



### Materials

Component	Material
Pump casing	Chrome-nickel steel AISI 304
Strainer	Chrome-nickel steel AISI 304
Impeller	Chrome-nickel steel AISI 304
Motor jacket	Chrome-nickel steel AISI 304
Pump jacket	Chrome-nickel steel AISI 304
Handle	Polypropylene
Shaft	Chrome-nickel steel AISI 303
Mechanical seal	Ceramic alumina/Carbon/NBR
Seal lubrication oil	Oil for food/pharmaceutical machinery

### Other features on request

- Other voltages. - Frequency 60 Hz. - Other mechanical seal. - Cable length 10 m.
- Vertical magnetic float switch. - Motor suitable operation with frequency converter.

### Construction

Single-impeller submersible pumps in chrome-nickel stainless steel, with vertical delivery port.

**GXR:** with open impeller.

**GXV:** with free-flow (vortex) impeller.

Motor cooled by the pumped water passing between the motor jacket and the external jacket.

Double shaft seal with oil chamber.

Minimum dimension and high levels of performance, for use in many different applications, head up to 12,7 m and flow rates up to 220 liters/min.

### Applications

- GXR:**
- For clean water containing solids up to 10 mm grain size.
  - For draining rooms or emptying tanks.
  - Extraction of water from ponds, streams or pits and for rainwater collection.
  - For irrigation purposes.

- GXV:**
- For clean or slightly dirty water, containing solids up to 25 mm grain size.
  - Particularly suitable for liquids with a high solid content.

For outdoor use a power supply cable of not less than 10 m should be used in accordance with: EN 60 335-2-41.

### Operating conditions

Liquid temperature up to 50° C.

Maximum immersion depth: 5 m.

Minimum water level with float: GXR = 70 mm, GXV = 130 mm.

Minimum water level manual operation: GXR = 15 mm, GXV = 30 mm.

Continuous duty.

### Motor

2-pole induction motor, 50 Hz (n = 2900 rpm).

**GXR, GXV:** three-phase 230 V  $\pm$  10%;  
three-phase 400 V  $\pm$  10%;

**GXRM, GXVM:** single-phase 230 V,  
with float switch and thermal protector.  
Incorporated capacitor.

Insulation class F.

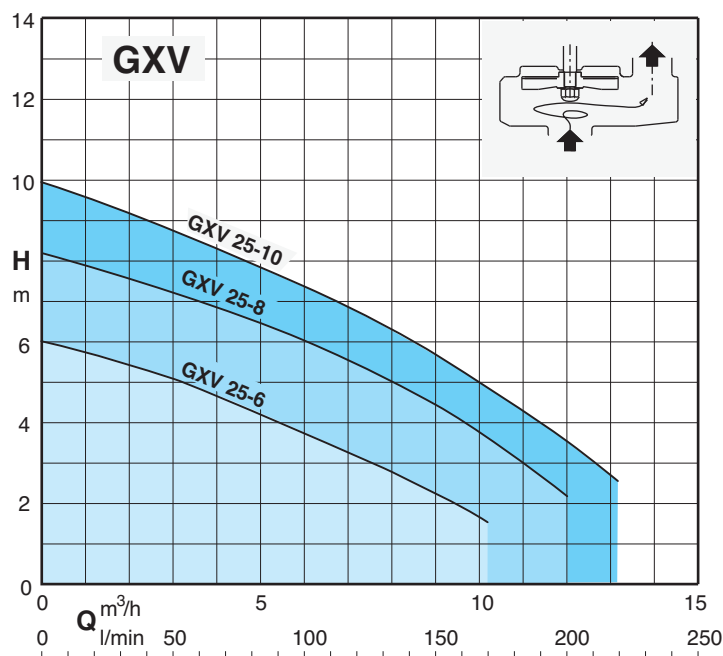
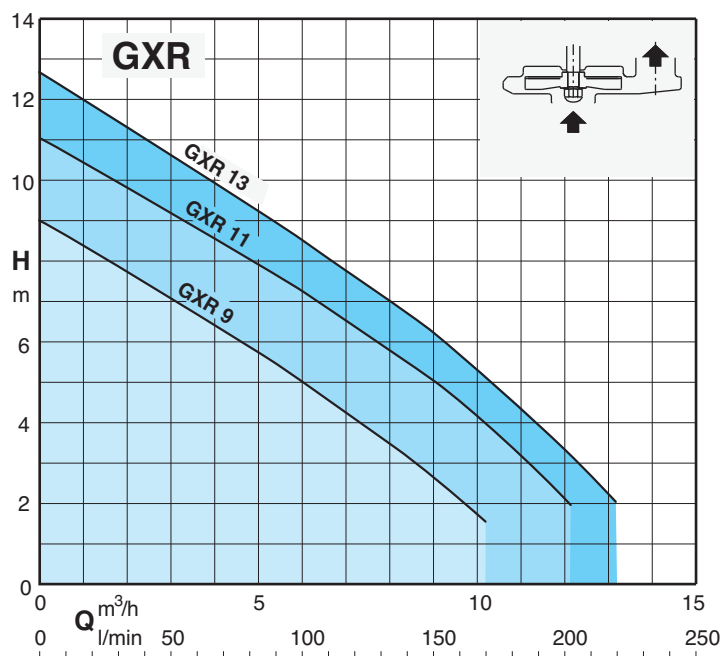
Protection IP X8 (for continuous immersion)

Double impregnation humidity-proof dry winding.

Constructed in accordance with: EN 60034-1;

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

### Characteristic curves n = 2900 rpm



## Features

PATENTED

G 1 1/4 vertical, upward delivery port for installation in small pits, without the need for an elbow on the pump.

Handle in polypropylene.

Easy inspection of the capacitor area

Easy adjustment of the float switch: to allow the adjustment of start/stop pump levels

Shaft in chrome-nickel stainless steel.

Motor cooled by the pumped water passing between the motor jacket and the external jacket.

