

**FAMCO**  
هایپر صنعت



**water passion**

تهران، کیلومتر ۲۱ بزرگراه لشگری (جاده مخصوص کرج)، روبروی پالایشگاه نفت پارس، پلاک ۱۲

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# 1959

## WHO WE ARE

WE WANT TO CONTINUE THAT WHICH WAS STARTED MANY YEARS AGO BY VINICIO METTIFOGO, FOUNDER AND PIONEER.

Calpeda is a family owned company with an history of 61 years.

Today, we are a reality that has evolved over the years, always looking to the future with a spirit that has brought us to being a respected reference point in the great world of water.

Our history has taken our tradition and strength to you, acknowledged for our professionalism, quality, reliability and service.



2020

## CALPEDA TODAY

Employees: 250  
Offices: Montorso V. (Vicenza) Italy  
Main factory: 30,000 sq. metres (covered)  
Types of pumps: more than 2,000  
Power outputs: from 0.5 kW to 200 kW



PATENTED



### Materials

Component	Material
Pump casing	Cast iron GJL 200 EN 1561
Impeller	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Motor jacket	
Jacket cover	
Handle	Polypropylene (with frame in AISI 304)
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, with free-flow (vortex) impeller with vertical threaded delivery port. Double mechanical shaft seal with interposed oil chamber, to protect against dry-running.

### Applications

For domestic or industrial waste water, dirty water with solids up to 40 mm grain size, for liquids which are compatible with the pump materials. For draining rooms or emptying tanks. Extraction of water from ponds, streams or pits and for rainwater collection.

### Operating conditions

Liquid temperature up to 35° C.  
pH value: 6-11.  
Maximum immersion depth: 5 m.  
Minimum immersion depth: 200 mm.  
Continuous duty (with submerged motor).

### Motor

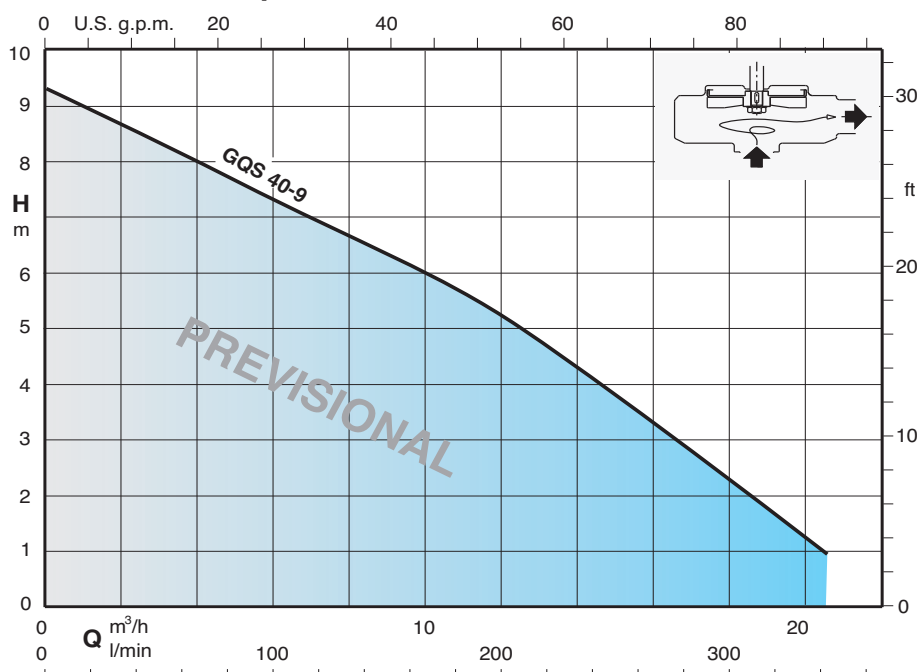
2-pole induction motor, 50 Hz ( $n \approx 2900$  rpm).  
**GQS:** three-phase 230 V  $\pm 10\%$ ;  
three-phase 400 V  $\pm 10\%$ ;  
Cable: H07RN-F, 4G1 mm<sup>2</sup>, length 10 m, without plug.  
**GQSM:** single-phase 230 V  $\pm 10\%$ ,  
with float switch and thermal protector.  
Incorporated capacitor.  
Cable: H07RN-F, 3G1 mm<sup>2</sup>, length 10 m, with plug  
CEI-UNEL 47166.

Insulation class F.  
Protection IP X8 (for continuous immersion)  
Triple 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 (as per 60 Hz data sheet).
- Other mechanical seal.
- Cable length 20 m.
- Motor suitable for operation with frequency converter.
- Three-phase pumps with incorporated float switch.

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



#### Performance n ≈ 2900 rpm

3~	230V 400V		1~	230V Capacitor			P <sub>1</sub>			P <sub>2</sub>			Q m <sup>3</sup> /h l/min	0	1,5	3	6	9	12	15	18	21	24	27	30	33
	A	A		A	μf	Vc	kW	kW	HP	H m	0	25		50	100	150	200	250	300	350	400	450	500	550		
<b>GQS 40-9</b>	2,8	1,6	<b>GQSM 40-9</b>	4,5	20	450	0,95	0,45	0,6	<b>H m</b>	9,3	8,8	8,3	7,3	6,3	5,2	3,8	2,3	0,9	-	-	-	-	-	-	-

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

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

Density ρ = 1000 kg/m<sup>3</sup>.

