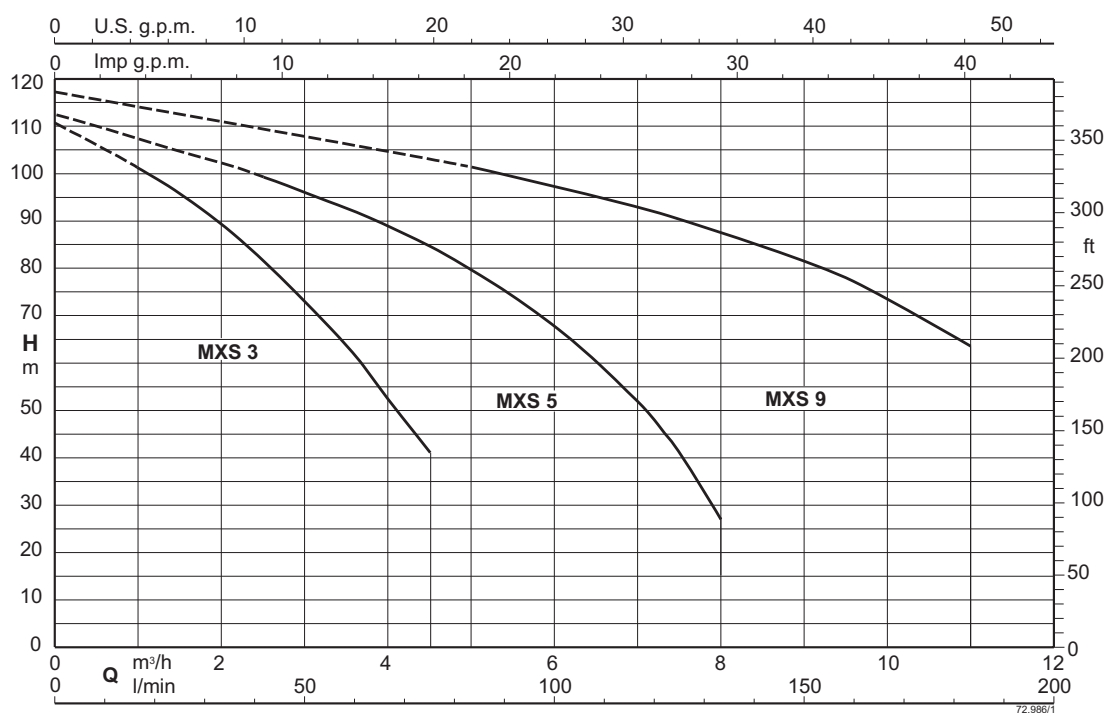


MXS

 calpeda®
Coverage chart $n \approx 2900$ rpm

Multi-stage stainless steel submersible
clean water pumps

Construction

5" Close coupled multi-stage submersible pumps.

All parts in contact with the fluid both internal and external are in chrome-nickle stainless steel.

MXSM with built-in capacitor, accessible through the delivery casing.

Hydraulics located below the motor with the motor cooled by the pumped fluid.

Safe operation is possible with the motor only partially submerged.

Double shaft seal with oil chamber.

The suction strainer prevents the entrance of solids with diameter bigger than 2 mm.

Applications

For water supply from wells, tanks or reservoirs.

For domestic, civil and industrial applications, for garden use, irrigation rain water harvesting systems.

Operating conditions

Liquid temperature up to 35° C.

Minimum internal diameter of well: 140 mm.

Minimum immersion depth: 100 mm.

Maximum immersion depth: 20 m (with suitable cable length).

Continuous duty.

Motor

2-pole induction motor, 50 Hz ($n \approx 2900$ rpm).

MXS: three-phase 230 V $\pm 10\%$;

400 V $\pm 10\%$.

Cable: H07RN8-F, length 15 m, without plug.

MXSM: single-phase 230 V $\pm 10\%$, with thermal protector.

