



### Construction

Vertical multi-stage close coupled pumps in **chrome-nickel stainless steel, with motor shields in brass.**  
 Suction connection on the lower casing and delivery connection on the top casing. Motor cooled by the pumped water passing between the motor jacket and the external jacket.  
 Double mechanical shaft seal with interposed oil chamber.

### Applications

For clean water without abrasives or additives aggressive for the materials of the pump.  
 For domestic, civil and industrial applications.  
 For installation in confined space with minimum ventilation.  
 For installation in locations subject to risk of temporary flooding.  
 For installation in areas exposed to water jetting.  
 When low-noise operation is required.

### Operating conditions

Water temperature up to 35 °C.  
 Maximum permissible pressure in the pump casing: 10 bar.  
 Continuous duty.

### Motor

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

**MXSU** : three-phase 230 V  $\pm 10\%$ ;  
 three-phase 400 V  $\pm 10\%$ .

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

**Control box with capacitor, on request.**

Cable: H07RN8-F, 4 G 1 mm<sup>2</sup>, length 2 m.

Insulation class F.

Protection IP 68.

Triple impregnation humidity-proof dry winding.

Constructed in accordance with: EN 60034-1;

EN 60335-1, EN 60335-2-41.

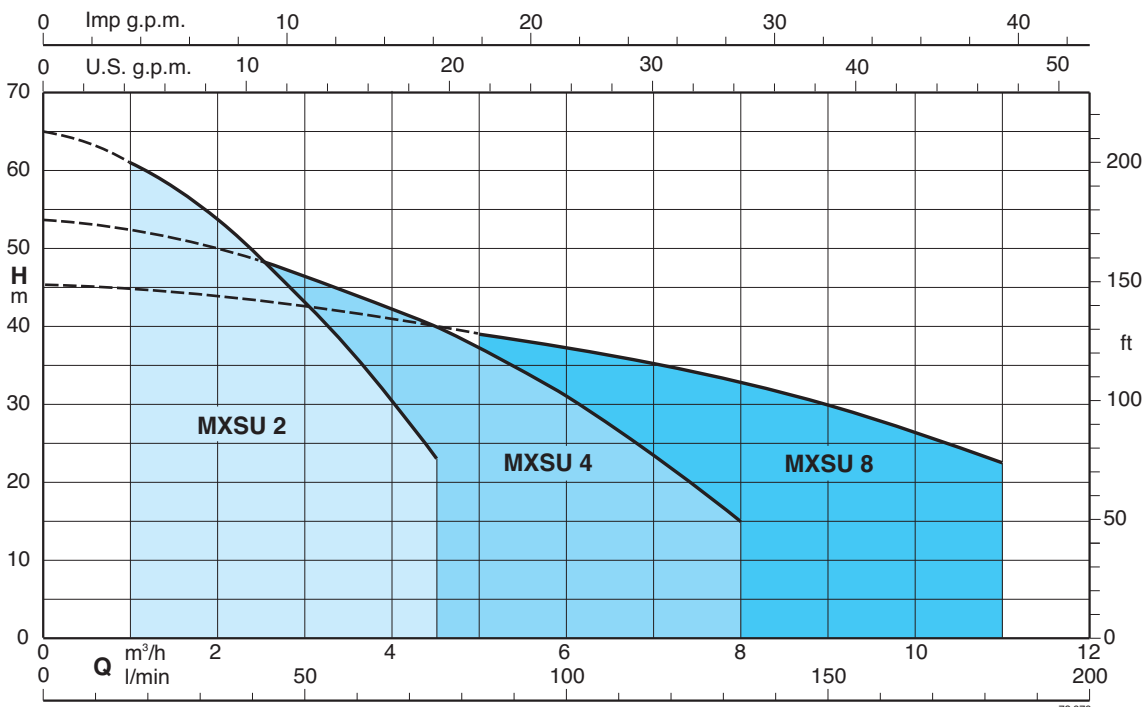
### Materials

Component	Material
External jacket	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Suction casing	
Stage casing	
Impeller	
Oil chamber cover	
Spacer sleeve	
Motor jacket	
Shaft	Chrome-nickel steel 1.4305 EN 10088 (AISI 303)
Motor shield	Brass P- Cu Zn 40 Pb 2 UNI 5705
Elbow	
Upper mechanical seal	Steatite, carbon, NBR
Lower mechanical seal	
Seal lubrication oil	Oil for food machinery and pharmaceutic use

### Special features on request

- Other voltages.
- Frequency 60 Hz (as per 60 Hz data sheet).
- Motor suitable for operation with frequency converter.

