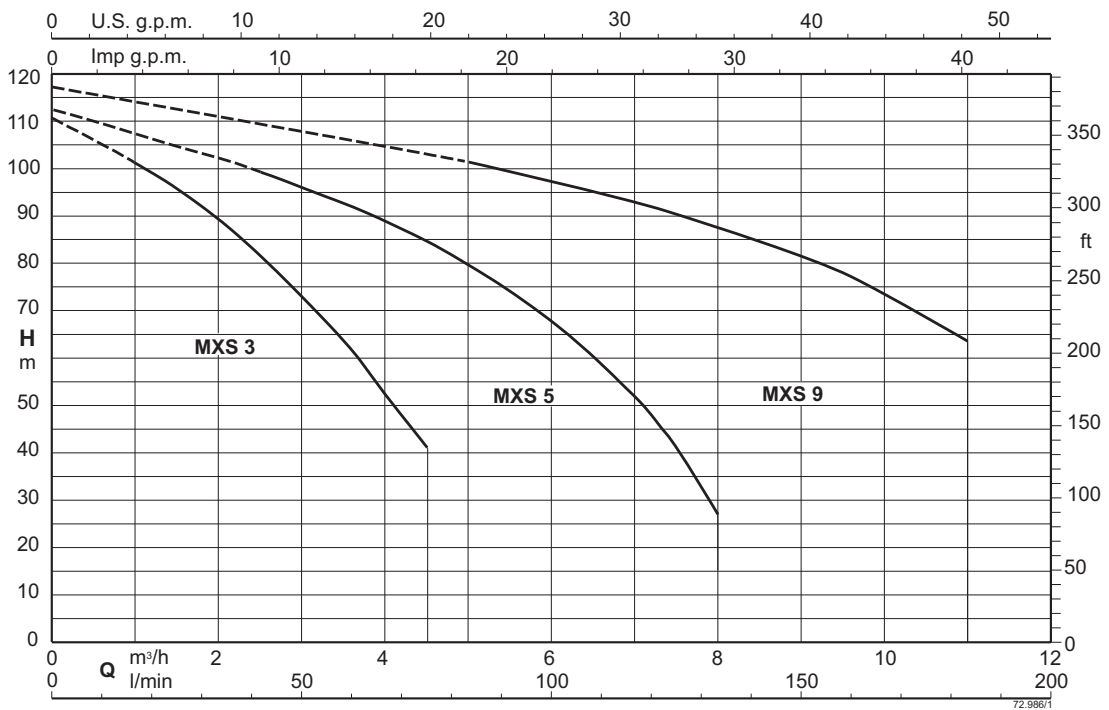


MXS



Coverage chart n ≈ 2900 rpm



Multi-stage stainless steel submersible clean water pumps

MXS



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	1,4	0,45	0,6	32,5	29,5	27,5	25,5	23	19,5	17	13	10	
MXS 304	1,6	0,55	0,75	44	41,5	39,5	36,5	33,5	29,5	25,5	21	16	
MXS 305	1,9	0,75	1	53	49,5	47	44	40	35	30	25	19	
MXS 306	2,2	0,9	1,2	65	61	58	54	49	43	37	30,5	23	
MXS 307	2,6	0,9	1,2	77,5	71	66,5	61	55	49	42	35	27	
MXS 308	2,8	1,1	1,5	88,5	81,5	76	70,5	64	56,5	49,5	41	32	
MXS 309	3,8	1,5	2	100	91	85	78,5	70,5	62,5	54,4	45	35	
MXS 310	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
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	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	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	5	450	20	0,75	1	1,1	53	49,5	47	44	40	35	30	25	19
MXSM 306	6	450	25	0,9	1,2	1,3	65	61	58	54	49	43	37	30,5	23
MXSM 307	6,6	450	25	0,9	1,2	1,5	77,5	71	66,5	61	55	49	42	35	27
MXSM 308	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	9	450	30	1,5	2	1,9	100	91	85	78,5	70,5	62,5	54,4	45	35
MXSM 310	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
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	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	2,2	0,9	1,2	43	39	38	36,5	34,5	33	30,5	25,5	19,5	13
MXS 505	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	2,8	1,1	1,5	66,5	58	55,6	53,5	51	48	45	36,5	27,5	16
MXS 507	4	1,5	2	78,5	69,5	66,5	64	61,5	58	54,5	45,5	36	22
MXS 508	4,3	1,5	2	88,5	78	75	72	68	64	60	50	38	25
MXS 509	5,6	2,2	3	101	91	87,5	84	80,5	75,5	71	60	46,5	28,5
MXS 510	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