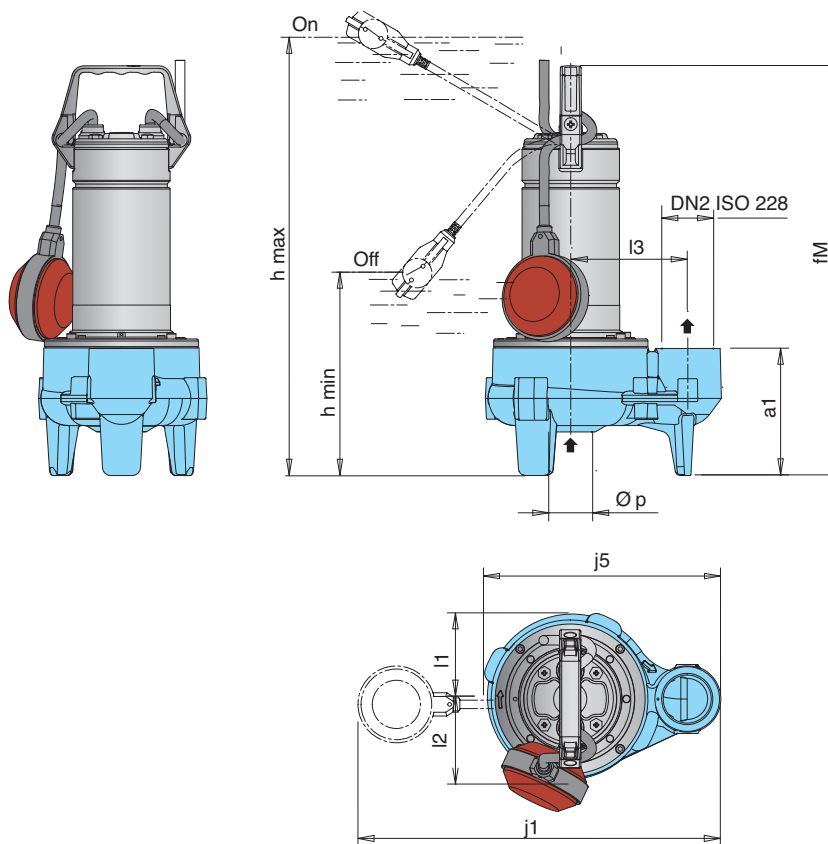
Kinematic viscosity ν = max 20 mm<sup>2</sup>/sec.

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#### Dimensions and weights



TYPE	DN	mm										kg (1)	
		a1	fM	l1	l2	l3	j5	Ø p	j1	h max	h min	GQS	GQSM
<b>GQS(M) 40-9</b>	G 1 1/2	120	385	78	81	110	222	40	410	460	200	10,5	10,5

1) With cable length: 10 m

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### Materials

Component	Material
Pump casing Impeller	Cast iron GJL 200 EN 1561
Motor jacket Jacket cover Casing cover	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, with free-flow (vortex) impeller.  
**GQS:** with vertical threaded delivery port (G 2").  
**GQV:** with horizontal flanged and threaded delivery port (DN 50 - G 2").

Double mechanical shaft seal with interposed oil chamber, to protect against dry-running.

### Applications

For domestic or industrial waste water, dirty water with solids up to 50 mm grain size, for liquids which are compatible with the pump materials.

For draining rooms or emptying tanks.

Extraction of water from ponds, streams or pits and for rainwater collection.

### Operating conditions

Liquid temperature up to 35° C.

pH value: 6-11.

Maximum immersion depth: 5 m.

Minimum immersion depth: 275 mm.

Continuous duty (with submerged motor).

### Motor

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

**GQV, GQS:** three-phase 230 V ± 10%;

three-phase 400 V ± 10%;

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

**GQVM, GQSM:** single-phase 230 V ± 10%;

with float switch and thermal protector.

Incorporated capacitor.

Cable: H07RN-F, 3G1 mm<sup>2</sup>, length 10 m, with plug CEI-UNEL 47166.

Insulation class F.

Protection IP X8 (for continuous immersion)

Triple impregnation humidity-proof dry winding.

Constructed in accordance with: EN 60034-1;

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

### Other features on request

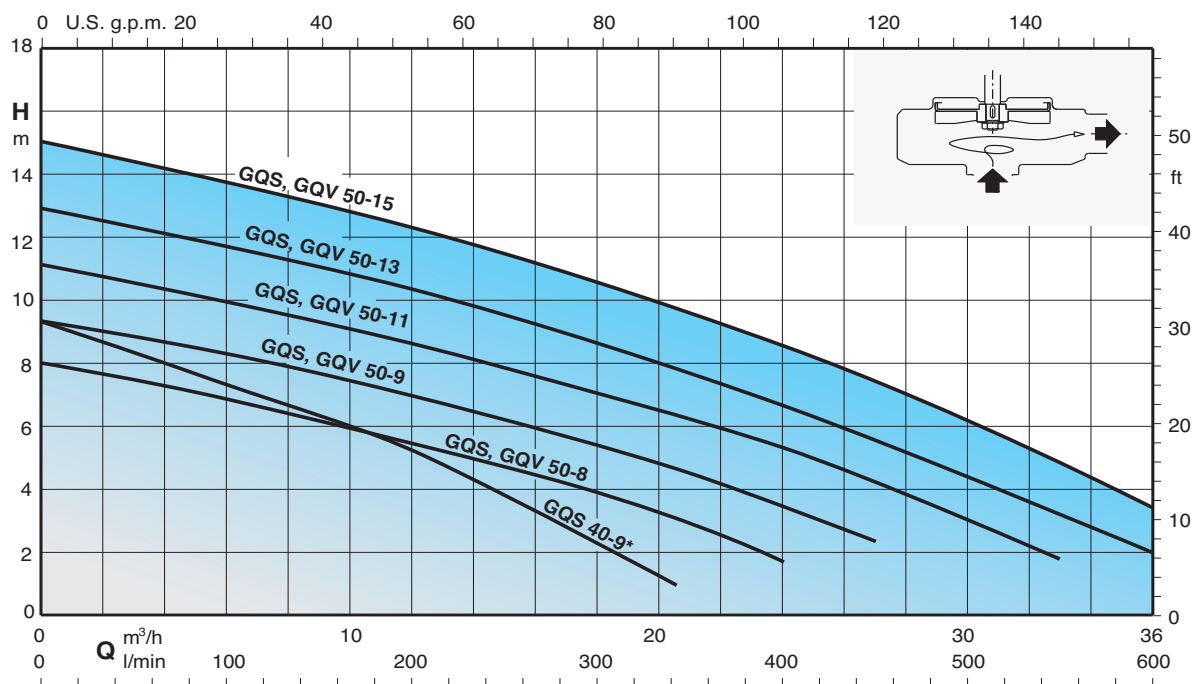
- Other voltages. - Frequency 60 Hz (as per 60 Hz data sheet).

- Other mechanical seal. - Cable length 20 m.

- Motor suitable for operation with frequency converter.

- Three-phase pumps with incorporated float switch.