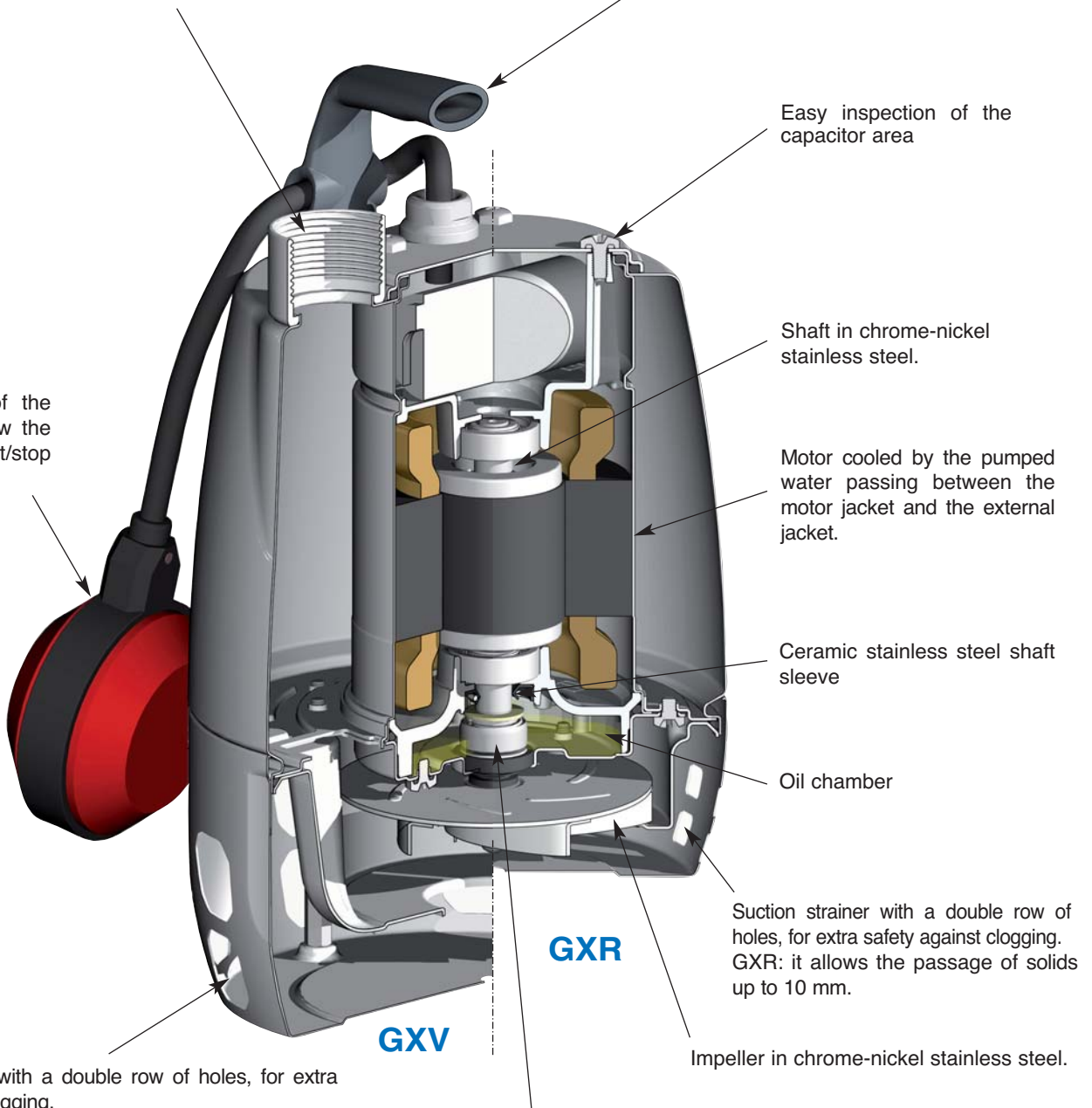
Ceramic stainless steel shaft sleeve

Oil chamber

Suction strainer with a double row of holes, for extra safety against clogging. GXR: it allows the passage of solids up to 10 mm.

Impeller in chrome-nickel stainless steel.

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



Suction strainer with a double row of holes, for extra safety against clogging. GXV: it allows the passage of solids up to 25 mm.



**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 = 2900 rpm).

**MXSU** : three-phase 230 V ± 10%;  
three-phase 400 V ± 10%.

**MXSUM** : single-phase 230 V ± 10% , with thermal protector.

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

Cable: H07RN8-F, 4 G 1 mm², 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.

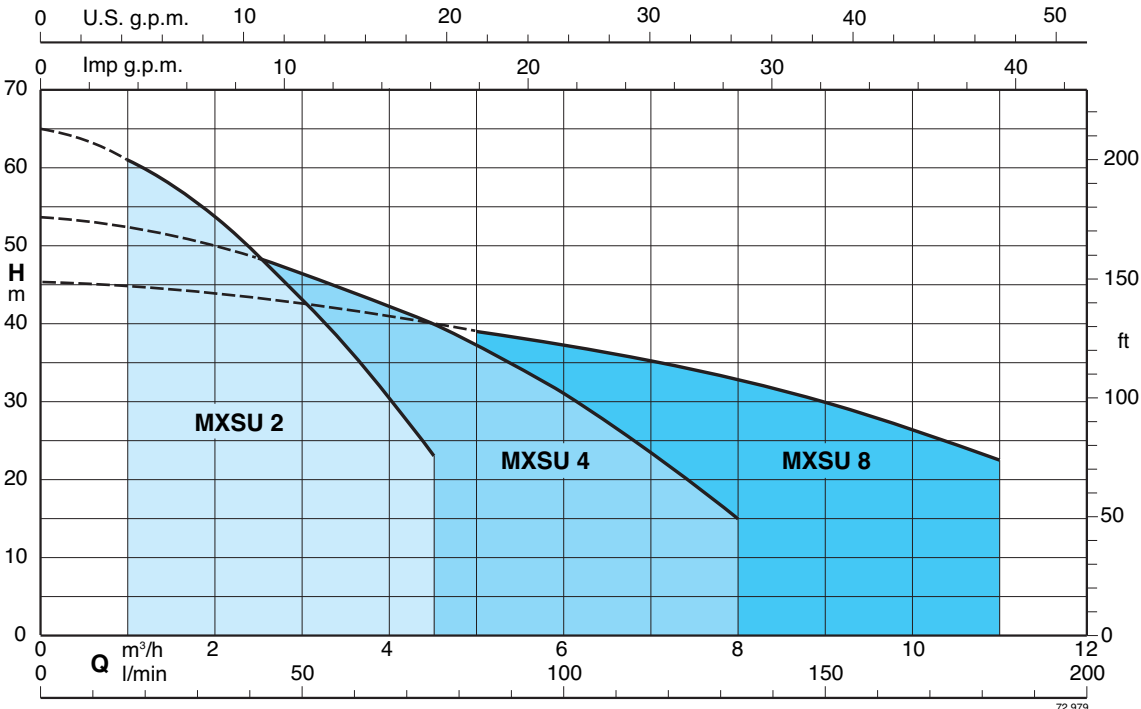
**Special features on request**

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

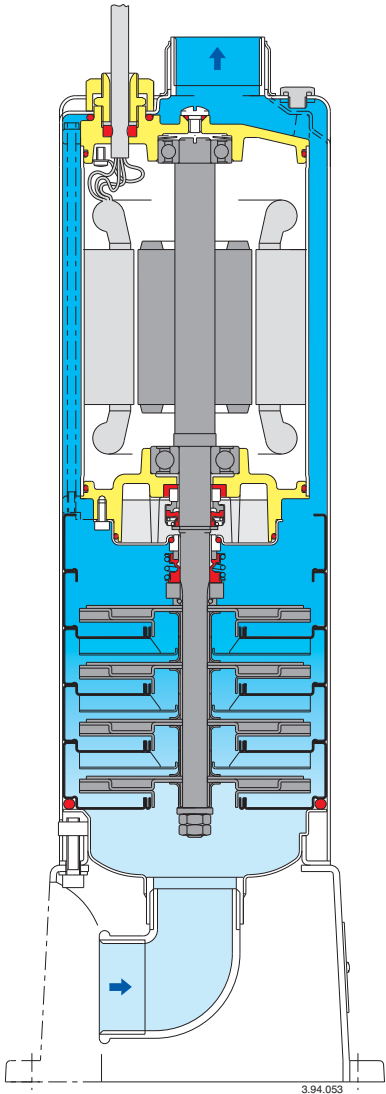
Materials

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	
	Brass P- Cu Zn 40 Pb 2 UNI 5705 nickel-plated
Upper mechanical seal	Steatite, carbon, NBR
Lower mechanical seal	
	Ceramic alumina, silicon carbide, NBR
Seal lubrication oil	Oil for food machinery and pharmaceutic use

Coverage chart n ≈ 2900 rpm

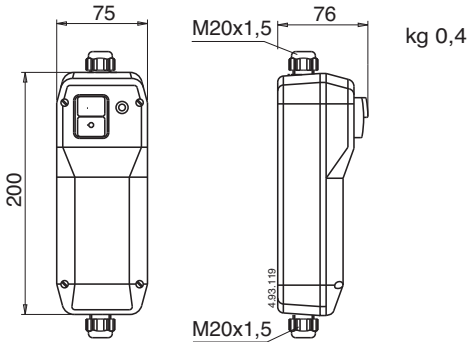


Features



Control box for single-phase pumps (on request)

Pump	Control box	Capacitor	
MXSUM 203/A	QM 11	20 µF	450 V
MXSUM 204/A			
MXSUM 205/A			
MXSUM 206/A	QM 12	25 µF	450 V
MXSUM 404/A			
MXSUM 405/A			
MXSUM 803/A			





### Construction

Horizontal multi-stage close coupled pumps in **chrome-nickel stainless steel**.