Incorporated capacitor

Float switch MXSM.. CG up to 10A (on demand)

Cable: H07RN8-F, length 15 m, with plug CEI-UNEL 47166.

Insulation class F.

Protection IP X8 (for continuous immersion).

Triple impregnation humidity-proof dry winding

Constructed in accordance with EN 60335-2-41.

Special features on request

Other voltages.

Frequency 60 Hz (as per 60 Hz data sheet).

Cable length 20 m.

Motor suitable for operation with frequency converter.

Designation

Example: MXSM 304

MXS = Series

M = Single-phase (without three-phase indication)

3 = Rated capacity in m³/h

04 = Number of impellers

Materials

Components	Materials
delivery casing	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
External jacket	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Suction strainer	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Stage casing	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Spacer sleeve	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Impeller	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
motor jacket	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Oil chamber cover	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Shaft	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Capacitor cover	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Upper mechanical seal	Steatite, carbon, NBR
Lower mechanical seal	Carbone, carburo di silicio, NBR
Seal lubrication oil	Oil for food machinery and pharmaceutic use



Coverage chart n ≈ 2900 rpm

Three-phase

				Q = Flow									
				m³/h	0	1	1,5	2	2,5	3	3,5	4	4,5
Model	400V	P2		l/min		16,66	25	33,33	41,66	50	58,33	66,66	75
	A	kW	HP	H (m) = Total head									
MXS 303/A	1,4	0,45	0,6		32,5	29,5	27,5	25,5	23	19,5	17	13	10
MXS 304/A	1,6	0,55	0,75		44	41,5	39,5	36,5	33,5	29,5	25,5	21	16
MXS 305/A	1,9	0,75	1		53	49,5	47	44	40	35	30	25	19
MXS 306/A	2,2	0,9	1,2		65	61	58	54	49	43	37	30,5	23
MXS 307/A	2,6	0,9	1,2		77,5	71	66,5	61	55	49	42	35	27
MXS 308/A	2,8	1,1	1,5		88,5	81,5	76	70,5	64	56,5	49,5	41	32
MXS 309/A	3,8	1,5	2		100	91	85	78,5	70,5	62,5	54,4	45	35
MXS 310/A	4,3	1,5	2		111	101,5	95	88,5	80	71	62	52,5	41,5

Single-phase

							Q = Flow										
							m³/h	0	1	1,5	2	2,5	3	3,5	4	4,5	
Model	230V	Capacitor		P2		P1	l/min		16,6	25	33,3	41,6	50	58,3	66,6	75	
	A	Vc	uf	kW	HP	kW	H (m) = Total head										
MXSM 303/A	3,5	450	14	0,45	0,6	0,8		32,5	29,5	27,5	25,5	23	19,5	17	13	10	
MXSM 304/A	4,1	450	20	0,55	0,75	0,9		44	41,5	39,5	36,5	33,5	29,5	25,5	21	16	
MXSM 305/A	5	450	20	0,75	1	1,1		53	49,5	47	44	40	35	30	25	19	
MXSM 306/A	6	450	25	0,9	1,2	1,3		65	61	58	54	49	43	37	30,5	23	
MXSM 307/A	6,6	450	25	0,9	1,2	1,5		77,5	71	66,5	61	55	49	42	35	27	
MXSM 308/A	8,3	450	30	1,1	1,5	1,7		88,5	81,5	76	70,5	64	56,5	49,5	41	32	
MXSM 309/A	9	450	30	1,5	2	1,9		100	91	85	78,5	70,5	62,5	54,4	45	35	
MXSM 310/A	12	450	35	1,5	2	2,2		111	101,5	95	88,5	80	71	62	52,5	41,5	

