

E-MX, E-NG

Pressurized system with integrated control



e-idos[®]
products



Construction

Easy to install, compact and plug and play pressurized system with 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.

Pumps:

E-MXP: version with multistage pumps

E-NGX: version with self-priming pumps

E-MXA: version with self-priming multistage pumps

Applications

For water supply.

For domestic use, for garden use and irrigation.

Features

- high efficiency asynchronous single-phase 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

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 (0 °C to +50 °C for E-MXP).

Ambient temperature up to +40 °C.

Maximum permissible pressure in the pump casing: 8 bar.

Continuous duty.



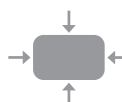
EASY TO INSTALL

Plug And Play solution



ECONOMIC SAVING

High efficiency asynchronous single-phase 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

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)
Suction casing (E-MXA)	PPO-GF20 (Noryl)
Stage casing (E-MXA,E-MXP)	PPO-GF20 (Noryl)
Impeller	PPO-GF20 (Noryl)
Diffuser (E-NGX)	PPO-GF20 (Noryl)
Ejector (E-NGX)	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.

Constructed in accordance with: EN 60034-1;

EN 60335-1, EN 60335-2-41.

E-MX, E-NG 1-pump pressurized system with integrated control



Performance $n \approx 2800$ 1/min

1 ~	230V P ₁		P ₂		Q $\frac{m^3/h}{l/min}$	0	1	1,5	2	2,25	3	3,5	4	4,5	5	5,4	6	6,5
	A	kW	kW	HP		0	16,6	25	33,3	37,5	50	58,3	66,6	75	83,3	90	100	108,3
E-MXPM 203-PCD	2,7	0,56	0,45	0,6	H m	33,7	30,5	28,6	26,4	25,2	21,1	17,9	14,4	10,8	7,0			
E-MXPM 204-PCD	3,8	0,70	0,55	0,75		45,1	40,9	38,5	35,8	34,4	29,4	25,6	21,3	16,7	11,9			
E-MXPM 205-PCD	4,8	0,89	0,75	1		55,6	50,4	47,3	43,9	42,1	36,1	31,4	26,3	20,9	15,3			
E-MXPM 403-PCD	3,8	0,75	0,55	0,75		34,0				30,1	27,9	26,2	24,2	22,0	19,6	17,5	13,8	10,2
E-MXPM 404-PCD	4,8	1,05	0,75	1		44,9				39,5	36,9	34,7	32,2	29,4	26,3	23,5	18,9	14,4

1 ~	230V P ₁		P ₂		Q $\frac{m^3/h}{l/min}$	0	0,3	1	2	2,4	3	3,2	3,6	4	4,5	5	6
	A	kW	kW	HP		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		