Compact and robust construction, without protruding flange and with single-piece lantern bracket and base.

Single-piece barrel casing, with front suction port above pumps axis and radial delivery at top.

Filling and draining plugs on the middle of the pump, accessible from any side (like the terminal box).

### Applications

For water supply.

For clean liquids, without abrasives, which are non-aggressive for stainless steel (with suitable seal materials, on request).

Universal pump, for domestic use, for civil and industrial applications, for garden use and irrigation.

### Operating conditions

Liquid temperature from - 15 °C to + 110 °C.

Ambient temperature up to 40 °C.

Maximum permissible pressure in the pump casing: 8 bar.

Continuous duty.

### Motor

2-pole induction motor, 50 Hz (n = 2800 rpm).

**MXH:** three-phase 230/400 V ± 10% up to 3 kW;  
400/690 V ± 10% from 3,7 to 4 kW.

**MXHM:** single-phase 230 V ± 10%, with thermal protector.  
Capacitor inside the terminal box.

Insulation class F.

Protection IP 54.

**Classification scheme IE2 for three-phase motors from 0,75 kW.**

Constructed in accordance with: EN 60034-1; EN 60034-30.

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

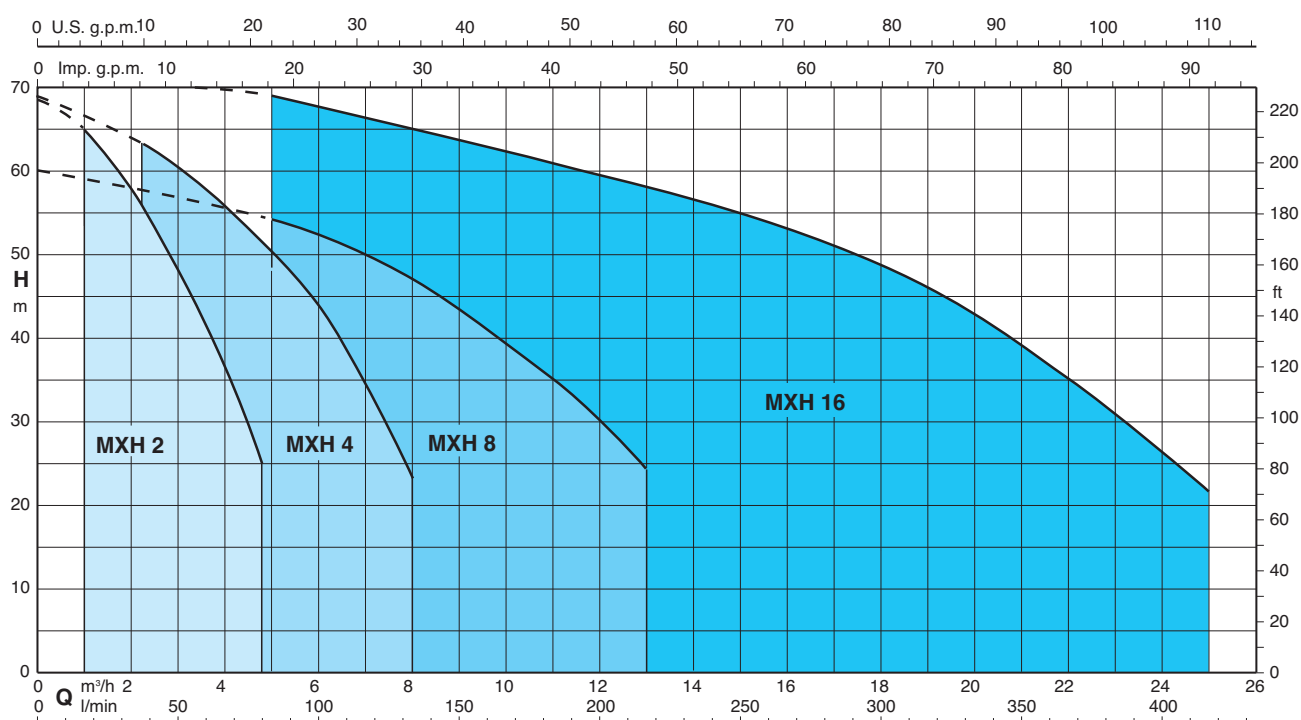
### Special features on request

- Other voltages.
- Frequency 60 Hz (as per 60 Hz data sheet).
- Protection IP 55.
- Special mechanical seal
- Pump casing seal rings in FPM.
- Higher or lower liquid or ambient temperatures.
- Motor suitable operation with frequency converter.

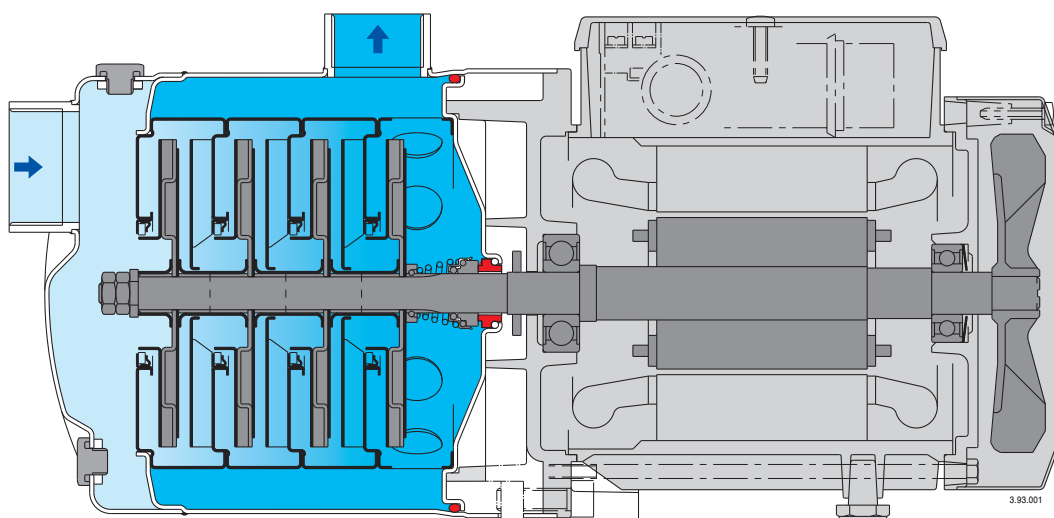
### Materials

Component	Material
Pump casing	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Stage casing	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Wear ring	PTFE
Impeller	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Casing cover	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Spacer sleeve	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Pump shaft	Chrome-nickel steel 1.4305 EN 10088 (AISI 303)
Plug	Chrome-nickel steel 1.4305 EN 10088 (AISI 303)
Mechanical seal with seat according to ISO 3069	Ceramic alumina, carbon, EPDM (Other materials on request)

### Coverage chart n ≈ 2800 rpm



### Features



#### Extra safety

against running dry, with the suction port above pump axis.

#### Reliable

All hydraulic parts in contact with the pumped liquid are of stainless steel.  
For liquids from -15 °C to 110 °C.

#### Robust

Single-piece, thick barrel casing.

#### Compact

Single-piece lantern bracket and base.  
Without protruding flange.

#### Greater protection

against leakage, with the pump casing cover separated from the motor shield.  
Possibility of inspecting the seal through the side apertures between the two walls.  
Greater protection against water entering the motor from outside provided by an extension of the pump casing around the lantern bracket.





