

Pearl®

8MRCP - 8MRSP

8" Rewindable Submersible Motors

8" rewindable submersible motors, asynchronous, two pole submersible motor, made combining cast iron and AISI 304 stainless steel or full stainless steel 304 or 316, to get the best durability and resistance. Available up to 150 HP.

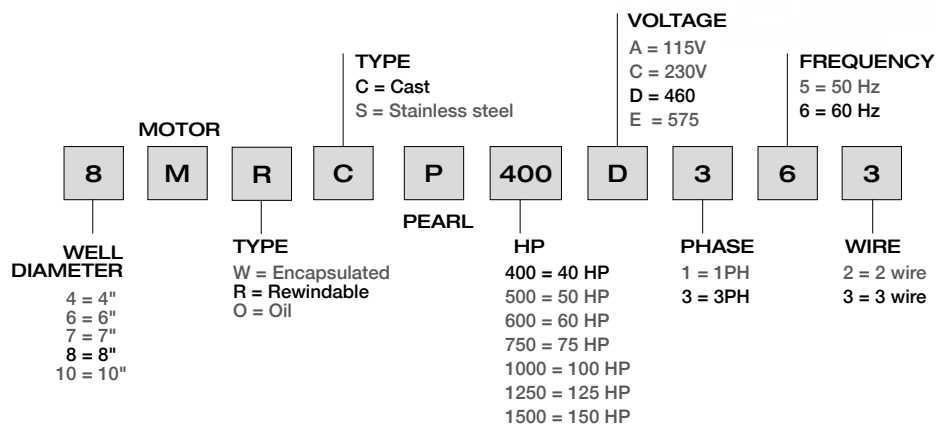
Our electrical design provides the best efficiency motor, bringing the best performance out of your submersible pump. PEARL MOTORS suitable for use with variable frequency drive (30Hz – 60Hz).

General Features

- Rewindable motors up to 150 HP
- High efficiency provides operation cost savings
- Flange with NEMA standards
- Stainless steel shaft
- Optional high corrosion resistive materials (AISI 304 - AISI 316 - Duplex - Bronze)
- Standard motor. Max. ambient water temperature 85°F (30° C) (optional up to 150°F (70°C))
- Max. Ambient water temperature up to 176°F (80°C) when motor is provided with PE2 + PA winding wire and PT100.
- Minimum water flow for temperature above indicated: 0.65 ft/seg (0.2 m/seg) for motors up to 75 HP. 1.64 ft/seg (0.5 m/seg) for motors up to 125 HP
- Standard voltage 220/230/380/460V - 50/60 Hz (Allowable voltage tolerance ± %10)
- Variable operation revolutions by frequency convertor (over 30 Hz)
- Availability to be operated by Soft-Starter
- CW & CCW direction of rotation
- Rewindable Motors (PVC, PP & PE2 + PA winding wire) provides long service life