### Characteristic curves n ≈ 2900 rpm



### Performance n ≈ 2900 rpm

3~	230V 400V		1~	230V Capacitor			P1		P2		Q m³/h l/min	H <sub>m</sub>											
	A	A		A	µf	Vc	kW	kW	HP	0		3	6	9	12	15	18	21	24	27	30	33	36
GQS 50-8 GQV 50-8	2,6	1,5	GQSM 50-8 GQVM 50-8	4,3	16	450	0,95	0,55	0,75	8	7,4	6,9	6,3	5,6	4,8	4	3	1,8	-	-	-	-	
GQS 50-9 GQV 50-9	3,1	1,8	GQSM 50-9 GQVM 50-9	4,8	16	450	1,1	0,75	1	9,3	8,8	8,3	7,7	7	6,2	5,3	4,3	3,2	2,2	-	-	-	
GQS 50-11 GQV 50-11	4	2,3	GQSM 50-11 GQVM 50-11	6,6	25	450	1,45	0,9	1,2	11	10,5	10	9,3	8,6	7,8	7	6,2	5,2	4,2	3	1,8	-	
GQS 50-13 GQV 50-13	5,2	3	GQSM 50-13 GQVM 50-13	8,4	30	450	1,8	1,1	1,5	12,8	12,2	11,6	11	10,3	9,5	8,6	7,7	6,7	5,7	4,5	3,3	2	
GQS 50-15 GQV 50-15	6,9	4	GQSM 50-15 GQVM 50-15	13	35	450	2,2	1,5	2	15	14,4	13,7	13	12,2	11,3	10,4	9,5	8,5	7,4	6,2	4,8	3,5	

P1 Max. power input.

P2 Rated motor power output.

Density  $\rho = 1000 \text{ kg/m}^3$ .

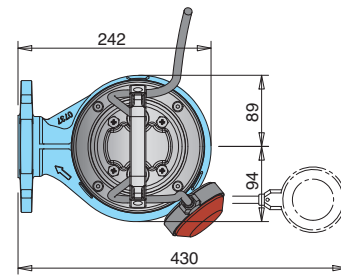
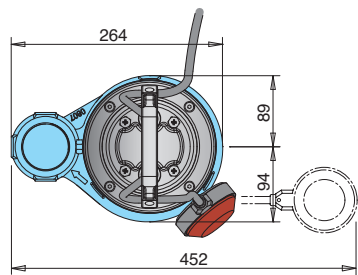
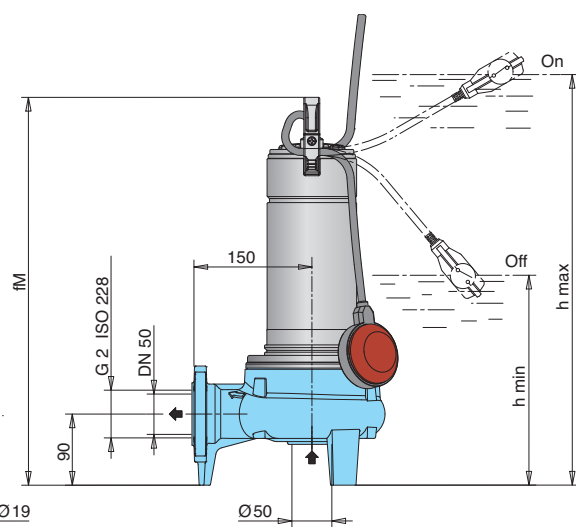
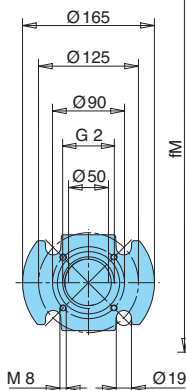
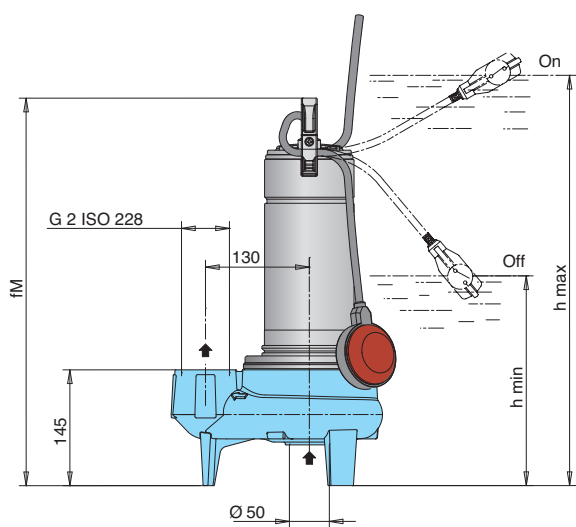
Kinematic viscosity  $\nu = \text{max } 20 \text{ mm}^2/\text{sec}$ .

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### Dimensions and weights



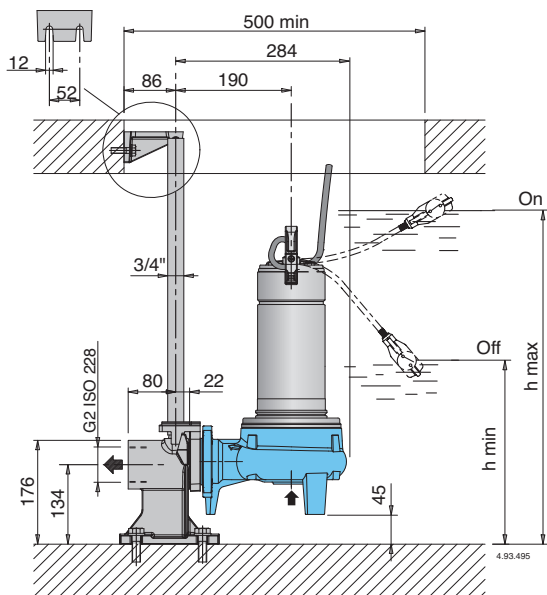
TYPE	mm			kg <sup>(1)</sup>	
	fM	h max	h min	GQS	GQSM
GQS(M) 50-8	460	535	275	14,8	15,8
GQS(M) 50-9	460	535	275	15	16
GQS(M) 50-11	485	560	300	15,8	17,8
GQS(M) 50-13	505	580	320	18,8	20,3
GQS 50-15	505	580	320	20,3	-
GQSM 50-15	535	610	350	-	21,8