### Materials

Component	Material
Pump casing	Cr-Ni-Mo steel 1.4404 EN 10088 (AISI 316L)
Stage casing	Cr-Ni-Mo steel 1.4404 EN 10088 (AISI 316L)
Wear ring	PTFE
Impeller	Cr-Ni-Mo steel 1.4404 EN 10088 (AISI 316L)
Casing cover	Cr-Ni-Mo steel 1.4404 EN 10088 (AISI 316L)
Spacer sleeve	Cr-Ni-Mo steel 1.4404 EN 10088 (AISI 316L)
Pump shaft	Cr-Ni-Mo steel 1.4404 EN 10088 (AISI 316L)
Plug	Cr-Ni-Mo steel 1.4404 EN 10088 (AISI 316L)
Mechanical seal with seat according to ISO 3069	Ceramic alumina, carbon, EPDM (Other materials on request)

### Construction

Horizontal multi-stage close coupled pumps in **chrome-nickel-molybdenum stainless steel AISI 316L**.

Compact and robust construction, without protruding flange and with single-piece lantern bracket and base.

Single-piece barrel casing, with front suction port above pumps axis and radial delivery at top.

Filling and draining plugs on the middle of the pump, accessible from any side (like the terminal box).

### Applications

For water supply.

For clean liquids, without abrasives, which are non-aggressive for stainless steel (with suitable seal materials, on request).

Universal pump, for domestic use, for civil and industrial applications, for garden use and irrigation.

### Operating conditions

Liquid temperature from - 15 °C to + 110 °C.

Ambient temperature up to 40 °C.

Maximum permissible pressure in the pump casing: 8 bar.

Continuous duty.

### Motor

2-pole induction motor, 50 Hz (n = 2800 rpm).

**MXHL:** three-phase 230/400 V ± 10%.

**MXHLM:** single-phase 230 V ± 10%, with thermal protector.

Capacitor inside the terminal box.

Insulation class F.

Protection IP 54.

**Classification scheme IE2 for three-phase motors from 0,75 kW.**

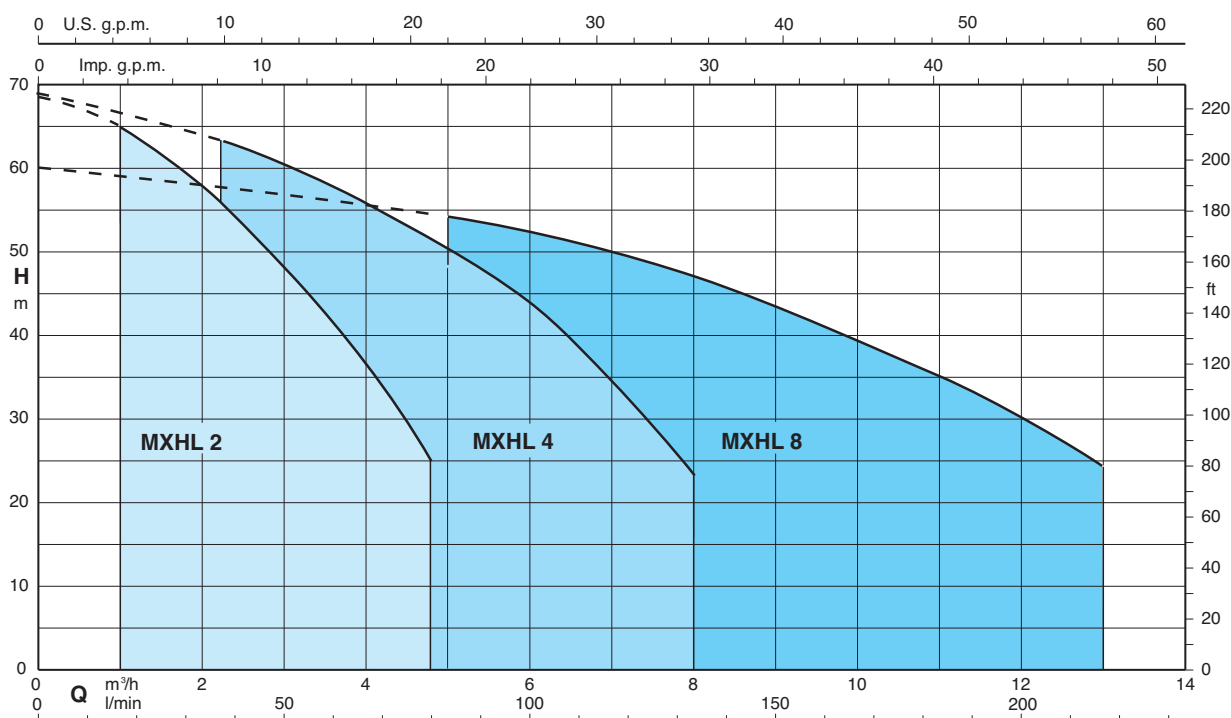
Constructed in accordance with: EN 60034-1; EN 60034-30.

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

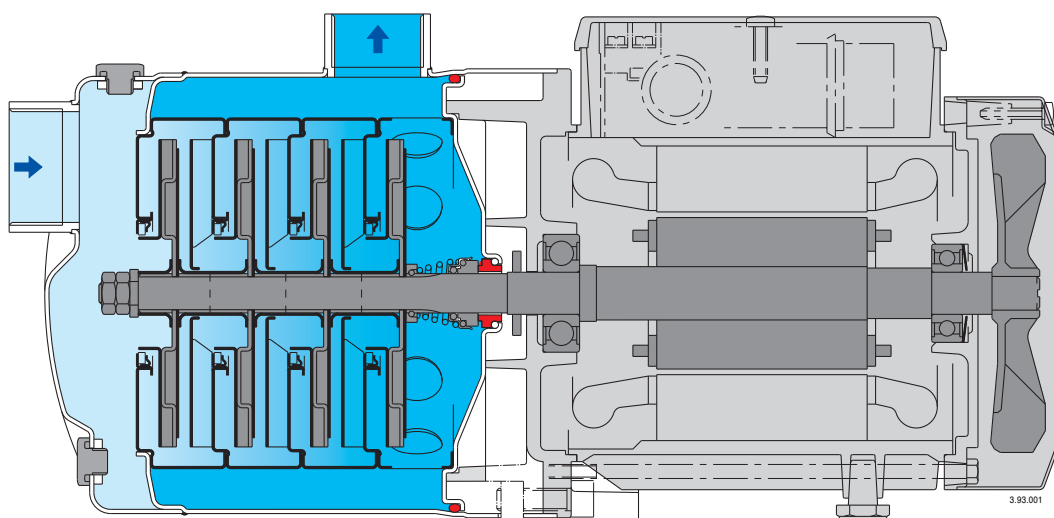
### Special features on request

- Other voltages.
- Frequency 60 Hz (as per 60 Hz data sheet).
- Protection IP 55.
- Special mechanical seal
- Pump casing seal rings in FPM.
- Higher or lower liquid or ambient temperatures.
- Motor suitable operation with frequency converter.

### Coverage chart n ≈ 2800 rpm



## Features



### Extra safety

against running dry, with the suction port above pump axis.

### Reliable

All hydraulic parts in contact with the pumped liquid are of stainless steel.  
For liquids from -15 °C to 110 °C.

### Robust

Single-piece, thick barrel casing.

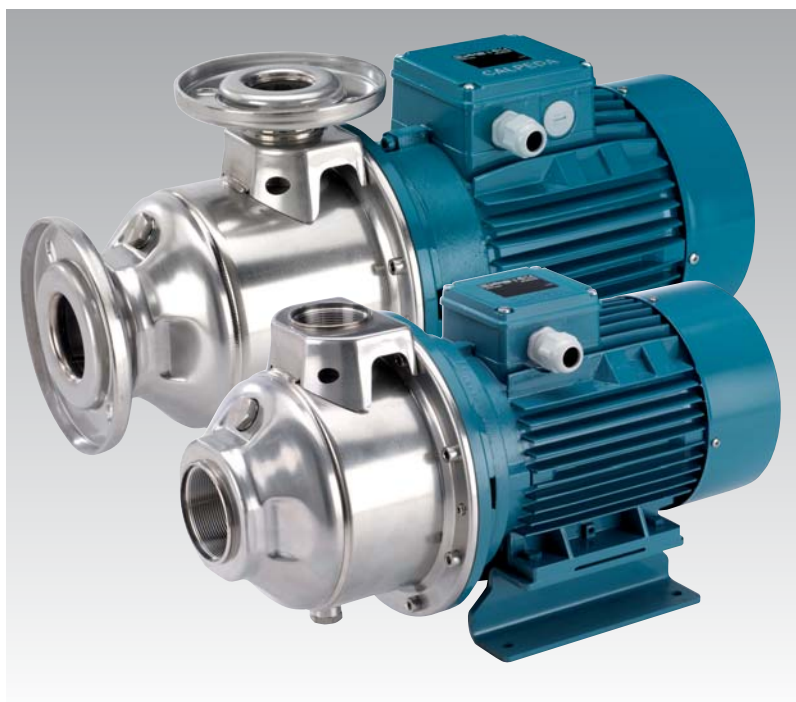
### Compact

Single-piece lantern bracket and base.  
Without protruding flange.

