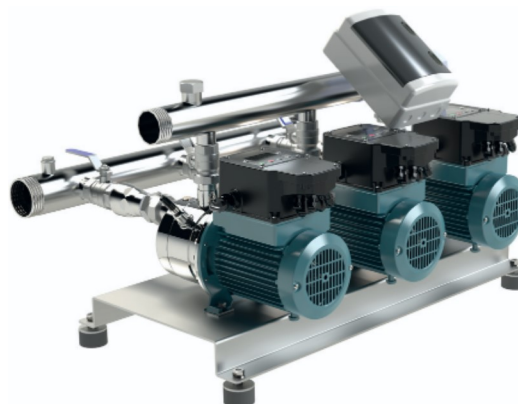
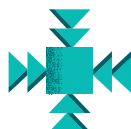




EASY TO INSTALL
Plug And play solution



ECONOMIC SAVING
IE5 ultra-high efficiency single-phase motor with 40% energy savings compared to an IE3 motor. IE5 motors operate at lower temperatures (up to 30°C less), which extends the lifespan of bearings and windings, while also reducing maintenance costs.



EASY TO USE
Equipped with a programmable software and, thanks to the analogic pressure sensor, the product allows to set the restart pressure.



CALPEDA FLOW
Bluetooth and WI-FI connection for pump control with CALPEDA FLOW app

Horizontal multi-stage close coupled
stainless steel pumps
with integrated control

Construction

Horizontal multi-stage stainless steel pumps with integrated VFD.

MXHEM: AISI 304 version

MXHELM: AISI 316 version

Complete with an integrated pressure transducer that maintains constant system pressure even during the opening and closing of user outlets.

2 and 3-pump booster sets

Suction and delivery manifolds in stainless steel AISI 304.

Connections for the installation of one G 1" connection pressure vessel

Applications

For water supply systems.

For clean liquids, without abrasives, which are non-aggressive for stainless steel (with suitable seal materials, on request).

Universal pump, for domestic use, for civil and industrial applications, for garden use and irrigation.

Features

- integrated frequency converter
- high efficiency asynchronous motor
- uniform and lower motor temperature
- motor power control
- programmable re-start pressure
- Operating pressure
- no hydraulic losses due to the measuring devices
- voltage and current control

Protections

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

Bluetooth and Wi-Fi connection

Monitor and understand your pump's performance in real-time.

Inputs and outputs (I/O)

1 Standard 4-20mA pressure transducer

2 Two programmable digital inputs:

- Float switch
- Second duty point
- Remote on/off

3 Two digital outputs:

- Alarm
- Pump status

4 RS485 multi-pump communication

Operating conditions

Liquid temperature from 0 °C to +40 °C.

Ambient temperature up to 40° C.

Maximum permissible pressure in the pump casing: 10 bar.

Continuous duty.

Motor

2-pole induction motor.

Rated speed 5400 rpm

Motor: variable speed

Frequency: 50-60 Hz

Single-phase 220-240V~50Hz/60Hz

H07RN8-F cable, 3G1.5 mm², length 1.5 m, with CEI-UNEL 47166 plug.

Insulation class F.

Protection IP X5.

- Constructed in accordance with EN 60034-1, EN 60335-1, EN 60335-2-41.

Special features on request

Special mechanical seal

Liquid temperature:

- from 0 °C up to +50°C for MXHEM 304 and 603

- from 0 °C up to +110°C for MXHEM 302, 303 and 602

Designation

Example: MXHE L M 302

MXH = Series

E = Electronic

L = Version in 1.4404 EN 10088 (AISI 316L)

M = Single-phase (no indication: three-phase)

