GXR, GXV

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
Shaft	Chrome-nickel steel 1.4305 EN 10088 (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 for 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.

Applications

GXR: - For clean water containing solids up to 10 mm grain size.
- For draining rooms or 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

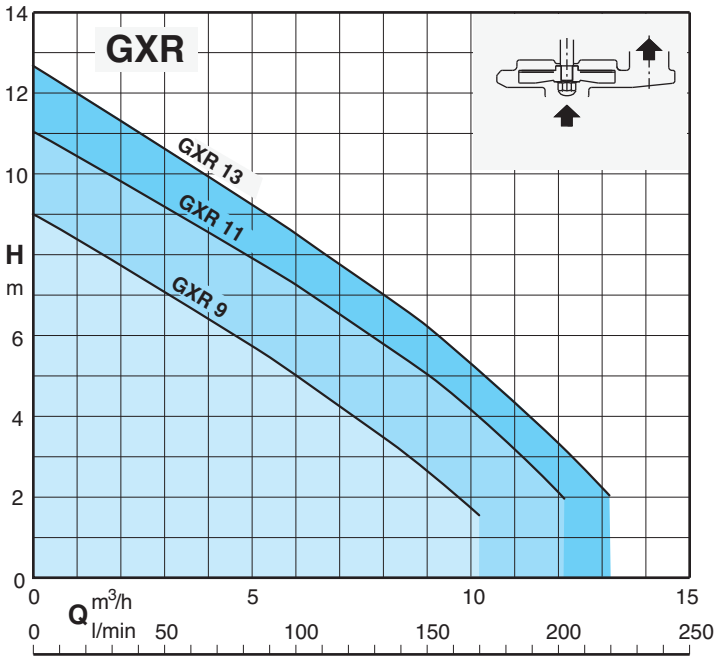
Liquid temperature up to 50° C.
Maximum immersion depth: 5 m.
Minimum water level with float: GXR = 70 mm, GXV = 130 mm.
Minimum water level manual operation: GXR = 15 mm, GXV = 30 mm.
Continuous duty.

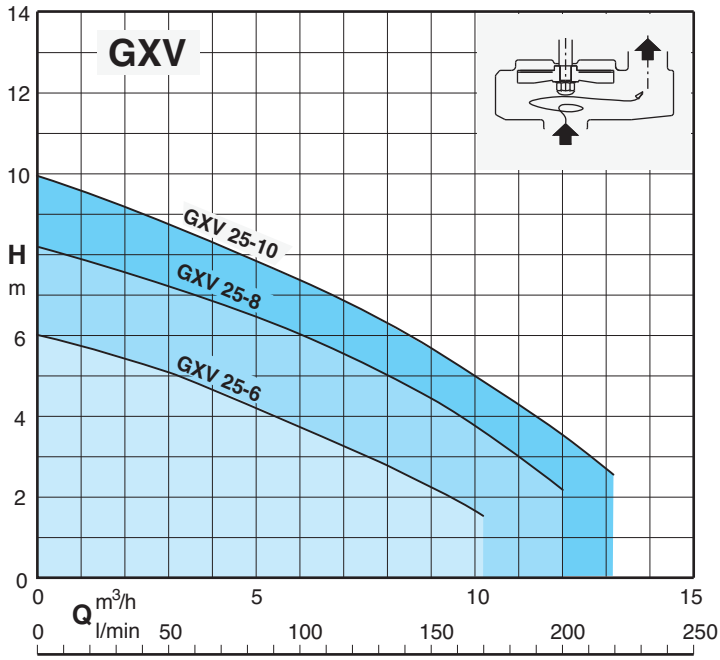
Motor

2-pole induction motor, 50 Hz (n ≈ 2900 rpm).
GXR, GXV: three-phase 230 V ± 10%;
three-phase 400 V ± 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





GXR, GXV

Submersible Pumps in stainless steel

calpeda®

Performance n ≈ 2900 rpm

3~	230V	400V	1~	230V	Capacitor		P_1	P_2		Q m^3/h	0	1,2	3	4,5	6	7,5	9	10,2	12	13,2
	A	A		A	µf	Vc	kW	kW	HP	l/min	0	20	50	75	100	125	150	170	200	220
GXR 9	1,6	0,9	**GXRM 9**	2,5	8	450	0,5	0,25	0,33		9	8,3	7	6	4,8	3,6	2,5	1,7		
GXR 11	2,3	1,3	**GXRM 11**	3,5	12,5	450	0,7	0,37	0,5	**H** m	11	10,4	9,5	8,5	7,5	6,5	5,3	4,2	2,2	
GXR 13	2,8	1,6	**GXRM 13**	4,5	16	450	0,95	0,45	0,6		12,7	11,7	10,7	9,7	8,5	7,3	6,3	5,2	3,2	2

