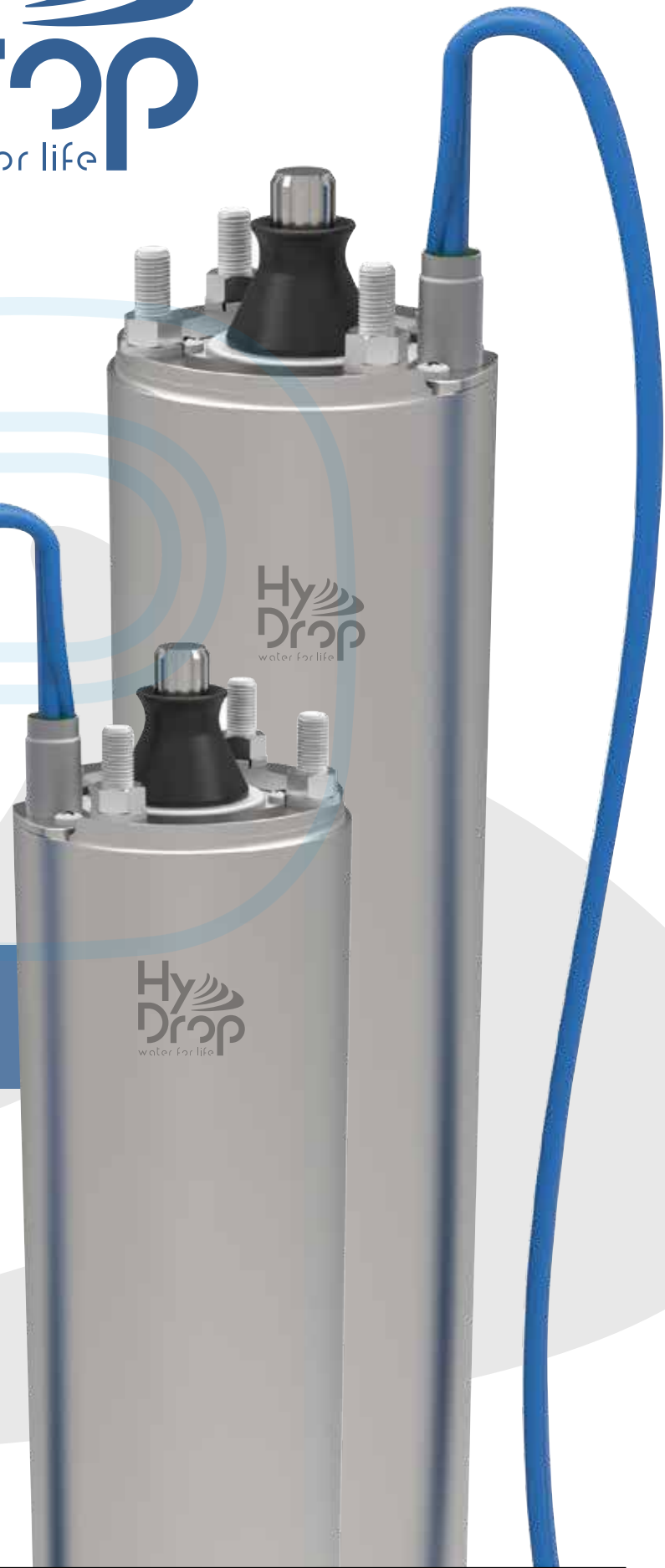


HyDrop

water for life



4HDW

50Hz - 60Hz

4" Water cooled
submersible motors
canned type

Motori sommersi 4"
in bagno d'acqua
con statore resinato

4HDW

4" WATER COOLED SUBMERSIBLE MOTORS CANNED TYPE



Experience, Made in Italy components and specific test made on each motor at the end of production line are our guarantee of high mechanical resistance and electrical performance



