



### Construction

Horizontal multi-stage close coupled pump.  
Single-piece barrel casing in cast iron, with front suction port above pumps axis and radial delivery at top.  
Stages in Noryl.

### Applications

For water supply.  
For domestic use, for garden use and irrigation.

### Operating conditions

Liquid temperature: 0 °C to +50 °C.  
Ambient temperature up to +40 °C.  
Maximum permissible pressure in the pump casing: 8 bar.  
Continuous duty.

### Motor

2-pole induction motor, 50 Hz ( $n \approx 2800$  rpm).

**MGP:** three-phase 230/400 V  $\pm 10\%$ .

**MGPM:** single-phase 230 V  $\pm 10\%$ , with thermal protector.  
Capacitor inside the terminal box.

Insulation class F.

Protection IP 54.

Motor suitable for operation with frequency converter from 1,1 kW.

**IE2 efficiency class for single-phase motors.**

**IE3 efficiency class for three-phase motors (IE2 up to 0,65 kW).**

Constructed in accordance with: EN 60034-1; EN 60034-30-1.  
EN 60335-1, EN 60335-2-41.

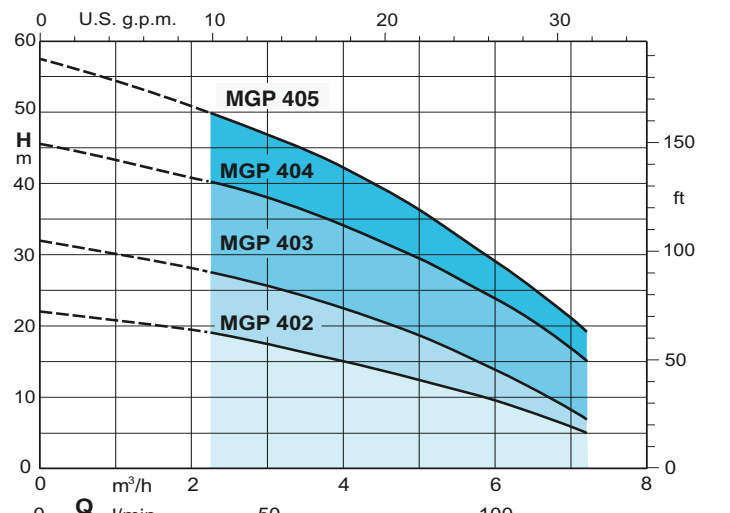
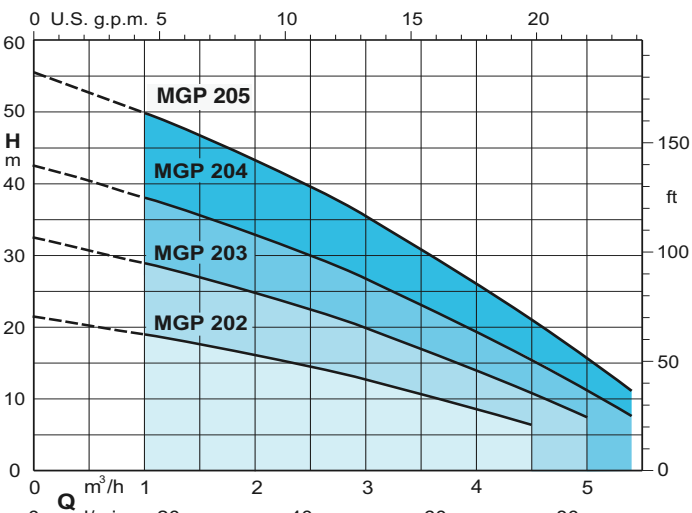
### Materials

Component	Material
Pump casing	Cast iron GJL 200 EN 1561
Casing cover	Cr-Ni steel 1.4301 EN 10088 (AISI 304)
Pump Shaft	Chrome steel 1.4104 EN 10088 (AISI 430)
Stage casing	PPO-GF20 (Noryl)
Impeller	PPO-GF20 (Noryl)
Mechanical seal	Carbon - Ceramic - NBR

### Special features on request

- Other voltages.
- Frequency 60 Hz (as per 60 Hz data sheet).
- Motor suitable for operation with frequency converter up to 0,75 kW.