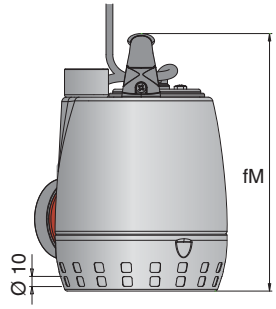
3~	230V	400V	1~	230V	Capacitor		P_1	P_2		Q m^3/h	0	1,2	3	4,5	6	7,5	9	10,2	12	13,2
	A	A		A	µf	Vc	kW	kW	HP	l/min	0	20	50	75	100	125	150	170	200	220
GXV 25-6	1,6	0,9	**GXVM 25-6**	2,5	8	450	0,5	0,25	0,33		6	5,7	5,2	4,5	3,8	3	2,2	1,5		
GXV 25-8	2,3	1,3	**GXVM 25-8**	3,5	12,5	450	0,7	0,37	0,5	**H** m	8,2	7,8	7,2	6,7	6,1	5,4	4,5	3,6	2,2	
GXV 25-10	2,8	1,6	**GXVM 25-10**	4,5	16	450	0,95	0,45	0,6		10	9,5	8,7	8	7,3	6,5	5,7	4,9	3,7	2,6

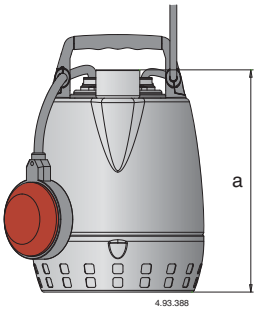
P_1 Max. power input. P_2 Rated motor power output. Density ρ = 1000 kg/m³. Kinematic viscosity ν = max 20 mm²/sec.

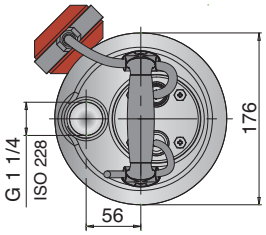
Tolerances according to UNI EN ISO 9906:2012

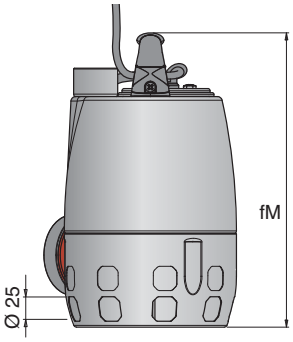
Pump type	Power supply cable				Float switch	
	Cable material	Section	Length	Plug CEE 7(VII)	Cable material	Section
GXRM 9 GXVM 25-6	H05RN-F	3G0,75 mm²	5 m	YES	H07RN-F	3G1 mm²
GXRM 11, 13 GXVM 25-8, 25-10	H07RN-F	3G1 mm²	5 m	YES	H07RN-F	3G1 mm²
GXR 9 GXV 25-6	H05RN-F	4G0,75 mm²	5 m	NO	NO	-
GXR 11, 13 GXV 25-8, 25-10	H07RN-F	4G1 mm²	5 m	NO	NO	-

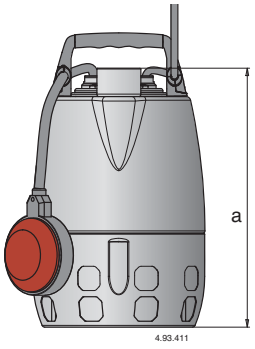
Dimensions and weights

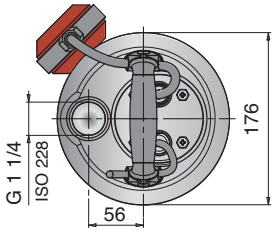












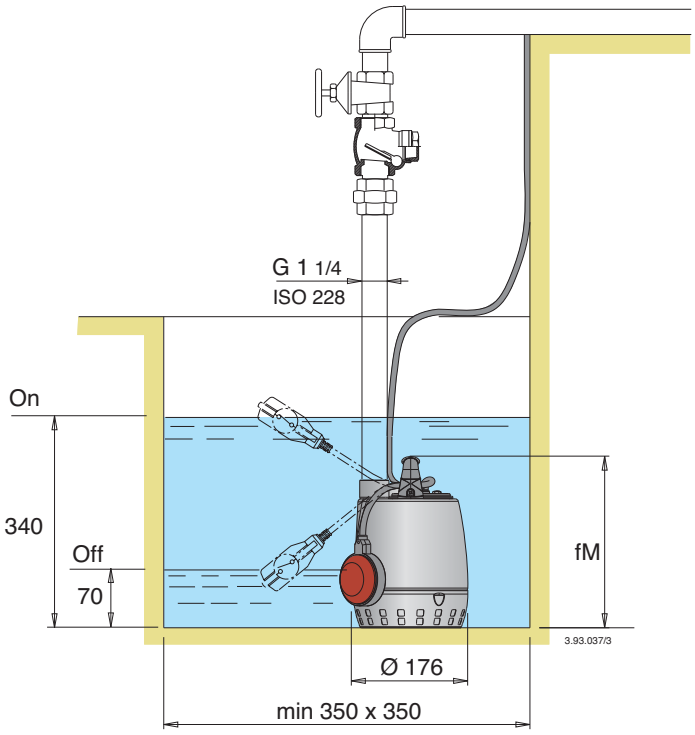
TYPE	Dimensions mm		(1) kg	
	fM	a	GXR	GXRM
GXR 9 - GXRM 9	265	230	5	5,2
GXR 11 - GXRM 11	300	265	6,2	6,5
GXR 13 - GXRM 13	300	265	6,7	7,2

