



4" Encapsulated Submersible Motors, Single Phase, 2 Wire

Four inch, asynchronous, two pole, submersible motor, made in AISI 304 stainless steel for parts in contact with water.

Cooling and lubrication of the thrust bearing assembly and carbon brushes is provided by a mixture of water and glycol. Squirrel-cage rotor mounted on Kingsbury self-centering thrust bearing. Stator housed in an airtight stainless steel casing (canned-type) with both flanges and shell in AISI 304L stainless steel.

Motor lead connection allows for fast and easy maintenance. Motor suitable for use with variable frequency drive (30Hz – 60Hz). The capacitor is placed in the Noryl cartridge directly connected to the motor, so the motor does not require an external control box. Thermal protection included in the motor.

General Features

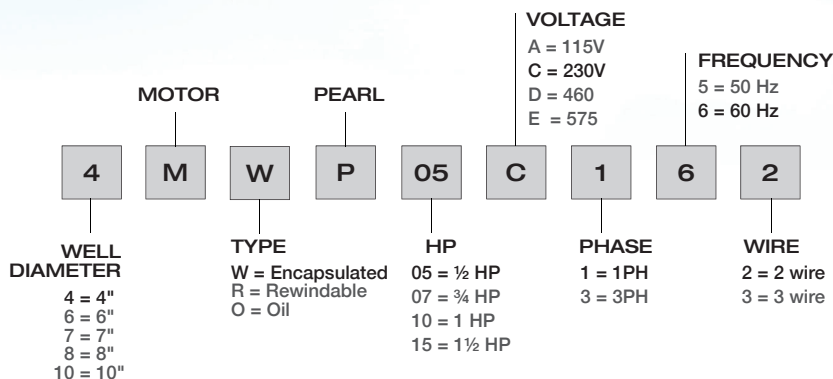
- NEMA 4" Flanges
- Protection IP68
- Insulation class F

Operating Limits

- Cooling flow: min. 0.2 m/s (0,66 ft/s)
- Voltage tolerance: $\pm 10\%$
- Max. motor startings per hour: 20
- Max. immersion depth: 984 feet (300 m)

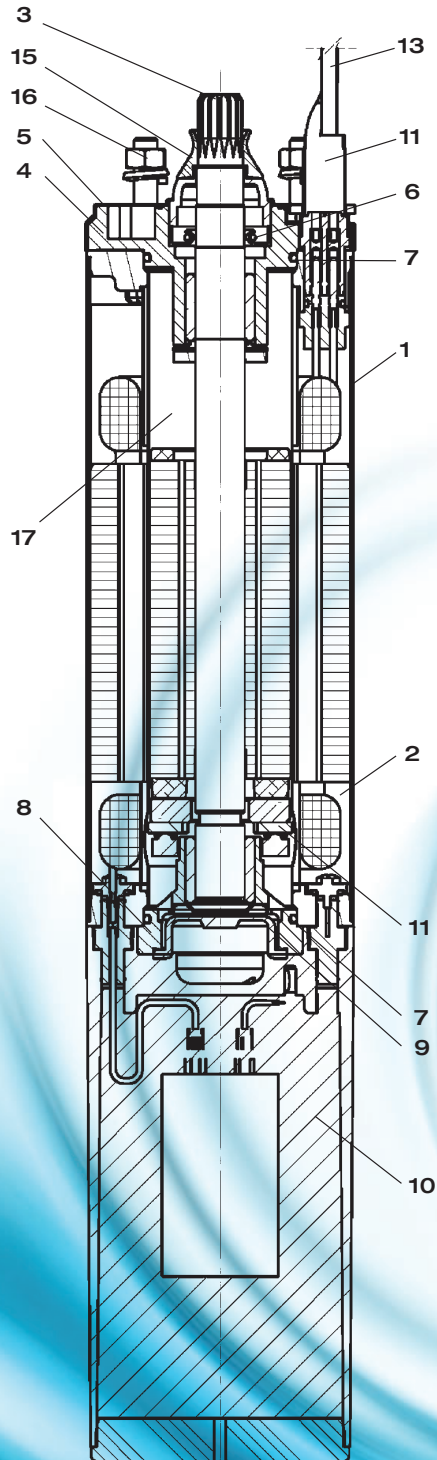
Nomenclature

Reading the motor data in the label.



4MWP

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Components

	PART NAME	MATERIAL	TYPE
1	Internal and external sleeve	Stainless Steel	AISI 304
2	Stator	Stainless Steel	AISI 304L
3	Shaft	Stainless Steel	AISI 431
4	Upper bracket	Cast iron	
5	Bracket cover	Stainless Steel	AISI 304
6	Lip seal / Gasket	Rubber	NBR
7	Gasket	Rubber	NBR
8	Lower bracket	Cast iron	
9	Diaphragm	Rubber	EDPM
10	Capacitor case	Plastic	Noryl
11	Thrust bearing	Stainless steel-graphite	
12	Valve	Stainless Steel	AISI 304
13	Cable	Rubber	EDPM
14	Connecting plug	Stainless Steel	AISI 316
15	Sand slinger (fixed-removable)	Rubber	NBR
16	Bolt and screws	Stainless Steel	AISI 304
17	Cooling liquid	Antifreeze + water	



Stainless steel AISI 304 with a special process of surface hardening and polishing of the working area of the brushes. Squirrel-cage rotor made in aluminum.

