | Cable Length [m] | Cable Section [mm <sup>2</sup> ] |
|--------------------------------|---------------------|---------------------|-------------|----|--------------------|----------------------|------|-------|-------|----------------|-----------------|---------------|-------------|------------------|----------------------------------|
| <b>Single-phase 2-wire PSC</b> |                     |                     |             |    |                    |                      |      |       |       |                |                 |               |             |                  |                                  |
| 4WM2W-S050                     | 0,5                 | 0,37                | 230         | 1  | 3,2                | 13,4                 | 2855 | 0,95  | 55    | 27             | 2000            | 328           | 8,5         | 1,5              | 3 x 1,5                          |
| 4WM2W-S075                     | 0,75                | 0,55                | 230         | 1  | 4,2                | 17,4                 | 2850 | 0,96  | 60    | 27             | 2000            | 348           | 9,5         | 1,5              | 3 x 1,5                          |
| 4WM2W-S100                     | 1                   | 0,75                | 230         | 1  | 5,8                | 23,3                 | 2850 | 0,93  | 59    | 36             | 2000            | 368           | 10,3        | 1,5              | 3 x 1,5                          |
| 4WM2W-S150                     | 1,5                 | 1,1                 | 230         | 1  | 7,8                | 32,7                 | 2845 | 0,97  | 67    | 36             | 3000            | 413           | 12,2        | 1,5              | 3 x 1,5                          |

## ELECTRICAL DATA 4WM2W - 60Hz

| Type                           | P <sub>2</sub> [Hp] | P <sub>2</sub> [kW] | Voltage [V] | S.F. | Ph | FULL LOAD          | FULL S.F.            | rpm  | cos φ | η [%] | Capacitor [μF] | Thrust Load [N] | Length A [mm] | Weight [kg] | Cable Length [m] | Cable Section [mm <sup>2</sup> ] |
|--------------------------------|---------------------|---------------------|-------------|------|----|--------------------|----------------------|------|-------|-------|----------------|-----------------|---------------|-------------|------------------|----------------------------------|
|                                |                     |                     |             |      |    | AMPS               | AMPS                 |      |       |       |                |                 |               |             |                  |                                  |
|                                |                     |                     |             |      |    | I <sub>n</sub> [A] | I <sub>MAX</sub> [A] |      |       |       |                |                 |               |             |                  |                                  |
| <b>Single-phase 2-wire PSC</b> |                     |                     |             |      |    |                    |                      |      |       |       |                |                 |               |             |                  |                                  |
| 4WM2W-S050                     | 0,5                 | 0,37                | 115         | 1,6  | 1  | 8,4                | 10,5                 | 3450 | 0,99  | 52    | 36             | 2000            | 348           | 9,5         | 1,5              | 3 x 1,5                          |
| 4WM2W-S050                     | 0,5                 | 0,37                | 230         | 1,6  | 1  | 4                  | 4,8                  | 3450 | 0,99  | 54    | 27             | 2000            | 348           | 9,5         | 1,5              | 3 x 1,5                          |
| 4WM2W-S075                     | 0,75                | 0,55                | 115         | 1,5  | 1  | 9,8                | 10,4                 | 3450 | 0,96  | 61    | 36             | 2000            | 368           | 10,3        | 1,5              | 3 x 1,5                          |
| 4WM2W-S075                     | 0,75                | 0,55                | 230         | 1,5  | 1  | 4,8                | 6                    | 3450 | 0,96  | 61    | 27             | 2000            | 368           | 10,3        | 1,5              | 3 x 1,5                          |
| 4WM2W-S100                     | 1                   | 0,75                | 230         | 1,4  | 1  | 6,2                | 7,6                  | 3450 | 0,98  | 61    | 36             | 3000            | 388           | 11,9        | 1,5              | 3 x 1,5                          |
| 4WM2W-S150                     | 1,5                 | 1,1                 | 230         | 1,3  | 1  | 8,1                | 9,6                  | 3450 | 0,98  | 62    | 36             | 3000            | 413           | 12,2        | 1,5              | 3 x 1,5                          |



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