

# 4MSX

4" Submersible motors on AISI 304



**60 Hz**  
**n ≈ 3450 rpm**



## Construction features

4" rewindable submersible motors filled with food grade dielectric fluid (USA FDA, European Pharmacopeia approved). Motor housing, lower and upper support, made in s.s. AISI 304, external shaft in s.s. AISI 316, amply sized rubber equalization diaphragm.

4" NEMA standard, four conductors flat electric cable suitable for use in drinking water, 0.5-3.0 Hp length 2.0 mt, 4.0-7.5 Hp length 3.0 mt. Triple seal system on rotor shaft, bi-directional mechanical seal+radial seal + sand guard.

Single phase motors: PSC type (Permanent Split Capacitor)

Rotation: single phase motors, clockwise facing shaft end, three phase motors clockwise or counter clockwise without distinction.

All motors are 100% tested.

## Operation data

Power	: from 0.5Hp to 3Hp (from 0.37 to 2.2 kW) for single phase motors : from 0.5Hp to 7.5Hp (from 0.37 to 5.5 kW) for three phase motors
Rotation speed	: about 3500 rpm
Alimentation tension	: 220V Single phase, 220V – 380V – 460V three phase
Tension change	: max +6% min. -10%
Frequency	: 60Hz / 2 poles
Starting	: D.O.L.
N° of starting/h	: max 20
Water Temperature	: 35°C – 100°F
Horizontal operation	: up to 3Hp (2.2 kW)
Insulation	: class F
Protection	: IP 68
Continuos service	: yes
Cooling flow	: min. 0.8 mt/sec.

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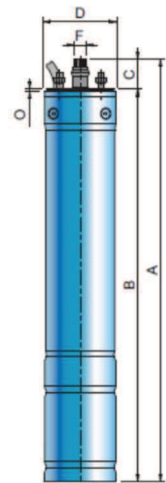
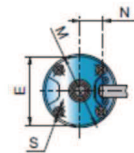
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### 4MX Single phase 60Hz

Motor	Rated Output		In (Amp)		Direct Start		Power Factor		η	RPM	Axial thrust (N)	Service Factor	In with S.F. (Amp)			Capacitor (μF)
	Kw	Hp	220V	230V	Ia/In	ca/cn	cos φ	%					220V	230V	450Vc	
4MSX 050M	0.37	0.5	3.8	4.0	4.1	0.94	0.94	49	≈3450	1500	1.6	4.9	5.2	16		
4MSX 035M	0.55	0.75	4.6	4.7	5.4	0.97	0.98	57				1.5	5.8	6.0	25	
4MSX 100M	0.75	1	6.5	6.7	4.2	0.80	0.93	58				1.4	7.9	8.1	30	
4MSX 150M	1.1	1.5	9.4	9.6	4.6	0.79	0.88	62				1.3	10.6	10.9	40	
4MSX 200M	1.5	2	12.0	12.7	4.5	0.92	0.91	61				1.25	13.1	13.5	60	
4MSX 300M	2.2	3	15.6	16.0	5.2	0.62	0.95	66				1.15	18.4	19.0	70	

### 4MX Three phase 60Hz

Motor	Rated Output		In (Amp)			Direct Start		Power Factor		η	RPM	Axial thrust (N)	Service Factor	In with S.F. (Amp)			
	Kw	Hp	220V	380V	460V	Ia/In	ca/cn	cos φ	%					220V	380V	460V	
4MSX 050T	0.37	0.5	2.5	1.5	1.2	5.6	5.14	0.67	60	≈3450	1500	1.6	3.1	1.8	1.5		
4MSX 035T	0.55	0.75	3.0	1.8	1.5	6.3	5.01	0.74	67				1.5	3.9	2.3	1.9	
4MSX 100T	0.75	1	4.5	2.6	2.1	4.4	3.62	0.72	64				1.4	5.4	3.1	2.6	
4MSX 150T	1.1	1.5	5.5	3.2	2.6	5.1	3.66	0.75	73				1.3	6.7	3.9	3.2	
4MSX 200T	1.5	2	7.4	4.3	3.5	5.2	3.75	0.74	76				1.25	8.5	4.9	4.1	
4MSX 300T	2.2	3	10.4	6.0	5.0	5.4	2.2	0.81	72				1.15	13.5	7.8	6.4	
4MSX 400T	3	4	13.7	7.9	6.5	6.6	3.7	0.75	77		4500	1.15	15.1	8.7	7.2		
4MSX 550T	4	5.5	17.3	10	8.3	7.2	2.5	0.76	79			1.15	19.2	11.1	9.2		
4MSX 350T	5.5	7.5	23.1	13.3	11	7.6	4.4	0.79	80			1.15	25.8	14.9	12.3		