TECHNICAL SPECIFICATIONS

Motor/Pump Flange: 4" nema standard

Voltage Tolerance: - 10% / + 10%

Max. Starts / Hour: 30

Degree of Protection: IP68

Insulation Class: F

Pumped Liquid Temperature: 32°F - 95°F | 0°C - 35°C

Min. Cooling Flow: 0,328 ft/s | 0,1 m/s

Mounting: Vertical and/or horizontal

Max. Immersion Depth: 300 m

Thrust Load: From 0,5 to 1,5 Hp 2000N

From 2 to 4 Hp 3000N

From 4 to 10 Hp 6500N

Stator: 24 slots

Single Phase Version: PSC TYPE
(Permanent split capacitor)

Cable, voltage, thrust loads [...] special versions available

| Cable lengths with connector available upon request | Length [m] | Section [mm ²] |
|---|------------|----------------------------|
| | 1,7 | 1,5 |
| | 2,7 | 2 |
| | 3,5 | 2 |
| | 10 | 1,5 |
| | 20 | 1,5 |
| | 20 | 2 |
| | 30 | 1,5 |
| | 30 | 2 |
| | 50 | 1,5 |
| | 50 | 2 |

FULL AISI 304 STAINLESS STEEL

Motor fully made of stainless steel AISI 304, upper bracket and the locking flanges of the encapsulated stator included. Stainless steel external sleeve 304L (Low Carbon).

REMOVABLE POWER CABLE-CONNECTOR

Plug-in plug-out system:

a) to ensure perfect sealing even in high water column installations

b) to facilitate motor replacement if needed
It meets all major international certifications regarding drinking water: ACS, KTW, WRAS.

SHAFT PROJECTION

Made of AISI 304 stainless steel till 3 Hp models and made of Duplex from 4 Hp and over to let shaft projection resist to high mechanical stress (due to high power motors).

RESTORE LIQUID VALVE

It allows water entry to restore the internal level of liquid.

SHAFT

Produced through a friction welding process that allows the application of two materials:

a) carbon steel in rotor area to enhance the electrical characteristics of the motor

b) AISI SS 304 or DUPLEX in shaft projection area (part in contact with water)

COOLING SYSTEM

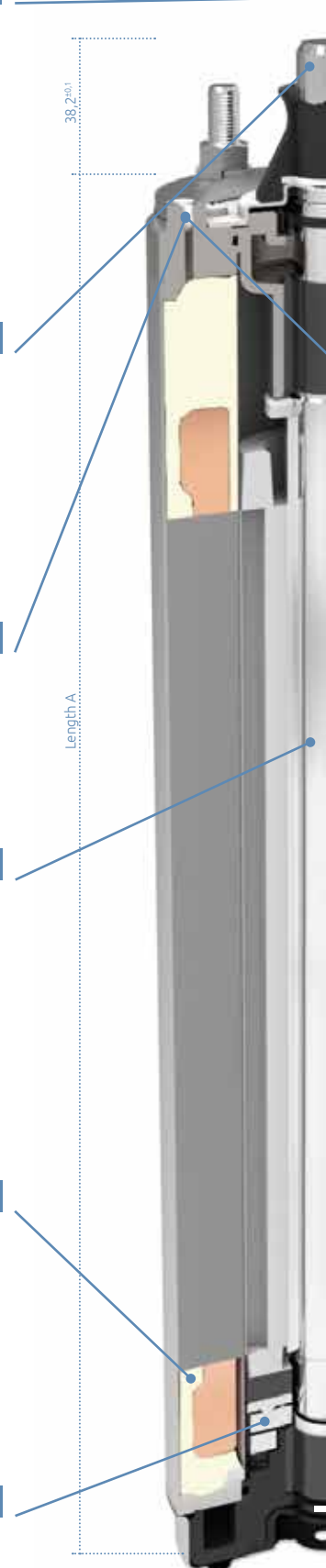
Relies on a filling liquid composed of water and propylene glycol that provides lubrication to the thrust bearing system and confers the characteristic of lowering the freezing point in case of storage in cold places.

THRUST BEARING SYSTEM

Kingsbury-type, made of stainless steel runners with a special lapping treatment to increase reliability and efficiency of the system.

