

HY04

4" Rewindable
Oil filled
Submersible motors



hydroo®

4" REWINDABLE OIL FILLED SUBMERSIBLE MOTORS

Motors designed to work in 4" or wider wells. The use of very high quality Made in Italy materials and our strict tests together with consolidated know how ensure high mechanical resistance and high performing electric features.

All parts in contact with water are in AISI 304 stainless steel. The power cable with removable connector ensures perfect water-tightness.

Product features

External sleeve and bottom:

Made in AISI 304 stainless steel. More specifically, sleeve is made of AISI 304L (Low carbon) to avoid possible corrossions on the welding.

Upper Bracket:

Cast iron with cataphoresis treatment and protected with an AISI 304 stainless steel cover. Sleeve clamping is ensured by 4 inserts in low power motors and 6 inserts in motors bigger than 3Hp.

Mechanical Seal:

Graphite/ceramic in the standard version; SIC-SIC version available upon request.

Ball Bearings:

Duly oversized to ensure a long lasting motor.

Stator:

With 24 slots, specifically developed to achieve maximum electrical yield. Airtight sealed and immersed in selected mineral white and highly refined oil, suitable to be used in drinking water (F.D.A., Food and Drug Administration, approved)

Removable Power Cable-Connector:

It ensures perfect sealing in the most critical conditions and it aids maintenance operations. More specifically, the connector prevents oil from rising in the conductors up to the joint, thus enabling immersion at greater depths. The power cable complies with all major standards on the use in drinking water (KTW, ACS, WRAS).

Shaft:

Carbon-steel alloys in the rotor area, to foster electrical features. AISI 304 stainless steel projection. DUPLEX, a special type of stainless steel, replaces AISI 304 in motors bigger than 3Hp. This steel combines excellent resistance to corrosion and high mechanical resistance, which is necessary where static torque becomes really important.

100% tested:

All motors are tested at the end of the line. An extremely effective seal check is also carried out on all motors.



SINGLE PHASE SUBMERSIBLE MOTORS 50Hz 230V OIL FILLED

Type	P ₂ [Hp]	P ₂ [kW]	Voltage [V]	Ph	I _n [A]	I _{law} [A]	rpm	φ cos	η [%]	Capacitor [μF]	Thrust load [N]	Length A [mm]	Weight [kg]	Cable section [mm ²]	Cable Length [m]
HYO4-037S230	0,5	0,37	230	1	3,6	12	2810	0,87	52	20	2000	311,3	6,45	4 x 1,5	1,7
HYO4-055S230	0,75	0,55	230	1	4,7	16,5	2810	0,88	57	25	2000	331,3	7,2	4 x 1,5	1,7
HYO4-075S230	1	0,75	230	1	5,9	18,9	2825	0,9	62	35	2000	356,3	8,45	4 x 1,5	1,7
HYO4-110S230	1,5	1,1	230	1	8,3	26,2	2840	0,91	64	40	2000	386,3	10,2	4 x 1,5	1,7
HYO4-150S230	2	1,5	230	1	10,7	35	2845	0,93	66	60	2000	436,3	11,65	4 x 1,5	1,7
HYO4-220S230	3	2,2	230	1	15,2	47	2820	0,93	67	80	2000	481,3	14,9	4 x 1,5	1,7
HYO4-370S230	5	3,7	230	1	24,5	95	2810	0,95	73	100+315/400	5000	699,5	24,15	4 x 2	2,7