### Coverage chart $n \approx 2900$ rpm



### Performance $n \approx 2900$ rpm

3~	230 V 400 V		1~	230 V Capacitor			P <sub>1</sub>	P <sub>2</sub>		Q	H m									
	A	A		A	μF	V		kW	kW		HP	m <sup>3</sup> /h	l/min	0	1	1,5	2	2,5	3	3,5
MXSU 203/A	2,4	1,4	MXSUM 203/A	3,5	20	450	0,8	0,55	0,75	H m	33	31	29,5	27,5	25	22	19	16	12	
MXSU 204/A	2,7	1,6	MXSUM 204/A	4,1	20	450	0,85	0,55	0,75		44	41,5	39,5	36,5	33,5	29,5	25,5	21	16	
MXSU 205/A	3,3	1,9	MXSUM 205/A	5	20	450	1,1	0,75	1		53	49,5	47	44	40	35	30	25	19	
MXSU 206/A	3,8	2,2	MXSUM 206/A	6	25	450	1,3	0,9	1,2		65	61	58	54	49	43	37	30,5	23	

3~	230 V 400 V		1~	230 V Capacitor			P <sub>1</sub>	P <sub>2</sub>		Q	H m									
	A	A		A	μF	V		kW	kW		HP	m <sup>3</sup> /h	l/min	0	2,5	3	3,5	4	4,5	5
MXSU 404/A	3,8	2,2	MXSUM 404/A	6	25	450	1,3	0,9	1,2	H m	43	39	38	36,5	34,5	33	30,5	25,5	19,5	13
MXSU 405/A	4,5	2,6	MXSUM 405/A	7	25	450	1,55	1,1	1,5		53	48	46,5	45	42,5	40	37,5	31	24	15

3~	230 V 400 V		1~	230 V Capacitor			P <sub>1</sub>	P <sub>2</sub>		Q	H m										
	A	A		A	μF	V		kW	kW		HP	m <sup>3</sup> /h	l/min	0	5	6	7	8	9	10	11
MXSU 803/A	4,5	2,6	MXSUM 803/A	7	25	450	1,55	1,1	1,5	H m	34,5	29,5	28	26,5	24,5	22,5	20	16,5			
MXSU 804/A	6,6	3,8						1,5	2		45,5	39	37	35	32,5	30	26,5	22,5			

P<sub>1</sub> Max. power input.

Test results with clean cold water, without gas content.

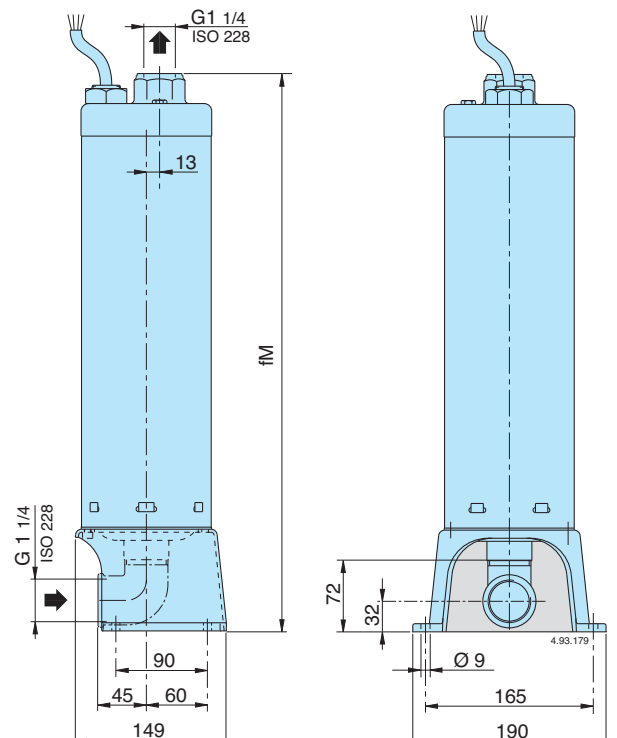
P<sub>2</sub> Rated motor power output.