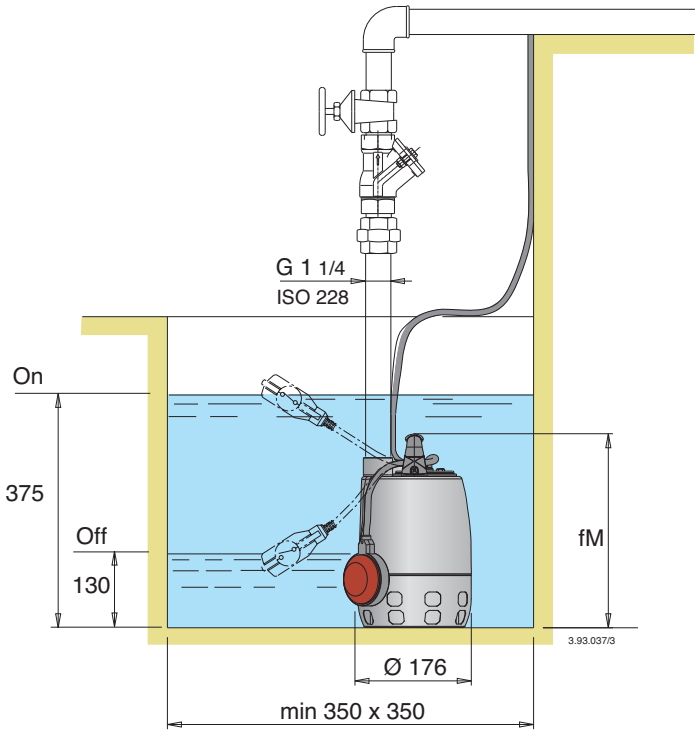
(1) With cable length: 5 m

TYPE	Dimensions mm		(1) kg	
	fM	a	GXV	GXVM
GXV 25-6 - GXVM 25-6	302	267	5,1	5,3
GXV 25-8 - GXVM 25-8	337	302	6,3	6,6
GXV 25-10 - GXVM 25-10	337	302	6,8	7,3

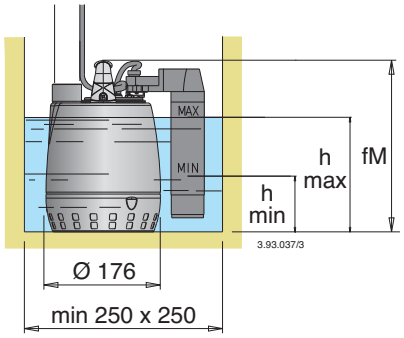
(1) With cable length: 5 m

Installation examples

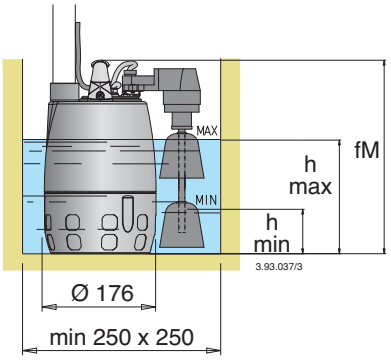




Installation examples with vertical magnetic float switch



TYPE	mm		
	fM	h min	h max
GXRM 9 GF	265	100	190
GXRM 11 GF	300	135	225
GXRM 13 GF	300	135	225



TYPE	mm		
	fM	h min	h max
GXVM 25-6 GFA	302	70	150
GXVM 25-8 GFA	337	70	185
GXVM 25-10 GFA	337	70	185

GXR, GXV

Submersible Pumps in stainless steel

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.

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.

Easy inspection of the capacitor area.

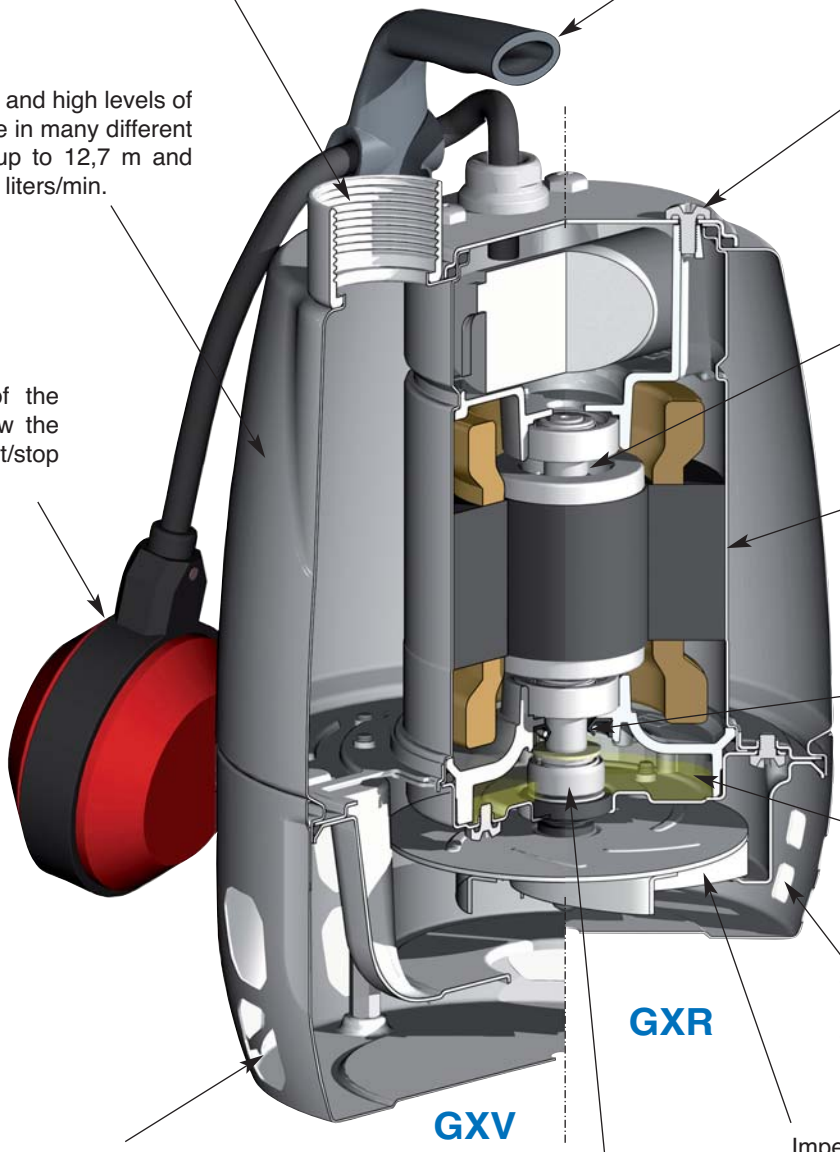
Shaft in chrome-nickel stainless steel.