38,2±0,1

Length A



50HZ

| | Type | P ₂ [Hp] | P ₂ [kW] | Voltage [V] | I _n [A] | I _{sw} [A] | rpm | cosφ | η [%] | Capacitor [μF] | Thrust Load [N] | Length A [mm] | Weight [kg] | Cable section [mm ²] | Cable Length [m] |
|--------------|-----------|---------------------|---------------------|-------------|--------------------|---------------------|------|------|-------|----------------|-----------------|---------------|-------------|----------------------------------|------------------|
| | | | | | | | | | | | | | | | |
| SINGLE PHASE | 4HDW-S050 | 0,5 | 0,37 | 230 | 3,5 | 12,5 | 2860 | 0,88 | 52 | 20 | 2000 | 237 | 6,8 | 4 x 1,5 | 1,7 |
| | 4HDW-S075 | 0,75 | 0,55 | 230 | 4,8 | 17,2 | 2855 | 0,88 | 57 | 25 | 2000 | 257 | 7,9 | 4 x 1,5 | 1,7 |
| | 4HDW-S100 | 1 | 0,75 | 230 | 5,7 | 19,7 | 2840 | 0,91 | 63 | 35 | 2000 | 272 | 9,1 | 4 x 1,5 | 1,7 |
| | 4HDW-S150 | 1,5 | 1,1 | 230 | 8,2 | 27,2 | 2845 | 0,91 | 64 | 40 | 2000 | 297 | 11,2 | 4 x 1,5 | 1,7 |
| | 4HDW-S200 | 2 | 1,5 | 230 | 10,5 | 36,4 | 2840 | 0,92 | 68 | 50 | 3000 | 332 | 13,4 | 4 x 1,5 | 1,7 |
| | 4HDW-S300 | 3 | 2,2 | 230 | 15,2 | 48,9 | 2840 | 0,91 | 69 | 70 | 3000 | 387 | 14,2 | 4 x 1,5 | 1,7 |
| | 4HDW-S500 | 5 | 3,7 | 230 | 25 | 98,8 | 2845 | 0,95 | 68 | 90 | 6500 | 634 | 27,8 | 4 x 2 | 2,7 |
| | 4HDW-T050 | 0,5 | 0,37 | 230 | 2,3 | 9,3 | 2855 | 0,57 | 71 | - | 2000 | 212 | 5,8 | 4 x 1,5 | 1,7 |
| | | | 400 | 1,4 | 6 | 2850 | 0,54 | 70 | - | | | | | | |
| THREE PHASE | 4HDW-T075 | 0,75 | 0,55 | 230 | 2,8 | 14 | 2855 | 0,65 | 76 | - | 2000 | 237 | 6,8 | 4 x 1,5 | 1,7 |
| | | | | 400 | 1,7 | 8,3 | 2855 | 0,62 | 75 | - | | | | | |
| | 4HDW-T100 | 1 | 0,75 | 230 | 3,4 | 16,1 | 2850 | 0,72 | 77 | - | 2000 | 257 | 7,9 | 4 x 1,5 | 1,7 |
| | | | | 400 | 2,1 | 9,8 | 2825 | 0,76 | 68 | - | | | | | |
| | 4HDW-T150 | 1,5 | 1,1 | 230 | 5 | 26 | 2820 | 0,77 | 72 | - | 2000 | 272 | 9,1 | 4 x 1,5 | 1,7 |
| | | | | 400 | 3,2 | 16,1 | 2825 | 0,68 | 73 | - | | | | | |
| | 4HDW-T200 | 2 | 1,5 | 230 | 6,6 | 28,6 | 2835 | 0,8 | 71 | - | 3000 | 297 | 11,2 | 4 x 1,5 | 1,7 |
| | | | | 400 | 4,1 | 18,7 | 2840 | 0,75 | 71 | - | | | | | |
| | 4HDW-T300 | 3 | 2,2 | 230 | 9,8 | 41,1 | 2835 | 0,8 | 70 | - | 3000 | 332 | 13,4 | 4 x 1,5 | 1,7 |
| | | | | 400 | 5,9 | 28,1 | 2830 | 0,78 | 69 | - | | | | | |
| 4HDW-T400 | 4 | 3 | 230 | 13 | 78,5 | 2855 | 0,79 | 73 | - | 3000 | 387 | 18,9 | 4 x 1,5 | 1,7 | |
| | | | | | | | | | | 6500 | 469 | 19,8 | 4 X 2 | 2,7 | |
| 4HDW-T400 | 4 | 3 | 400 | 7,9 | 48,4 | 2850 | 0,76 | 72 | - | 3000 | 387 | 18,9 | 4 x 1,5 | 1,7 | |
| | | | | | | | | | | 6500 | 469 | 19,8 | 4 X 2 | 2,7 | |
| 4HDW-T550 | 5,5 | 4 | 230 | 17,2 | 89,4 | 2845 | 0,76 | 77 | - | 6500 | 574 | 23,4 | 4 x 2 | 2,7 | |
| | | | 400 | 10,1 | 51,5 | 2850 | 0,74 | 77 | - | | | | | | |
| 4HDW-T750 | 7,5 | 5,5 | 230 | 24,5 | 113,4 | 2850 | 0,76 | 74 | - | 6500 | 634 | 27,8 | 4 x 2 | 2,7 | |
| | | | 400 | 13,9 | 66,6 | 2850 | 0,77 | 74 | - | | | | | | |
| 4HDW-T1000 | 10 | 7,5 | 400 | 16,9 | 91,5 | 2845 | 0,76 | 74 | - | 6500 | 734 | 31,4 | 4 x 2 | 2,7 | |

