

Type 4WP

QUALITY Submersible Motor in AISI 304

The New 4" Stainless Steel Canned Type Motor developed by EBARA is the result of many years experience in the manufacturing of submersible motors that match your pumps' needs. By using the advanced design and manufacturing techniques EBARA has introduced the 4WP for deep well pumps. These canned type motors have all the necessary features to assure reliability, durability and efficient operation.

APPLICATIONS

• Built for coupling with submersible multistage 4" pumps for deep well.

TECHNICAL FEATURES

- Filling liquid
 - Water with food grade compound for cooling and lubricating rotor, radial and thrust load bearing.
- Nema coupling
- Shaft sealing system
 - Includes a labyrinth seal with a sand slinger for an effective sand protection. A lip seal prevent coolant fluid from leakage.
- Electric cable
 - Removable four wires polychloroprene flat cable with watertight connector with integral earthing system.
- Stator room is resin filled. Under vacuum resin filling method gives maximum heat exchange rate and superior dieletric insulation characteristic.
- For a better corrosion resistance motor frame and motor base end cover are made of AISI 304 stainless steel.
- Bearing system
 - Unique design hydrodynamic thrust bearing fulfils ideal non contacting operation, providing less wear and assuring long bearing lifetime. Low thrust 1500/3000N class, Kingsbury type with spherical shaped sliding pads. High thrust 6500N class, one simple piece flat surface pad with flexible function(patent pending). The combination of high-tech material on radial bearing ensures durable operation under tough application. Low thrust 1500/3000N class, carbon-graphite radial bearing, mating AISI 303 ss burnished shaft portion. High thrust 6500N class, ceramic radial bearing, mating tungsten carbide shaft sleeve.
- Pressure equalising is made possible by an optimised design of a rubber diaphragm that ensure proper heat liquid expansion, balancing inside/outside pressure.

OPERATING LIMITS

- Maximum allowable rating voltage fluctuation ±6%.
- Maximum deep head: 150m
- Maximum motor starting per hour: 30 times
- Liquid for use: clean water (Ph 6.5 to 8)
- Water well temperature range : 0 to 30°C with minimum flow rate speed of 0.08 m/s.
- Axial thrust : 1500N from 0.37kW up to 0.75kW 3000N from 0.75kW up to 2.2kW 6500N from 3kW up to 5.5kW

AVAILABLE MODELS

- Single-phase :
 - from 0.37kW up to 3.7kW 220-240V 50Hz
- Three-phase : - from 0.37kW up to 5.5kW 415V 50Hz
- Special voltage available on request.
- PSC,CSCR,CSIR control box, available on request.

36.5*88

DIMENSION

4WP (0.37kW to 2.2kW) 1500N/3000N





375

14.2



1



480

18.3

23.4 29.4

4

6500 N 555

TECHNICAL DATA 50Hz

Technical data for single phase 4WP series 4" motors - 50 Hz -														
Туре		Thrust Load	Weight	н	kW	Нр	In	Istart	DDM	Cos•	Ts/Tn PSC	EFF%	Crun	C start
		N	Kg	mm			Aı	np					μF	μF
Single Phase 230V 50Hz	4WP 050 M	1500	6.8	250	0.37	0.5	3.4	11.0	2850	0.91	0.65	58	16	36 - 46
	4WP 075 M		8.1	265	0.55	0.75	4.4	16.6	2840	0.92	0.63	62	20	72 - 86
	4WP 100 M		10.6	295	0.75	1	5.9	19.8	2860	0.94	0.62	65	30	88 - 106
	4WP 150 M	3000	11.2	340	1.1	1.5	7.8	29.5	2850	0.94	0.62	66	40	88 - 106
	4WP 200 M		14	375	1.5	2	10.2	36.4	2850	0.95	0.61	68	50	130 - 156
	4WP 300 M		16.4	430	2.2	3	15	52.5	2840	0.94	0.55	69	70	189 - 227
	4WP 500 M	6500	29.3	675	3.7	5	24	102	2840	0.92	0.50	72	100	189 - 227
Technical data for three phase 4WP series 4" motors - 50 Hz -														
Three Phase 400V 50Hz	4WP 050 T	1500	5.8	235	0.37	0.5	1.2	5.1	2840	0.73	2.1	63		
	4WP 075 T		7	250	0.55	0.75	1.7	6.5	2840	0.73	2.0	64		
	4WP 100 T		8.3	265	0.75	1	2.2	9.2	2840	0.75	1.9	67		
	4WP 150 T	3000	10.9	295	1.1	1.5	3.0	14.2	2840	0.76	2.3	71		
	4WP 200 T		11.4	340	1.5	2	4.0	18.5	2830	0.78	2.1	72		
	4WP 300 T		14.2	375	2.2	3	5.6	26.5	2830	0.79	2.4	74		
	4WP 400 T	6500	18.3	480	3	4	7.5	34.3	2830	0.79	2.2	76		
	4WP 550 T		23.4	555	4	5.5	10.1	44	2840	0.77	2.3	75		
	4WP 750 T		29.4	675	5.5	7.5	13.6	62	2840	0.80	2.2	76		

*All specifications are subject to change without prior notice.



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Authorised dealer: