



Materials

Component	Material
Delivery casing	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
External jacket	
Suction strainer	
Stage casing	
Spacer sleeve	
Impeller	
Motor jacket	
Jacket cover	
Oil chamber cover	
Shaft	
Upper mechanical seal	Steatite, carbon, NBR
Lower mechanical seal	Ceramic alumina, silicon carbide, NBR
Seal lubrication oil	Oil for food machinery and pharmaceutical use

Construction

Close coupled multi-stage submersible pumps.
All parts in contact with the fluid both internal and external are in chrome-nickel 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 and rain water harvesting systems.

Operating conditions

Water 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

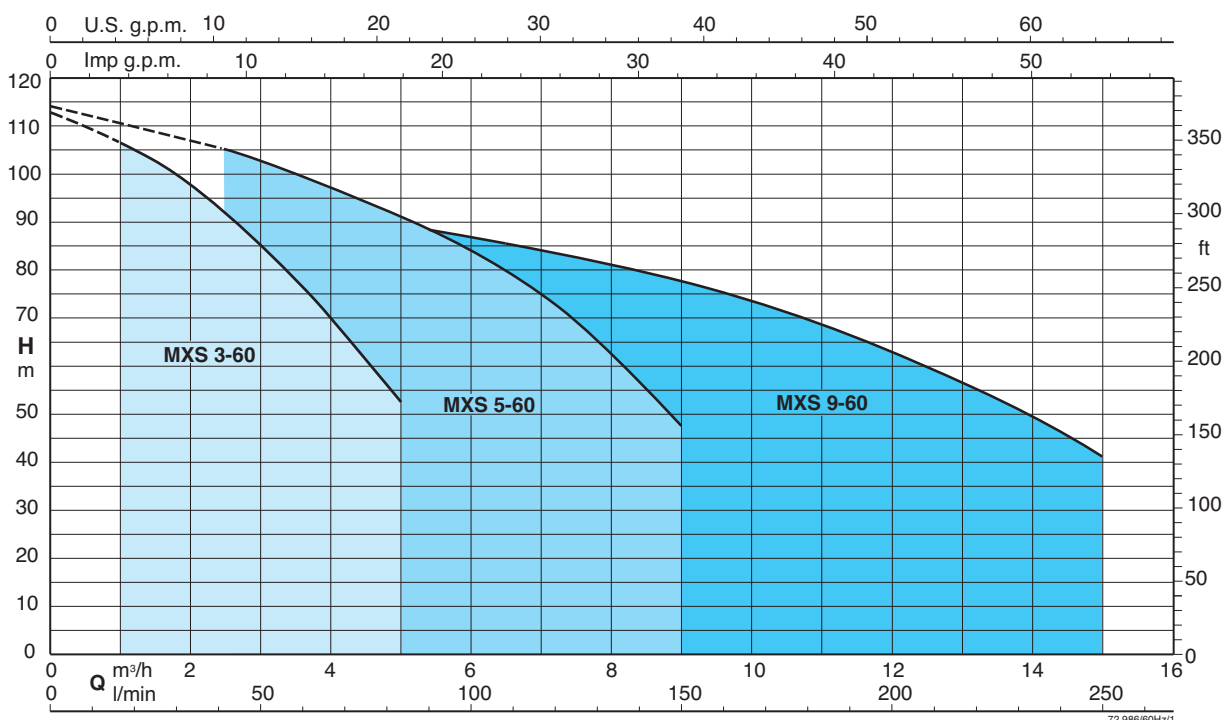
2-pole induction motor, 60 Hz ($n \approx 3450$ 1/min).
MXS : three-phase 220 V \pm 10%;
 three-phase 380 V \pm 10%.
 Cable: H07RN8-F, length 15 m, without plug.
MXSM: single-phase 220 V \pm 10%, with thermal protector.
 Incorporated capacitor.
 Float switch MXSM.. CG up to 15A (on demand)
 Cable: H07RN8-F, length 15 m, with plug CEI-UNEL 47166.

Insulation class F.
 Protection IP 68 (for continuous immersion).
 Double impregnation humidity-proof dry winding.
 Constructed in accordance with EN 60335-2-41.

Special features on request

- Other voltages.
- Cable length 20 m.
- Motor suitable operation with frequency converter.

Coverage chart $n \approx 3450$ rpm



Performance n ≈ 3450 rpm

3 ~	220 V 380 V			1 ~	220 V Capacitor				P ₂		Q m³/h l/min	0	1	1,5	2	2,5	3	3,5	4	4,5	5
	A	A	IA/IN		A	µF	V	IA/IN	kW	HP		0	1	1,5	2	2,5	3	3,5	4	4,5	5
MXS 302-60	2,6	1,5	3,7	MXSM 302-60	4,1	14	450	2,7	0,45	0,6	H m	32	30,7	29,3	27,7	25,7	23,7	21,3	19,3	16,7	14
MXS 303-60	4,1	2,4	3,2	MXSM 303-60	6,5	20	450	3,3	0,75	1		48,5	46	44	41,5	38,5	35,5	32	29	25	21
MXS 304-60	4,8	2,8	3,7	MXSM 304-60	7,2	20	450	3	0,9	1,2		64,5	61	59	56	52,7	49	45	40,3	35,3	30
MXS 305-60	5,6	3,2	7,3	MXSM 305-60	9,4	30	450	4,9	1,1	1,5		81	77	74	70	65,5	60,5	55	49,5	43	36,5
MXS 306-60	6,1	3,5	6,7	MXSM 306-60	10,5	30	450	4,4	1,5	2		95	91	87	82	76,5	70,5	64	57	50	42
MXS 307-60	8,7	5	5,6	MXSM 307-60	14,4	35	450	4,3	1,5	2		113	107	103	98	92	85	78	70	61,5	52,5

3 ~	220 V 380 V			1 ~	220 V Capacitor				P ₂		Q m³/h l/min	0	2,5	3	3,5	4	5	6	7	8	9
	A	A	IA/IN		A	µF	V	IA/IN	kW	HP		0	2,5	3	3,5	4	5	6	7	8	9
MXS 502-60	4,1	2,4	3,2	MXSM 502-60	5,5	20	450	2,2	0,9	1,2	H m	32	29	28,3	27,7	26,7	24,7	22	19,3	16	11,3
MXS 503-60	5,6	3,2	3,2	MXSM 503-60	7,2	25	450	3	1,1	1,5		48	43,5	42,5	41,5	40	37	33	29	24	17
MXS 504-60	6,1	3,5	6,7	MXSM 504-60	9,4	30	450	4,9	1,1	1,5		64	59	57,5	56	54	50	45	40	33	24
MXS 505-60	8,2	4,7	5,9	MXSM 505-60	14,4	35	450	4,3	1,5	2		80	73,8	71,9	70	67,5	62,5	56,3	50	41,3	30
MXS 506-60	9,5	5,5	5,1						2,2	3		98	90	88,3	85,7	83,1	78	72	64,3	54	40,3
MXS 507-60	11,1	6,4	6,4						2,2	3		114	105	103	100	97	91	84	75	63	47

3 ~	220 V 380 V			1 ~	220 V Capacitor				P ₂		Q m³/h l/min	0	5	6,5	8	10	11	12	13	14	15
	A	A	IA/IN		A	µF	V	IA/IN	kW	HP		0	5	6,5	8	10	11	12	13	14	15
MXS 902-60	6,1	3,5	6,7	MXSM 902-60	9,4	30	450	4,9	1,5	2	H m	34	23	28,8	27,2	24,8	23,2	21,2	19,2	16,8	14
MXS 903-60	8,7	5	5,6	MXSM 903-60	14,4	35	450	4,3	1,8	2,5		50	45	43,2	40,8	37,2	34,8	31,8	28,8	25,2	21
MXS 904-60	11,1	6,4	6,4						2,2	3		67	60	57,6	54,4	49,6	46,4	42,4	38,4	33,6	28
MXS 905-60	14,7	8,5	5,6						3	4		84	75	72	68	62	58	53	48	42	35
MXS 906-60	-	10,2	5,5						3	4		101	90	86,5	81,5	74,5	69,5	63,5	57,5	50,5	42

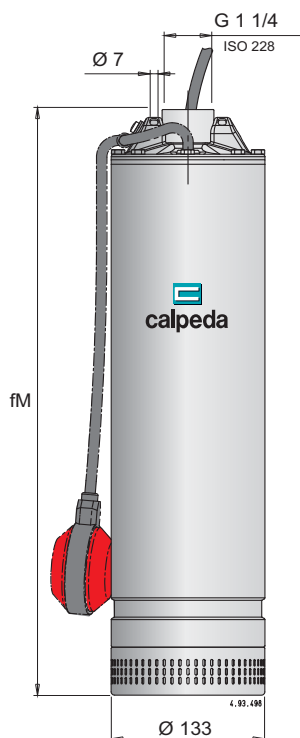
P₂ Rated motor power output.

Test results with clean cold water, without gas content.

IA/IN = D.O.L. starting current / Rated current

Tolerances according to UNI EN ISO 9906:2012

Dimensions and weights



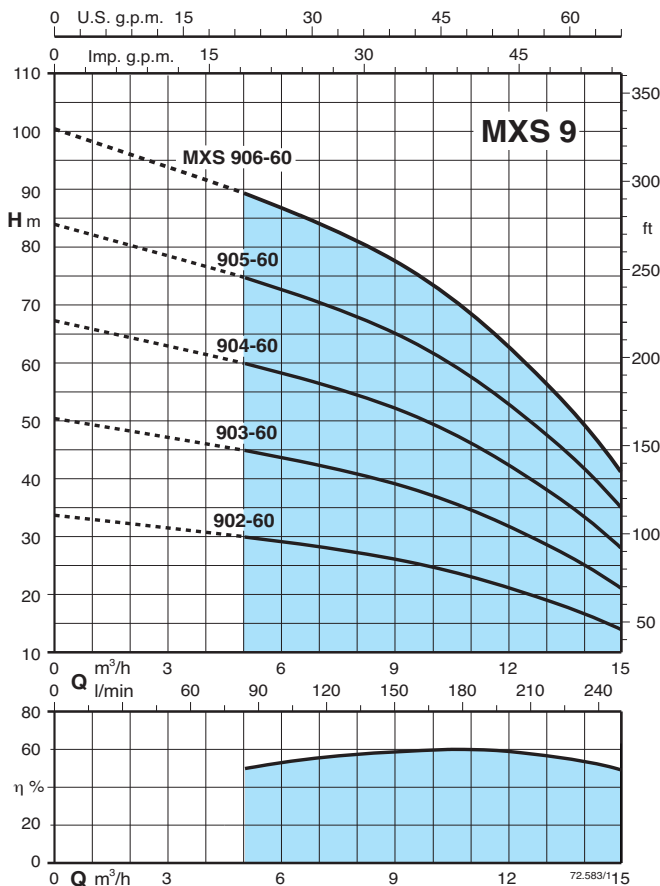
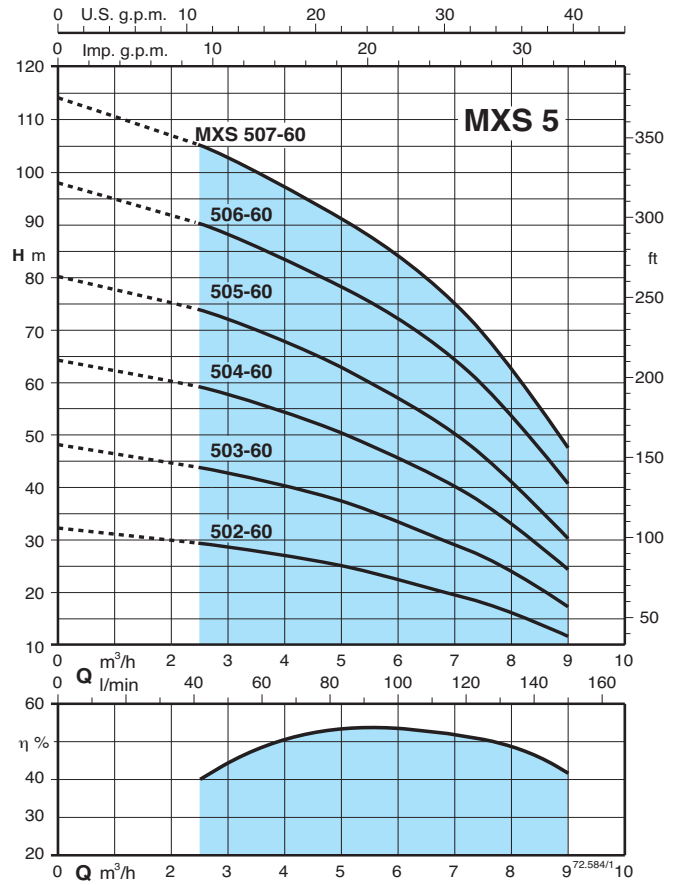
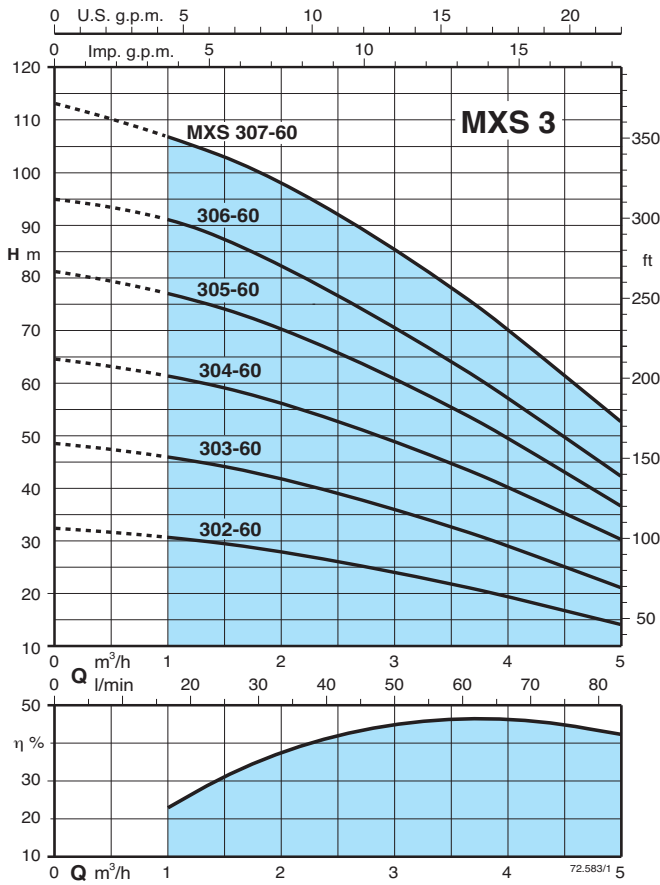
Weights with cable length: 15 m

Pump	fM mm	kg		Cavo H07RN8-F		
		MXS	MXSM	230V 3 ~	400V 3 ~	230V 1 ~
MXS 302-60 - MXSM 302-60	440,5	12,3	13,3	4G1 mm ²	4G1 mm ²	3G1 mm ²
MXS 303-60 - MXSM 303-60	503,5	14,5	16	4G1 mm ²	4G1 mm ²	3G1 mm ²
MXS 304-60 - MXSM 304-60	528,5	-15,5	16,5	4G1 mm ²	4G1 mm ²	3G1 mm ²
MXS 305-60 - MXSM 305-60	597,5	17,3	18,8	4G1 mm ²	4G1 mm ²	3G1,5 mm ²
MXS 306-60 - MXSM 306-60	621,5	17,5	19	4G1 mm ²	4G1 mm ²	3G1,5 mm ²
MXS 307-60 - MXSM 307-60	670,5	20	21,5	4G1,5 mm ²	4G1 mm ²	3G2,5 mm ²
MXS 502-60 - MXSM 503-60	455,5	14,3	15,3	4G1 mm ²	4G1 mm ²	3G1 mm ²
MXS 503-60 - MXSM 503-60	503,5	15,3	16,3	4G1 mm ²	4G1 mm ²	3G1 mm ²
MXS 504-60 - MXSM 504-60	572,5	17	18,5	4G1 mm ²	4G1 mm ²	3G1,5 mm ²
MXS 505-60 - MXSM 505-60	621,5	19,3	20,8	4G1 mm ²	4G1 mm ²	3G2,5 mm ²
MXS 506-60	646,5	19,5		4G1,5 mm ²	4G1 mm ²	
MXS 507-60	694,5	21,5		4G2,5 mm ²	4G1 mm ²	
MXS 902-60 - MXSM 902-60	537,5	17,8	19,3	4G1 mm ²	4G1 mm ²	3G1,5 mm ²
MXS 903-60 - MXSM 903-60	592,5	20	21,5	4G1,5 mm ²	4G1 mm ²	3G2,5 mm ²
MXS 904-60	646,5	22		4G2,5 mm ²	4G1 mm ²	
MXS 905-60	677,5	23,5		4G2,5 mm ²	4G1,5 mm ²	
MXS 906-60	732,5	26,5			4G1,5 mm ²	

MXSM ... CG

With float switch pump (on demand)

Performance $n \approx 3450$ rpm



Features

Flexible

Allows the inspection of the capacitor without disassembling the pump, through the delivery casing.

Reliable

The ball bearings and shaft are sized in order to reduce stresses, guaranteeing high reliability in any operating condition.

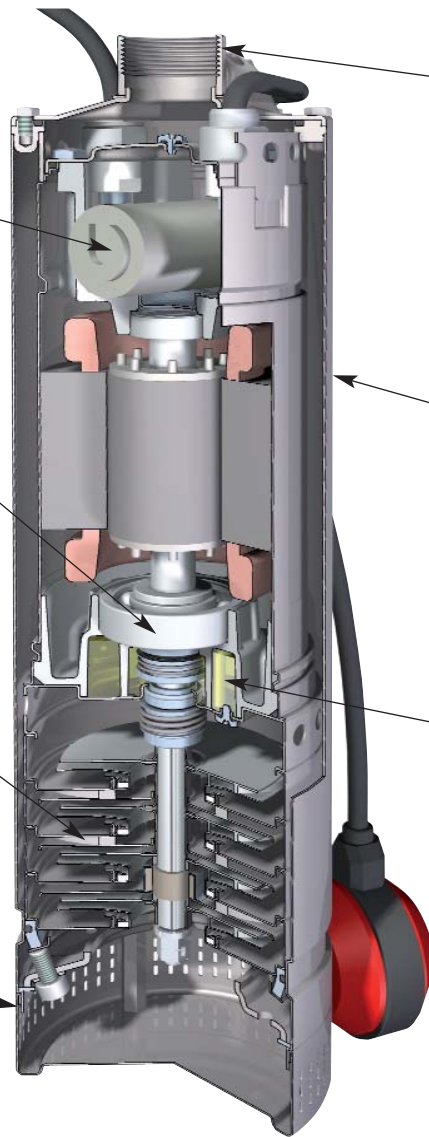
Totally in stainless steel

All parts in contact with the pumped liquid both internal and external are in stainless steel AISI 304, without plastic materials and components.

Low cost installation

Immersed, without suction pipe and valves. The cylindrical suction strainer provides support for the pump when installed on a flat surface or tank bottom. For operation with 100 mm minimum water level.

PATENTED



Robust

Its robust stainless steel construction allows for the pump to be suspended from the delivery pipe.

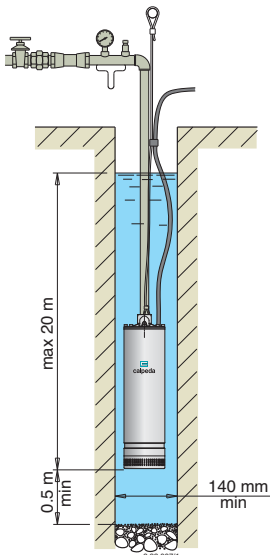
Low-Noise operation

The design of hydraulic parts, the water-filled shroud around the motor and the submerged operation ensures low noise operation.

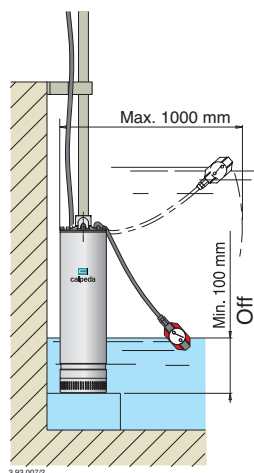
Greater Safety

The double shaft sealing with an oil chamber separates the motor from the water and provides further protection against accidental operation when dry.

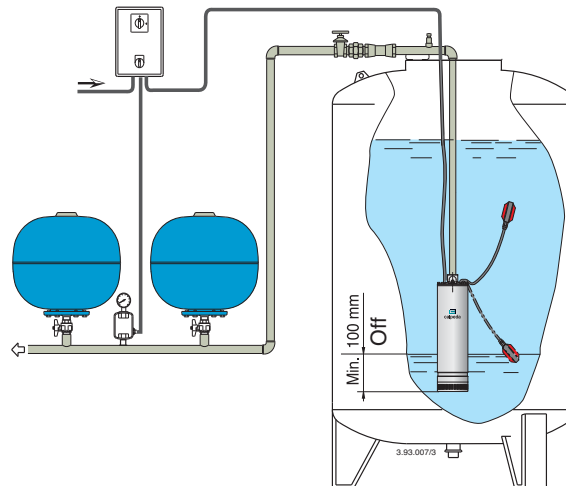
Installation



Pump in suspended position



Pump with float switch (on demand)



Installation example