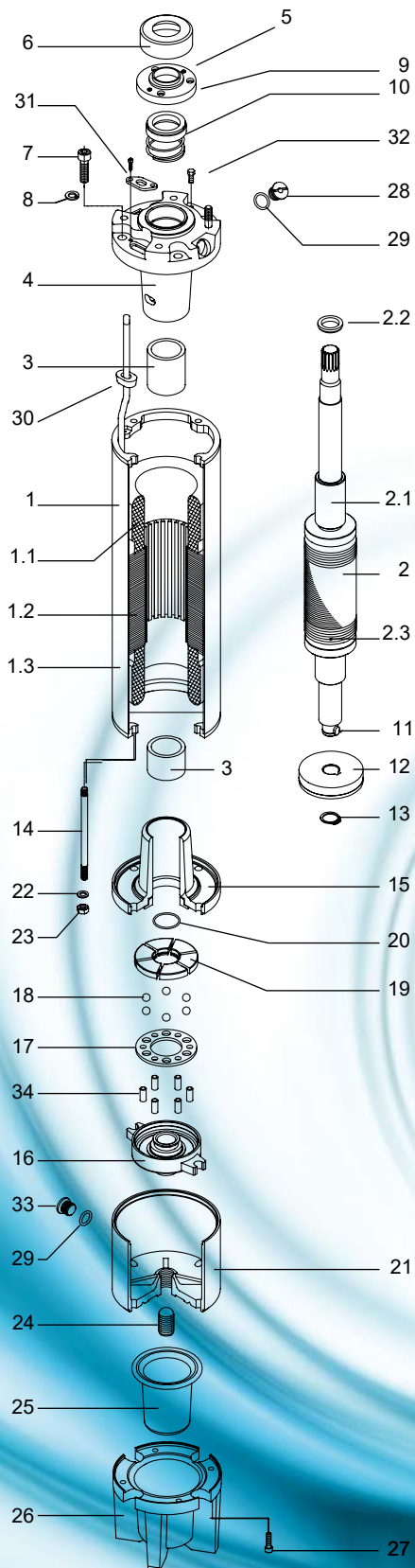
Nomenclature

Reading the motor data in the label.



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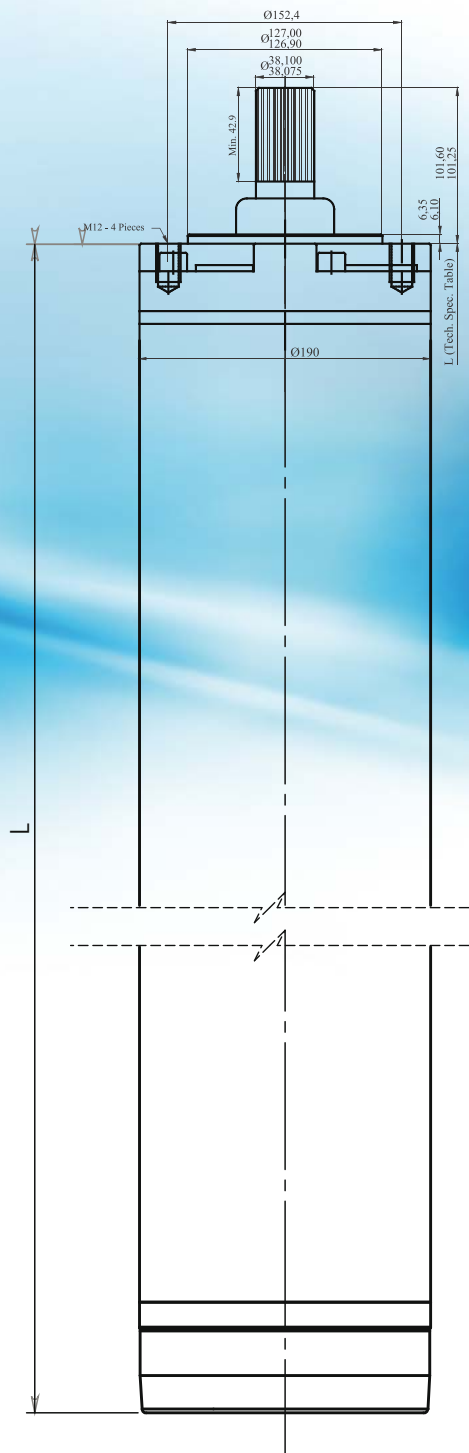
Components

No	PART NAME	MATERIAL
1	Stator	-
1.1	Winding wire	Copper
1.2	Stator package	M350 / Magnetic Seal
1.3	Stator shell	AISI 304
2	Rotor	-
2.1	Shaft sleeve	Coated CrNi
2.2	Balance ring	St 37
2.3	Copper ring	Cu
3	Radial bearing	Carbon
4	Upper bearing body	GG20-22
5	Bushing	Bronze
6	Slinger (sand guard)	NBR_EPDM
7	Hexagon socket cap screws	Stainless Steel
8	Copper ring	Cu
9	Cover seal	AISI 420
10	Mechanical seal	Ceramic Carbon
11	Axial thrust bearing key	AISI 420
12	Axial thrust bearing	Carbon With Antimony
13	Retaining ring	St 37
14	Tie rod	Stainless Steel
15	Lower bearing body	GG20-22
16	Thrust bearing support	GG20-22
17	Ball holder	St 37 (Coated Cr+3)
18	Thrust bearing ball	Stainless Steel
19	Tilting pads	AISI 420
20	O-ring	NBR 70
21	Thrust bearing body	GG20
22	Copper ring	Cu
23	Nut	Stainless Steel
24	Screw (thrust bearing base)	Stainless Steel
25	Membrane	NBR-EPDM
26	Membrane body	GG22
27	Hexagon socket cap screws	Stainless Steel
28	Check-valve	Bronze
29	O-ring	NBR 70
30	Cable seal	NBR
31	Cover seal	AISI 304
32	Nut	Stainless Steel
33	Plush (r 3/8")	Bronze
34	Ball holder pins	Stainless Steel

