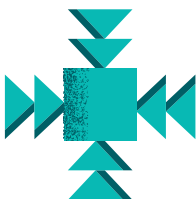




EASY TO INSTALL
Plug And play solution



ECONOMIC SAVING
High efficiency single-phase motor



EASY TO USE
Equipped with programmable logic, the product allows programming thanks to the simple and intuitive display.

Self-priming swimming pool pumps boosting system with integrated control

Construction

Self-priming swimming pool pumps with built-in strainer and motor insulated from pumped water.
 The pump is made with high quality plastic materials, corrosion and sand erosion resistant.
 With stainless steel diffuser.
 Base-plate kit.

Applications

For water circulation in swimming pool filtration systems.
 For clean or slightly dirty water with solids in suspension.

Operating conditions

Liquid temperature from 0 °C to +40 °C.
 Ambient temperature up to 40° C.
 Maximum permissible pressure in the pump casing 2,5 bar.
 Continuous duty.

Motor

2-pole induction motor.
 Nominal speed 3970 rpm
 - Motor: variable speed
 Frequency: 50-60 Hz
 Single-phase 220-240V~50Hz/220V~60Hz, with thermal protector.
 Cable: H07RN8-F, 3G1,5 mm², length 1,5 m, with plug
 CEI-UNEL 47166.
 Insulation class F.
 Protection IP X4.
 Constructed in accordance with EN 60034-1, EN 60335-1, EN 60335-2-41.

Features

- integrated frequency converter
- high efficiency asynchronous motor
- motor power control
- voltage and current control
- monitoring of maximum starting current

Protections

- dry-run protection
- detects the presence of air in the pump casing
- overload control and overheating motor control
- pump blockage
- power supply control
- starts per hour control
- detects small leakages in the system

Designation

Example: I-MPCM 31
 I = Version with integrated frequency converter
 MPC = Series
 M = Singlephase version (no indication: threephase)
 31 = Pump type

Materials

Components	Materials
Pump casing	Noryl PPO-GF30
Diffuser cover	Noryl PPO-GF30
Impeller	Noryl PPO-GF30
Strainer cover	Lexan
Strainer basket	Polypropylene
Diffuser funnel and wear-ring	Steel 1.4401 EN 10088 (AISI 316)
Mechanical seal	Carbon - Ceramic - FPM

Performance

Single-phase

Model	230V	P1	Q = Flow										
			m ³ /h	0	2	4	6	8	10	12	14	16	
	A	kW	l/min		33,3	66,6	100	133	167	200	233	267	
				H (m) = Total head									
I-MPCM 31	4,6	1,05		15,6	15,6	15,2	14,4	13,4	11,9	10,2	8,1	5,6	