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	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	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	7	450	25	1,1	1,5	1,5	53	-	47,5	45,5	43,5	41	38,5	35,5	29,5	13,5
MXSM 506	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	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	13	450	35	1,5	2	2,4	88,5	78	75	72	68	64	60	50	38	25
MXSM 509	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	400V P2			Q = Flow								
				m³/h	0	5	6	7	8	9	10	11
				l/min	83,33	100	116	133	150	166	183	
	A	kW	HP	H (m) = Total head								
MXS 903	2,6	1,1	1,5	34	28,2	26,8	25,2	23,3	21,2	18,5	15,5	
MXS 904	3,8	1,5	2	45,5	39	37	35	32,5	30	26,5	22,5	
MXS 905	4,3	2,2	3	58	49	46,5	45	42,5	38,5	34	30	
MXS 906	5,6	2,2	3	70	59,5	56,5	54	50,5	46,5	42	37	
MXS 907	6,6	3	4	81	71	68,5	66	62	58	53	47	
MXS 908	8,5	3	4	93	81	78	75	71	66	60,5	53	
MXS 909	8,5	3	4	105	92	88	84	79	73,5	67,5	57,5	
MXS 910	8,5	3	4	117	101,2	96,5	93	87,5	81,5	73,5	63,5	

Single-phase

Model	230V Capacitor			P2		P1	Q = Flow								
							m³/h	0	5	6	7	8	9	10	11
							l/min	83,3	100	117	133	150	167	183	
	A	Vc	uf	kW	HP	kW	H (m) = Total head								
MXSM 903	7	450	25	1,1	1,5	1,5	34	29,5	28	26,5	24,5	22,5	20	16,5	
MXSM 904	9	450	30	1,5	2	1,9	45,5	39	37	35	32,5	30	26,5	22,5	
MXSM 905	13	450	35	2,2	3	2,4	58	49	47,3	45,2	42,5	38,9	34,5	30	
MXSM 906	14,3	450	40	2,2	3	2,9	70	59,5	56,5	54	50,5	46,5	42	37	

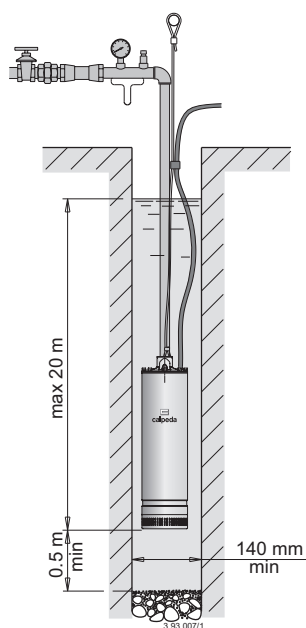
P1: Maximum power input.

P2: Rated motor power output.

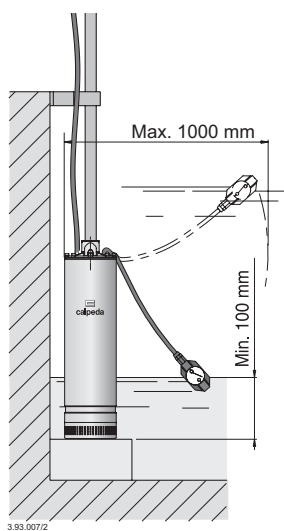
Tolerances according to UNI EN ISO 9906:2012

Test results with clean cold water, without gas content.

