E-NGX

Pressurized system with integrated control

e-idos® products

Construction

Easy to install, compact and plug and play pressurized system with self-priming pumps and integrated pressure transducer for automatic control of starting/stopping of the pump when utilization points are opened/closed with a integrated non-return valve into the pump suction.

Applications

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

Features

- high efficiency asynchronous motor
- capacitor less stressed in voltage
- uniform and lower motor temperature
- motor power control
- programmable re-start pressure
- programmable stop pressure
- no hydraulic losses due to the measuring devices
- voltage and current control
- monitoring of maximum starting current

EASY TO INSTALL
Plug And Play solution

ECONOMIC SAVING
High efficiency asynchronous motor
24 % less energy consumption compared to a standard pump

EASY TO USE
Equipped with a programmable software and, thanks to the analogic pressure sensor, the product allows to set the restart pressure. An ideal solution which allows to reduce or remove the need of a expansion tank

Protections

- dry-run protection
- overload control and overheating motor control
- pump blockage
- power supply control
- starts per hour control

Operating conditions

Liquid temperature: 0 °C to +35 °C.
Ambient temperature up to +40 °C.
Maximum permissible pressure in the pump casing: 8 bar.
Continuous duty.

Materials

Component	Material
Pump casing	Cr-Ni steel 1.4301 EN 10088 (AISI 304)
Casing cover	Cr-Ni steel 1.4301 EN 10088 (AISI 304)
Pump Shaft	Chrome steel 1.4104 EN 10088 (AISI 430)
Plug	Cr-Ni steel 1.4305 EN 10088 (AISI 303)
Impeller	PPO-GF20 (Noryl)
Diffuser	PPO-GF20 (Noryl)
Ejector	PPO-GF20 (Noryl)
Mechanical seal	Carbon - Ceramic - NBR

Motor

2-pole induction motor, 50 Hz (n ≈ 2800 rpm).
Single-phase 230 V ± 10%, with thermal protector.
Capacitor inside the terminal box.
Cable: H07RN-F, 3G1,5 mm², length 1,5 m, with plug CEI-UNEL 47166.
Insulation class F.
Protection IP X4.
IE2 efficiency class for single-phase motors.
Constructed in accordance with: EN 60034-1; EN 60335-1, EN 60335-2-41.

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Performance n ≈ 2800 1/min

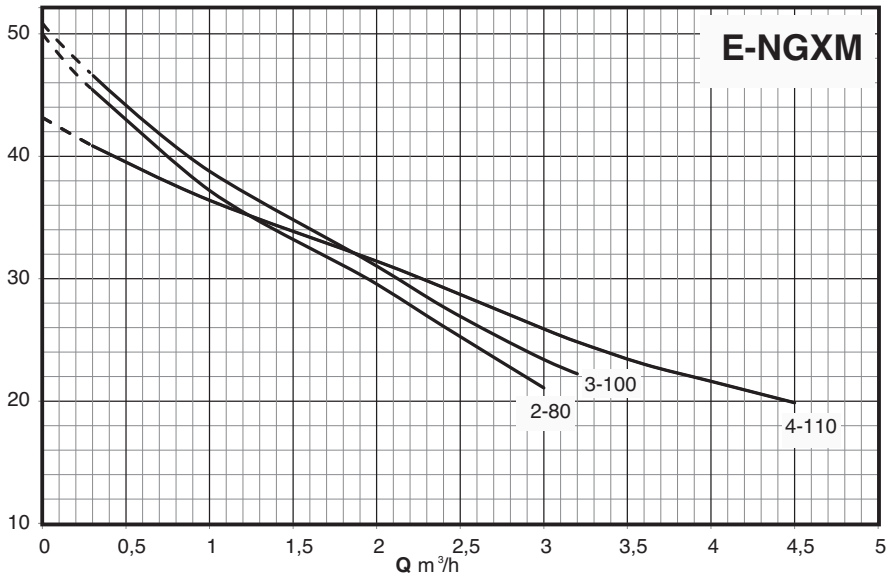
1 ~	230V	P_1	P_2		Q m^3/h	0	0,3	1	2	2,4	3	3,2	3,6	4	4,5	5	6
	A	kW	kW	HP	l/min	0	5	16,6	33,3	40	50	53,3	60	66,6	75	83,3	100
E-NGXM 2/80-PCD	3,8	0,8	0,55	0,75	H m	50,0	45,5	37,2	29,6	26,1	21,1						
E-NGXM 3/100-PCD	4,2	0,95	0,65	0,9		50,9	46	38,8	31	27,4	23,2	22,2					
E-NGXM 4/110-PCD	4,8	1	0,75	1		43,2	40,8	36,4	31,4	29,3	25,9	24,8	23	21,6	19,9		

P_1 Max. power input.
P_2 Rated motor power output.

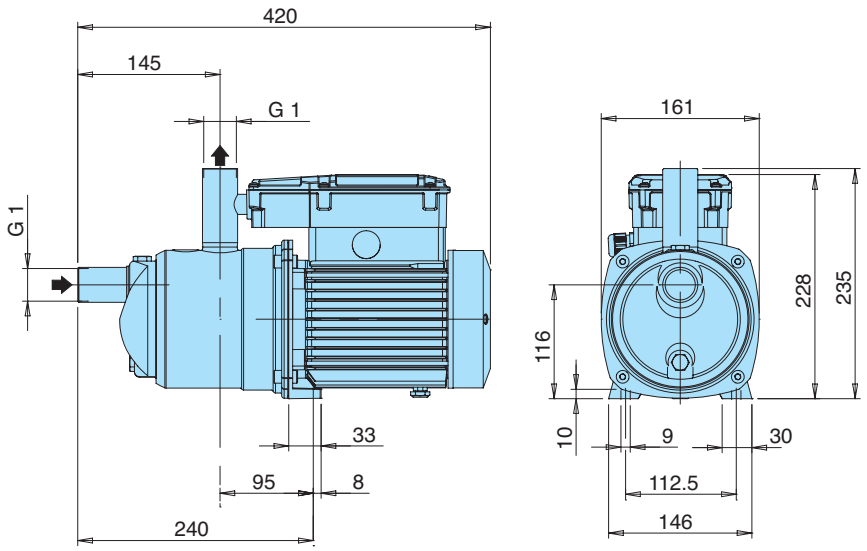
Test results with clean cold water, without gas content.
Tolerances according to UNI EN ISO 9906:2012

+ 0,5 m security margin on NPSH-value is necessary.

Characteristic curves n ≈ 2800 1/min



Dimensions and weights



TYPE	Net weight kg (1)
E-NGXM 2/80-PCD	10.1
E-NGXM 3/100-PCD	10.2
E-NGXM 4/100-PCD	11

(1) With cable length: 1,5 m