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

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.

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

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

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
Shaft	Chrome-nickel steel 1.4305 EN 10088 (AISI 303)
Mechanical seal	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 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 60 335-2-41.

Operating conditions

Liquid temperature up to 50° C.
Maximum immersion depth: 5 m.
Minimum water level with float: 70 mm,.
Minimum water level manual operation: 15 mm.
Continuous duty.

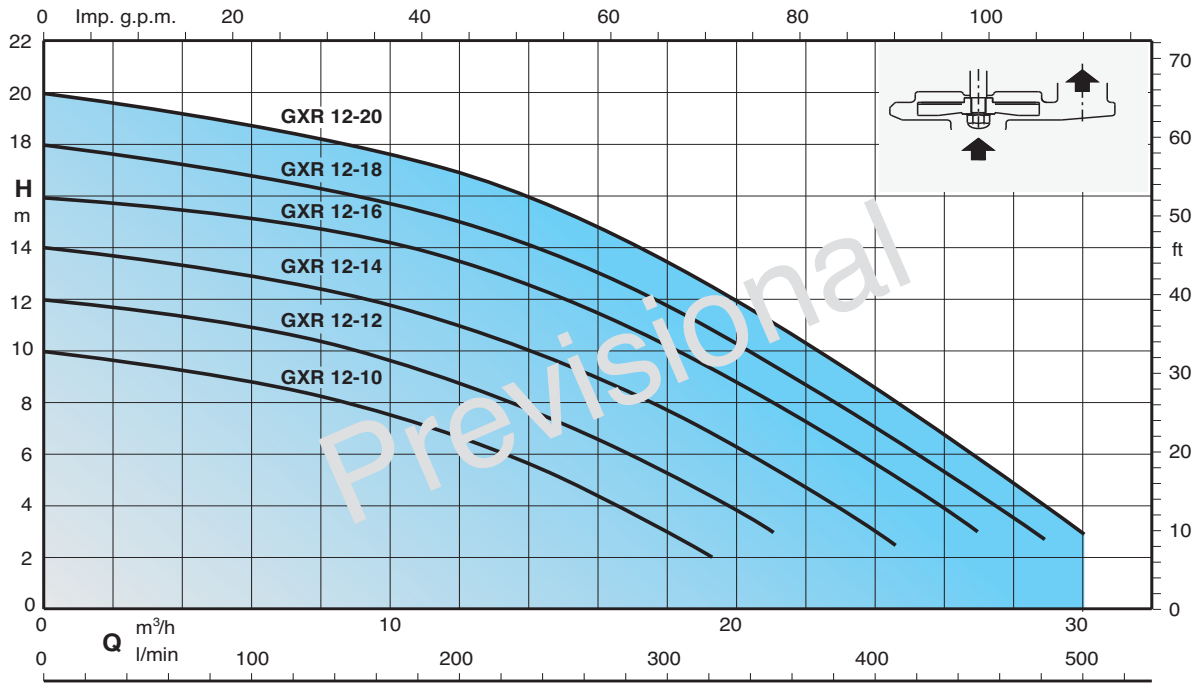
Motor

2-pole induction motor, 50 Hz (n ≈ 2900 rpm).
GXR: three-phase 230 V ± 10%;
three-phase 400 V ± 10%;
Cable: H07RN-F, 4G1 mm², length 10 m, without plug.
GXRM: single-phase 230 V,
with float switch and thermal protector.
Incorporated capacitor.
Cable: H07RN-F, 3G1 mm² (3G1,5 mm² 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 ≈ 2900 rpm



