

# GXR 12

## Submersible Pumps in stainless steel



### Materials

Component	Material
Pump casing Strainer Impeller Motor jacket Pump jacket	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Handle	Polypropylene (with frame in AISI 304)
Shaft	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Mechanical seal: upper lower	Ceramic alumina/Carbon/NBR
Seal lubrication oil	Oil for food/pharmaceutical machinery

### Construction

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

**GXR**: with open impeller.

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

Double shaft seal with oil chamber.

### Applications

- For clean water containing solids up to 12 mm grain size.
- For draining rooms or emptying tanks.
- Extraction of water from ponds, streams or pits and for rainwater collection.
- For irrigation purposes.

For outdoor use a power supply cable of not less than 10 m should be used in accordance with: EN 60335-2-41.

### Operating conditions

Liquid temperature up to 40° C.

Maximum immersion depth: 5 m.

Minimum water level with float: 70 mm.

Minimum water level manual operation: 15 mm.

Continuous duty.

### Motor

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

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

three-phase 400 V  $\pm 10\%$ ;

Cable: H07RN-F, 4G1 mm<sup>2</sup>, length 10 m, without plug.

**GXR**M: single-phase 230 V,

with float switch and thermal protector.

Incorporated capacitor.

Cable: H07RN-F, 3G1 mm<sup>2</sup> (3G1,5 mm<sup>2</sup> for 1,1 kW, 3G2,5 mm<sup>2</sup> for 1,5 kW), length 10 m, with plug CEI-UNEL 47166.

Insulation class F.

Protection IP X8 (for continuous immersion)

Double impregnation humidity-proof dry winding.

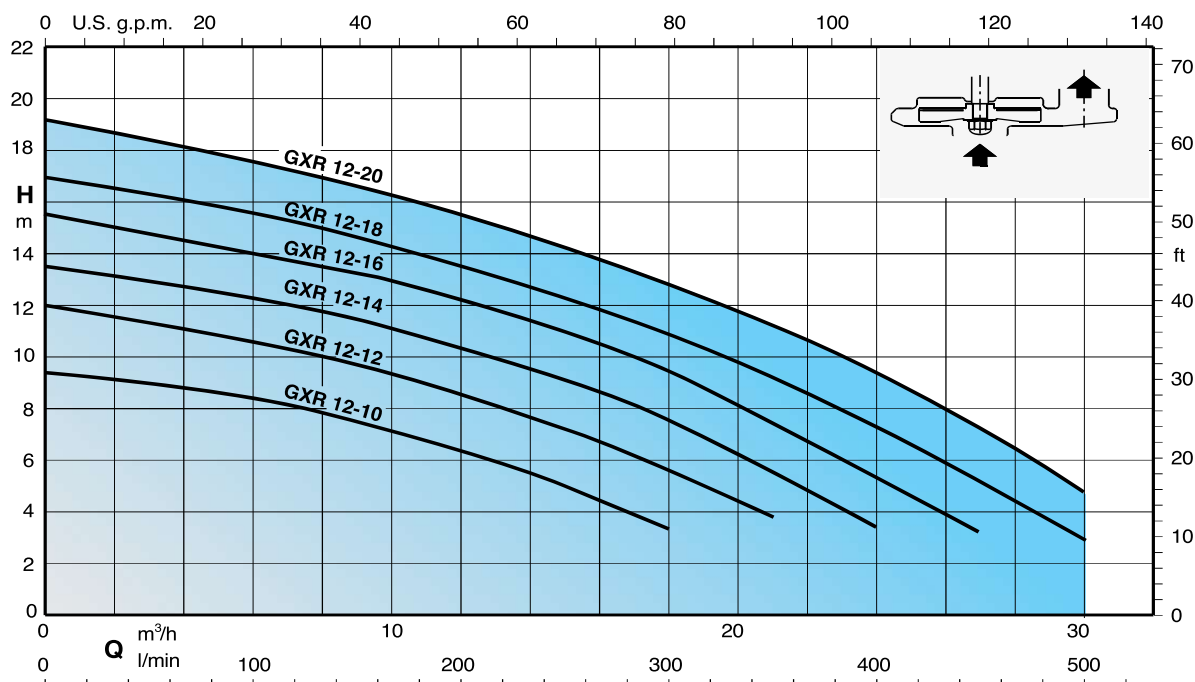
Constructed in accordance with: EN 60034-1;