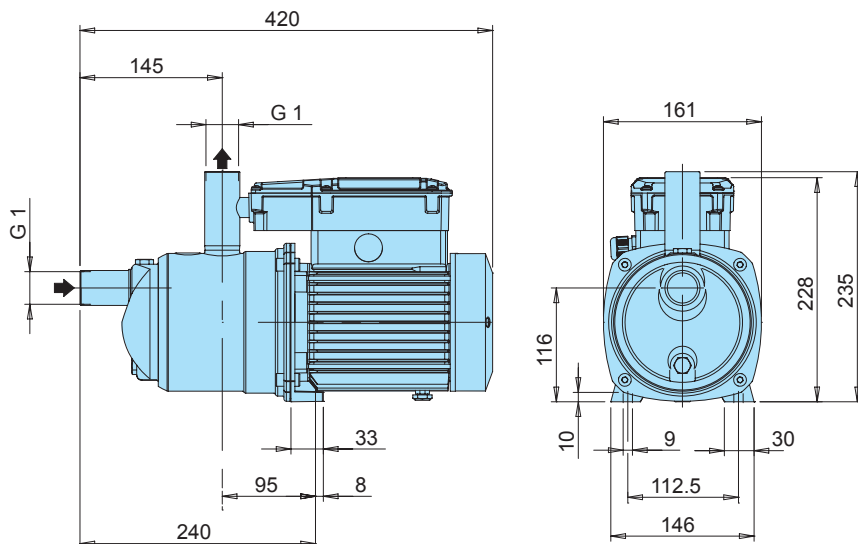
1 ~	230V P ₁		P ₂		Q $\frac{m^3/h}{l/min}$	0	1	1,5	2	2,25	3	3,5	4	4,5	5	5,4	6	6,5
	A	kW	kW	HP		0	16,6	25	33,3	37,5	50	58,3	66,6	75	83,3	90	100	108,3
E-MXAM 203-PCD	2,7	0,56	0,45	0,6	H m	33,6	30,1	28,0	25,6	24,3	20,5	17,6	14,2					
E-MXAM 204-PCD	3,8	0,70	0,55	0,75		44,7	40,0	37,2	34,2	32,6	27,4	23,6	19,3	14,5				
E-MXAM 403-PCD	3,8	0,75	0,55	0,75		33,8			30,1	29,4	27,1	25,3	23,4	21,2	18,9	16,8	13,8	
E-MXAM 404-PCD	4,8	1,05	0,75	1		44,5			39,4	38,6	35,8	33,5	30,9	28,1	25,1	22,5	18,3	14,4

P₁ Max. power input.
P₂ 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.

