

MGP

Horizontal Multi-Stage Close Coupled Pumps



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.

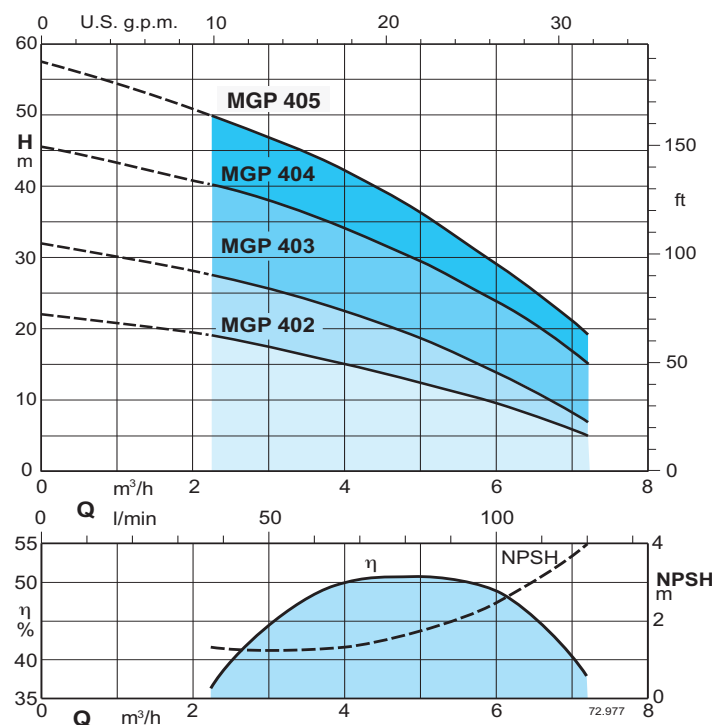
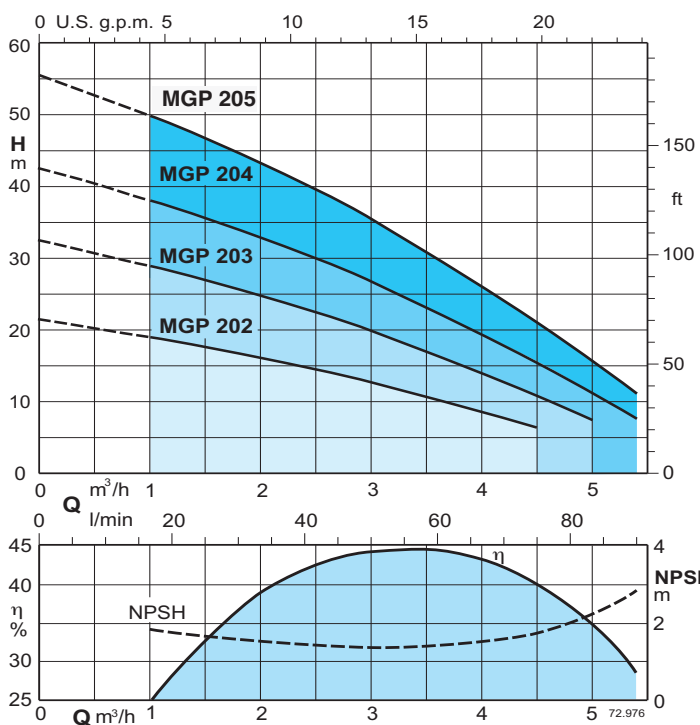
Materials

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 ₁		P ₂		Q	m ³ /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 ₁		P ₂		Q	m ³ /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

P₁ Max. power input.

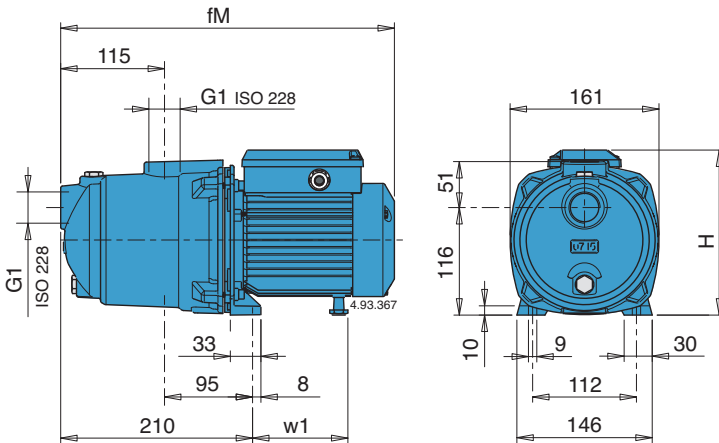
P₂ Rated motor power output.

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 m³/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.