3 = Rated flow in m³/h

02 = Number of impellers

Materials

Components	MXHEM	MXHELM
Pump casing	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)	Stainless Steel 1.4404 EN 10088 (AISI 316L)
Casing cover	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)	Stainless Steel 1.4404 EN 10088 (AISI 316L)
Stage casing	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)	Stainless Steel 1.4404 EN 10088 (AISI 316L)
Wear ring	PPS	PPS
Impeller	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)	Stainless Steel 1.4404 EN 10088 (AISI 316L)
Casing cover	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)	Stainless Steel 1.4404 EN 10088 (AISI 316L)
Spacer sleeve	Chrome-nickel steel 1.4301 EN 10088 (AISI 304)	Stainless Steel 1.4404 EN 10088 (AISI 316L)
Pump shaft	Chrome-nickel steel 1.4305 EN 10088 (AISI 303)	Stainless Steel 1.4404 EN 10088 (AISI 316L)
Plug	Chrome-nickel steel 1.4305 EN 10088 (AISI 303)	Stainless Steel 1.4404 EN 10088 (AISI 316L)
Mechanical seal with seat according to ISO 3069	Ceramic alumina/Carbon/EPDM	Ceramic alumina/Carbon/EPDM
O-ring	EPDM	EPDM

Operating modes



Constant pressure mode

The system keeps the pressure constant when the quantity of water requested by the user changes. The user can choose the operating pressure according to his needs.



Fixed speed mode

In this mode, the pump-inverter unit operates as a traditional constant-curve pump until the motor's power limit is reached; the operating curve can be set by the user within a range of curves.

Performance

Single-phase

				Q = Flow								
				m³/h	0	1	2	3	4	5	6	7
Model		230V	P1	l/min		16,6	33,3	50	66,6	83,3	100	117
		A	kW	H (m) = Total head								
MXHELM	MXHEM 302	3,5	0,8		48	44,6	38,2	32	26,5	21	15,6	10
MXHELM	MXHEM 303	5,9	1,35		74	72,1	66,5	57	47,5	39,5	31,5	23,1
MXHELM	MXHEM 304	7,7	1,8		96,5	93,5	87,5	76,5	64,5	54	44	32,6

				Q = Flow									
				m³/h	0	2	4	6	8	10	12	13	
Model	230V	P1	l/min	33,3		66,6	100	133	167	200	217		
	A	kW	H (m) = Total head										
MXHELM	MXHEM 602	5,9	1,35			51	50,4	44,4	34,7	27	21,4	13,7	9,8
MXHELM	MXHEM 603	7.7	1.8			75	73.6	62.2	48.1	37.6	29.8	20.1	15.1

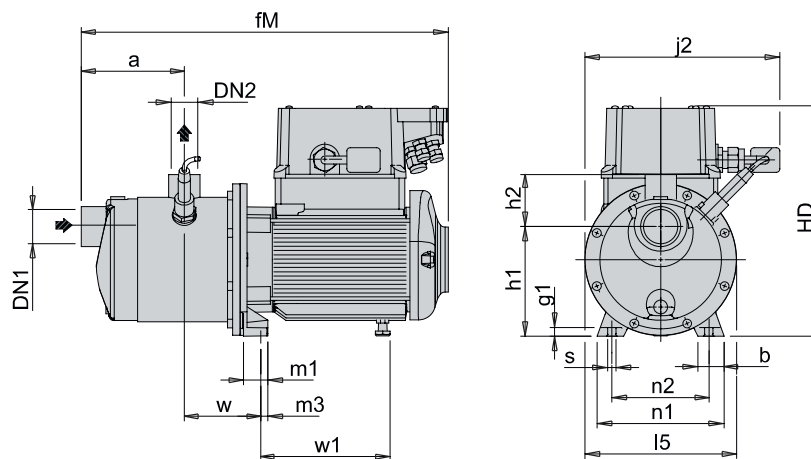
P1: Maximum power input.

H: Total head in m

Test results with clean cold water, without gas content.