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

### Other features on request

- Other voltages. - Frequency 60 Hz.
- Other mechanical seal. - Cable length 20 m.
- Vertical magnetic float switch.
- Motor suitable for operation with frequency converter.
- Three-phase pumps with incorporated float switch.

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



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### Performance $n \approx 2900$ rpm

3~	230V 400V		1~	230V		Capacitor	P <sub>1</sub>	P <sub>2</sub>		Q	m <sup>3</sup> /h	0	3	6	9	12	15	18	21	24	27	30
	A	A		A	μf	Vc	kW	kW	HP		l/min	0	50	100	150	200	250	300	350	400	450	500
GXR 12-10	2,6	1,5	GXRM 12-10	4	12,5	450	0,85	0,45	0,6	H <sub>m</sub>	9,3	9	8,3	7,5	6,3	5	3,3	-	-	-	-	
GXR 12-12	3,3	1,9	GXRM 12-12	5,2	16	450	1,1	0,55	0,75		12	11,3	10,6	9,6	8,5	7,2	5,6	3,7	-	-	-	
GXR 12-14	3,8	2,2	GXRM 12-14	6	20	450	1,3	0,75	1		13,5	13	12,2	11,4	10,4	9	7,5	5,6	3,3	-	-	
GXR 12-16	4,8	2,8	GXRM 12-16	7,4	25	450	1,6	0,9	1,2		15,5	14,7	14	13,2	12,2	11	9,4	7,5	5,4	3,2	-	
GXR 12-18	5,8	3,3	GXRM 12-18	9,5	30	450	2	1,1	1,5		17	16,3	15,5	14,6	13,5	12,3	10,8	9,2	7,3	5,2	3	
GXR 12-20	6,9	4	GXRM 12-20	13	35	450	2,2	1,5	2		19,2	18,4	17,5	16,5	15,5	14,2	12,8	11,2	9,3	7,2	4,7	

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

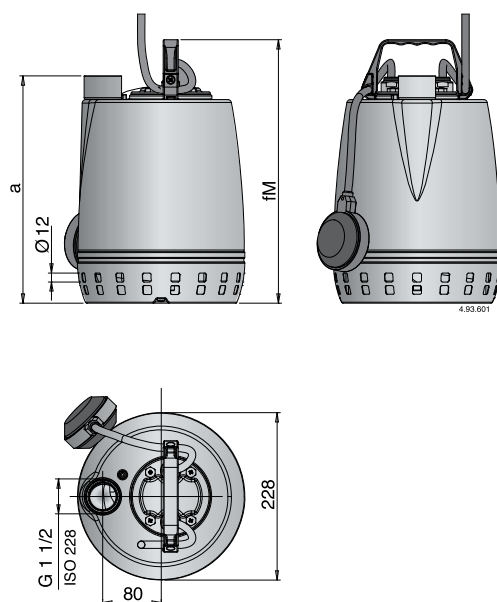
P<sub>2</sub> Rated motor power output.

Density  $\rho = 1000$  kg/m<sup>3</sup>.

Kinematic viscosity  $\nu = \max 20$  mm<sup>2</sup>/sec.