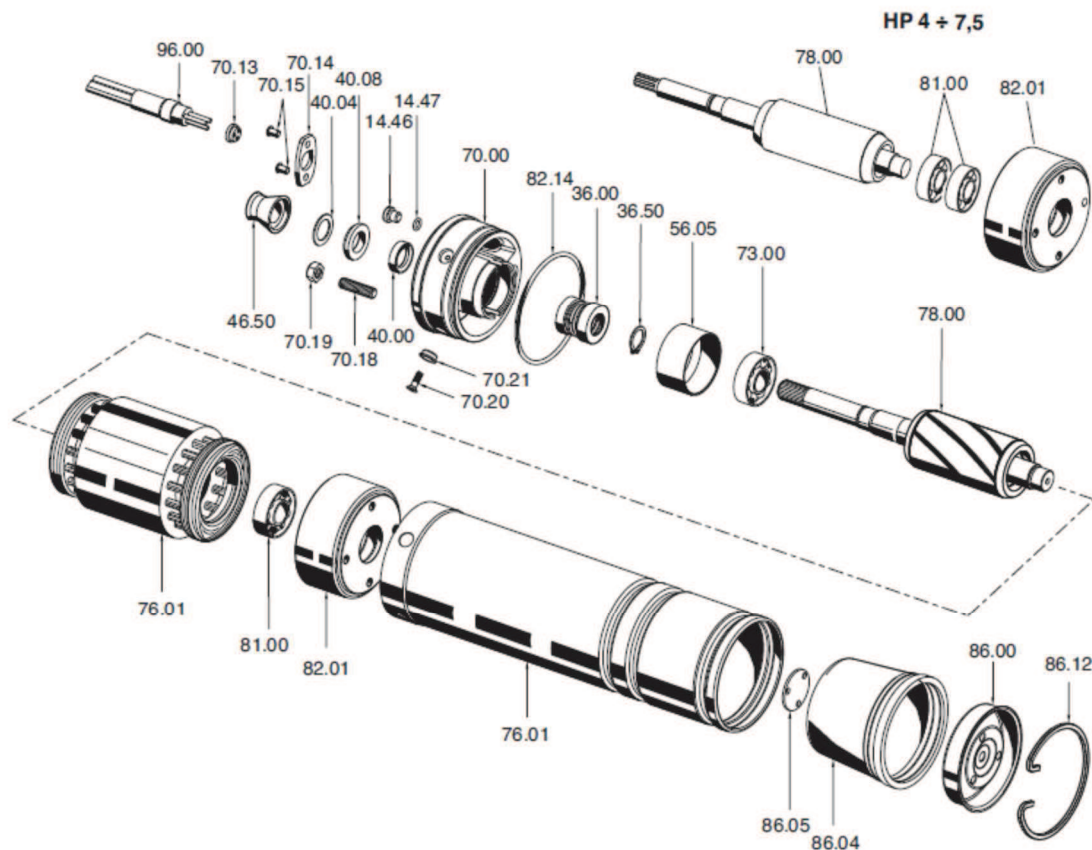
Motor	Rated Output		ph.	Dimensions (mm)											Weight (Kg.)
	Kw	Hp		A	B	C	D	E	F	M	N	O	S		
4MSX 050M	0.37	0.5	Single	365	327	38 +0.030/+0.05	∅95	∅87.3 h8	∅15.5 +0.1/0	∅76 ±0.1	33	3	M8	7.6	
4MSX 035M	0.55	0.75		400	362									9.4	
4MSX 100M	0.75	1		400	362									9.4	
4MSX 150M	1.1	1.5		440	402									10.7	
4MSX 200M	1.5	2		485	447									12.4	
4MSX 300M	2.2	3		555	517									15.7	
4MSX 050T	0.37	0.5	Three	365	327	38 +0.030/+0.05	∅95	∅87.3 h8	∅15.5 +0.1/0	∅76 ±0.1	33	3	M8	7.7	
4MSX 035T	0.55	0.75		365	327									7.7	
4MSX 100T	0.75	1		385	347									8.7	
4MSX 150T	1.1	1.5		400	362									9.5	
4MSX 200T	1.5	2		440	402									10.8	
4MSX 300T	2.2	3		440	402									11.7	
4MSX 400T	3	4		519	481									15.1	
4MSX 550T	4	5.5		584	546									18.1	
4MSX 350T	5.5	7.5		684	646									22.5	

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POS.	DENOMINATION	Q.ty.
14.46	Oil Cap	2
14.47	O-ring	2
36.00	Mechanical Seal	1
36.50	Mechanical seal circlip	1
40.00	Radial shaft seal	1
40.04	Spacer	1
40.08	Adjusting Ring	1
46.50	Sand Protection	1
56.05	Cable jacket	1
70.00	Motor Flange	1
70.13	Washer	1
70.14	Cable fastener	1
70.15	Screw	2
70.18	Stud Bolt	4
70.19	Nut	4
70.20	Screw	4
70.21	Washer	4
73.00	Bearing	1
76.01	Motor jacket with winding	1
78.00	Shaft with rotor packet	1
81.00	Ball bearing	1
82.01	Lower Support	1
82.14	O-ring	1
86.00	Stator membrane cover	1
86.12	Fastening Ring	1
86.04	Membrane	1
86.05	Diapham protection plate	1
96.00	Cable	1