### Greater protection

against leakage, with the pump casing cover separated from the motor shield.  
Possibility of inspecting the seal through the side apertures between the two walls.  
Greater protection against water entering the motor from outside provided by an extension of the pump casing around the lantern bracket.





### Materials

Component	Material
Pump casing	Chrome-nickel steel AISI 304
Stage casing	Chrome-nickel steel AISI 304
Wear ring	PTFE
Impeller	Chrome-nickel steel AISI 304
Casing cover	Chrome-nickel steel AISI 304
Spacer sleeve	Chrome-nickel steel AISI 304
Pump shaft	Chrome-nickel steel AISI 316
Plug	Chrome-nickel steel AISI 303
Mechanical seal with seat according to ISO 3069-KU	Ceramic alumina, carbon, EPDM (Other materials on request)

### Construction

Horizontal multi-stage close coupled pumps in **chrome-nickel stainless steel**.

Compact and robust construction, with compact lantern bracket and motor with feet.

Single-piece barrel casing, with front suction port above pumps axis and radial delivery at top.

Filling and draining plugs on the middle of the pump, accessible from any side (like the terminal box).

### Applications

For water supply.

For clean liquids, without abrasives, which are non-aggressive for stainless steel (with suitable seal materials, on request).

Universal pump, for civil and industrial applications, for garden use and irrigation.

### Operating conditions

Liquid temperature from - 15 °C to + 110 °C.

Ambient temperature up to 40 °C.

Maximum permissible pressure in the pump casing: 10 bar.

### Motor

2-pole induction motor, 50 Hz (n = 2900 rpm).

**MXH:** three-phase 230/400 V ± 10% up to 3 kW;

400/690 V ± 10% from 4 to 7,5 kW.

Insulation class F.

Protection IP 54.

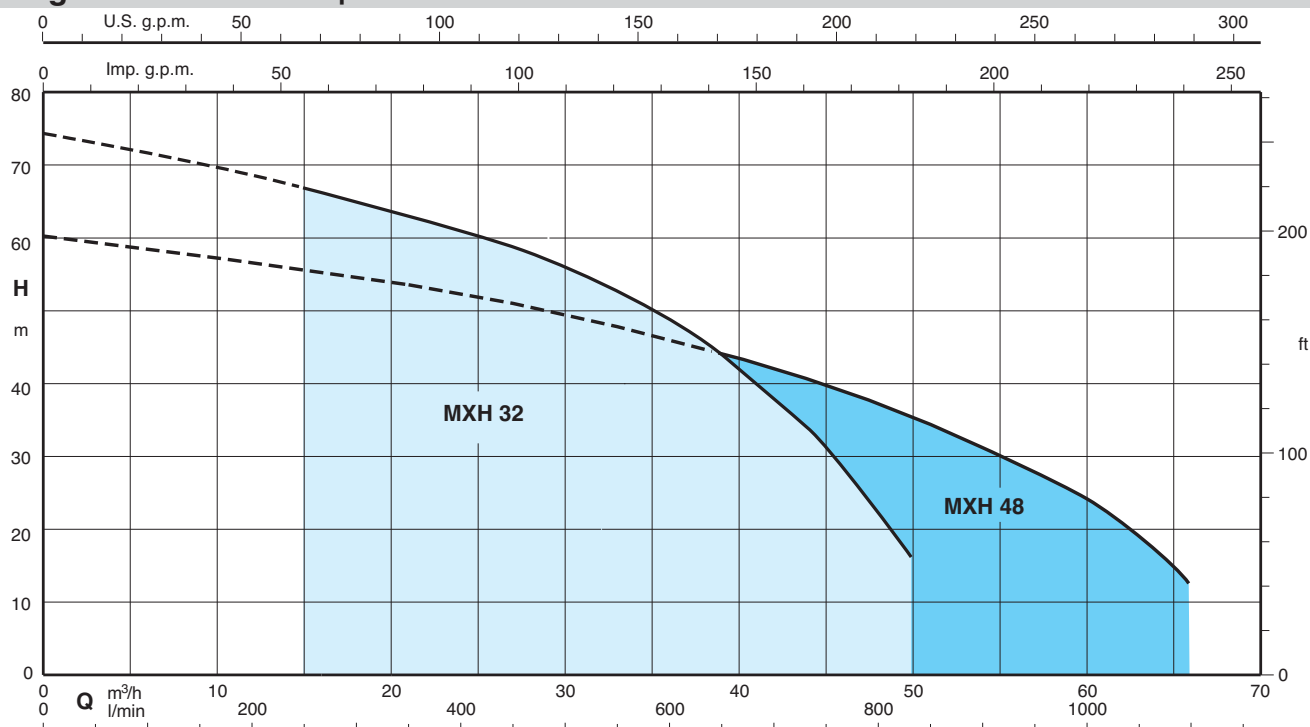
**Classification scheme IE2.**

Constructed in accordance with: EN 60034-1;  
EN 60034-30.

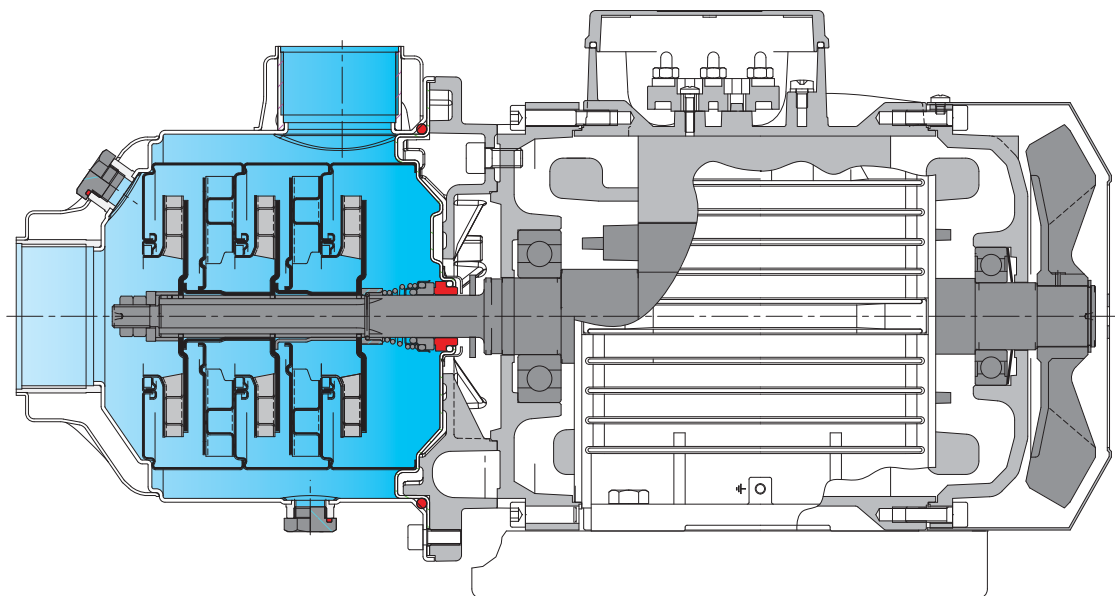
### Special features on request

- Pump with Victaulic ports (MXH-V).
- Pump with flanged ports (MXH-F).
- Other voltages.
- Frequency 60 Hz (as per 60 Hz data sheet).
- Protection IP 55.
- Special mechanical seal
- Seal rings in FPM.
- Higher or lower ambient temperatures.
- Motor suitable operation with frequency converter.