Three-phase

				Q = Flow										
				m³/h	0	2,5	3	3,5	4	4,5	5	6	7	8
Model	400V	P2		l/min		41,66	50	58,33	66,66	75	83,33	100	116	133
	A	kW	HP	H (m) = Total head										
MXS 503/A	1,6	0,55	0,75		32,2	28,5	27,5	26	24,5	22,5	21,5	18	13,5	8
MXS 504/A	2,2	0,9	1,2		43	39	38	36,5	34,5	33	30,5	25,5	19,5	13
MXS 505/A	2,6	1,1	1,5		53	47,5	45,5	43,5	41	38,5	35,5	29,5	22	13,5
MXS 506/A	2,8	1,1	1,5		66,5	58	55,6	53,5	51	48	45	36,5	27,5	16
MXS 507/A	4	1,5	2		78,5	69,5	66,5	64	61,5	58	54,5	45,5	36	22
MXS 508/A	4,3	1,5	2		88,5	78	75	72	68	64	60	50	38	25
MXS 509/A	5,6	2,2	3		101	91	87,5	84	80,5	75,5	71	60	46,5	28,5
MXS 510/A	5,6	2,2	3		111	100	96,5	93	89	84,5	80	66,5	52	31

Single-phase

							Q = Flow										
							m³/h	0	2,5	3	3,5	4	4,5	5	6	7	8
Model	230V	Capacitor		P2		P1	l/min		41,6	50	58,3	66,6	75	83,3	100	117	133
	A	Vc	uf	kW	HP	kW	H (m) = Total head										
MXSM 503/A	4,1	450	20	0,55	0,75	0,9		32,2	28,5	27,5	26	24,5	22,5	21,5	18	13,5	8
MXSM 504/A	6	450	25	0,9	1,2	1,2		43	39	38	36,5	34,5	33	30,5	25,5	19,5	13
MXSM 505/A	7	450	25	1,1	1,5	1,5		53	47,5	45,5	43,5	41	38,5	35,5	29,5	22	13,5
MXSM 506/A	8,3	450	30	1,1	1,5	1,7		66,5	58	55,6	53,5	51	48	45	36,5	27,5	16
MXSM 507/A	12	450	35	1,5	2	2,2		78,5	69,5	66,5	64	61,5	58	54,5	45,5	36	22
MXSM 508/A	13	450	35	1,5	2	2,4		88,5	78	75	72	68	64	60	50	38	25
MXSM 509/A	14,3	450	40	2,2	3	2,9		101	91	87,5	84	80,5	75,5	71	60	46,5	28,5

Three-phase

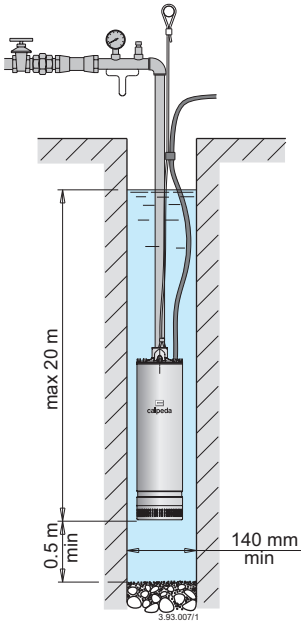
Model				Q = Flow								
				m³/h	0	5	6	7	8	9	10	11
				l/min		83,33	100	116	133	150	166	183
400V		P2		H (m) = Total head								
A		kW	HP									
MXS 903/A	2,6	1,1	1,5		34	28,2	26,8	25,2	23,3	21,2	18,5	15,5
MXS 904/A	3,8	1,5	2		45,5	39	37	35	32,5	30	26,5	22,5
MXS 905/A	4,3	2,2	3		58	49	46,5	45	42,5	38,5	34	30
MXS 906/A	5,6	2,2	3		70	59,5	56,5	54	50,5	46,5	42	37
MXS 907/A	6,6	3	4		81	71	68,5	66	62	58	53	47
MXS 908/A	8,5	3	4		93	81	78	75	71	66	60,5	53
MXS 909/A	8,5	3	4		105	92	88	84	79	73,5	67,5	57,5
MXS 910/A	8,5	3	4		117	101,2	96,5	93	87,5	81,5	73,5	63,5