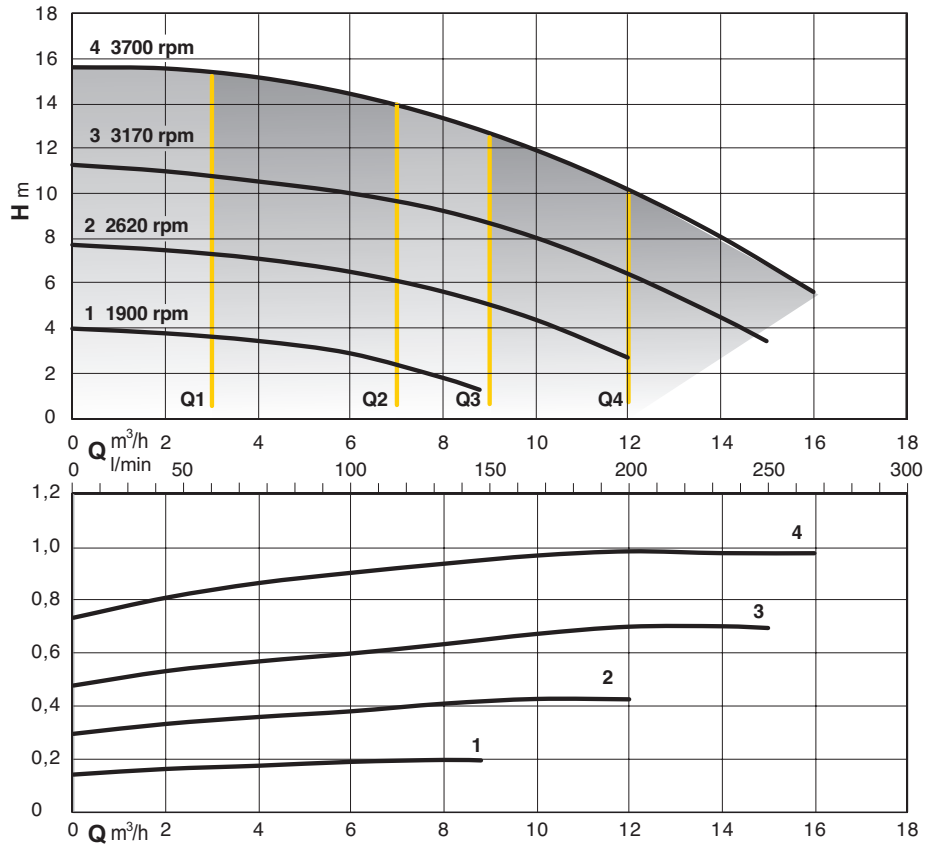
P1: Maximum power input.

P2: Rated motor power output.

H: Total head in m.

Tolerances according to UNI EN ISO 9906:2012

Characteristic curves



Constant flow mode

Q1 - Q2 - Q3 - Q4

In this mode, the system keeps the preset flow rate constant as the pressure required by the system varies.

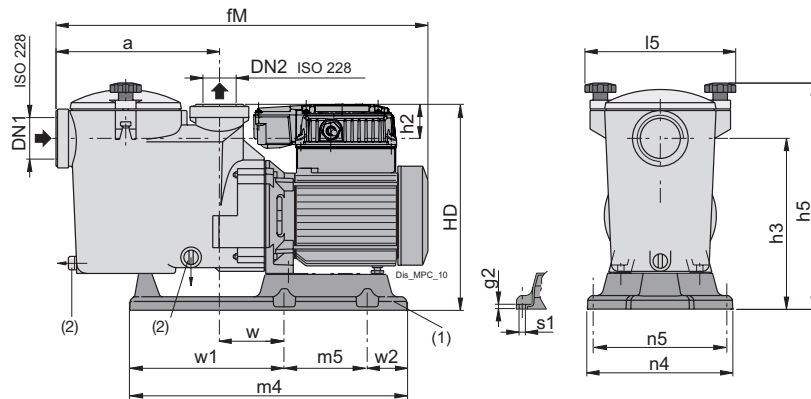


Programmable Speed Mode

1 - 2 - 3 - 4

In this mode, by changing the working frequency, it is possible to choose one of the 4 utilization curves included within the working range.

Dimensions and weights



TYPE			mm																	Kg Weight
	DN1	DN2	a	fM	g2	h2	h3	h5	HD	l5	m4	m5	n4	n5	s1	w	w1	w2		
I-MPCM 31	G2	G1 1/2	235	546	7	50	243	323	293	215	410	123	215	197	9	100	128.5	158.5	12.7	

Control Panel



- They allow to visualize:
- Initial screen (rUn, OFF, StB, Err)
 - Motor Operating Frequency
 - Supply current input
 - Supply electrical power input
 - Supply voltage

Features

- Strong transparent Lexan strainer cover
- Strong Noryl pump casing
- Large capacity strainer basket
- Stainless steel AISI 316 wear-ring diffuser-funnel, for extra reliability
- Diffuser with peripheral-longitudinal flow, for a quicker self-priming