60HZ

| | Type | P ₂ [Hp] | P ₂ [kW] | S.F. | Voltage [V] | Operating characteristics at full (S.F.) power | | | | | Capacitor [μF] | Thrust load [N] | Length A [mm] | Weight [kg] | Cable section [mm ²] | Cable Length [m] |
|--------------|-----------|---------------------|---------------------|------|-------------|--|---------------------|------|------|-------|----------------|-----------------|---------------|-------------|----------------------------------|------------------|
| | | | | | | I _n [A] | I _{sw} [A] | rpm | cosφ | η [%] | | | | | | |
| SINGLE PHASE | 4HDW-S050 | 0,5 | 0,37 | 1,6 | 220 | 3,8 | 20,2 | 3470 | 0,97 | 57 | 20 | 2000 | 257 | 7,9 | 4 x 1,5 | 1,7 |
| | | | | | 110 | 8,9 | 29 | 3465 | 0,95 | 56 | 100 | | | | | |
| | 4HDW-S075 | 0,75 | 0,55 | 1,5 | 220 | 5,4 | 22,6 | 3450 | 0,94 | 81 | 25 | 2000 | 257 | 7,9 | 4 x 1,5 | 1,7 |
| | | | | | 110 | 12,7 | 39 | 3470 | 0,91 | 60 | 120 | | | | | |
| | 4HDW-S100 | 1 | 0,75 | 1,4 | 220 | 6,7 | 32 | 3440 | 0,96 | 63 | 35 | 2000 | 272 | 9,1 | 4 x 1,5 | 1,7 |
| | | | | | 110 | 15,1 | 48 | 3480 | 0,97 | 62 | 140 | | | | | |
| | 4HDW-S150 | 1,5 | 1,1 | 1,3 | 220 | 9,4 | 39 | 3440 | 0,97 | 66 | 40 | 2000 | 297 | 11,2 | 4 x 1,5 | 1,7 |
| | | | | | 110 | 18,9 | 72 | 3470 | 0,98 | 65 | 160 | | | | | |
| 4HDW-S200 | 2 | 1,5 | 1,25 | 220 | 11,4 | 43 | 3435 | 0,98 | 68 | 60 | 3000 | 332 | 13,4 | 4 x 1,5 | 1,7 | |
| 4HDW-S300 | 3 | 2,2 | 1,15 | 220 | 16,3 | 47 | 3425 | 0,98 | 68 | 70 | 3000 | 387 | 14,2 | 4 x 1,5 | 1,7 | |
| 4HDW-S500 | 5 | 3,7 | 1,15 | 220 | 24,9 | 92 | 3450 | 0,98 | 69 | 90 | 6500 | 634 | 27,8 | 4 x 2 | 2,7 | |
| THREE PHASE | 4HDW-T050 | 0,5 | 0,37 | 1,6 | 220 | 3,2 | 18,9 | 3455 | 0,65 | 67 | - | 2000 | 237 | 6,8 | 4 x 1,5 | 1,7 |