Tolerances according to UNI EN ISO 9906:2012

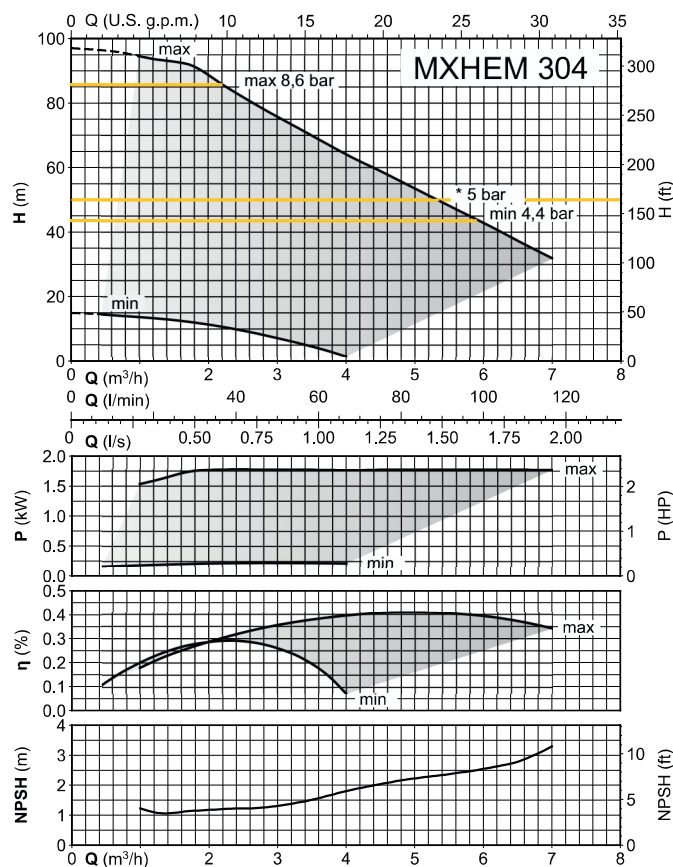