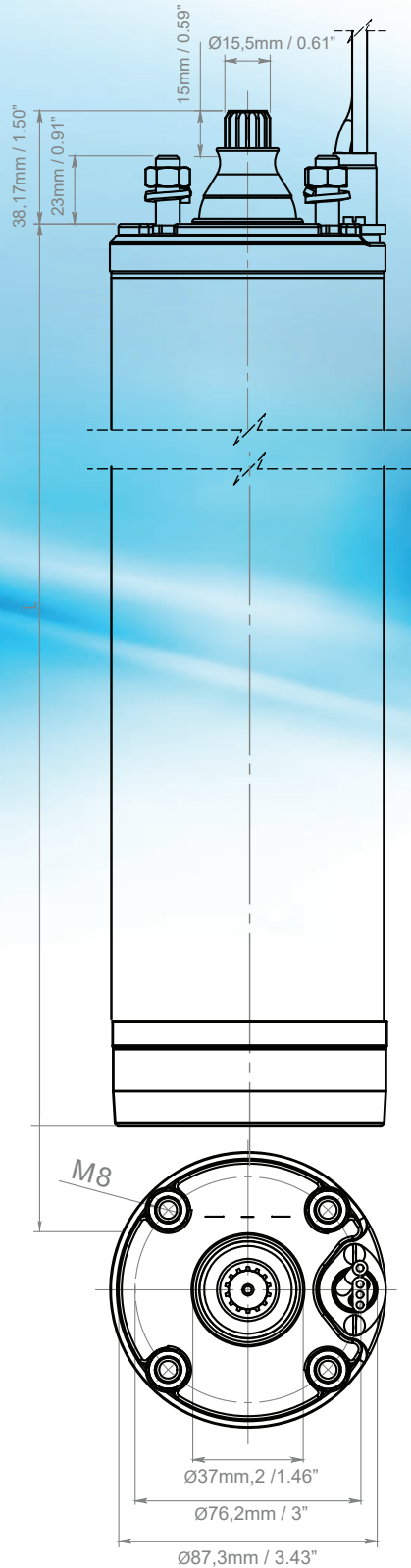


Kingsbury type thrust bearing unit consisting of tilting pads made of highly-resistant stainless steel and machined using the spherical lapping process. From 0,5 HP to 1,5 HP: 2000N (3000N in the 1,5 HP 60Hz version)

Shafts with end part made of stainless



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Dimensions

4MWP - SINGLE PHASE / 2 WIRE

MODEL	P2		L		WEIGHT	
	[HP]	[kW]	[mm]	[inch]	[Kg]	[lbs]
4MWP 05	0.5	0.37	341	13.425	10.1	22.3
4MWP 05	0.5	0.37	331	13.031	9.9	21.9
4MWP 07	0.75	0.55	351	13.819	10.9	24.1
4MWP 10	1	0.75	426	16.772	13.5	29.8
4MWP 15	1.5	1.1	471	18.543	15.5	34.2

Other Options

Motor Leads with different lengths.
Different supply voltages.

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Electrical Data 60 Hz

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MODEL	P2		AXIAL LOAD	V	SF	I _n	I _n (SF)	I _s / I _n	Cs / Cn	P1	N	Cos φ	η	C	Ø	LC	R
	[HP]	[kW]	[lbf]	[V]		[A]	[A]			[W]	rpm		%	[μF]	[plg ²]	[ft]	[Ω]
4MWP 05A162	0.5	0.37	450	115	1.6	8.6	10	4.2	0.65	800	3450	0.88	46	80	3 x 14	5 1/2	0.95
4MWP 05C162	0.5	0.37	450	230	1.6	3.9	5	4.6	0.65	800	3450	0.88	46	20	3 x 14	5 1/2	3.70
4MWP 07C162	0.75	0.55	450	230	1.5	6.3	6.9	4.3	0.65	1200	3450	0.82	47	25	3 x 14	5 1/2	2.50
4MWP 10C162	1	0.75	700	230	1.4	7.7	8.8	4.8	0.68	1500	3450	0.84	50	35	3 x 14	5 1/2	1.90
4MWP 15C162	1.5	1.1	700	230	1.3	11.8	12.7	4.7	0.7	2120	3450	0.85	53	40	3 x 14	5 1/2	1.45

P2: Rated output
V: Rated voltage
SF: Service factor
I_n: Rated current
I_n (SF): Service factor current
I_s/I_n: Locked rotor current-Rated current
Cs/Cn: Locked rotor Torque-Rated Torque

P1: Power consumption
N: RPM
Cos φ : Power factor
η: Efficiency
C: Capacitor
Ø: Cable section
LC: Cable length