| | | | | | 380 | 2 | 11,6 | 3475 | 0,56 | 67 | - | | | | | |
| | 4HDW-T075 | 0,75 | 0,55 | 1,5 | 220 | 4,2 | 26,5 | 3465 | 0,68 | 71 | - | 2000 | 257 | 6,8 | 4 x 1,5 | 1,7 |
| | | | | | 380 | 2,5 | 16,8 | 3480 | 0,59 | 71 | - | | | | | |
| | 4HDW-T100 | 1 | 0,75 | 1,4 | 220 | 5,7 | 30,5 | 3480 | 0,6 | 72 | - | 2000 | 272 | 7,9 | 4 x 1,5 | 1,7 |
| | | | | | 380 | 3,5 | 21,3 | 3470 | 0,59 | 71 | - | | | | | |
| | 4HDW-T150 | 1,5 | 1,1 | 1,3 | 220 | 5,9 | 35 | 3465 | 0,74 | 72 | - | 2000 | 297 | 9,1 | 4 x 1,5 | 1,7 |
| | | | | | 380 | 3,7 | 22 | 3455 | 0,69 | 72 | - | | | | | |
| | 4HDW-T200 | 2 | 1,5 | 1,25 | 220 | 7,8 | 44 | 3450 | 0,76 | 73 | - | 3000 | 312 | 12,1 | 4 x 1,5 | 1,7 |
| | | | | | 380 | 4,7 | 24,9 | 3440 | 0,73 | 72 | - | | | | | |
| 4HDW-T300 | 3 | 2,2 | 1,15 | 220 | 10,4 | 51 | 3445 | 0,74 | 75 | - | 3000 | 332 | 13,4 | 4 x 1,5 | 1,7 | |
| | | | | 380 | 6,3 | 31 | 3445 | 0,74 | 74 | - | | | | | | |
| 4HDW-T400 | 4 | 3 | 1,15 | 220 | 13,6 | 74 | 3465 | 0,76 | 75 | - | 3000 | 440 | 18,9 | 4 x 1,5 | 1,7 | |
| | | | | | | | | | | | | 6500 | 469 | 19,8 | 4 X 2 | 2,7 |
| | | | | | | | | | | | | | 3000 | 440 | 18,9 | 4 x 1,5 |
| 4HDW-T400 | 4 | 3 | 1,15 | 380 | 8,4 | 42 | 3460 | 0,74 | 75 | - | 6500 | 469 | 19,8 | 4 X 2 | 2,7 | |
| | | | | | | | | | | | | | | | | |
| 4HDW-T550 | 5,5 | 4 | 1,15 | 220 | 17,4 | 120 | 3480 | 0,83 | 77 | - | 6500 | 574 | 23,4 | 4 x 2 | 2,7 | |
| | | | | 380 | 9,7 | 69 | 3480 | 0,87 | 77 | - | | | | | | |
| 4HDW-T750 | 7,5 | 5,5 | 1,15 | 220 | 25,5 | 139 | 3455 | 0,75 | 79 | - | 6500 | 634 | 27,8 | 4 x 2 | 2,7 | |
| | | | | 380 | 14,2 | 81 | 3460 | 0,72 | 78 | - | | | | | | |
| 4HDW-T1000 | 10 | 7,5 | 1,15 | 380 | 18,8 | 96 | 3460 | 0,77 | 81 | - | 6500 | 734 | 31,4 | 4 x 2 | 2,7 | |