### Coverage chart n = 2900 rpm



### Features



#### Flexibility

Three versions of ports: threaded, flanged and Victaulic.

#### Extra safety

With front axis suction port for optimum suction conditions.

#### Reliable

All hydraulic parts in contact with the pumped liquid are made in stainless steel.  
For liquids from -15 °C to 110 °C.

#### Robust

Single-piece, thick barrel casing, open on one side only, with reinforced threaded ports.

#### Compact

The bracket between pump and motor is extremely compact.

#### Greater protection

Against leakage, with the pump casing cover separated from the motor shield.  
Possibility of inspecting the seal through the side apertures between the two walls.



### Materials

Component	Material
Pump casing	Cr-Ni steel 1.4301 EN 10088 (AISI 304)
Casing cover	Cr-Ni steel 1.4301 EN 10088 (AISI 304)
Impeller	Brass P-Cu Zn 40 Pb 2 UNI 5705
Wear ring impeller-diffuser	Cr-Ni steel 1.4301 EN 10088 (AISI 304)
Diffuser	PPO-GF20 (Noryl)
Ejector	PPO-GF20 (Noryl)
Shaft	Chrome steel 1.4104 EN 10088 (AISI 430) Cr-Ni steel 1.4305 EN 10088 (AISI 303) for NGX 5,6
Mechanical seal	Carbon - Ceramic - NBR

### Construction

Close-coupled self-priming shallow-well pump with built-in ejector.

A high-quality pump for domestic water supply. Designed with environmental considerations, featuring a stainless steel casing, brass alloy impeller with minimal use of plastic materials.

### Applications

For drawing water out of a well.

For lifting water containing air or other gases.

For increasing water pressure from flooded suction applications.

As pressure boosting pump for central water systems with low pressure (follow local specifications if increasing network pressure).

For garden use.

For washing with a jet of water.

### Operating conditions

Liquid temperature: 0 °C to +35 °C.

Ambient temperature up to +40 °C.

Suction lift up to 9 m.

Maximum permissible pressure in the pump casing: 8 bar.

Continuous duty.

### Motor

2-pole induction motor, 50 Hz (n = 2800 rpm).

**NGX:** three-phase 230/400 V ± 10%.

**NGXM:** single-phase 230 V ± 10%, with thermal protector.  
Capacitor inside the terminal box.

Insulation class F.

Protection IP 54.

**Classification scheme IE2 for three-phase motors from 0,75 kW.**

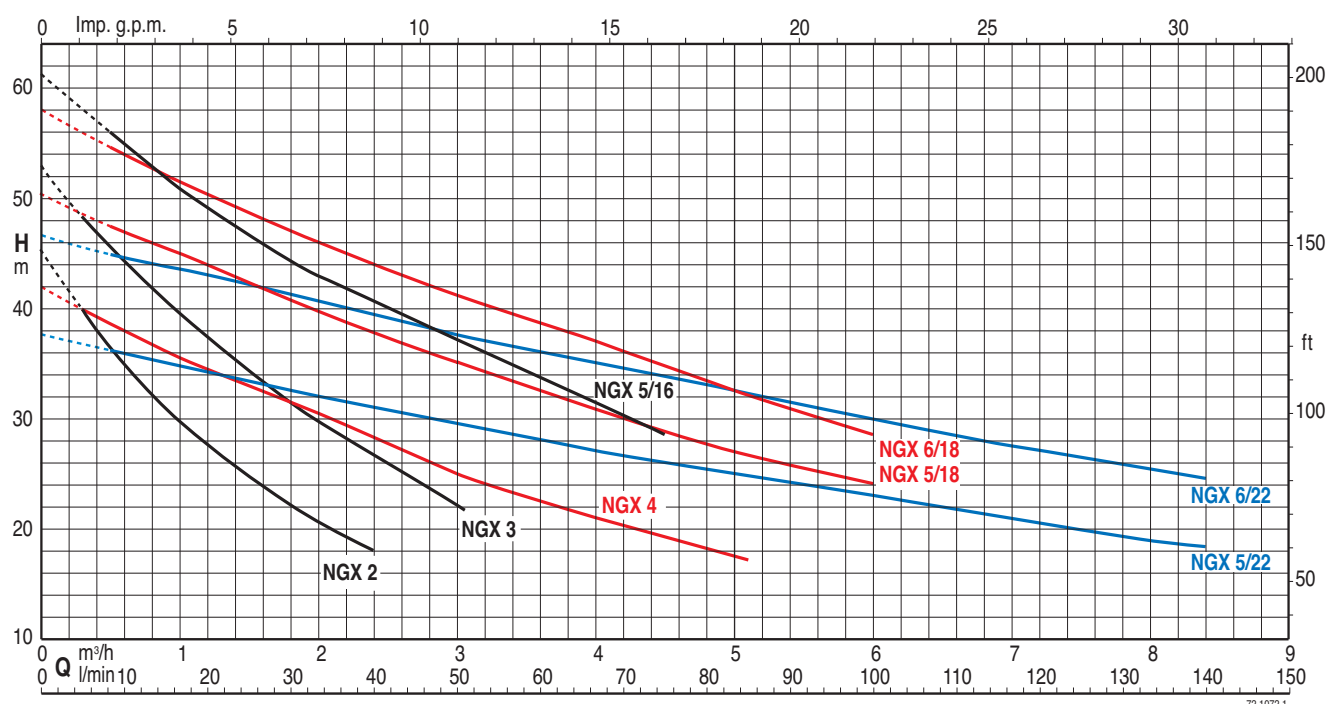
Constructed in accordance with: EN 60034-1; EN 60034-30.  
EN 60335-1, EN 60335-2-41.

### Special features on request

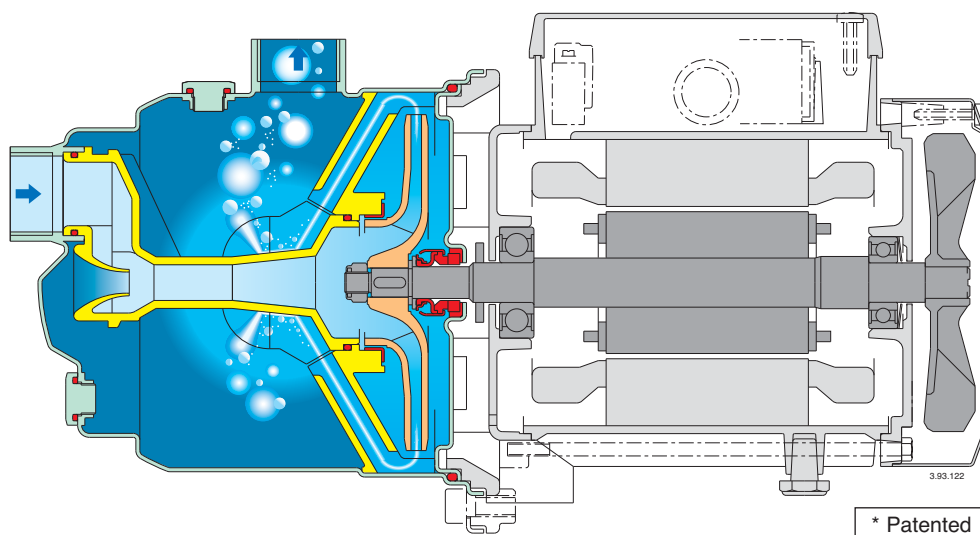
- Other voltages.