### Characteristic curves $n \approx 2800$ rpm



### Performance $n \approx 2800$ rpm

3 ~	230 V 400 V		1 ~	230 V		P <sub>1</sub>		P <sub>2</sub>		Q	H										
	A	A		A	kW	kW	HP	m <sup>3</sup> /h	l/min		0	1	1,5	2	2,5	3	3,5	4	4,5	5	5,4
<b>MGP 202</b>	1,7	1	<b>MGPM 202</b>	2,3	0,45	0,25	0,34	H	m	21,5	19	17,5	16	14,5	12,5	10,5	8,5	6,5			
<b>MGP 203</b>	2,4	1,4	<b>MGPM 203</b>	3	0,63	0,37	0,5			32,5	29	27	25	22,5	20	17	14	11	7,5		
<b>MGP 204</b>	2,8	1,6	<b>MGPM 204</b>	3,3	0,75	0,45	0,6			43	38	35,5	32,7	29,7	26,5	23	19,2	15,2	11	7,5	
<b>MGP 205/A</b>	3,5	2	<b>MGPM 205</b>	5,4	1	0,75	1			56	50	46,5	43,5	40	35,5	31	26,5	21	16	11	

3 ~	230 V 400 V		1 ~	230 V		P <sub>1</sub>		P <sub>2</sub>		Q	H							
	A	A		A	kW	kW	HP	m <sup>3</sup> /h	l/min		0	2,25	3	3,5	4	4,5	5	6
<b>MGP 402</b>	2,4	1,4	<b>MGPM 402</b>	3	0,61	0,37	0,5	H	m	22	19	17,5	16,5	15	14	12,5	9,5	5
<b>MGP 403/A</b>	3	1,73	<b>MGPM 403/A</b>	4,5	0,85	0,55	0,75			32	27,5	25,5	23,7	22	20	18	13,3	7
<b>MGP 404/A</b>	3,5	2	<b>MGPM 404</b>	5,4	1,2	0,75	1			46	40	38	36,5	34	32	29,5	24	15
<b>MGP 405</b>	4,5	2,6	<b>MGPM 405</b>	7,4	1,5	1,1	1,5			56	50	47	45	42,5	39,5	36	29	19

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

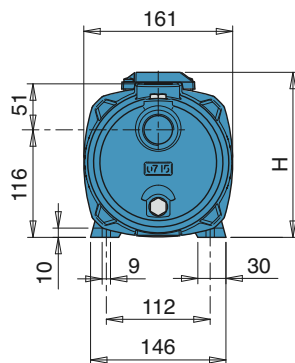
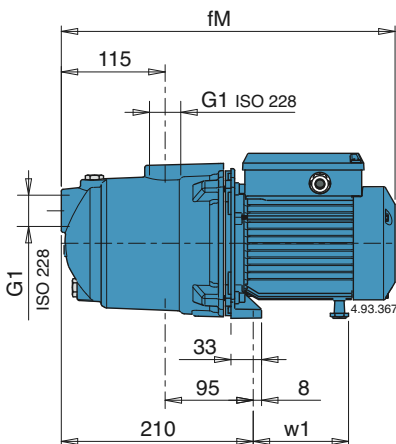
P<sub>2</sub> Rated motor power output.

Test results with clean cold water, without gas content.  
+ 0,5 m security margin on NPSH-value is necessary.

Tolerances according to UNI EN ISO 9906:2012

For capacities over 4 m<sup>3</sup>/h use a suction pipe G 1 1/4 (DN 32).

### Dimensions and weights



TYPE	mm			Net weight	
	fM	H	w1	MGP	MGPM
<b>MGP 202 - MGPM 202</b>	362	176	102	8,9	9
<b>MGP 203 - MGPM 203</b>	362	176	102	9,3	9,4
<b>MGP 204 - MGPM 204</b>	362	176	102	10,3	10,4
<b>MGP 205/A - MGPM 205</b>	391	192	112	13,3	13,5
<b>MGP 402 - MGPM 402</b>	362	176	102	9,5	9,6
<b>MGP 403/A - MGPM 403/A</b>	391	192	112	11,6	11,8
<b>MGP 404/A - MGPM 404</b>	391	192	112	13,3	13,5
<b>MGP 405 - MGPM 405</b>	421	192	112	16,2	16,5

### Features

#### Extra safety

against running dry, with the suction port above pump axis.

#### Robust

Single-piece barrel casing.

#### Compact

Single-piece lantern bracket and base.

#### Low noise

with the water-filled shroud around the stages.

