



### 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  $\varnothing$  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 ( $n \approx 2900$  rpm).

**GQG:** three-phase 230 V  $\pm$  10%;  
 three-phase 400 V  $\pm$  10%;.

**GQGM:** single-phase 230 V  $\pm$  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.

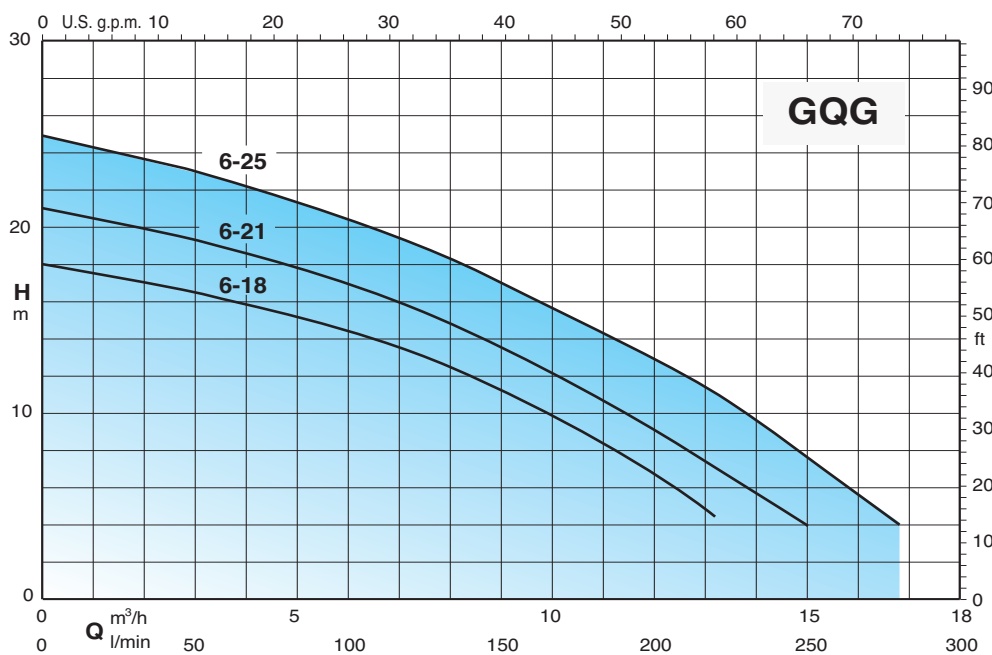
### Materials

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 $n \approx 2900$ rpm



### Performance $n \approx 2900$ rpm

3~	230V 400V		1~	230V Capacitor			P <sub>1</sub>	P <sub>2</sub>		Q								
	A	A		A	$\mu$ f	Vc		kW	kW		HP	m <sup>3</sup> /h	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	<b>H m</b>	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

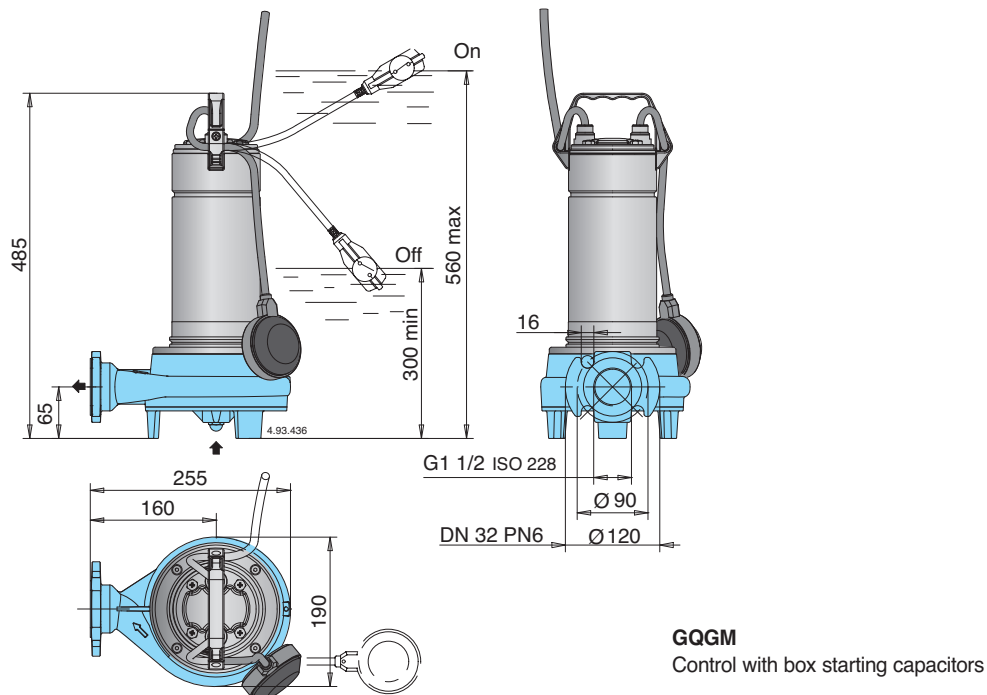
P1 Max. power input.