GXR 12

Submersible Pumps in stainless steel

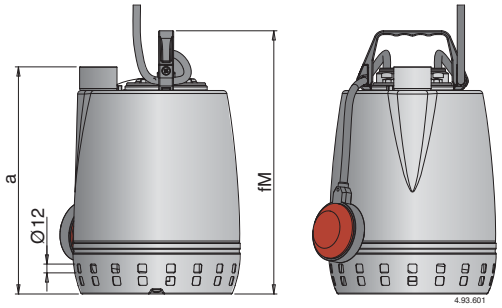
Performance n ≈ 2900 rpm

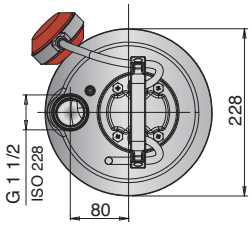
3~	230V	400V	1~	230V	Capacitor		P_1	P_2		Q m^3/h	0	3	6	9	12	15	18	21	24	27	30
	A	A		A	µf	Vc	kW	kW	HP	l/min	0	50	100	150	200	250	300	350	400	450	500
GXR 12-10	2	1,2	**GXRM 12-10**	3,1	12,5	450	0,7	0,45	0,6		10	9,5	8,8	8	6,7	5	3	-	-	-	-
GXR 12-12	2,4	1,4	**GXRM 12-12**	3,6	16	450	1	0,55	0,75		12	11,6	11	10,2	9	7,5	5,5	3,2	-	-	-
GXR 12-14	2,8	1,6	**GXRM 12-14**	4,6	16	450	1	0,75	1		14	13,5	12,8	12	10,8	9,3	7,5	5,5	3	-	-
GXR 12-16	4	2,3	**GXRM 12-16**	6	25	450	1,3	0,9	1,2	**H** m	16	15,5	15	14,2	13,2	11,8	10,2	8	5,5	2,3	-
GXR 12-18	4,8	2,8	**GXRM 12-18**	8	30	450	1,7	1,1	1,5		18	17,5	17	16,2	15	13,7	11,8	9	7	4,3	1,5
GXR 12-20	6,6	3,8	**GXRM 12-20**	12	35	450	2,2	1,5	2		20	19,5	18,8	18	16,8	15,2	13,2	10,8	8,4	5,7	3

P_1 Max. power input. P_2 Rated motor power output. Density ρ = 1000 kg/m³. Kinematic viscosity ν = max 20 mm²/sec.

Tolerances according to UNI EN ISO 9906:2012

Dimensions and weights

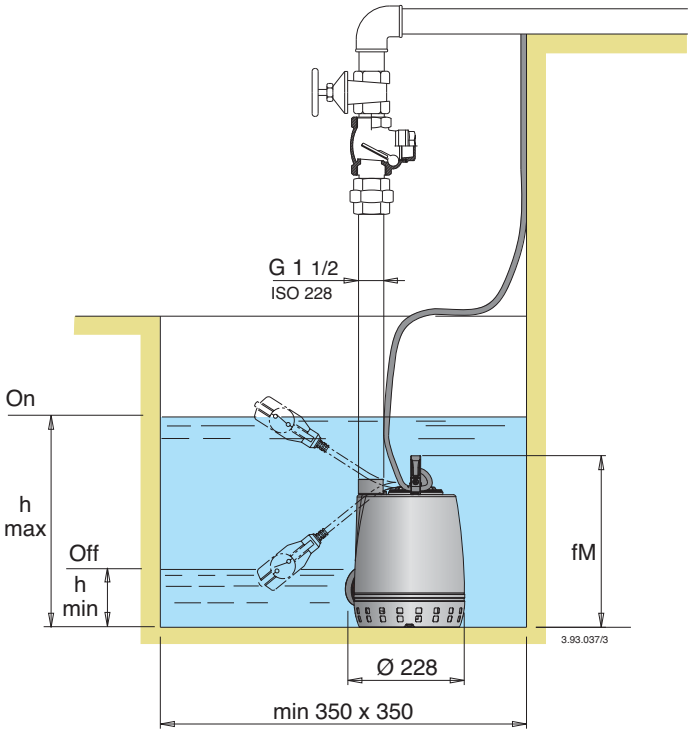




TYPE	mm	
	fM	a
GXR 12-10 - GXRM 12-10	360	310
GXR 12-12 - GXRM 12-12	375	325
GXR 12-14 - GXRM 12-14	375	325
GXR 12-16 - GXRM 12-16	400	350
GXR 12-18 - GXRM 12-18	420	370
GXR 12-20 - GXRM 12-20	450	400

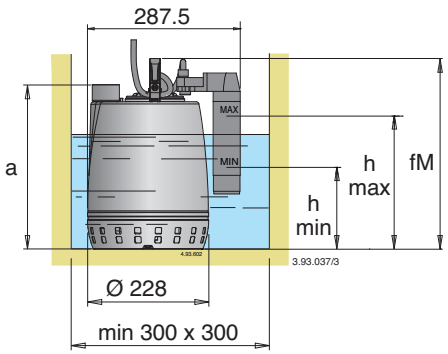
(1) With cable length: 10 m

Installation examples



TYPE	mm		
	fM	h min	h max
GXR 12-10 - GXRM 12-10	360	255	380
GXR 12-12 - GXRM 12-12	375	270	395
GXR 12-14 - GXRM 12-14	375	270	395
GXR 12-16 - GXRM 12-16	400	295	420
GXR 12-18 - GXRM 12-18	420	315	440
GXR 12-20 - GXRM 12-20	450	345	470