Tolerances according to UNI EN ISO 9906:2012

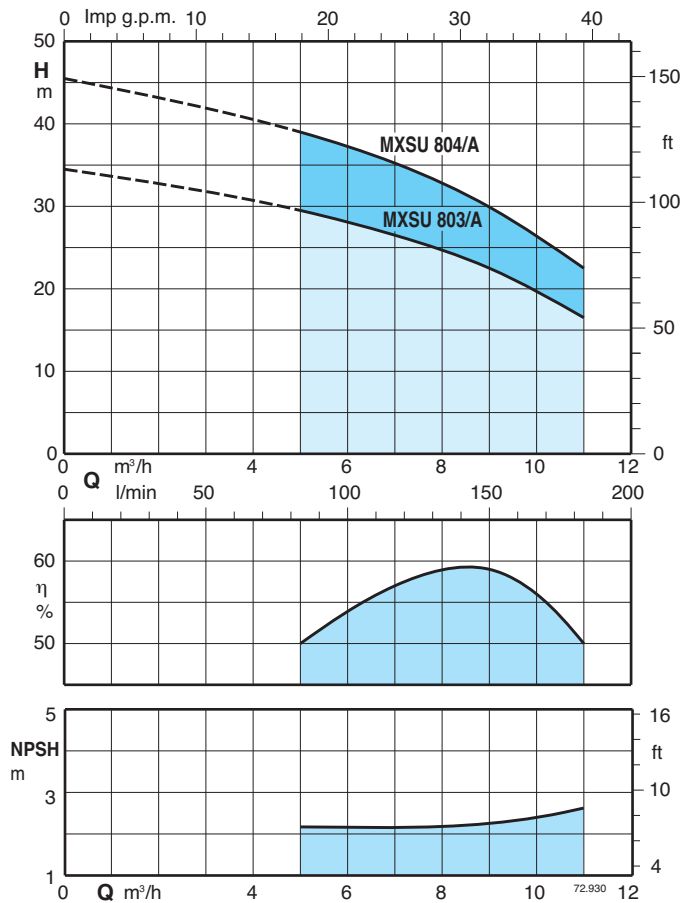
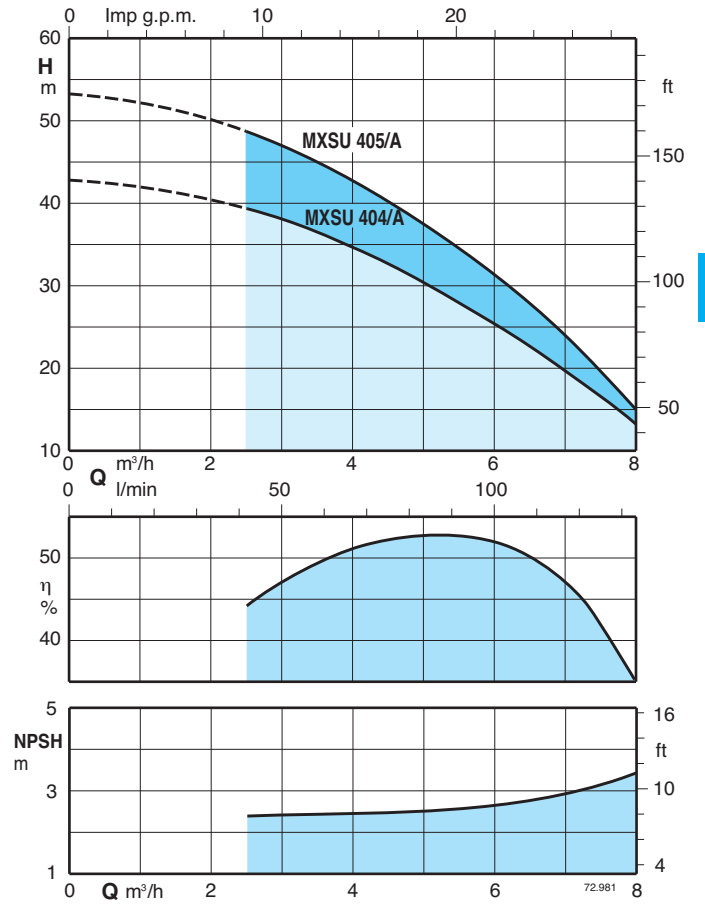
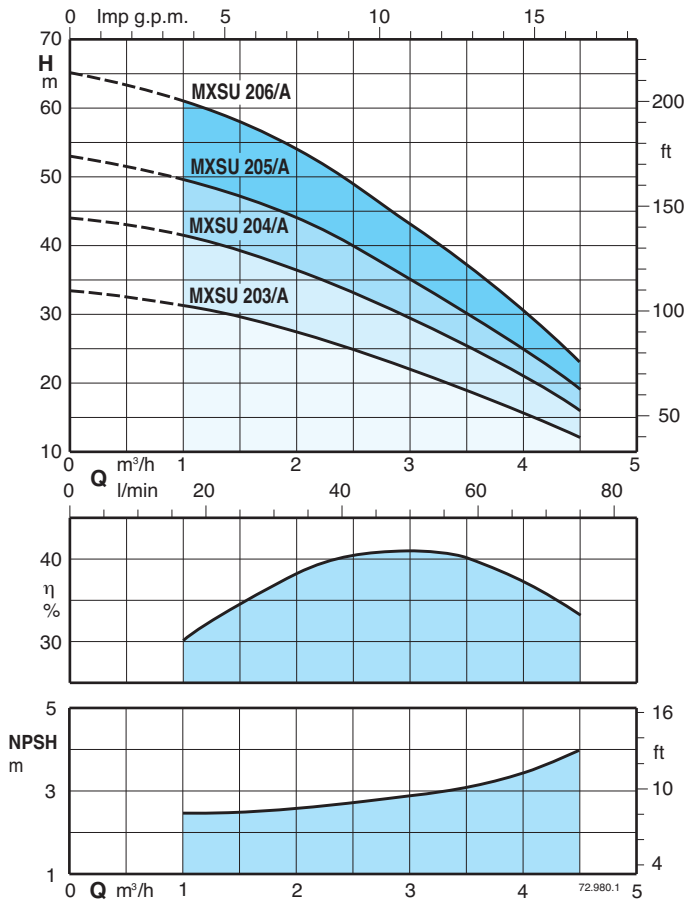
### Dimensions and weights