1) With cable length: 10 m

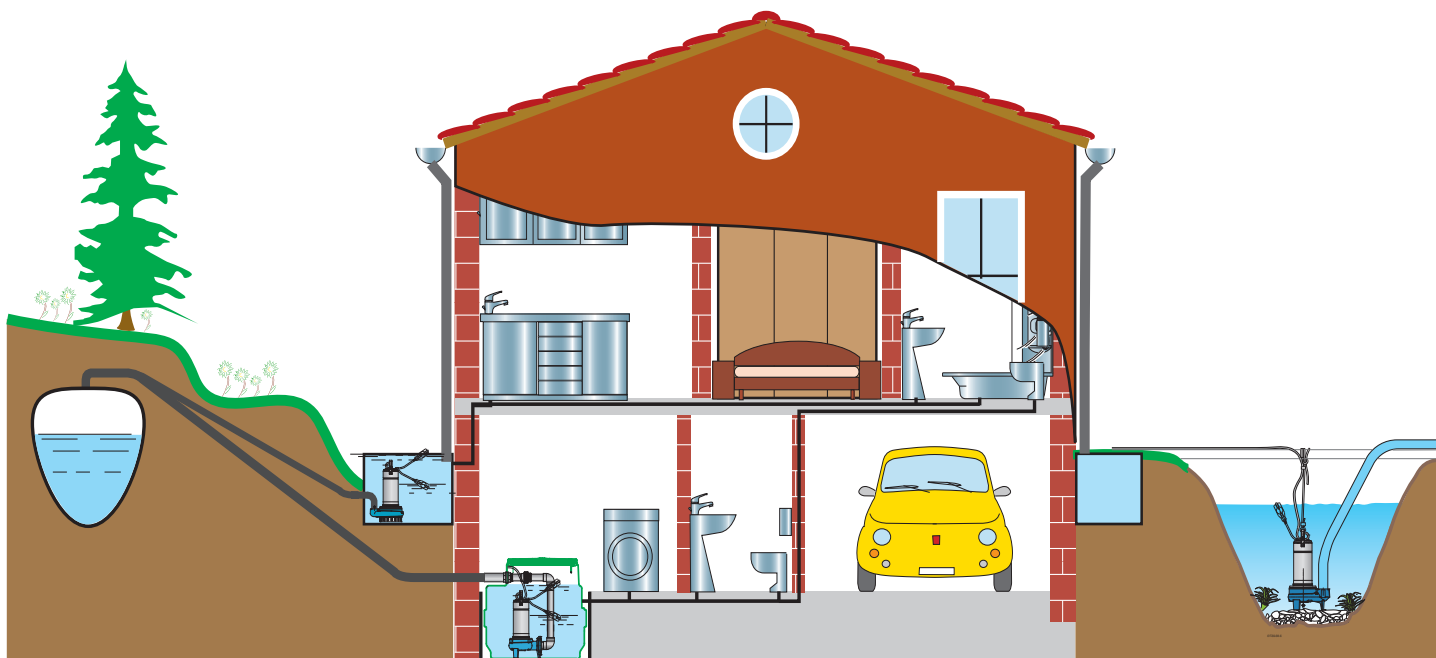
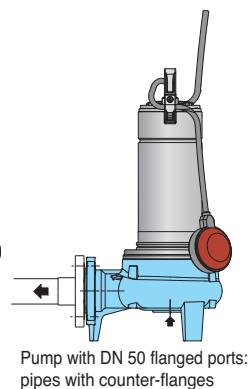
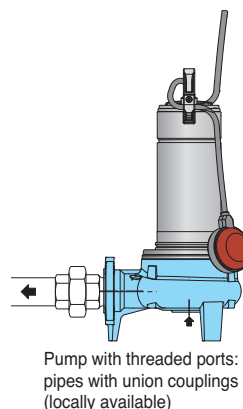
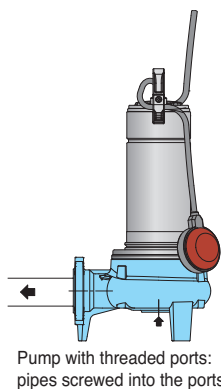
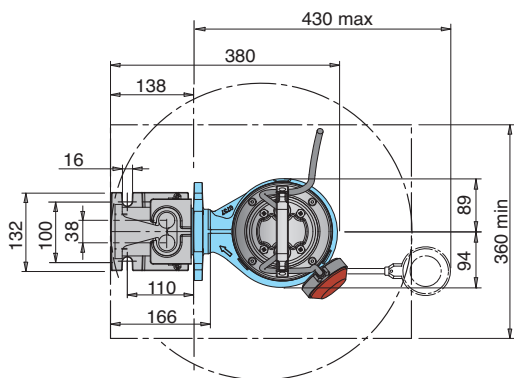
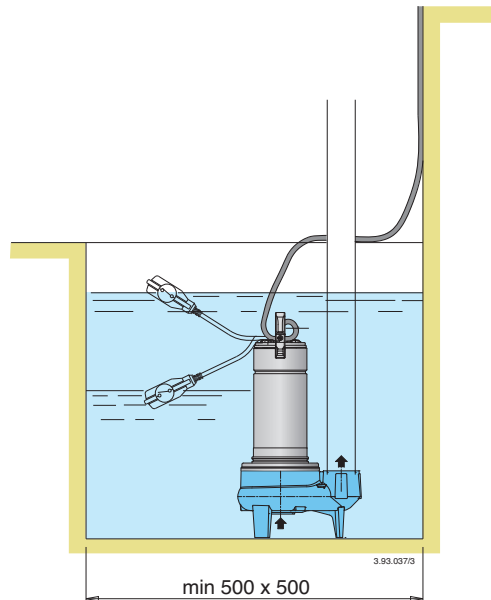
TYPE	mm			kg <sup>(1)</sup>	
	fM	h max	h min	GQV	GQVM
GQV(M) 50-8	460	535	275	15	16
GQV(M) 50-9	460	535	275	15,2	16,2
GQV(M) 50-11	485	560	300	16	18
GQV(M) 50-13	505	580	320	19	20,5
GQV 50-15	505	580	320	20,5	-
GQVM 50-15	535	610	350	-	22

1) With cable length: 10 m

### Installation examples



TYPE	mm	
	h max	h min
GQV(M) 50-8	580	320
GQV(M) 50-9	580	320
GQV(M) 50-11	605	345
GQV(M) 50-13	625	365
GQV 50-15	625	365
GQVM 50-15	655	395





**Features**

Cable length 10 m, pump single-phase with plug

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Handle in polypropylene, with frame in stainless steel.

Easy inspection of the capacitor area.

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

Ring against accidental extraction of the cable.

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

Relief valve: the pump is fitted to a relief valve for air release around the impeller granting a proper pump priming also after long standstill periods.

Chamber with food/pharmaceutical machinery oil

Maximum flexibility of connection:

- Flange DN 50 PN 10 EN 1092-2
- N. 4 M8 holes on Ø 90 for duck foot coupling SA-G2"
- G 2 ISO 228

Impeller with epoxy cataphoresis treatment for a greater protection against the rust.

Shaft in chrome-nickel stainless steel.