Installation examples with vertical magnetic float switch



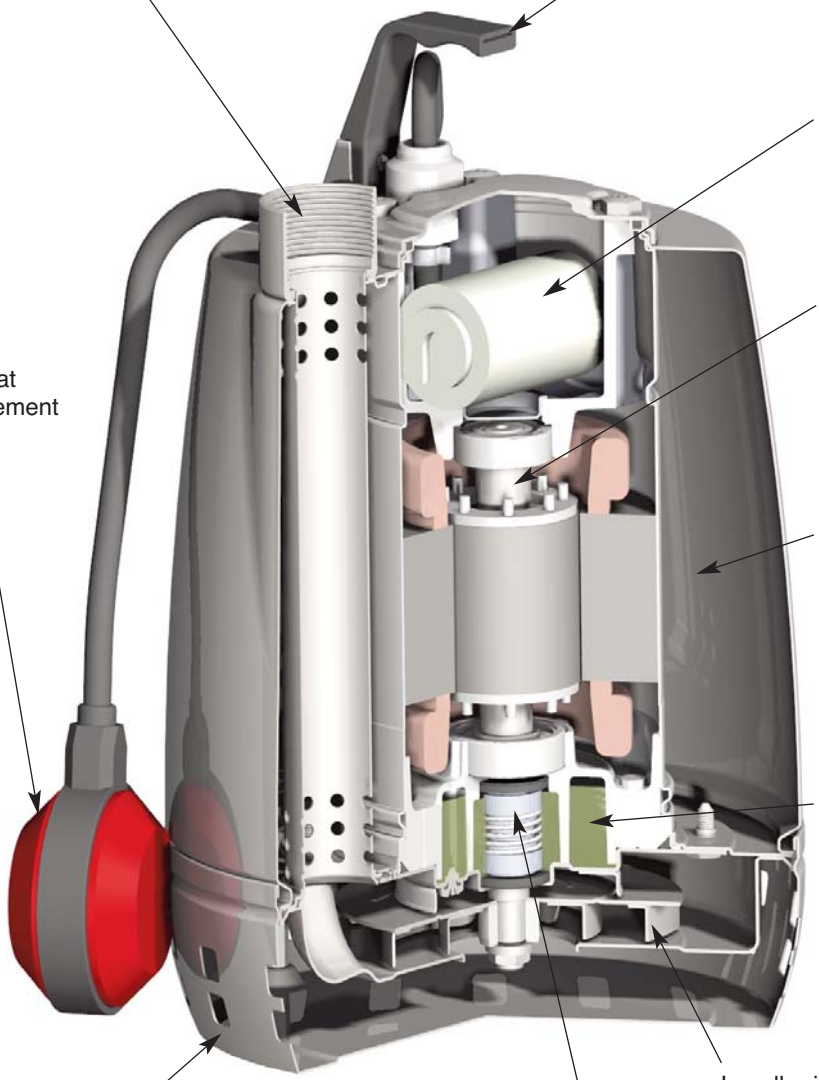
TYPE	mm			
	fM	a	h min	h max
GXRM 12-10 GF	360	310	180	270
GXRM 12-12 GF	375	325	195	285
GXRM 12-14 GF	375	325	195	285
GXRM 12-16 GF	400	350	220	310
GXRM 12-18 GF	420	370	240	330
GXRM 12-20 GF	450	400	270	360

GXR 12

Submersible Pumps in stainless steel

Features

PATENTED



Handle in polypropylene, with frame in stainless steel.

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

Easy inspection of the capacitor area.

Shaft in chrome-nickel stainless steel.

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

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.

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.

GXR-R

Submersible Pumps for rainwater applications in stainless steel

calpeda®

Materials

Component	Material
Pump casing Suction casing Impeller Motor jacket Pump jacket	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Handle	Polypropylene
Shaft	Chrome-nickel steel 1.4305 EN 10088 (AISI 303)
Mechanical seal	Ceramic alumina/Carbon/NBR
Seal lubrication oil	Oil for food/pharmaceutical machinery

Construction

Single-impeller submersible pumps in chrome-nickel stainless steel, with horizontal suction port and vertical delivery port for rainwater applications.
GXR-R: 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 10 mm grain size.
Extraction of water from ponds, emptying tanks or pits and for rainwater applications.
For irrigation purposes.
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

Floating suction filter has to be provided, see ex. pag. 217.
Liquid temperature up to 50° C.
Maximum immersion depth: 5 m.
Minimum water level with float 70 mm.
Minimum water level manual operation 15 mm.
Continuous duty.