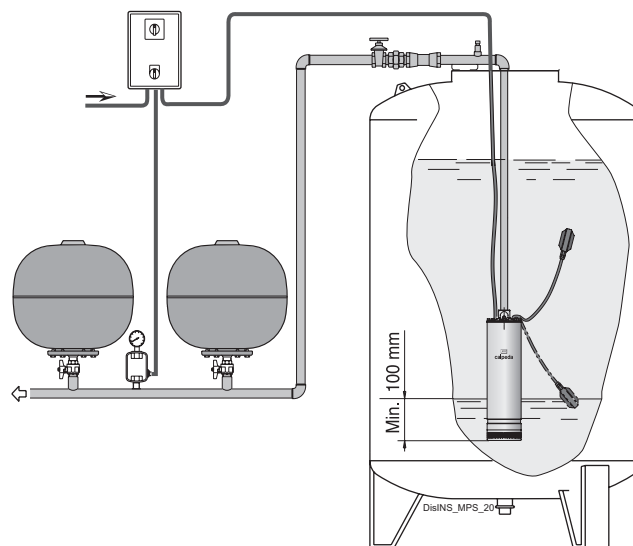
Installation



Pump in suspended position

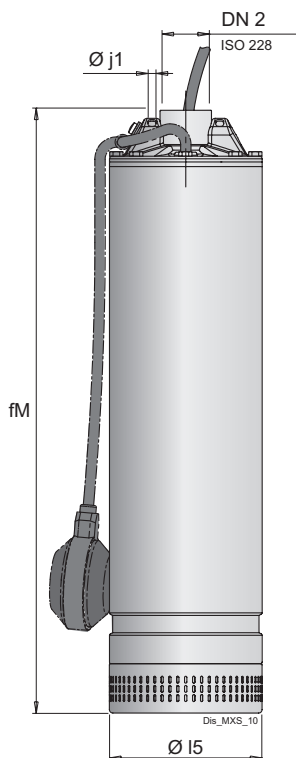


Pump in the standing position



Examples of installations

Dimensions and weights



TYPE	DN2	mm			kg Weight
		fM	j1	l5	
MXS 303	G 1 1/4	465	7	133	11.7
MXS 304	G 1 1/4	504	7	133	13.3
MXS 305	G 1 1/4	553	7	133	14
MXS 306	G 1 1/4	601	7	133	15.7
MXS 307	G 1 1/4	601	7	133	16
MXS 308	G 1 1/4	671	7	133	18.8
MXS 309	G 1 1/4	768	7	133	19.3
MXS 310	G 1 1/4	768	7	133	21.4
MXS 503	G 1 1/4	504	7	133	12.7
MXS 504	G 1 1/4	553	7	133	14.5
MXS 505	G 1 1/4	553	7	133	15
MXS 506	G 1 1/4	622	7	133	17.5
MXS 507	G 1 1/4	671	7	133	19.8
MXS 508	G 1 1/4	768	7	133	20.2
MXS 509	G 1 1/4	768	7	133	22.7
MXS 510	G 1 1/4	768	7	133	23.6
MXS 903	G 1 1/4	523	7	133	14.2
MXS 904	G 1 1/4	573	7	133	16.5
MXS 905	G 1 1/4	653	7	133	19
MXS 906	G 1 1/4	738	7	133	21.8
MXS 907	G 1 1/4	738	7	133	24.2
MXS 908	G 1 1/4	853	7	133	27.4
MXS 909	G 1 1/4	853	7	133	28.1
MXS 910	G 1 1/4	853	7	133	29.2

TYPE	DN2	mm			kg Weight
		fM	j1	l5	
MXSM 303	G 1 1/4	465	7	133	12.4
MXSM 304	G 1 1/4	504	7	133	14.1
MXSM 305	G 1 1/4	553	7	133	15.8
MXSM 306	G 1 1/4	601	7	133	17.1
MXSM 307	G 1 1/4	601	7	133	17.7
MXSM 308	G 1 1/4	671	7	133	20.5
MXSM 309	G 1 1/4	768	7	133	20.9
MXSM 310	G 1 1/4	768	7	133	24.6
MXSM 503	G 1 1/4	504	7	133	13.7
MXSM 504	G 1 1/4	553	7	133	16.1
MXSM 505	G 1 1/4	553	7	133	16.7
MXSM 506	G 1 1/4	622	7	133	19.2
MXSM 507	G 1 1/4	671	7	133	22.1
MXSM 508	G 1 1/4	768	7	133	23.4
MXSM 509	G 1 1/4	768	7	133	25.7
MXSM 903	G 1 1/4	553	7	133	16.1
MXSM 904	G 1 1/4	573	7	133	18.2
MXSM 905	G 1 1/4	653	7	133	22.3
MXSM 906	G 1 1/4	738	7	133	24.8

MXSM ... CG
With float switch pump (on demand)

With cable length: 15m

Characteristic curves $n \approx 2900$ rpm