THREE PHASE SUBMERSIBLE MOTORS 50Hz 230V OIL FILLED

Type	P ₂ [Hp]	P ₂ [kW]	Voltage [V]	Ph	I _n [A]	I _{lavv} [A]	rpm	φ cos	η [%]	Capacitor [μF]	Thrust load [N]	Length A [mm]	Weight [kg]	Cable section [mm ²]	Cable Length [m]
HYO4-037T230	0,5	0,37	230	3	2,2	8,9	2855	0,75	57	-	2000	311,3	6,45	4 x 1,5	1,7
HYO4-055T230	0,75	0,55	230	3	3,4	13,5	2830	0,70	62	-	2000	331,3	7,2	4 x 1,5	1,7
HYO4-075T230	1	0,75	230	3	4,1	15,5	2820	0,74	62	-	2000	356,3	8,45	4 x 1,5	1,7
HYO4-110T230	1,5	1,1	230	3	5,9	25	2825	0,68	68	-	2000	371,3	9,35	4 x 1,5	1,7
HYO4-150T230	2	1,5	230	3	8,2	27,5	2830	0,64	70	-	2000	386,3	10,2	4 x 1,5	1,7
HYO4-220T230	3	2,2	230	3	10,6	39,5	2815	0,70	72	-	2000	436,3	11,65	4 x 1,5	1,7
HYO4-300T230	4	3	230	3	12,8	39,5	2830	0,81	75	-	3000	481,3	14,9	4 x 1,5	1,7
HYO4-400T230	5,5	4	230	3	15,6	86	2840	0,83	76	-	5000	609,5	20,05	4 x 2	2,7
HYO4-550T230	7,5	5,5	230	3	22,7	109	2825	0,78	79	-	5000	699,5	24,65	4 x 2	2,7

THREE PHASE SUBMERSIBLE MOTORS 50Hz 400V OIL FILLED

Type	P ₂ [Hp]	P ₂ [kW]	Voltage [V]	Ph	I _n [A]	I _{lavv} [A]	rpm	φ cos	η [%]	Capacitor [μF]	Thrust load [N]	Length A [mm]	Weight [kg]	Cable section [mm ²]	Cable Length [m]
HYO4-037T400	0,5	0,37	400	3	1,8	5,8	2850	0,54	58	-	2000	311,3	6,45	4 x 1,5	1,7
HYO4-055T400	0,75	0,55	400	3	2	8	2835	0,65	63	-	2000	331,3	7,2	4 x 1,5	1,7
HYO4-075T400	1	0,75	400	3	2,5	9,4	2825	0,77	63	-	2000	356,3	8,45	4 x 1,5	1,7
HYO4-110T400	1,5	1,1	400	3	3,4	15,5	2825	0,69	68	-	2000	371,3	9,35	4 x 1,5	1,7
HYO4-150T400	2	1,5	400	3	4,8	18	2835	0,63	71	-	2000	386,3	10,2	4 x 1,5	1,7
HYO4-220T400	3	2,2	400	3	6,1	39,5	2810	0,69	72	-	2000	436,3	11,65	4 x 1,5	1,7
HYO4-300T400	4	3	400	3	7,1	39,5	2835	0,69	75	-	3000	481,3	14,9	4 x 1,5	1,7
HYO4-400T400	5,5	4	400	3	9,2	49,5	2845	0,83	76	-	5000	609,5	20,05	4 x 2	2,7
HYO4-550T400	7,5	5,5	400	3	11,7	64	2835	0,86	79	-	5000	699,5	24,65	4 x 2	2,7
HYO4-750T400	10	7,5	400	3	16,4	88	2840	0,81	81	-	5000	799,5	28,95	4 x 2	2,7

TECHNICAL SPECIFICATIONS

Motor/Pump Flange	4" Nema Standard
Degree of protection	IP 68
Insulation Class	F
Voltage tolerance	- 10% / + 10%
Pumped liquid temperature	0°C - 35°C 32°F - 95°F
Min. Cooling Flow	0,1 m/s 0,328 ft/s
Max. Starts / Hour	30
Mounting	Vertical And/Or Horizontal
Max. Immersion Depth	200M
Thrust Load	
From 0,5 to 3 Hp	2000N
From 3 to 4 Hp	3000N
From 5,5 to 10 Hp	5000N
Single Phase Version: Psc Type (Permanent Split Capacitor)	
Rewindable Motor Version	
Cables, Voltage, Thrust Loads [...] Special Versions Available.	