Single-phase

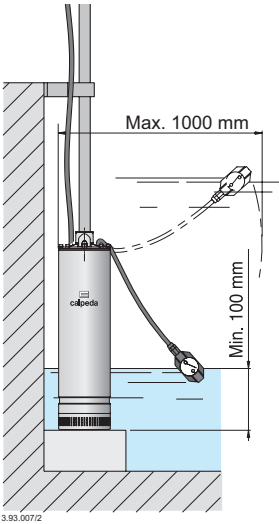
							Q = Flow								
							m³/h	0	5	6	7	8	9	10	11
Model	230V	Capacitor		P2		P1	l/min		83,3	100	117	133	150	167	183
	A	Vc	uf	kW	HP	kW	H (m) = Total head								
MXSM 903/A	7	450	25	1,1	1,5	1,5		34	28,2	26,8	25,2	23,3	21,2	18,5	15,5
MXSM 904/A	9	450	30	1,5	2	1,9		45,5	39	37	35	32,5	30	26,5	22,5
MXSM 905/A	13	450	35	2,2	3	2,4		58	49	46,5	45	42,5	38,5	34	30
MXSM 906/A	14,3	450	40	2,2	3	2,9		70	59,5	56,5	54	50,5	46,5	42	37

P1: Maximum power input.
P2: Rated motor power output.
Tolerances according to UNI EN ISO 9906:2012
Test results with clean cold water, without gas content.

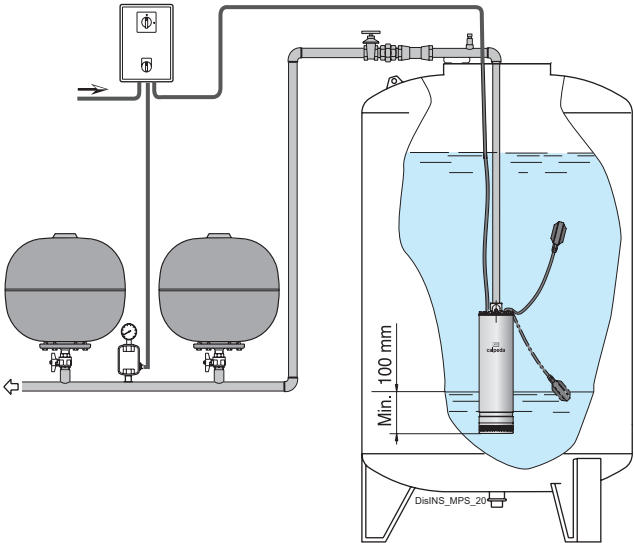
Installation



Pump in suspended position

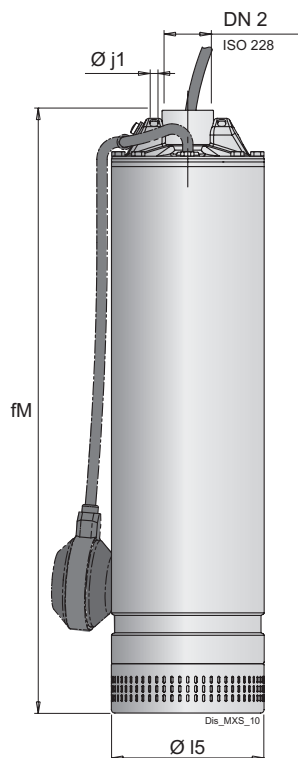


Pump in the standing position



Examples of installations

Dimensions and weights

**MXSM ... CG**

With float switch pump (on demand)