Pump casing with epoxy cataphoresis treatment joined to the external paint for a greater protection against the rust.

The free-flow impeller (vortex) construction is particularly suitable for liquids containing solids up to 50 mm grain size.

**GQV**

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

**GQS**

PATENTED



**Construction**

Single-impeller submersible pumps, (with two-passage) with channels impeller with vertical threaded delivery port (G 2"). Double mechanical shaft seal with interposed oil chamber, to protect against dry-running.

**Applications**

For domestic or industrial waste water, dirty water with solids up to 50 mm grain size, for liquids which are compatible with the pump materials.  
For draining rooms or emptying tanks.  
Extraction of water from ponds, streams or pits and for rainwater collection.

**Operating conditions**

Liquid temperature up to 35° C.  
pH value: 6-11.  
Maximum immersion depth: 5 m.  
Minimum immersion depth: 275 mm.  
Continuous duty (with submerged motor).

**Motor**

2-pole induction motor, 50 Hz (n ≈ 2900 rpm).  
**GQN** : three-phase 230 V ± 10%;  
three-phase 400 V ± 10%;  
Cable: H07RN-F, 4G1 mm<sup>2</sup>, length 10 m, without plug.  
**GQNM**: single-phase 230 V ± 10%,  
with float switch and thermal protector.  
Incorporated capacitor.  
Cable: H07RN-F, 3G1 mm<sup>2</sup>, length 10 m, with plug  
CEI-UNEL 47166.

Insulation class F.  
Protection IP X8 (for continuous immersion)  
Triple impregnation humidity-proof dry winding.  
Constructed in accordance with: EN 60034-1;  
EN 60335-1, EN 60335-2-41.

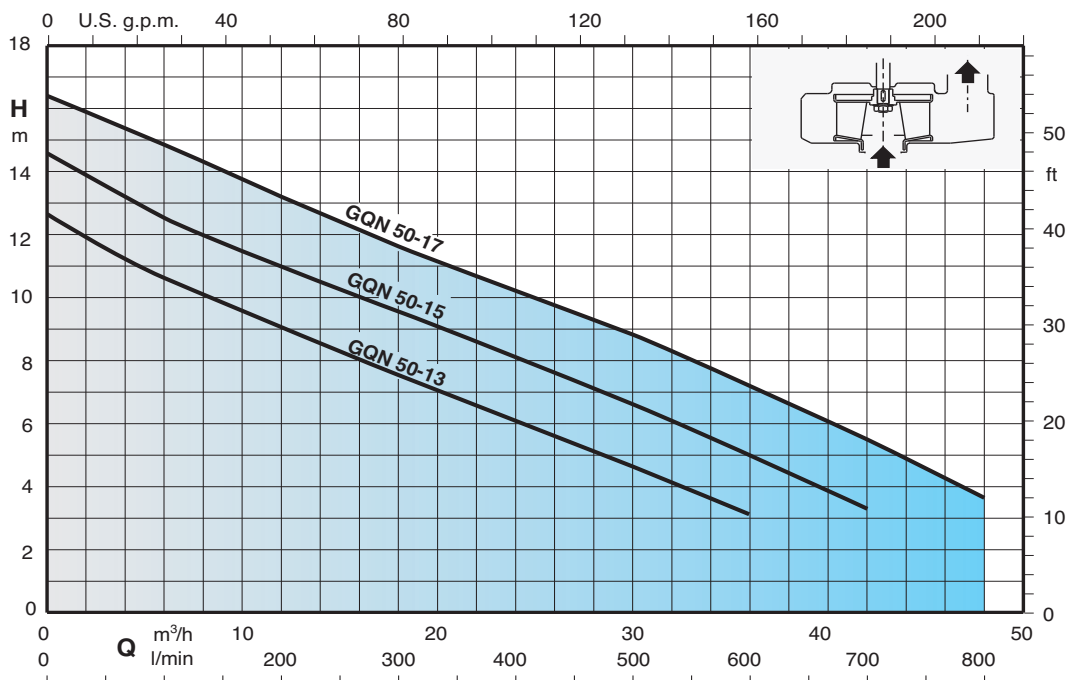
**Materials**

Component	Material
Pump casing Impeller	Cast iron GJL 200 EN 1561
Motor jacket Jacket cover Casing cover	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

**Other features on request**

- Other voltages.
- Frequency 60 Hz (as per 60 Hz data sheet).
- Other mechanical seal.
- Cable length 20 m.
- Motor suitable for operation with frequency converter.
- Three-phase pumps with incorporated float switch.

**Characteristic curves n ≈ 2900 rpm**



### Performance n ≈ 2900 rpm

3~	230V 400V		1~	230V			Capacitor P <sub>1</sub>			P <sub>2</sub>		Q									
	A	A		A	μf	Vc	kW	kW	HP	m <sup>3</sup> /h	l/min		0	3	6	12	18	24	30	36	42
<b>GQN 50-13</b>	4	2,3	<b>GQNM 50-13</b>	6,6	25	450	1,45	0,9	1,2	<b>H</b>	12,7	11,6	10,6	8,9	7,7	6,3	4,7	3,1	-	-	
<b>GQN 50-15</b>	5,8	3,3	<b>GQNM 50-15</b>	8,4	30	450	1,8	1,1	1,5		14,6	13,5	12,6	10,9	9,6	8,3	6,7	5	3,2	-	
<b>GQN 50-17</b>	7,8	4,5	<b>GQNM 50-17</b>	12	35	450	2,2	1,5	2		16,4	15,7	14,9	13,2	11,7	10,3	8,9	7,3	5,5	3,6	

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

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

Density ρ = 1000 kg/m<sup>3</sup>.

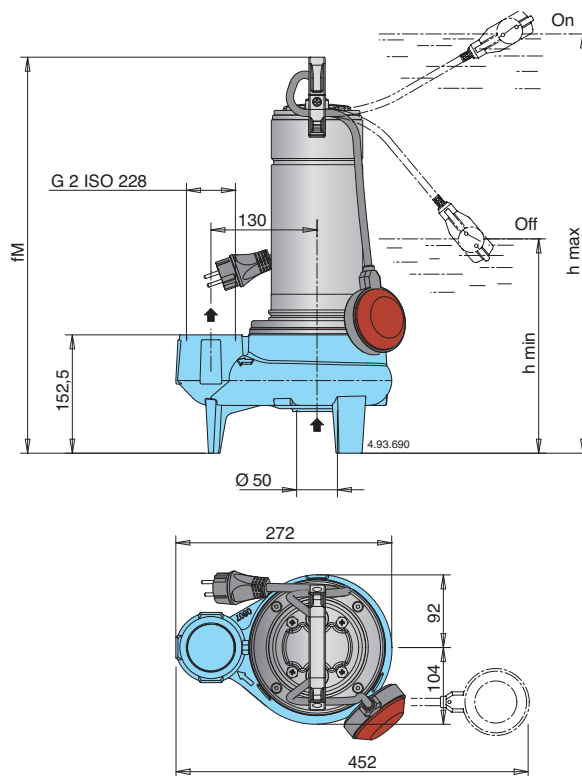
Kinematic viscosity ν = max 20 mm<sup>2</sup>/sec.

