



SUBMERSIBLE MOTORS

TECHNICAL DATA SHEET

MSQA4 SERIES

OIL FILLED
4"



ADVANTAGES



Cataphoretic anti-corrosion coating on upper support.



Robust construction for continuous duty operation.



Oil filled design using premium, pharma-grade, non-toxic, colorless white oil (FDA, USP-NF, Ph. Eur compliant).



Service workshop and spare parts support.



APPLICATIONS



DRINKING WATER SYSTEM



DEEP WELLS



DUG WELLS



DUG WELLS

FEATURES



Detachable connector lead for quick and easy maintenance.



Connector lead materials with CE certification, suitable for drinking water applications.



Available connector lead lengths: 5.57 ft up to 2 HP; 8.20 ft for 3 HP and above.



Motor housing and upper/lower support covers in AISI 304 stainless steel.



Motor shaft: AISI 304 stainless steel (1/2 – 3 HP) and AISI 630 stainless steel (5 – 10 HP).

TECHNICAL SPECS

OPERATIONAL

Operational position:	Vertical
Duty rating:	Continuous
Maximum immersion depth:	492.15 ft
RPM (60 Hz, 2 Poles)	3 450
Maximum allowable supply voltage variation:	±10%
Maximum water temperature:	41 – 95 °F
Minimum cooling flow velocity:	0.66 ft/s

PROTECTION

Ingress Protection:	IP68
Insulation Class:	F

4" / 1-PHASE / 2-WIRE MOTORS

GTIN-13 (E-COMMERCE CODE)	MODEL	NOMINAL POWER		PHASES X VOLTAGE (ø x V-)	SERVICE FACTOR (S.F.)	CURRENT (A)		EFFICIENCY (η%)	POWER FACTOR (COSφ)	COUPLING TYPE	MAXIMUM AXIAL THRUST	
		HP	kW			F.L.A.	S.F.A.	100% LOAD	100% LOAD		Kg	Lb
7503052499448	MSQA4 1/211152H	1/2	0.37	1 × 115	1.6	8.5	9.8	64	89	NEMA 4"	204	450
7503052499455	MSQA4 1/212302H			1 × 230		4.8	5.2	75				
7503053131187	MSQA4 3/412302H	3/4	0.55	1.5	5.6	6.6	65	89				
7503052499585	MSQA4 112302H	1	0.75	1.4	6.3	7.6	68	90				
7503052499523	MSQA4 1.512302H	1.5	1.1	1.3	8.7	10.3	69	92				
7503059103416	MSQA4 21230H	2	1.5	1.25	10.6	12.2	72	92				

4" / 1-PHASE / 3-WIRE MOTORS

GTIN-13 (E-COMMERCE CODE)	MODEL	NOMINAL POWER		PHASES X VOLTAGE (∅ × V-)	SERVICE FACTOR (S.F.)	CURRENT (A)		EFFICIENCY (η%)	POWER FACTOR (COSφ)	COUPLING TYPE	MAXIMUM AXIAL THRUST	
		HP	kW			F.L.A.	S.F.A.	100% LOAD	100% LOAD		Kg	Lb
7503052499547	MSQA4 1/21115	1/2	0.37	1 × 115	1.6	8.5	9.8	64	89	NEMA 4"	204	450
7503052499318	MSQA4 1/21230			1 × 230		4.8	5.2		75			
7503059103423	MSQA4 3/41115	3/4	0.55	1 × 115	1.5	10.9	12.8	65	59			
7503052499400	MSQA4 3/41230			1 × 230		5.6	6.6		75			
7503052499486	MSQA4 11115	1	0.75	1 × 115	1.4	11.5	14.5	68	98			
7503052499561	MSQA4 11230			1 × 230		6.3	7.6		89			
7503052499530	MSQA4 1.51230	1.5	1.1	1.3	8.7	10.3	69	90				
7503052499493	MSQA4 21230	2	1.5	1.25	10.6	12.2	72	92				
7503052499592	MSQA4 31230	3	2.2	1.15	14.4	16.1	70	96	306		675	
7503052499608	MSQA4 51230	5	3.7		25	28	71		540		1125	

CONTROL BOX FOR SINGLE-PHASE MOTORS

GTIN-13 (E-COMMERCE CODE)	MODEL	NOMINAL POWER	PHASES	VOLTAGE (V~)	INCLUDES	CAPACITOR (µF)	
		HP				START	RUN
7503052499615	CCQA 1/2115	1/2	1	115	Thermal protector and moisture protected ON/ OFF switch	65	65
7503052499431	CCQA 1/2230			230		16	16
7503052499509	CCQA 3/4230	3/4				20	20
7503052499424	CCQA 1115	1		115	100	100	
7503052499516	CCQA 1230			25	25		
7503052499622	CCQA 1.5230	1.5		230	Thermal protector, start relay, and moisture protected ON/ OFF switch	125	35
7503052499639	CCQA 2230	2				200	40
7503052499646	CCQA 3230	3				300	55
7503052499653	CCQA 5230	5				400	75

- Robust metal housing with weatherproof coating.
- ON/OFF switch with dust and moisture protection (not included on 5 HP model).
- Thermal overload relay protection from overcurrent.
- 1/2, 3/4, and 1 HP models: Start capacitor.
- 1.5, 2, 3, and 5 HP models: Start and run capacitor
- Wall mount design.