TYPE	DN2	mm			kg
		fM	j1	I5	Weight
MXS 303/A	G 1 1/4	465	7	133	11.6
MXS 304/A	G 1 1/4	504	7	133	-
MXS 305/A	G 1 1/4	553	7	133	13.6
MXS 306/A	G 1 1/4	601	7	133	15.3
MXS 307/A	G 1 1/4	601	7	133	15.6
MXS 308/A	G 1 1/4	671	7	133	-
MXS 309/A	G 1 1/4	768	7	133	-
MXS 310/A	G 1 1/4	768	7	133	-
MXS 503/A	G 1 1/4	504	7	133	-
MXS 504/A	G 1 1/4	553	7	133	14
MXS 505/A	G 1 1/4	553	7	133	14.6
MXS 506/A	G 1 1/4	622	7	133	17.2
MXS 507/A	G 1 1/4	671	7	133	-
MXS 508/A	G 1 1/4	768	7	133	20.7
MXS 509/A	G 1 1/4	768	7	133	-
MXS 510/A	G 1 1/4	768	7	133	-
MXS 903/A	G 1 1/4	553	7	133	-
MXS 904/A	G 1 1/4	573	7	133	16.1
MXS 905/A	G 1 1/4	653	7	133	14.6
MXS 906/A	G 1 1/4	738	7	133	22.2
MXS 907/A	G 1 1/4	738	7	133	-
MXS 908/A	G 1 1/4	853	7	133	-
MXS 909/A	G 1 1/4	853	7	133	-
MXS 910/A	G 1 1/4	853	7	133	-

Cable H07RN8-F,	
230V 3 ~	400V 3 ~
4G1 mm2	4G1 mm2
4G1 mm2	4G1 mm2
4G1 mm2	4G1 mm2
4G1 mm2	4G1 mm2
4G1 mm2	4G1 mm2
4G1 mm2	4G1 mm2
4G1,5 mm2	4G1 mm2
4G1,5 mm2	4G1 mm2
4G1 mm2	4G1 mm2
4G1 mm2	4G1 mm2
4G1 mm2	4G1 mm2
4G1 mm2	4G1 mm2
4G1 mm2	4G1 mm2
4G1,5 mm2	4G1 mm2
4G1,5 mm2	4G1 mm2
4G1,5 mm2	4G1 mm2
4G1 mm2	4G1 mm2
4G1 mm2	4G1 mm2
4G1,5 mm2	4G1 mm2
4G2,5 mm2	4G1 mm2
4G2,5 mm2	4G1 mm2
4G2,5 mm2	4G1,5 mm2
4G2,5 mm2	4G1,5 mm2

TYPE	DN2	mm			kg
		fM	j1	I5	Weight
MXSM 303/A	G 1 1/4	465	7	133	-
MXSM 304/A	G 1 1/4	504	7	133	-
MXSM 305/A	G 1 1/4	553	7	133	15.5
MXSM 306/A	G 1 1/4	601	7	133	15.5
MXSM 307/A	G 1 1/4	601	7	133	17.1
MXSM 308/A	G 1 1/4	671	7	133	-
MXSM 309/A	G 1 1/4	768	7	133	-
MXSM 310/A	G 1 1/4	768	7	133	-
MXSM 503/A	G 1 1/4	504	7	133	-
MXSM 504/A	G 1 1/4	553	7	133	15.8
MXSM 505/A	G 1 1/4	553	7	133	15.9
MXSM 506/A	G 1 1/4	622	7	133	18.6
MXSM 507/A	G 1 1/4	671	7	133	-
MXSM 508/A	G 1 1/4	768	7	133	24.5
MXSM 509/A	G 1 1/4	768	7	133	-
MXSM 903/A	G 1 1/4	553	7	133	-
MXSM 904/A	G 1 1/4	573	7	133	17.7
MXSM 905/A	G 1 1/4	653	7	133	-
MXSM 906/A	G 1 1/4	738	7	133	24.9

Cable H07RN8-F,	
230V 1 ~	
3G1 mm2	
3G1 mm2	
3G1 mm2	
3G1 mm2	
3G1 mm2	
3G1,5 mm2	
3G1,5 mm2	
3G2,5 mm2	
3G1 mm2	
3G1 mm2	
3G1,5 mm2	
3G2,5 mm2	
3G2,5 mm2	
3G2,5 mm2	
3G1,5 mm2	
3G1,5 mm2	
3G2,5 mm2	
3G2,5 mm2	

With cable length: 15m

Characteristic curves n ≈ 2900 rpm