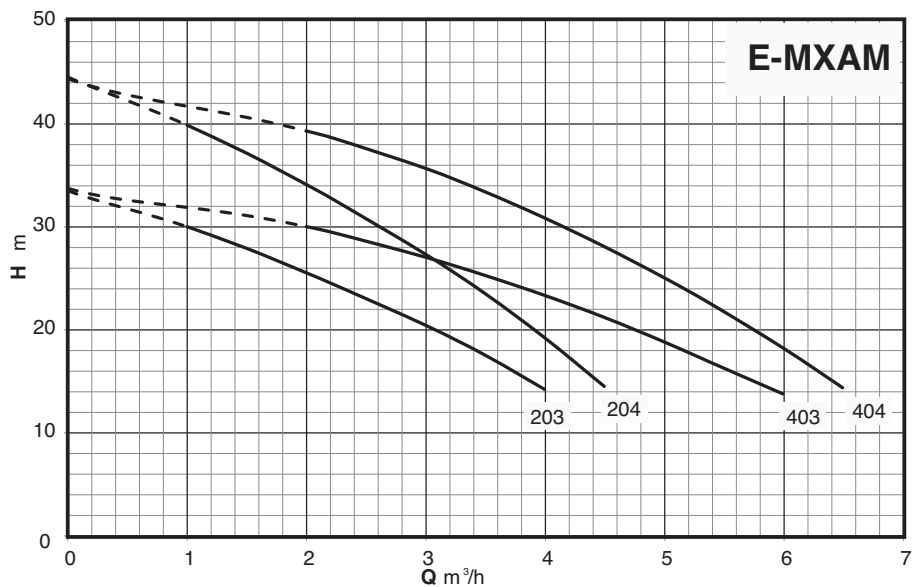
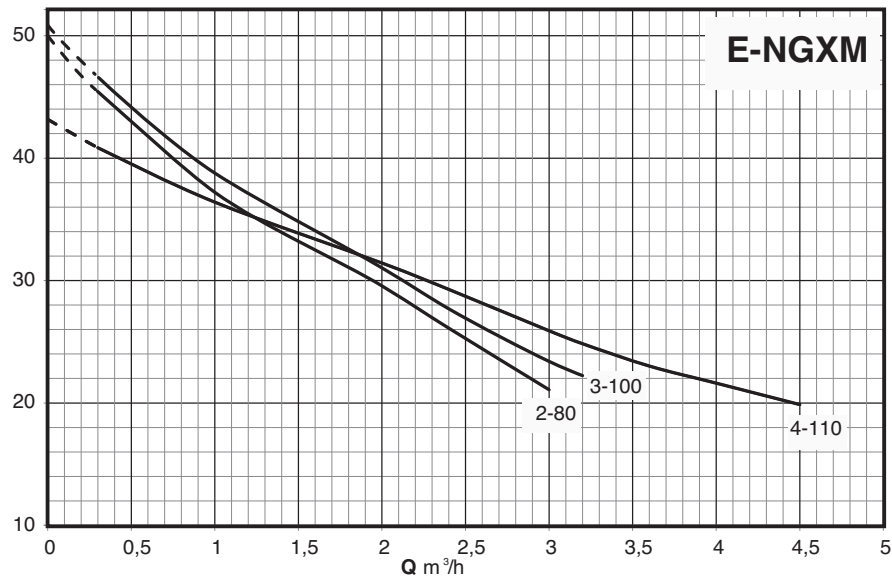
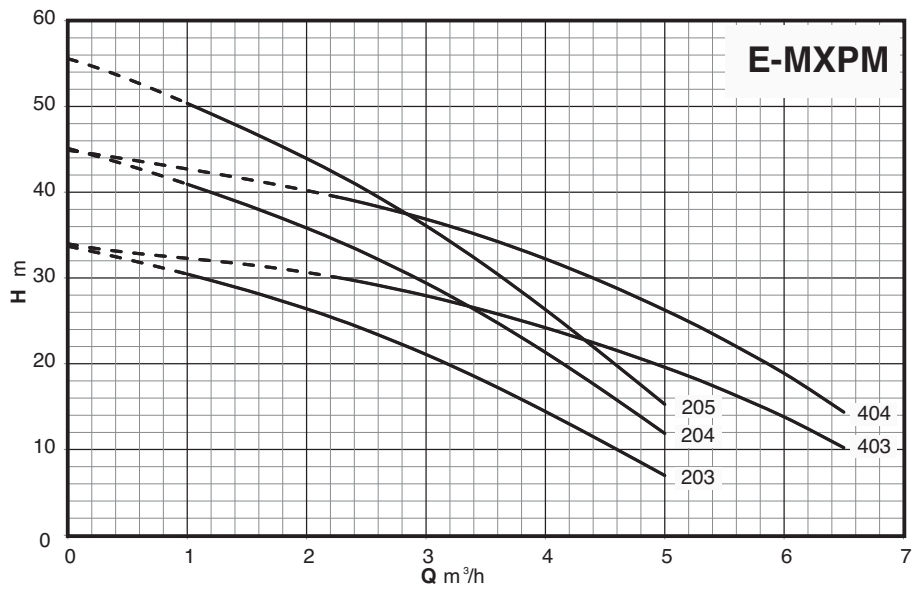
Dimensions and weights



TYPE	Net weight kg ⁽¹⁾
E-MXPM 203-PCD	9,5
E-MXPM 204-PCD	10,8
E-MXPM 205-PCD	11,7
E-MXPM 403-PCD	10,6
E-MXPM 404-PCD	11,5
E-MXAM 203-PCD	9,6
E-MXAM 204-PCD	10,9
E-MXAM 403-PCD	10,7
E-MXAM 404-PCD	11,5
E-NGXM 2/80-PCD	10,0
E-NGXM 3/100-PCD	10,0
E-NGXM 4/100-PCD	10,9