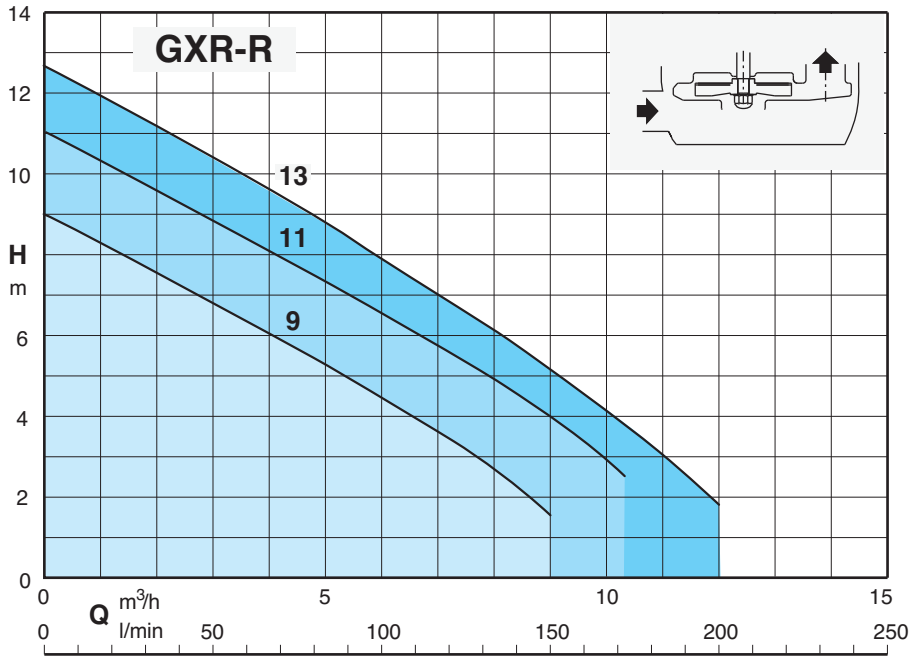
Motor

2-pole induction motor, 50 Hz (n ≈ 2900 rpm).
GXR-R: three-phase 230 V ± 10%;
three-phase 400 V ± 10%;
GXR-RM: 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.

Other features on request

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

Characteristic curves n ≈ 2900 rpm



GXR-R

Submersible Pumps for rainwater applications in stainless steel

Performance n ≈ 2900 rpm

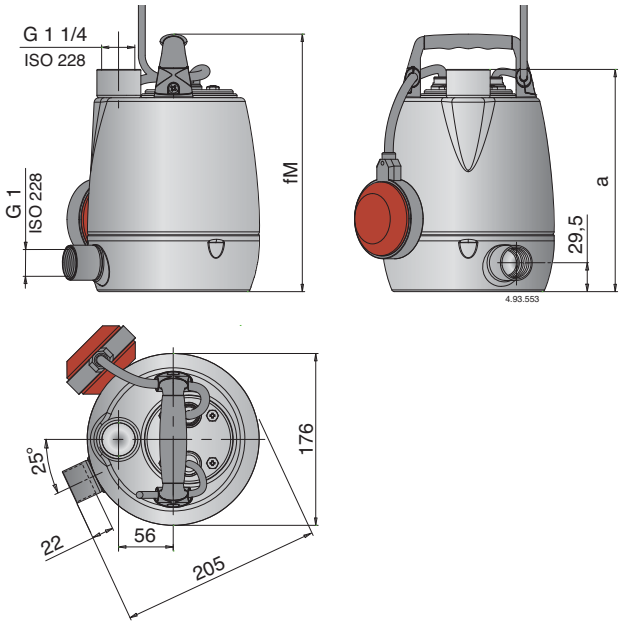
3~	230V	400V	1~	230V	Capacitor		P_1	P_2		Q m^3/h	0	1,2	3	4,5	6	7,5	9	10,2	12	13,2
	A	A		A	µf	Vc	kW	kW	HP	l/min	0	20	50	75	100	125	150	170	200	220
GXR-R 9	1,6	0,9	**GXR-RM 9**	2,5	8	450	0,5	0,25	0,33		9	8,2	6,8	5,8	4,5	3,2	1,7			
GXR-R 11	2,3	1,3	**GXR-RM 11**	3,5	12,5	450	0,7	0,37	0,5	**H** m	11	10,2	9	7,8	6,7	5,5	4	2,7		
GXR-R 13	2,8	1,6	**GXR-RM 13**	4,5	16	450	0,95	0,45	0,6		12,7	11,6	10,4	9,2	7,8	6,5	5,1	3,8	1,8	

P_1 Max. power input. P_2 Rated motor power output. Density ρ = 1000 kg/m³. Kinematic viscosity ν = max 20 mm²/sec.

Tolerances according to UNI EN ISO 9906:2012

Pump type	Power supply cable				Float switch	
	Cable material	Section	Length	Plug CEE 7(VII)	Cable material	Section
GXR-RM 9	H05RN-F	3G0,75 mm²	5 m	YES	H07RN-F	3G1 mm²
GXR-RM 11, 13	H07RN-F	3G1 mm²	5 m	YES	H07RN-F	3G1 mm²
GXR-R 9	H05RN-F	4G0,75 mm²	5 m	NO	NO	-
GXR-R 11, 13	H07RN-F	4G1 mm²	5 m	NO	NO	-