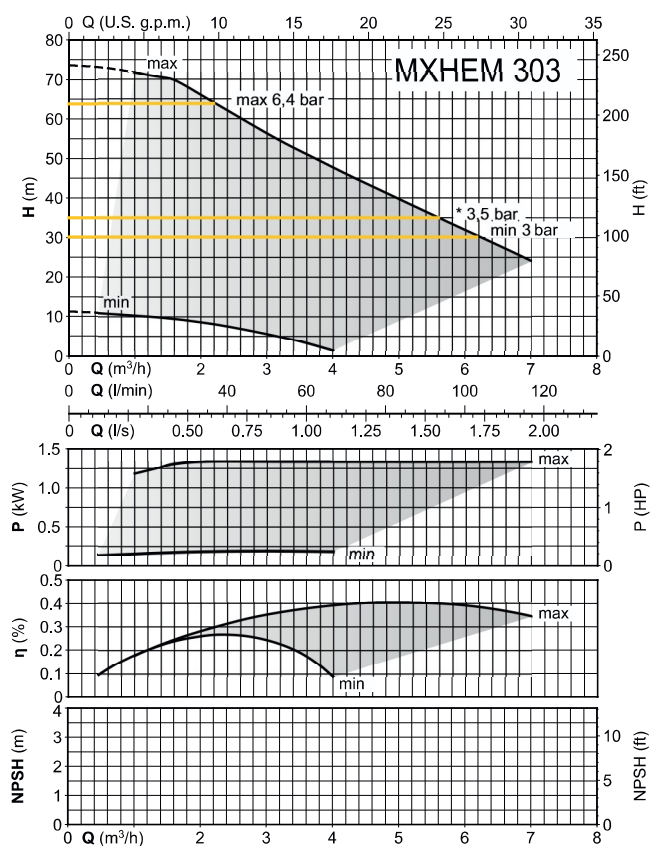
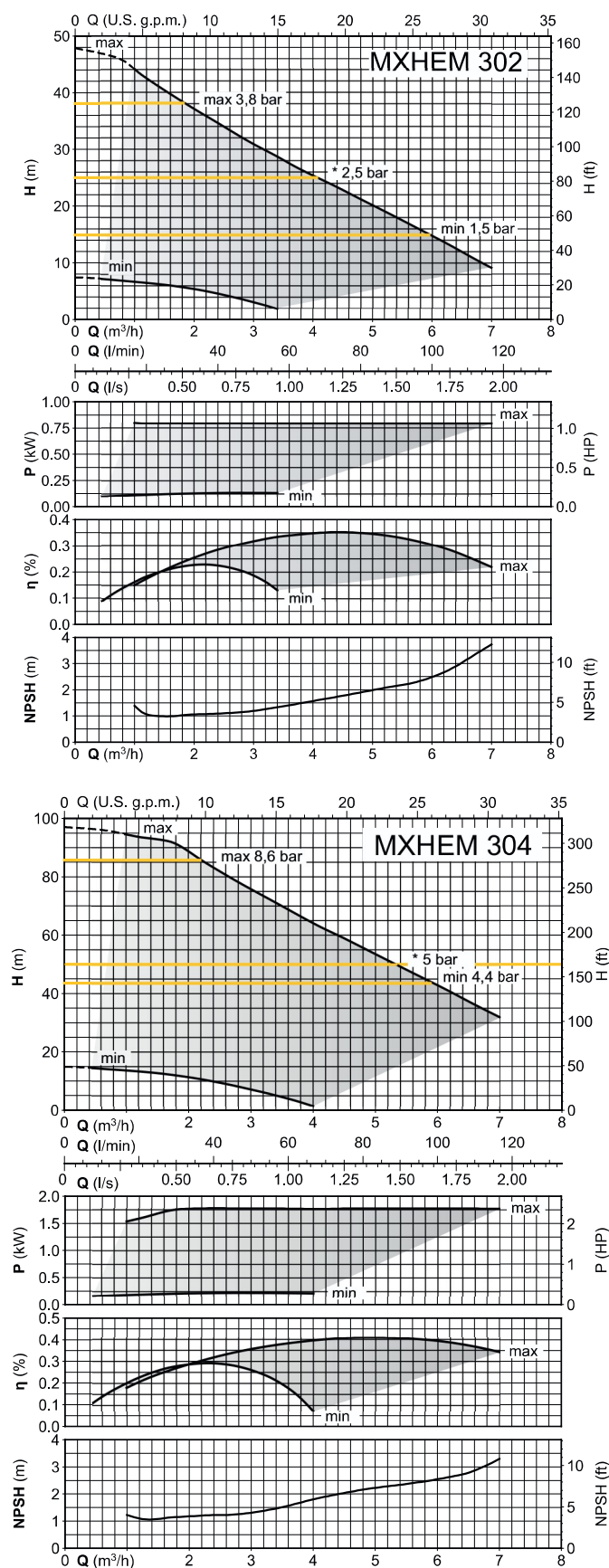
Dimensions and weight