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

### Characteristic curves n ≈ 2800 rpm



### Features



#### A different pump with new features

An exclusive diffuser design with flow control device\* provides for compact construction, fast self-priming capability and low noise.

#### Reliable

With new design features the NGX is more robust and forgiving when temporary abnormal operating conditions may exist.

#### Compact

The NGX is smaller than conventional pumps of a similar type, allowing for installation in restricted spaces and providing for easier retrofit applications.

#### Safe

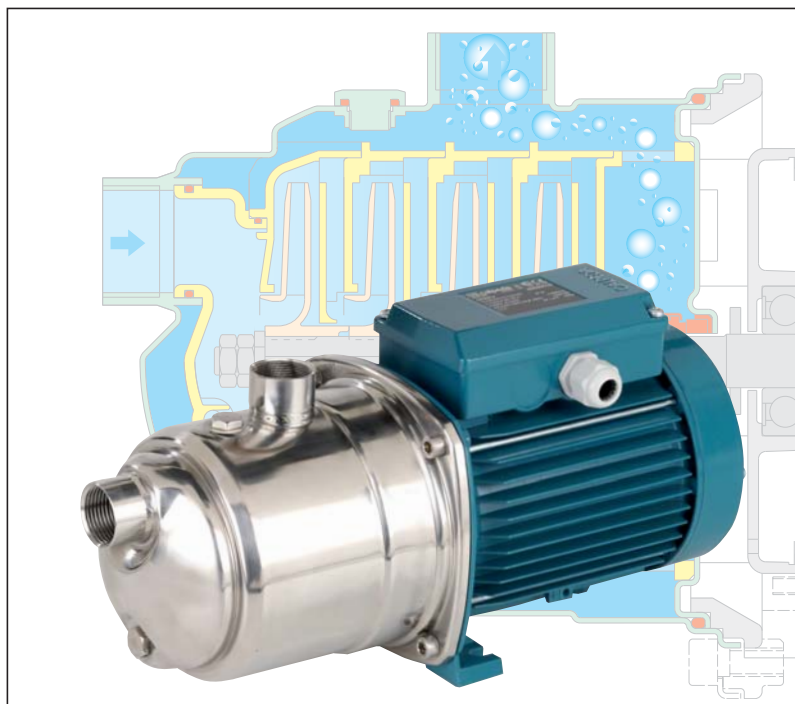
Fast air evacuation reduces the risk of air-pockets developing at the mechanical seal preventing the danger of seal failure due to a lack of flushing and cooling.

#### Better self-priming

The NGX are capable of lifting water from depths of 9 m in less than 3 minutes, offers new possibilities on suction lift applications and provides better trouble free service on normal shallow-well suction lift duties, also with a long suction pipe above the water level.

#### Low noise

The new diffuser and flow control device\* guide the fluid from the impeller into the central part of the pump casing, reducing turbulence and velocity, with effective use of the surrounding liquid in dampening the noise of flow.



### Construction

Horizontal multi-stage, self-priming, close coupled pump.  
Single-piece barrel casing in chrome-nickel stainless steel, with front suction port above pumps axis and radial delivery at top.  
Stages in Noryl.

### Applications

For water supply.  
For domestic use, for garden use and irrigation.

### Operating conditions

Liquid temperature: 0 °C to +35 °C.  
Ambient temperature up to +40 °C.  
Suction lift up to 8 m.  
Maximum permissible pressure in the pump casing: 8 bar.  
Continuous duty.

### Motor

2-pole induction motor, 50 Hz (n = 2800 rpm).  
**MXA:** three-phase 230/400 V  $\pm$  10%.  
**MXAM:** single-phase 230 V  $\pm$  10%, with thermal protector.  
Capacitor inside the terminal box.

Insulation class F.  
Protection IP 54.

**Classification scheme IE2 for three-phase motors from 0,75 kW.**  
Constructed in accordance with: EN 60034-1; EN 60034-30.  
EN 60335-1, EN 60335-2-41.

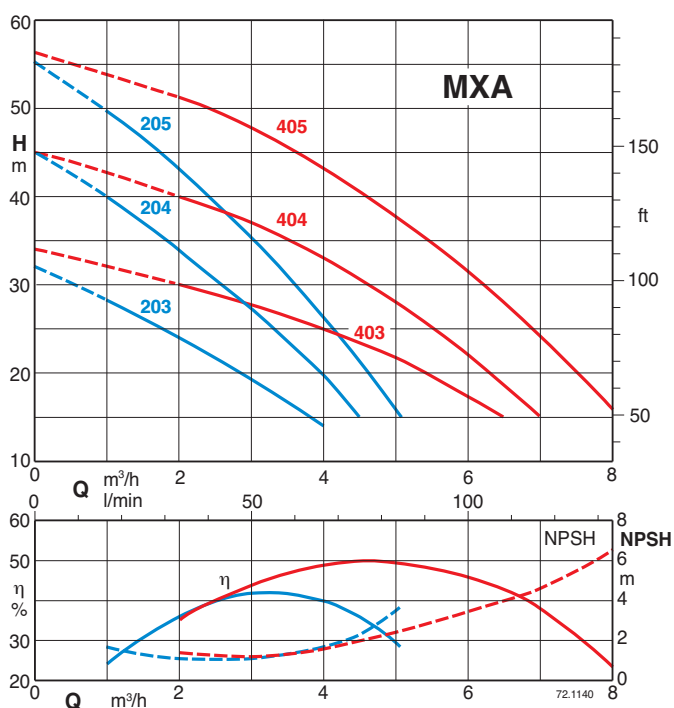
### Special features on request

- Other voltages.
- Frequency 60 Hz (as per 60 Hz data sheet).

### Materials

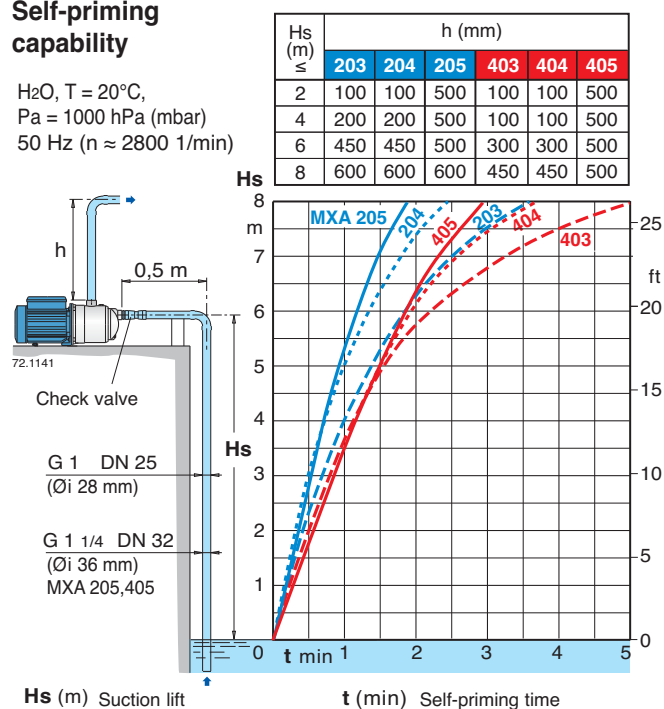
Component	Material
Pump casing	Cr-Ni steel 1.4301 EN 10088 (AISI 304)
Casing cover	Cr-Ni steel 1.4301 EN 10088 (AISI 304)
Pump Shaft	Chrome steel 1.4104 EN 10088 (AISI 430) Cr-Ni steel 1.4305 EN 10088 (AISI 303) for MXA 205,405
Plug	Cr-Ni steel 1.4305 EN 10088 (AISI 303)
Suction casing	PPO-GF20 (Noryl)
Stage casing	PPO-GF20 (Noryl)
Impeller	PPO-GF20 (Noryl)
Mechanical seal	Carbon - Ceramic - NBR

### Characteristic curves n $\approx$ 2800 rpm



### Self-priming capability

H<sub>2</sub>O, T = 20°C,  
Pa = 1000 hPa (mbar)  
50 Hz (n  $\approx$  2800 1/min)







Construction

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 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, 50 Hz (n = 2900 1/min).  
**MXS** : three-phase 230 V ± 10%;  
three-phase 400 V ± 10%.  
Cable: H07RN8-F, length 15 m, without plug.  
**MXSM**: single-phase 230 V ± 10%, with thermal protector up to 1,8 kW.  
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 68 (for continuous immersion).  
Double impregnation humidity-proof dry winding.  
Constructed in accordance with EN 60335-2-41.