⁽¹⁾ With cable length: 1,5 m

Characteristic curves $n \approx 2800$ 1/min



Performance $n \approx 2800$ 1/min

TYPE	P ₁		P ₂		Q	H													
	kW	HP	kW	HP		m ³ /h	0	2	3	4	4,5	6	7	8	9	10	10,8	12	13
BSM2F 2E-MXPM 203-PCD	0,56x2	0,6x2	0,45x2	0,6x2	0	33,7	30,5	28,6	26,4	25,2	21,1	17,9	14,4	10,8	7,0				
BSM2F 2E-MXPM 204-PCD	0,70x2	0,75x2	0,55x2	0,75x2	2	45,1	40,9	38,5	35,8	34,4	29,4	25,6	21,3	16,7	11,9				
BSM2F 2E-MXPM 205-PCD	0,89x2	1x2	0,75x2	1x2	3	55,6	50,4	47,3	43,9	42,1	36,1	31,4	26,3	20,9	15,3				
BSM2F 2E-MXPM 403-PCD	0,75x2	0,75x2	0,55x2	0,75x2	4	34,0				30,1	27,9	26,2	24,2	22,0	19,6	17,5	13,8	10,2	
BSM2F 2E-MXPM 404-PCD	1,05x2	1x2	0,75x2	1x2	4,5	44,9				39,5	36,9	34,7	32,2	29,4	26,3	23,5	18,9	14,4	

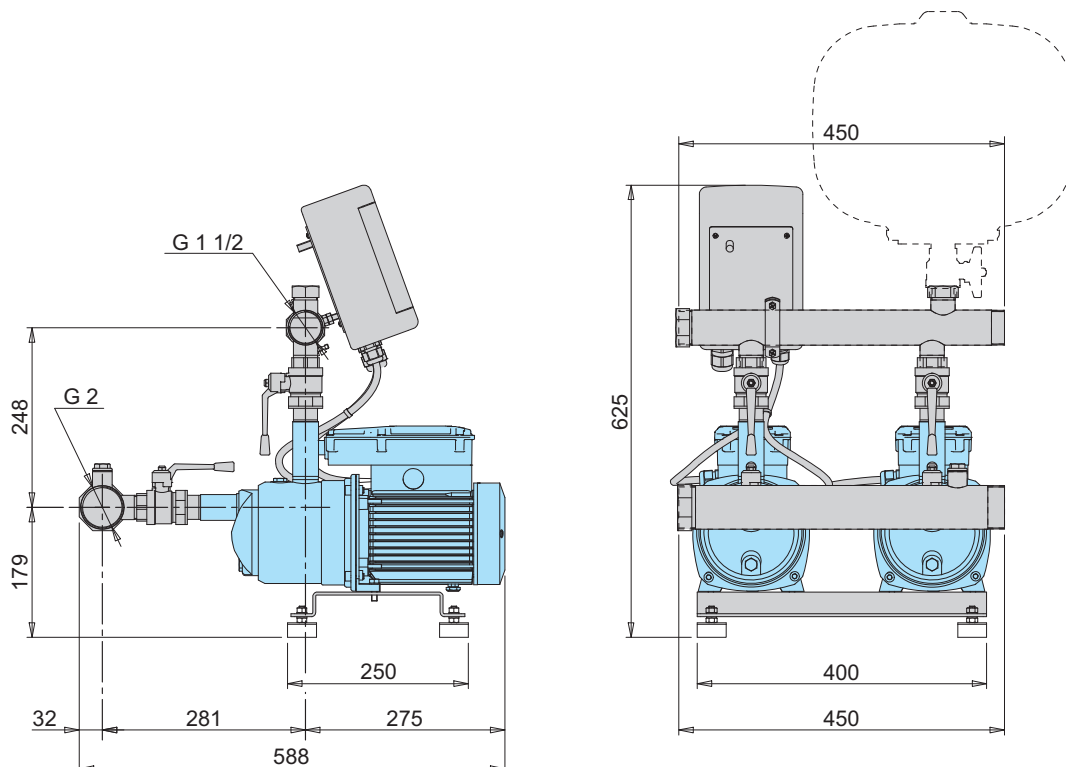
P₁ Max. power input.

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Characteristic curves $n \approx 2800$ 1/min