TYPE			mm																kg
	DN1	DN2	a	b	fM	g1	h1	h2	HD	j2	l5	m1	m3	n1	n2	s	w	w1	Weight
MXHEM 302	G 1 1/4	G 1	96	30.5	373	10	126	60	265	224	175	28	8	146	112	9.5	88	122	-
MXHEM 303	G 1 1/4	G 1	96	30.5	373	10	126	60	265	224	175	28	8	146	112	9.5	88	122	13
MXHEM 304	G 1 1/4	G 1	119	30.5	422	10	126	60	265	224	175	28	8	146	112	9.5	88	149	15.4
MXHEM 602	G 1 1/2	G 1	111	30.5	387	10	126	60	265	224	175	28	8	146	112	9.5	88	122	-
MXHEM 603	G 1 1/2	G 1	111	30.5	414	10	126	60	265	224	175	28	8	146	112	9.5	88	149	15.2

Weight with cable length: 1,5 m

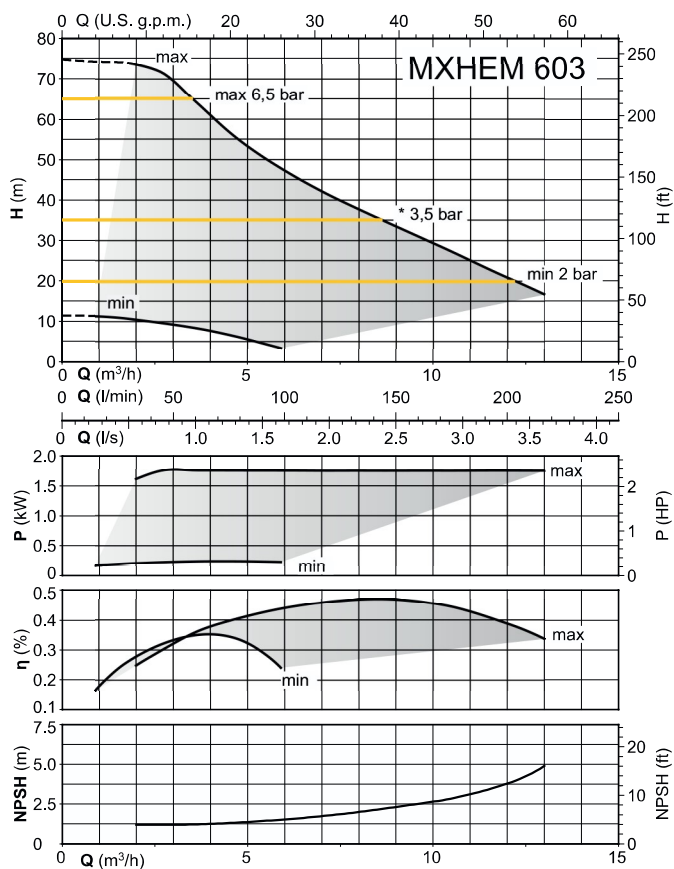
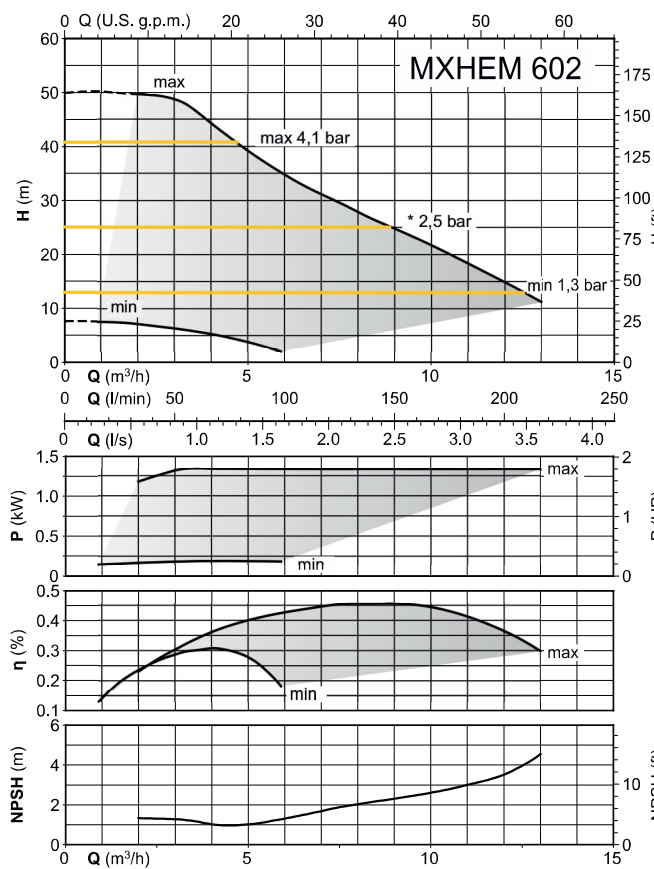
Characteristic curves



Constant pressure mode

* Factory settings

Characteristic curves



Constant pressure mode

* Factory settings

Performance

Single-phase

			Q = Flow								
			m³/h	0	2	4	6	8	10	12	14
Model	230V	P1	l/min			33,3	66,6	100	133	167	200
	A	kW	H (m) = Total head								
BSM2V 2 MXHEM 302	2 X 3,5	2 X 0.8		48	44,6	38,2	32	26,5	21	15,6	10
BSM2V 2 MXHEM 303	2 X 5,9	2 X 1.35		74	72,1	66,5	57	47,5	39,5	31,5	23,1
BSM2V 2 MXHEM 304	2 X 7,7	2 X 1.8		96,5	93,5	87,5	76,5	64,5	54	44	32,6

			Q = Flow								
			m³/h	0	4	8	12	16	20	24	26
Model	230V	P1	l/min		66,6	133	200	267	333	400	433
	A	kW	H (m) = Total head								
BSM2V 2 MXHEM 602	2 X 5,9	2 X 1.35		51	50,4	44,4	34,7	27	21,4	13,7	9,8
BSM2V 2 MXHEM 603	2 X 7,7	2 X 1.8		75	73,6	62,2	48,1	37,6	29,8	20,1	15,1

