



### 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.  
**Classification scheme IE3 for three-phase motors from 0,75 kW.**  
Constructed in accordance with: EN 60034-1; EN 60034-30-1. EN 60335-1, EN 60335-2-41.

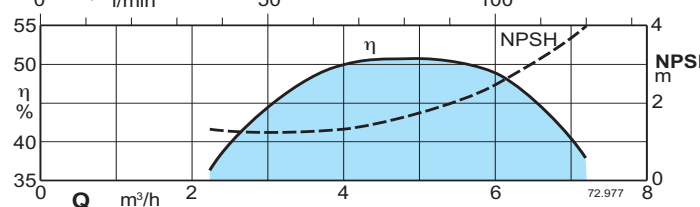
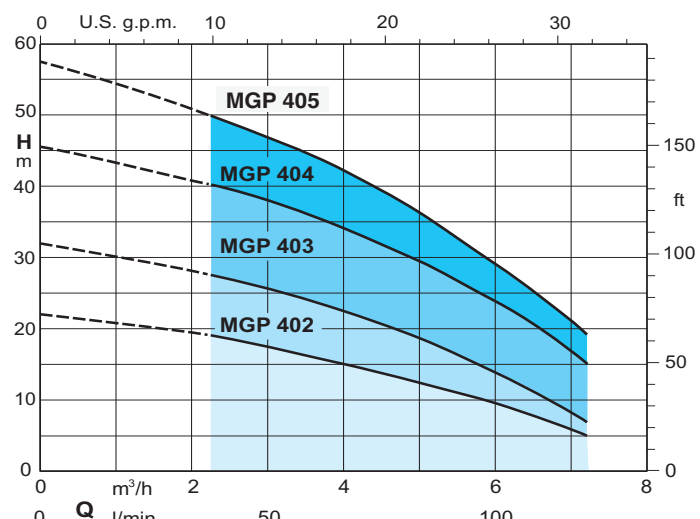
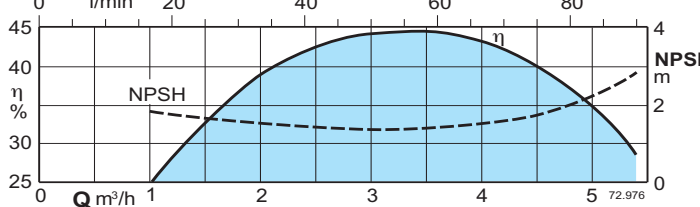
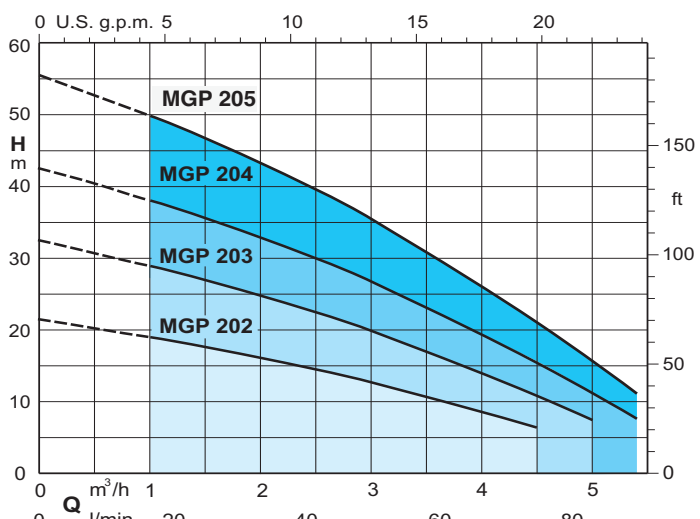
### Materials

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	m <sup>3</sup> /h											
	A	A		A	kW	kW	HP		0	1	1,5	2	2,5	3	3,5	4	4,5	5	5,4	
MGP 202	1,7	1	MGPM 202	2,3	0,45	0,33	0,45	H	0	16,6	25	33,3	41,6	50	58,3	66,6	75	83,3	90	
MGP 203	2,4	1,4	MGPM 203	3	0,63	0,45	0,6		21,5	19	17,5	16	14,5	12,5	10,5	8,5	6,5			
MGP 204	2,8	1,6	MGPM 204	3,3	0,75	0,55	0,75		32,5	29	27	25	22,5	20	17	14	11	7,5		
MGP 205/A	3,5	2	MGPM 205	5,4	1	0,75	1		43	38	35,5	32,7	29,7	26,5	23	19,2	15,2	11	7,5	
									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	m <sup>3</sup> /h									
	A	A		A	kW	kW	HP		0	2,25	3	3,5	4	4,5	5	6	7,2	
MGP 402	2,4	1,4	MGPM 402	3	0,61	0,45	0,6	H	0	37,5	50	58,3	66,6	75	83,3	100	120	
MGP 403	3	1,73	MGPM 403	3,5	0,85	0,55	0,75		22	19	17,5	16,5	15	14	12,5	9,5	5	
MGP 404/A	3,5	2	MGPM 404	5,4	1,2	0,75	1		32	27,5	25,5	23,7	22	20	18	13,3	7	
MGP 405	4,5	2,6	MGPM 405	7	1,5	1,1	1,5		46	40	38	36,5	34	32	29,5	24	15	
									56	50	47	45	42,5	39,5	36	29	19	

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

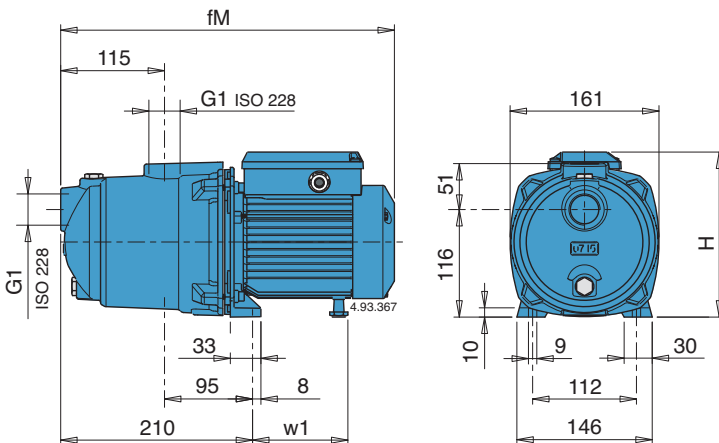
P<sub>2</sub> Rated motor power output.

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 kg	
	fM	H	w1	MGP	MGPM
MGP 202 - MGPM 202	362	176	102	8,9	9
MGP 203 - MGPM 203	362	176	102	9,3	9,4
MGP 204 - MGPM 204	362	176	102	10,3	10,4
MGP 205/A - MGPM 205	391	192	112	13,3	13,5
MGP 402 - MGPM 402	362	176	102	9,5	9,6
MGP 403 - MGPM 403	362	176	102	10,3	10,4
MGP 404/A - MGPM 404	391	192	112	13,3	13,5
MGP 405 - MGPM 405	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.