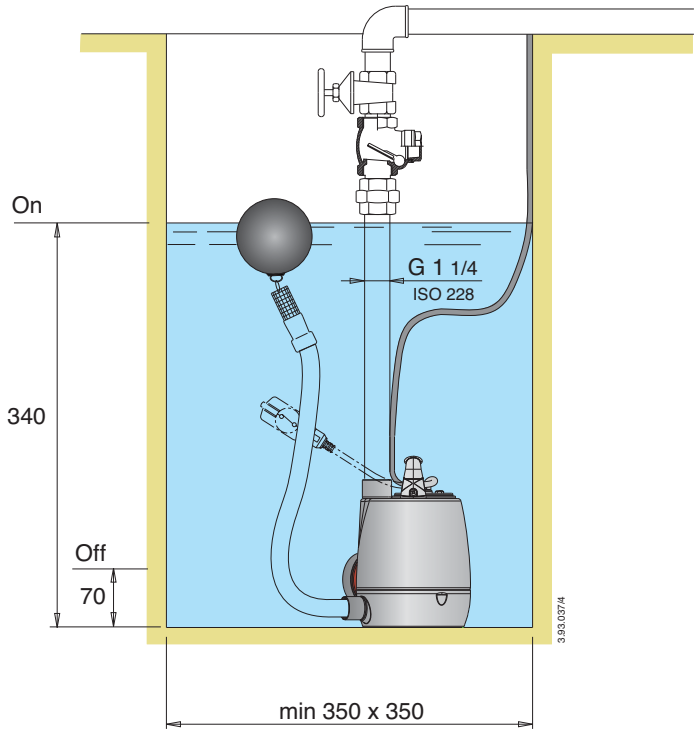
Dimensions and weights



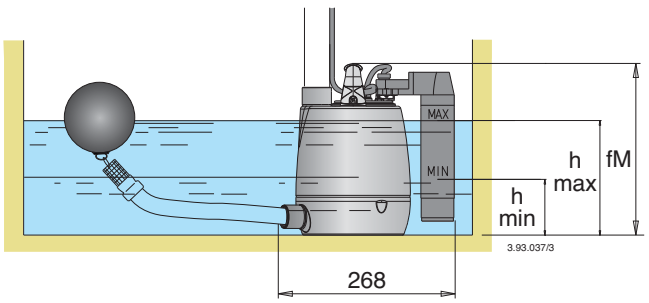
TYPE	Dimensions mm		(1) kg	
	fM	a	GXR-R	GXR-RM
GXR-R 9 - GXR-RM 9	265	230	5	5,2
GXR-R 11 - GXR-RM 11	300	265	6,2	6,5
GXR-R 13 - GXR-RM 13	300	265	6,7	7,2

(1) With cable length: 5 m

Installation examples with floating suction filter with pipe



Installation examples with vertical magnetic float switch



TYPE	mm			(1) kg
	fM	h min	h max	GXR-RM
GXR-RM 9 GF	265	100	190	5,2
GXR-RM 11 GF	300	135	225	6,5
GXR-RM 13 GF	300	135	225	7,2

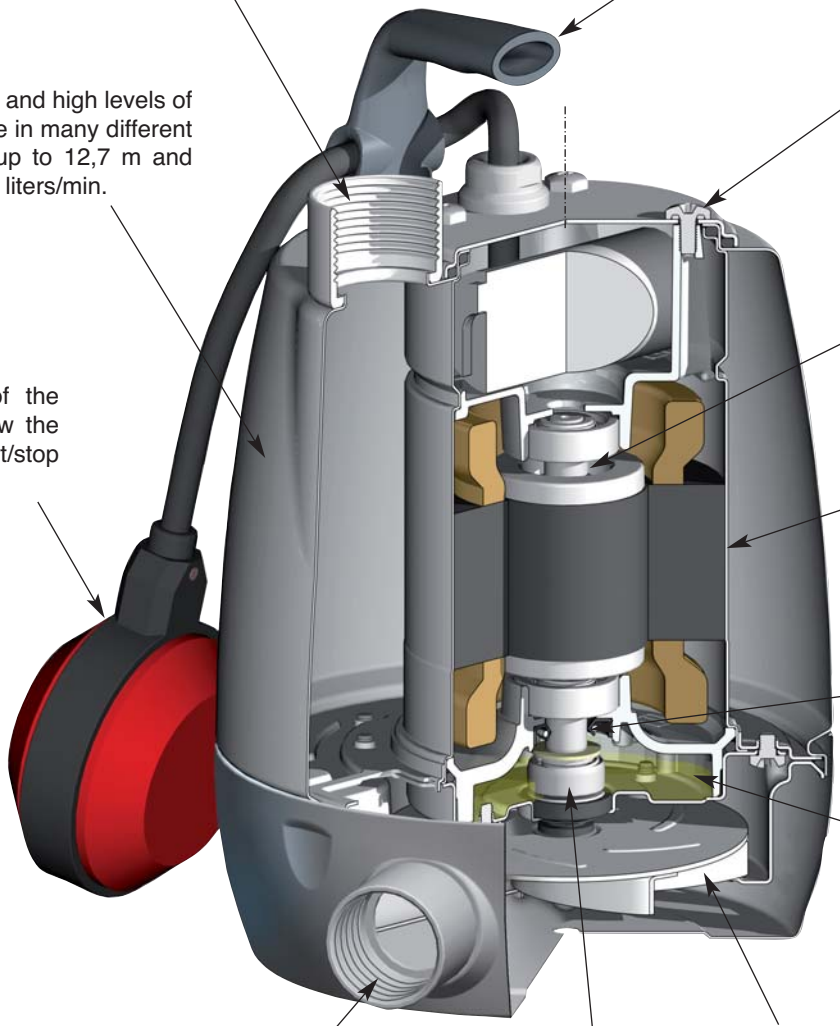
(1) With cable length: 5 m

GXR-R

Submersible Pumps for rainwater applications in stainless steel

Features

PATENTED



G 1 1/4 vertical, upward delivery port.

Handle in polypropylene.

Minimum dimension and high levels of performance, for use in many different applications, head up to 12,7 m and flow rates up to 200 liters/min.

Easy inspection of the capacitor area

Shaft in chrome-nickel stainless steel.

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

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

Ceramic stainless steel shaft sleeve

Oil chamber

Impeller in chrome-nickel stainless steel, it allows the passage of solids up to 10 mm.

G 1 orizontal suction port for rainwater applications

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