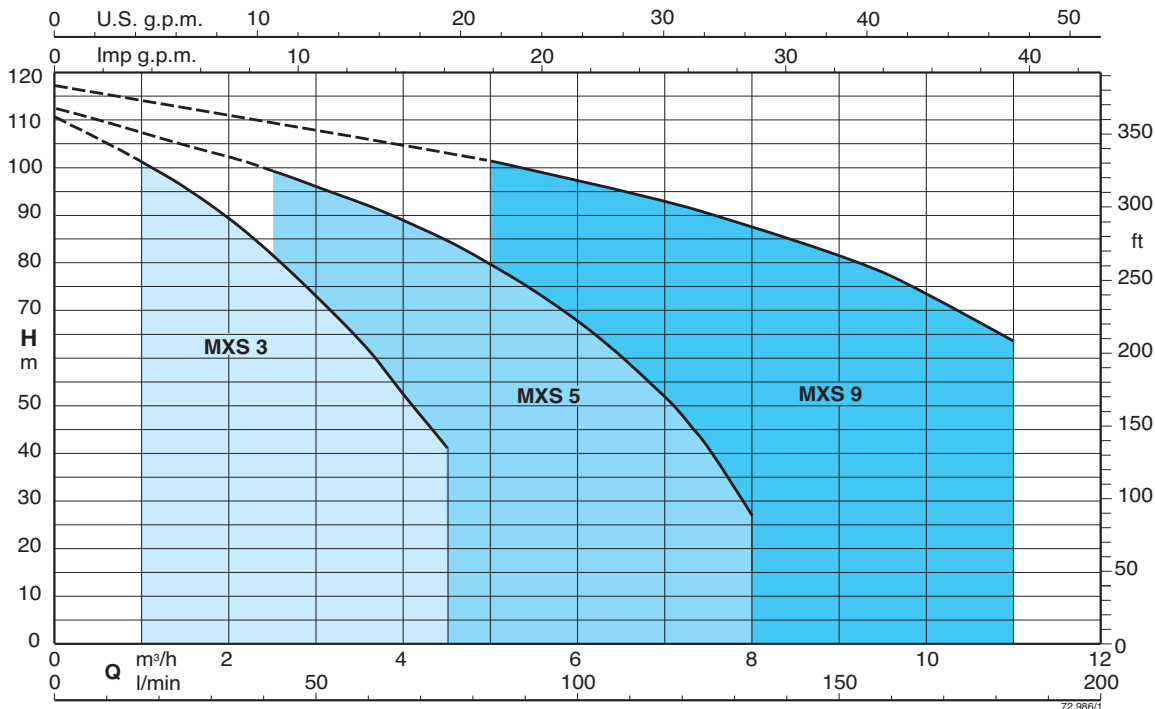
Special features on request

- Other voltages. - Frequency 60 Hz (as per 60 Hz data sheet).
- Cable length 20 m.
- Motor suitable operation with frequency converter.

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	
Oil chamber cover	
Shaft	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Motor shield	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Upper mechanical seal	Steatite, carbon, NBR
Lower mechanical seal	Ceramic alumina, silicon carbide, NBR
Seal lubrication oil	Oil for food machinery and pharmaceutic use

Coverage chart n ≈ 2900 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

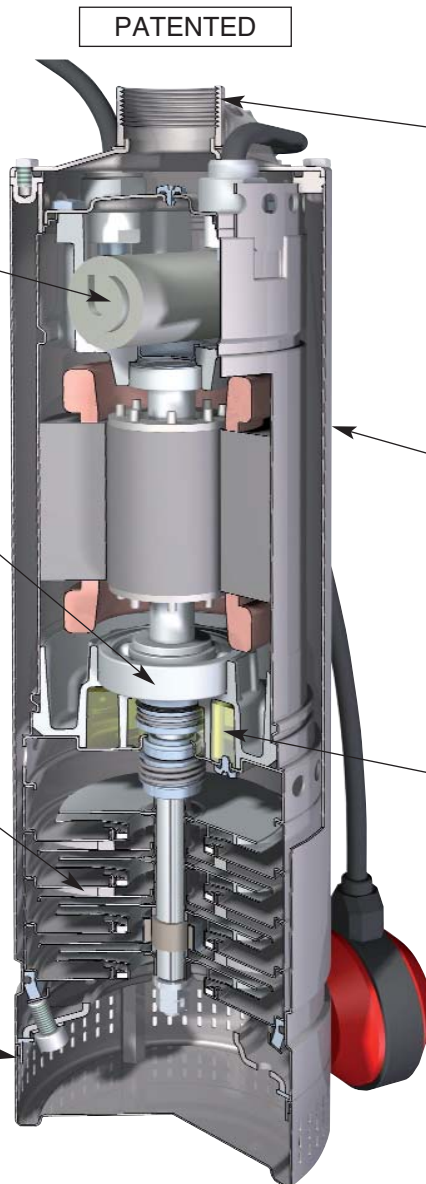
Its robust stainless steel construction allows for the pump to be suspended from the delivery pipe.

#### Low-Noise operation

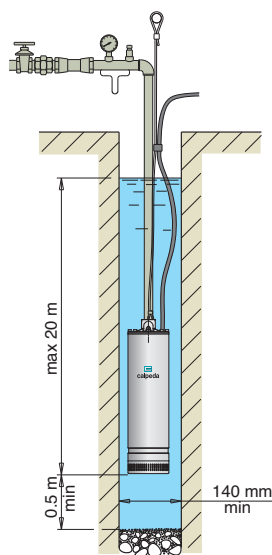
The design of hydraulic parts, the water-filled shroud around the motor and the submerged operation ensures low noise operation.

#### Greater Safety

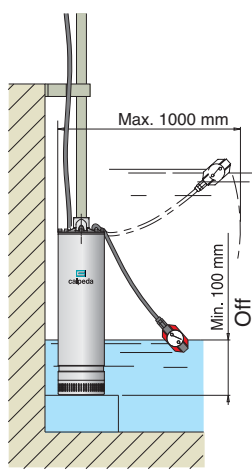
The double shaft sealing with an oil chamber separates the motor from the water and provides further protection against accidental operation when dry.



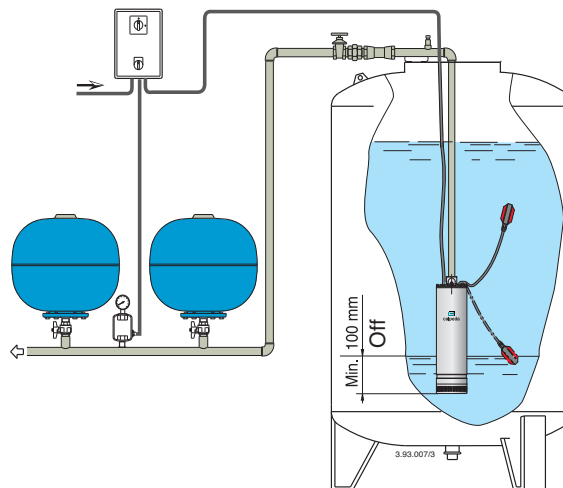
### Installation



Pump in suspended position



Pump with float switch (on demand)



Installation example