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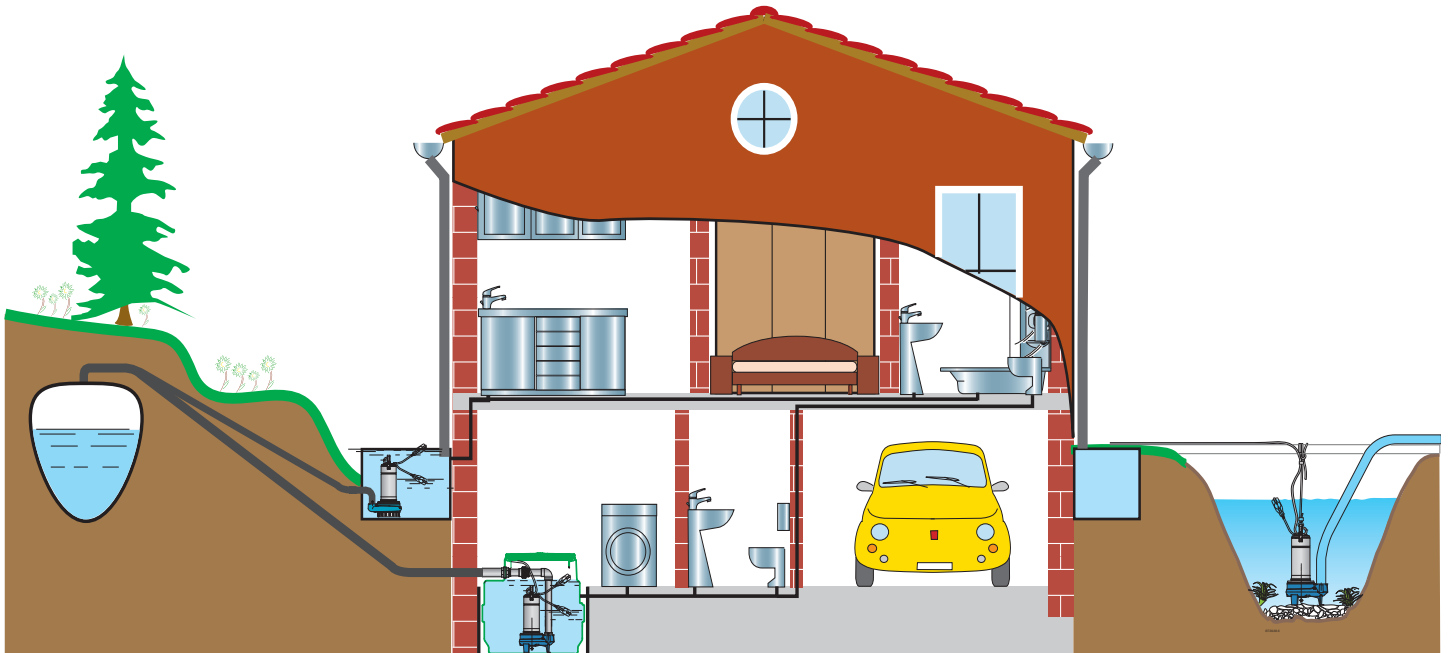
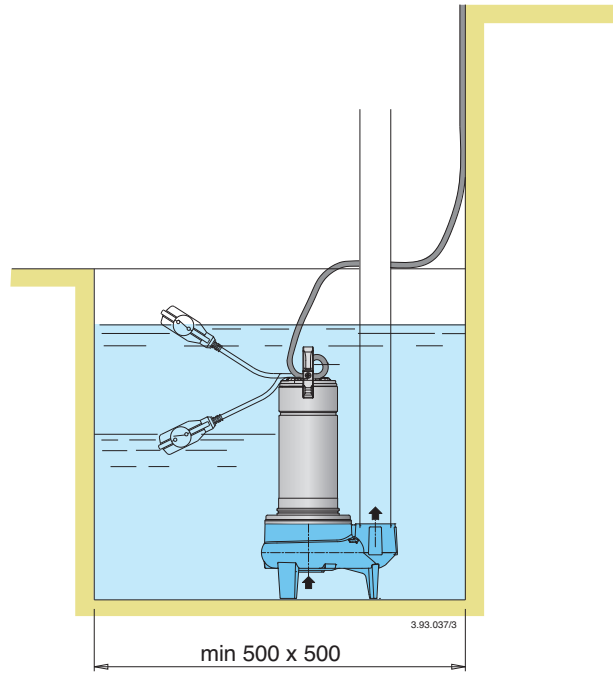
### Dimensions and weights



TYPE	fM	mm		kg <sup>(1)</sup>	
		h max	h min	GQN	GQNM
<b>GQN(M) 50-13</b>	493	568	308	16	18
<b>GQN(M) 50-15</b>	513	588	328	19	20,5
<b>GQN 50-17</b>	513	588	328	20,5	-
<b>GQNM 50-17</b>	543	618	358	-	22

1) With cable length: 10 m

Installation examples



**Features**

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Cable length 10 m, pump single-phase with plug

Handle in polypropylene, with frame in stainless steel.

Easy inspection of the capacitor area.

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

Ring against accidental extraction of the cable.

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

Relief valve: the pump is fitted to a relief valve for air release around the impeller granting a proper pump priming also after long standstill periods.