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Dimensions

8MRCP - TRIFASICO / 3 WIRE

MODEL	P2		L		WEIGHT	
	[HP]	[kW]	[mm]	[plg]	[Kg]	[lbs]
8MRCP 400	40	30	1056	41.6	129	284
8MRCP 500	50	37	1116	43.9	138	304.9
8MRCP 600	60	45	1201	47.3	152	335.9
8MRCP 750	75	55	1286	50.6	170	375.7
8MRCP 1000	100	75	1391	54.7	195	430.9
8MRCP 1250	125	92	1471	57.9	210	462.9
8MRCP 1500	150	110	1601	63	235	518

OPTIONS AVAILABLE:

8MRCP 1500D36V 8" Submersible motors, 150 HP, 460 V, 3 PH, 60 Hz.

8MRSP - TRIFASICO / 3 WIRE

MODEL	P2		L		WEIGHT	
	[HP]	[kW]	[mm]	[plg]	[Kg]	[lbs]
8MRSP 400	40	30	948	37.3	125	276.3
8MRSP 500	50	37	1008	39.7	134	296.1
8MRSP 600	60	45	1093	43	148	327
8MRSP 750	75	55	1178	46.4	166	366.9
8MRSP 1000	100	75	1283	50.5	191	422.1
8MRSP 1250	125	92	1471	57.9	210	462.9
8MRSP 1500	150	110	1601	63	235	518

Other Options

Motor leads with different lengths.
Different supply voltages.

8MRCP - 8MRSP

8" Rewindable Submersible Motors

Electrical Data 60 Hz

8MRCP - 3 PHASE / 3 WIRE

MODEL	PN		AXIAL LOAD [kN]	VOLT. V	N rpm	I _n A	I _n (SF) A	I _A A	η (% load)			Cos φ (% load)			RESISTANCE 3 ~ 60 hz DoI (U1-V1) [Ω]
	[HP]	[kW]							50	75	100	50	75	100	
8MRCP 400D363V	40	30	45	460	3480	54.1	62.2	288	81	83	83	79	81	84	0.51
8MRCP 500D363V	50	37	45	460	3480	65.9	75.8	351	83	84	84	74	81	84	0.36
8MRCP 600D363V	60	45	45	460	3490	79.2	91.1	421	84	85	85	74	81	84	0.27
8MRCP 750D363V	75	55	45	460	3500	95.7	110.1	509	85	86	86	74	81	84	0.23
8MRCP 1000D363V	100	75	45	460	3500	127.4	146.5	678	85	87	87	74	82	85	0.15
8MRCP 1250D363V	125	92	55	460	3500	158.2	181.9	842	86	87	87	73	80	84	0.12
8MRCP 1500D363V	150	110	55	460	3490	191.3	220	1018	86	86	86	73	80	84	0.11

8MRSP - 3 PHASE / 3 WIRE

MODEL	PN		AXIAL LOAD [kN]	VOLT. V	N rpm	I _n A	I _n (SF) A	I _A A	η (% load)			Cos φ (% load)			RESISTANCE 3 ~ 60 hz DoI (U1-V1) [Ω]
	[HP]	[kW]							50	75	100	50	75	100	
8MRSP 400D363V	40	30	45	460	3480	54.1	62.2	288	81	83	83	79	81	84	0.51
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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
 C_s/C_n: Locked rotor Torque-Rated Torque

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