PUMP	fM	kg
	mm	
MXSU 203/A	524	11,3
MXSU 204/A	524	11,5
MXSU 205/A	548	12
MXSU 206/A	572	13,3
MXSU 404/A	524	12,4
MXSU 405/A	548	12,9
MXSU 803/A	548	12,5
MXSU 804/A	548	14,7

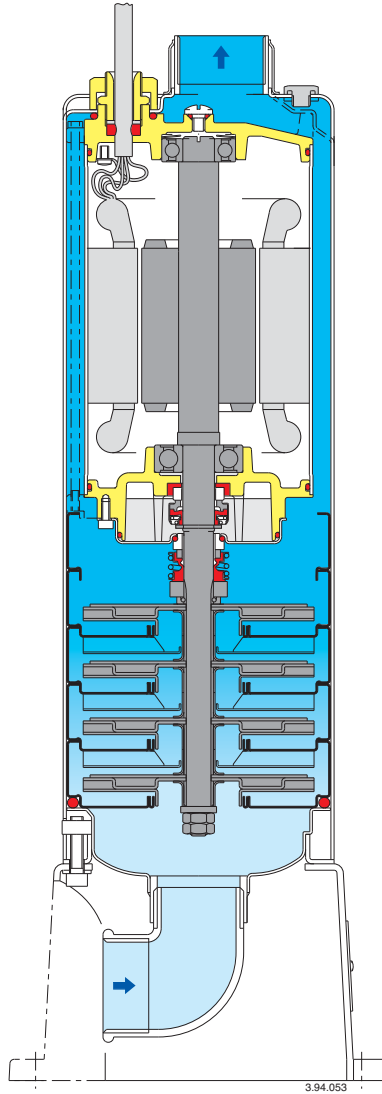
PUMP	fM	kg
	mm	
MXSUM 203/A	524	12,3
MXSUM 204/A	524	12,5
MXSUM 205/A	548	13,6
MXSUM 206/A	572	14,8
MXSUM 404/A	524	14
MXSUM 405/A	548	14,4
MXSUM 803/A	548	14,1



### Characteristic curves $n \approx 2900$ rpm

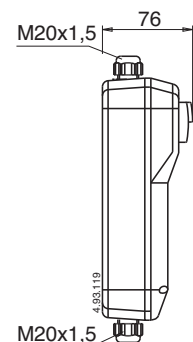
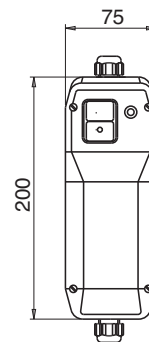


## Features



### Control box for single-phase pumps (on request)

Pump	Control box	Capacitor	
		Value	Voltage
MXSUM 203/A	QM 20	20 $\mu$ F	450 V
MXSUM 204/A			
MXSUM 205/A			
MXSUM 206/A	QM 25	25 $\mu$ F	450 V
MXSUM 404/A			
MXSUM 405/A			
MXSUM 803/A			



kg 0,4