



**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.

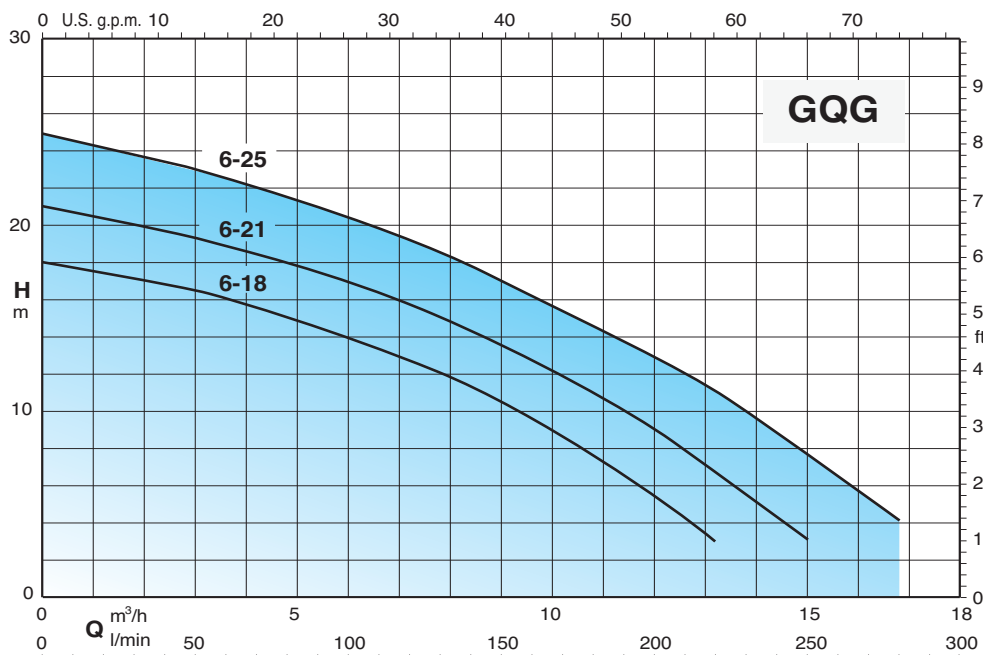
**Materials**

Component	Material
Pump casing Impeller Casing cover	Cast iron GJL 200 EN 1561
Coltello rotante Coltello fisso	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~		1~	230V			P <sub>1</sub>	P <sub>2</sub>		Q	H <sub>m</sub>								
	230V	400V		A	μf	V <sub>c</sub>		kW	kW		HP	m <sup>3</sup> /h	l/min	0	3	6	9	12	13,2
<b>GQG 6-18</b>	4	2,3	<b>GQGM 6-18</b>	7	30+80	450	1,3	0,9	1,2	H <sub>m</sub>	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		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>.

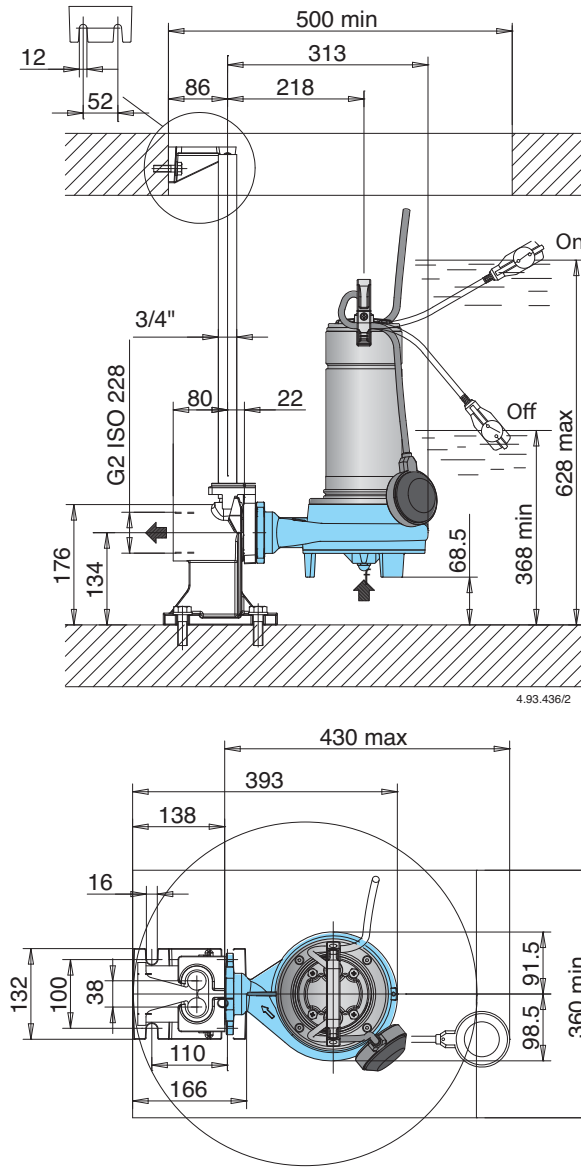
Kinematic viscosity  $\nu = \max 20$  mm<sup>2</sup>/sec.

### Dimensions and weights

**GQGM**  
Control with box starting capacitors

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