Tolerances according to UNI EN ISO 9906:2012

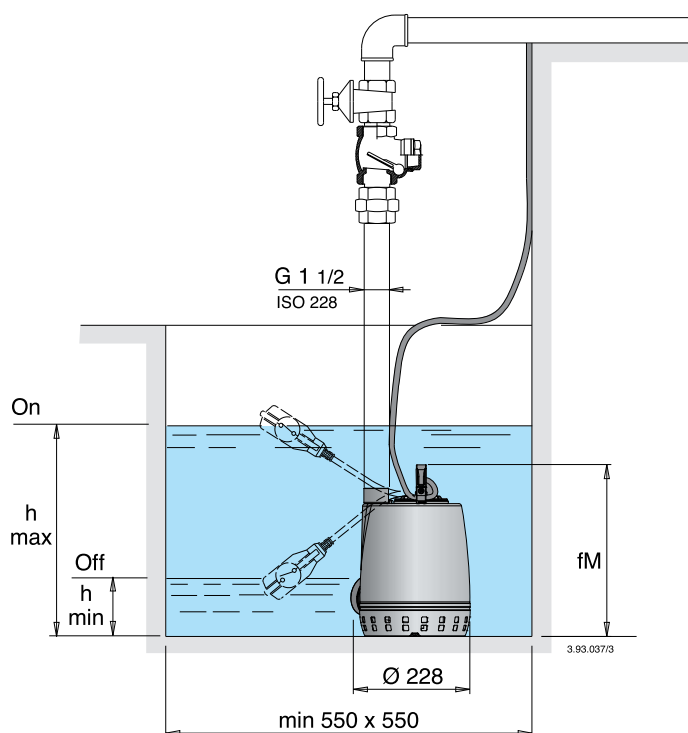
### Dimensions and weights



TYPE	mm		kg <sup>(1)</sup>	
	fM	a	GXR	GXRM
<b>GXR 12-10 - GXRM 12-10</b>	360	310	10,3	11,3
<b>GXR 12-12 - GXRM 12-12</b>	375	325	11,5	12,5
<b>GXR 12-14 - GXRM 12-14</b>	400	350	13	14
<b>GXR 12-16 - GXRM 12-16</b>	400	350	13,6	14,6
<b>GXR 12-18 - GXRM 12-18</b>	420	370	14,4	15,9
<b>GXR 12-20 - GXRM 12-20</b>	450	400	16	17,5

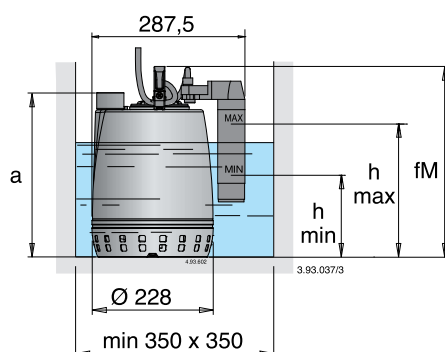
<sup>(1)</sup> With cable length: 10 m

### Installation examples



TYPE	mm		
	fM	h min	h max
GXR 12-10 - GXRM 12-10	360	175	435
GXR 12-12 - GXRM 12-12	375	190	450
GXR 12-14 - GXRM 12-14	400	215	475
GXR 12-16 - GXRM 12-16	400	215	475
GXR 12-18 - GXRM 12-18	420	235	495
GXR 12-20 - GXRM 12-20	450	265	525

### Installation examples with vertical magnetic float switch



TYPE	mm			
	fM	a	h min	h max
GXRM 12-10 GF	360	310	180	270
GXRM 12-12 GF	375	325	195	285
GXRM 12-14 GF	400	350	220	310
GXRM 12-16 GF	400	350	220	310

### Features

PATENTED

G 1 1/2 vertical, upward delivery port for installation in small pits, without the need for an elbow on the pump.

Handle in polypropylene, with frame in stainless steel.

Easy inspection of the capacitor area.

Shaft in chrome-nickel stainless steel.

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

Chamber with food/pharmaceutical machinery oil

Impeller in chrome-nickel stainless steel.

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

Suction strainer with a double row of holes, for extra safety against clogging with the passage of solids up to 12 mm grain size.

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