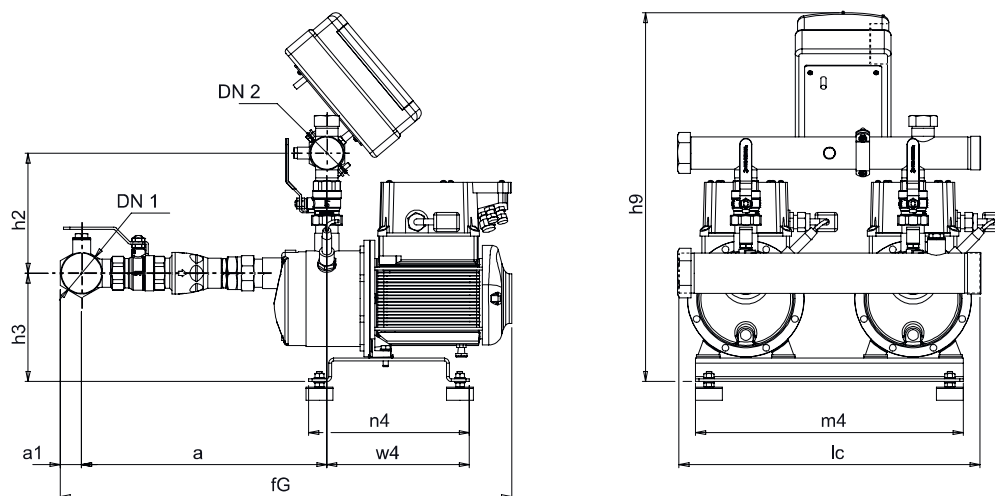
P1: Maximum power input.

H: Total head in m

Test results with clean cold water, without gas content.

Tolerances according to UNI EN ISO 9906:2012

Dimensions and weight



TYPE			mm										kg
	DN1	DN2	a	a1	fG	h2	h3	h9	lc	m4	n4	w4	Weight
BSM2V 2 MXHEM 302	G 2	G 1 1/2	367	32	675	180	162	540	450	400	240	213	-
BSM2V 2 MXHEM 303	G 2	G 1 1/2	367	32	675	180	162	540	450	400	240	213	38,1
BSM2V 2 MXHEM 304	G 2	G 1 1/2	389	32	725	180	162	540	450	400	240	213	-
BSM2V 2 MXHEM 602	G 2 1/2	G 2	437	40	754	186	162	540	450	400	240	213	-
BSM2V 2 MXHEM 603	G 2 1/2	G 2	437	40	783	186	162	540	450	400	240	213	-

Performance

Single-phase

			Q = Flow								
			m³/h	0	3	6	9	12	15	18	21
Model	230V	P1	l/min			50	100	150	200	250	300
	A	kW	H (m) = Total head								
BSM3V 3 MXHEM 302	3 X 3,5	3 X 0.8		48	44,6	38,2	32	26,5	21	15,6	10
BSM3V 3 MXHEM 303	3 X 5,9	3 X 1.35		74	72,1	66,5	57	47,5	39,5	31,5	23,1
BSM3V 3 MXHEM 304	3 X 7,7	3 X 1.8		96,5	93,5	87,5	76,5	64,5	54	44	32,6

			Q = Flow								
			m³/h	0	6	12	18	24	30	36	39
Model	230V	P1	l/min			100	200	300	400	500	600
	A	kW	H (m) = Total head								
BSM3V 3 MXHEM 602	3 X 5,9	3 X 1.35		51	50,4	44,4	34,7	27	21,4	13,7	9,8
BSM3V 3 MXHEM 603	3 X 7,7	3 X 1.8		75	73,6	62,2	48,1	37,6	29,8	20,1	15,1