P2 Rated motor power output.

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

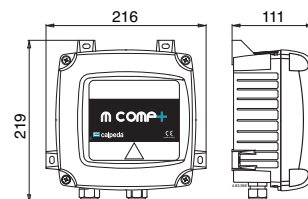
Kinematic viscosity  $\nu = \max 20$  mm<sup>2</sup>/sec.

### Dimensions and weights

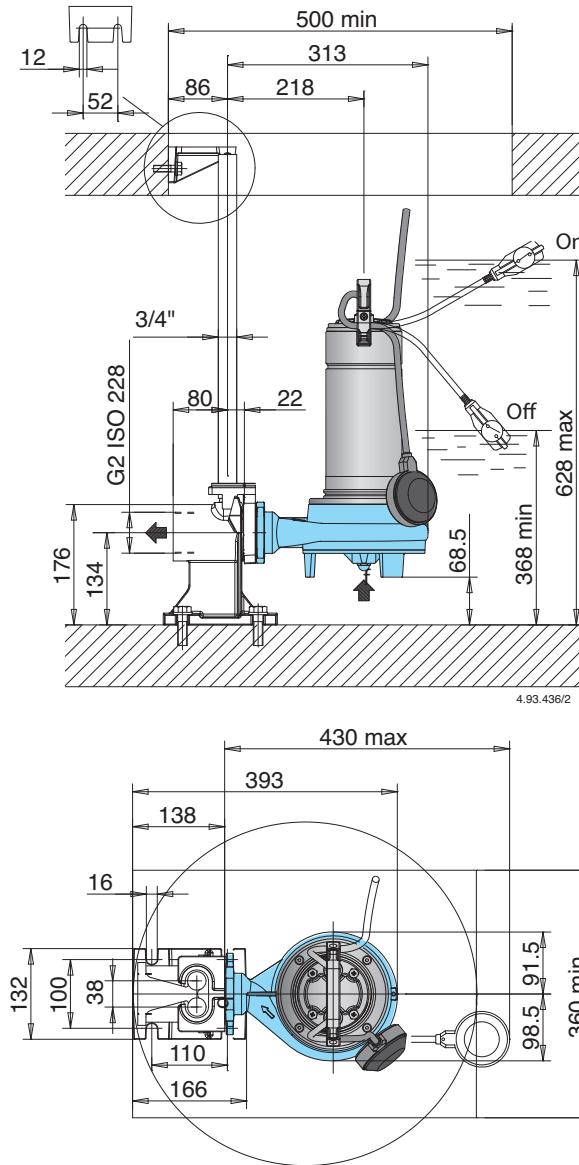


TYPE	kg	
	GQG	GQGM
<b>GQG(M) 6-18</b>	18,5	19,5
<b>GQG(M) 6-21</b>	18,7	19,7
<b>GQG(M) 6-25</b>	19	20

**GQGM**  
Control with box starting capacitors



### Installation example



### Features