Chamber with food/pharmaceutical machinery oil

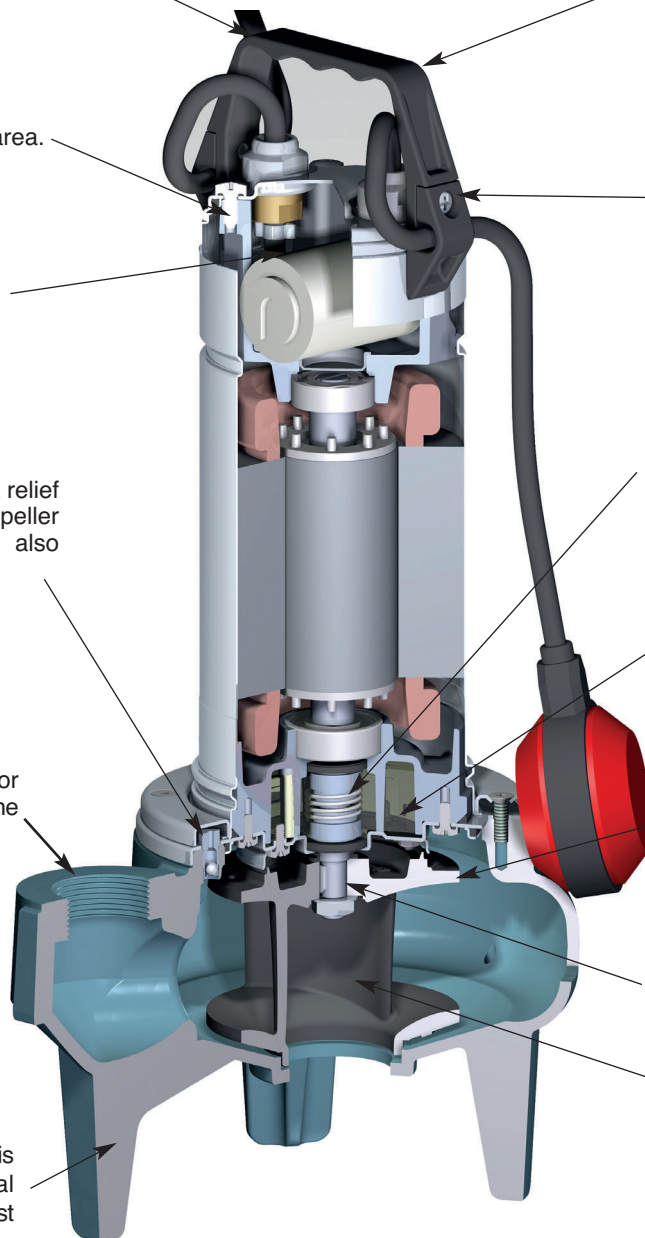
G 2 vertical, upward delivery port for installation in small pits, without the need for an elbow on the pump.

Impeller with epoxy cataphoresis treatment for a greater protection against the rust.

Pump casing with epoxy cataphoresis treatment joined to the external paint for a greater protection against the rust.

Shaft in chrome-nickel stainless steel.

Channels impeller (two-passage). Construction is particularly suitable for liquids containing solids up to 50 mm grain size.





### Construction

Submersible pumps with high power grinder, with horizontal flanged and threaded delivery port (DN 32 PN 6 - G 1 1/2). Double mechanical shaft seal with interposed oil chamber, to protect against dry-running.

### Applications

Suitable for pumping waste water containing long filamentous, paper and textile materials and organics. They are particularly suitable for use in domestic, residential and industrial installations. Solid passage Ø 6 mm

### Operating conditions

Liquid temperature up to 35° C.  
Maximum immersion depth: 5 m.  
Minimum immersion depth: 300 mm.  
Continuous duty (with submerged motor).

### Motor

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

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

**GQGM:** single-phase 230 V ± 10%,  
with float switch, thermal protection and control box with starting capacitors.

Cable: H07RN8-F, 4G1 mm<sup>2</sup> (4G1,5 mm<sup>2</sup> for GMGM 6-25), length 10 m.

Insulation class F.

Protection IP X8 (for continuous immersion)

Triple impregnation humidity-proof dry winding.

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

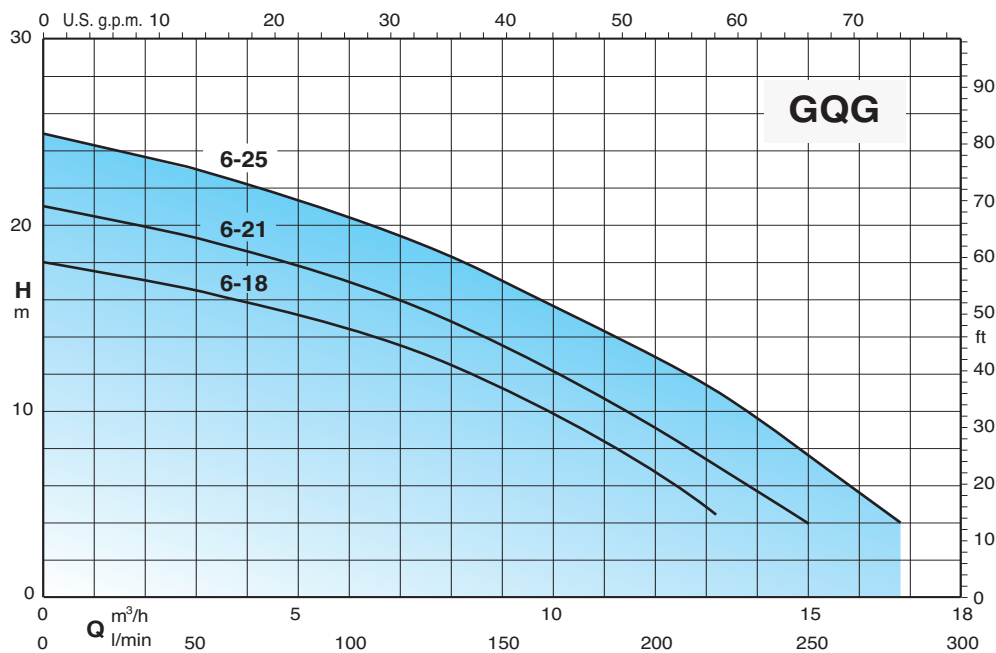
### Materials

Component	Material
Pump casing Impeller Casing cover	Cast iron GJL 200 EN 1561
Rotating cutting blade Fixed cutting blade	Nickel-Molybdenum steel 1.4125 EN 10088 (AISI 440C)
Motor jacket Jacket cover	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)
Handle	Polypropylene (with frame in AISI 304)
Shaft	Chrome-nickel steel 1.4305 EN 10088 (AISI 303)
Mechanical seal: upper lower	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 20 m.
- Vertical magnetic float switch.
- Three-phase pumps with incorporated float switch.

