

HYA4

4" Water cooled
Submersible motors
Canned type

hydroo®

4" WATER COOLED SUBMERSIBLE MOTORS, CANNED TYPE

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 electrical features.

All parts in contact with water are in AISI 304 stainless steel which ensures resistance to corrosion even in the most extreme conditions of use.

Product features

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:

It ensures perfect sealing in the most critical conditions and it aids maintenance operations. The power cable complies with all major standards on the use in drinking water (KTW, ACS, WRAS).

Filling Liquid:

Mixture of water and propylene glycol to ensure adequate lubrication of the thrust bearing system together with the ability to lower the freezing point when stored in very cold places.

Restore Liquid Valve:

It allows water in to restore internal level.

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.

Thrust Bearing System:

Kingsbury-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.



SINGLE PHASE SUBMERSIBLE MOTORS 50Hz 230V WATER COOLED

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]
HYA4-037S230	0,5	0,37	230	1	3,5	12,5	2860	0,88	52	20	2000	237	6,8	4 x 1,5	1,7
HYA4-055S230	0,75	0,55	230	1	4,8	17,2	2855	0,88	57	25	2000	257	7,9	4 x 1,5	1,7
HYA4-075S230	1	0,75	230	1	5,7	19,7	2840	0,91	63	35	2000	272	9,1	4 x 1,5	1,7
HYA4-110S230	1,5	1,1	230	1	8,2	27,2	2845	0,91	64	40	2000	297	11,2	4 x 1,5	1,7
HYA4-150S230	2	1,5	230	1	10,5	36,4	2840	0,92	68	50	3000	332	13,4	4 x 1,5	1,7
HYA4-220S230	3	2,2	230	1	15,2	48,9	2840	0,91	69	70	3000	387	14,2	4 x 1,5	1,7
HYA4-370S230	5	3,7	230	1	25	98,8	2845	0,95	68	90	6500	634	27,8	4 x 2	2,7

THREE PHASE SUBMERSIBLE MOTORS 50Hz 230V WATER COOLED

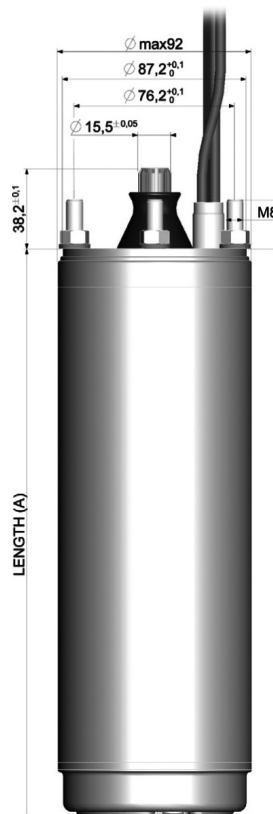
Type	P ₂ [Hp]	P ₂ [kW]	Voltage [V]	Ph	I _n [A]	I _{law} [A]	rpm	φ cos	η [%]	Capacitor [μF]	Thrust load [N]	Length A [mm]	Weight [kg]	Cable section [mm ²]	Cable Length [m]
HYA4-037T230	0,5	0,37	230	3	2,3	9,3	2855	0,57	71	-	2000	212	5,8	4 x 1,5	1,7
HYA4-055T230	0,75	0,55	230	3	2,8	14,0	2855	0,65	76	-	2000	237	6,8	4 x 1,5	1,7
HYA4-075T230	1	0,75	230	3	3,4	16,1	2850	0,72	77	-	2000	257	7,9	4 x 1,5	1,7
HYA4-110T230	1,5	1,1	230	3	5	26,0	2820	0,77	72	-	2000	272	9,1	4 x 1,5	1,7
HYA4-150T230	2	1,5	230	3	6,6	28,6	2835	0,80	71	-	3000	297	11,2	4 x 1,5	1,7
HYA4-220T230	3	2,2	230	3	9,8	41,1	2835	0,80	70	-	3000	332	13,4	4 x 1,5	1,7
HYA4-300T230	4	3	230	3	13	78,5	2855	0,79	73	-	3000	387	18,9	4 x 1,5	1,7
HYA4-400T230	5,5	4	230	3	17,2	89,4	2845	0,76	77	-	6500	574	23,4	4 x 2	2,7
HYA4-550T230	7,5	5,5	230	3	24,5	113,4	2850	0,76	74	-	6500	634	27,8	4 x 2	2,7

THREE PHASE SUBMERSIBLE MOTORS 50Hz 400V WATER COOLED

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]
HYA4-037T400	0,5	0,37	400	3	1,4	6,0	2850	0,54	70	-	2000	212	5,8	4 x 1,5	1,7
HYA4-055T400	0,75	0,55	400	3	1,7	8,3	2855	0,62	75	-	2000	237	6,8	4 x 1,5	1,7
HYA4-075T400	1	0,75	400	3	2,1	9,8	2825	0,76	68	-	2000	257	7,9	4 x 1,5	1,7
HYA4-110T400	1,5	1,1	400	3	3,2	16,1	2825	0,68	73	-	2000	272	9,1	4 x 1,5	1,7
HYA4-150T400	2	1,5	400	3	4,1	18,7	2840	0,75	71	-	3000	297	11,2	4 x 1,5	1,7
HYA4-220T400	3	2,2	400	3	5,9	28,1	2830	0,78	69	-	3000	332	13,4	4 x 1,5	1,7
HYA4-300T400	4	3	400	3	7,9	48,4	2850	0,76	72	-	3000	387	18,9	4 x 1,5	1,7
HYA4-400T400	5,5	4	400	3	10,1	51,5	2850	0,74	77	-	6500	574	23,4	4 x 2	2,7
HYA4-550T400	7,5	5,5	400	3	13,9	66,6	2850	0,77	74	-	6500	634	27,8	4 x 2	2,7
HYA4-750T400	10	7,5	400	3	16,9	91,5	2845	0,76	74	-	6500	734	31,4	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	300M
Thrust Load	
From 0,5 Until 1,5 HP	2000N
From 3 Until 4 HP	3000N
From 5,5 Until 10 HP	5000N
Single Phase Version: PSC Type (Permanent Split Capacitor)	
Cables, Voltage, Thrust Loads [...] Special Versions Available.	



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