4" / 3-PHASE MOTORS

GTIN-13 (E-COMMERCE CODE)	MODEL	NOMINAL POWER		PHASES X VOLTAGE ($\phi \times V$ -)	SERVICE FACTOR (S.F.)	CURRENT (A)		EFFICIENCY (η %)	POWER FACTOR (COS ϕ)	COUPLING TYPE	MAXIMUM AXIAL THRUST	
		HP	kW			F.L.A.	S.F.A.				Kg	Lb
7503052499141	MSQA4 1/23230	1/2	0.37	3 × 230	1.6	2.8	3.3	62	63	NEMA 4"	204	450
7503052499325	MSQA4 3/43230	3/4	0.55		1.5	3.8	4.3	59	66			
7503052499332	MSQA4 13230	1	0.75		1.4	4.5	5.2	63	67			
7503052499349	MSQA4 1.53230	1.5	1.1		1.3	5.7	6.6	70	74			
7503052499356	MSQA4 23230	2	1.5		1.25	7.6	8.5	75	70			
7503052499417	MSQA4 33230	3	2.2	3 × 460	1.15	10.3	11.2	76	76		306	675
7503052499370	MSQA4 33460					4.8	5.3	77	79			
7503052499363	MSQA4 53230	5	3.7	3 × 230		17.5	18.7	72	75	NEMA 4"	540	1125
7503052499387	MSQA4 53460			3 × 460		8.4	9.3	76	77			
7503052499578	MSQA4 7.53230	7.5	5.5	3 × 230		25.3	27.6	74	74			
7503052499394	MSQA4 7.53460			3 × 460		12	13.2	78	78			
7503052499554	MSQA4 103230	10	7.5	3 × 230		34.5	37.5	76	72			
7503052499479	MSQA4 103460			3 × 460		16.9	18.5	77	76			

4" / 1-PHASE / 2-WIRE MOTORS

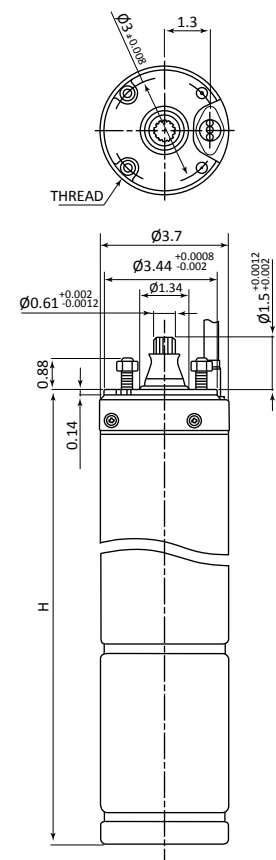
MODEL	NOMINAL POWER		DIMENSIONS (in)	WEIGHT (Lb)
	HP	kW	H	
MSQA4 1/211152H	1/2	0.37	15.6	17.0
MSQA4 1/212302H				17.0
MSQA4 3/412302H	3/4	0.55	16.4	19.0
MSQA4 112302H	1	0.75	17.0	20.3
MSQA4 1.512302H	1.5	1.1	18.0	22.9
MSQA4 212302H	2	1.5	19.3	26.2

4" / 1-PHASE / 3-WIRE MOTORS

MODEL	NOMINAL POWER		DIMENSIONS (in)	WEIGHT (Lb)
	HP	kW	H	
MSQA4 1/21115	1/2	0.37	13.6	3.3
MSQA4 1/21230				
MSQA4 3/41115	3/4	0.55	14.4	3.7
MSQA4 3/41230				
MSQA4 11115	1	0.75	15.0	3.6
MSQA4 11230				
MSQA4 1.51230	1.5	1.1	15.9	4.5
MSQA4 21230	2	1.5	17.3	5.2
MSQA4 31230	3	2.2	19.5	6.3
MSQA4 51230	5	3.7	26.9	10.3

4" / 3-PHASE MOTORS

MODEL	NOMINAL POWER		DIMENSIONS (in)	WEIGHT (Lb)
	HP	kW	H	
MSQA4 1/23230	1/2	0.37	13.0	14.8
MSQA4 3/43230	3/4	0.55	13.6	16.3
MSQA4 13230	1	0.75	14.4	18.1
MSQA4 1.53230	1.5	1.1	15.0	19.6
MSQA4 23230	2	1.5	15.9	22.1
MSQA4 33230	3	2.2	17.3	25.6
MSQA4 33460				
MSQA4 53230	5	3.7	23.9	43.0
MSQA4 53460				
MSQA4 7.53230	7.5	5.5	26.9	50.7
MSQA4 7.53460				
MSQA4 103230	10	7.5	30.8	60.6



Dimensions in Inches

CONTROL BOX

MODEL	DIMENSIONS (in)				WEIGHT (Lb)
	H	D	C	D	
CCQA 1/2115	5.08	8.46	3	-	2.9
CCQA 1/2230					
CCQA 3/4230					
CCQA 1115					
CCQA 1230	8.07	9.4	5.8	1.2	5.7
CCQA 1.5230					6.0
CCQA 2230					6.4
CCQA 3230					
CCQA 5230					