### Characteristic curves n ≈ 2900 rpm



### Performance $n \approx 2900$ rpm

3~	230V 400V		1~	230V Capacitor			P <sub>1</sub>	P <sub>2</sub>		Q	H m							
	A	A		A	$\mu$ f	Vc		kW	kW		HP	0	3	6	9	12	13,2	15
<b>GQG 6-18</b>	4	2,3	<b>GQGM 6-18</b>	7	30+80	450	1,3	0,9	1,2	$\frac{m^3}{h}$	18	16,5	14,5	11,2	6,5	4,5		
<b>GQG 6-21</b>	4,8	2,8	<b>GQGM 6-21</b>	7,5	30+80	450	1,5	1,1	1,5	$\frac{l}{min}$	21	19,2	17	13,5	9	7	4	
<b>GQG 6-25</b>	6,6	3,8	<b>GQGM 6-25</b>	9,5	30+80	450	2	1,5	2		25	23	20,5	17	13	11	7,8	4

P1 Max. power input.

P2 Rated motor power output.

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

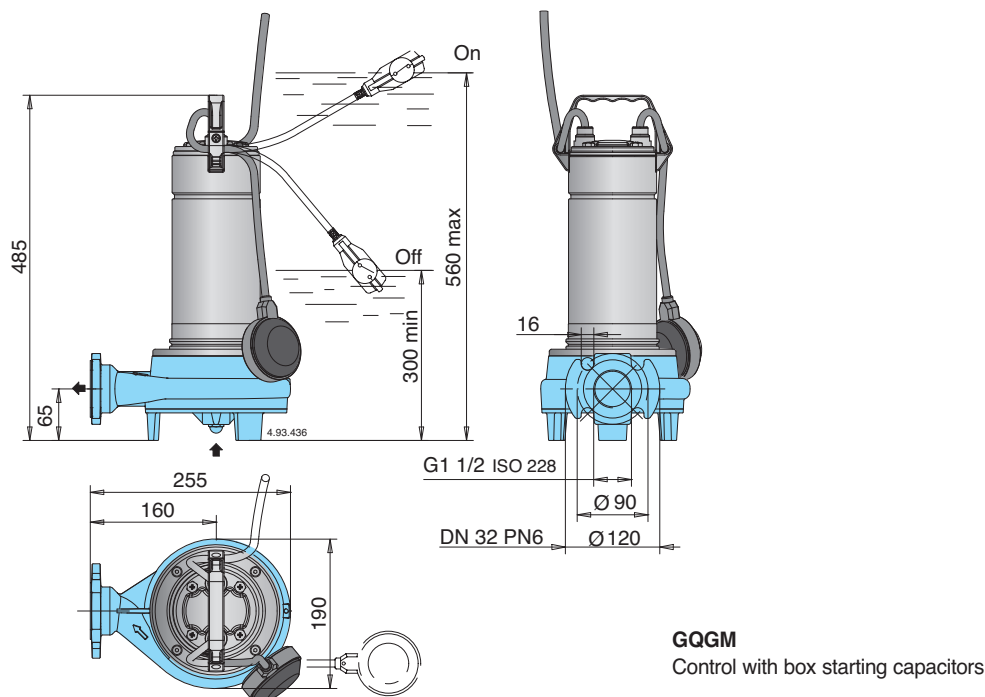
Kinematic viscosity  $\nu = \max 20$  mm<sup>2</sup>/sec.

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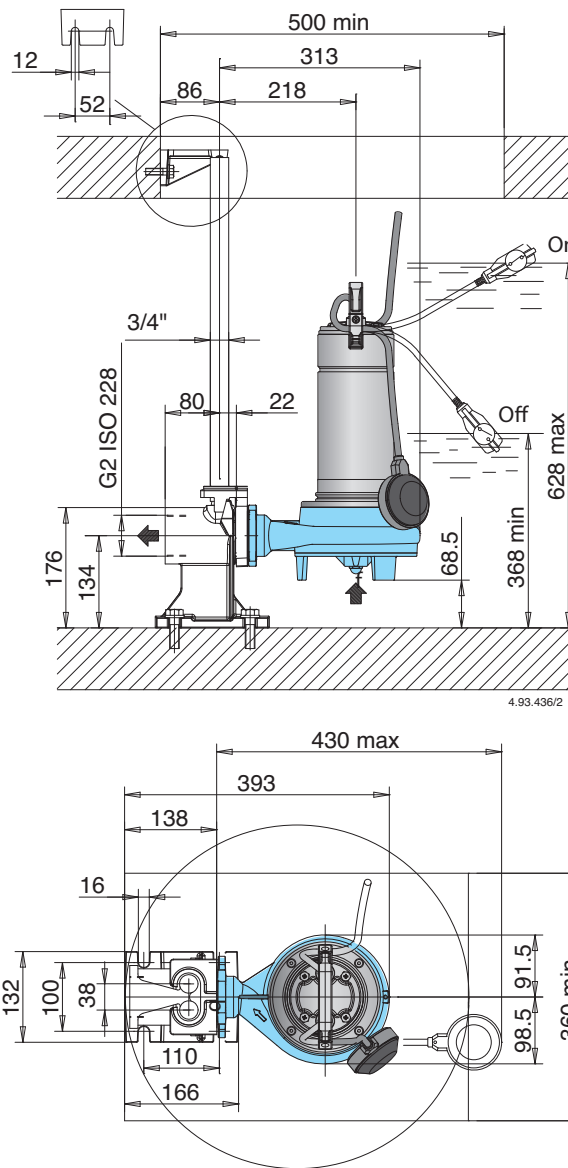
E-mail: info@famcocorp.com

### Dimensions and weights



TYPE	kg	
	GQG	GQGM
<b>GQG(M) 6-18</b>	18,5	19,5
<b>GQG(M) 6-21</b>	18,7	19,7
<b>GQG(M) 6-25</b>	19	20

Installation example





**Features**

PATENTED

Cable length 10 m.

Handle in polypropylene, with frame in stainless steel.

Ring against accidental extraction of the cable.

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

Relief valve: the pump is fitted to a relief valve for air release around the impeller granting a proper pump priming also after long standstill periods.

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

Maximum flexibility of connection:  
- Flange DN 32 PN 6 EN 1092-2  
- G 1 1/2 ISO 228  
- for duck foot coupling SA-G2

Chamber with food/pharmaceutical machinery oil.

Impeller with epoxy cataphoresis treatment for a greater protection against the rust.

Shaft in chrome-nickel stainless steel.

Pump casing and casing cover with epoxy cataphoresis treatment joined to the external paint for a greater protection against the rust.

Cutting system made of HRC 60 hardness AISI 440C stainless steel.