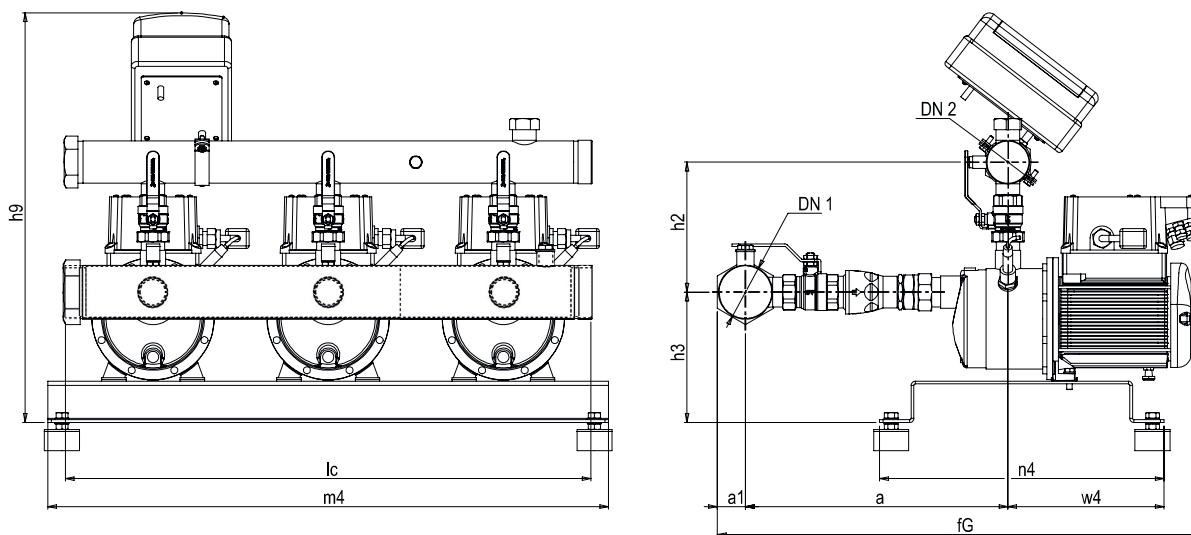
P1: Maximum power input.

H: Total head in m

Test results with clean cold water, without gas content.

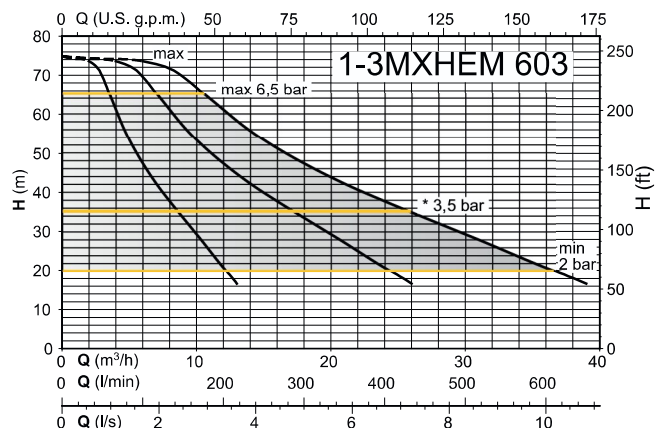
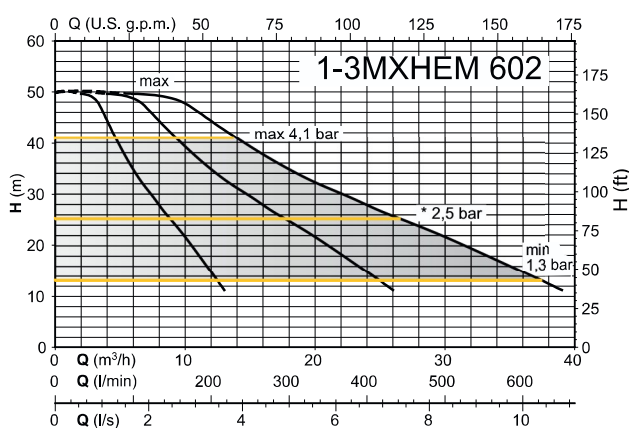
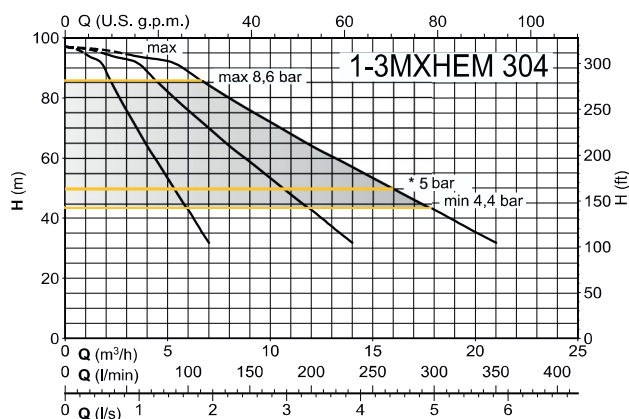
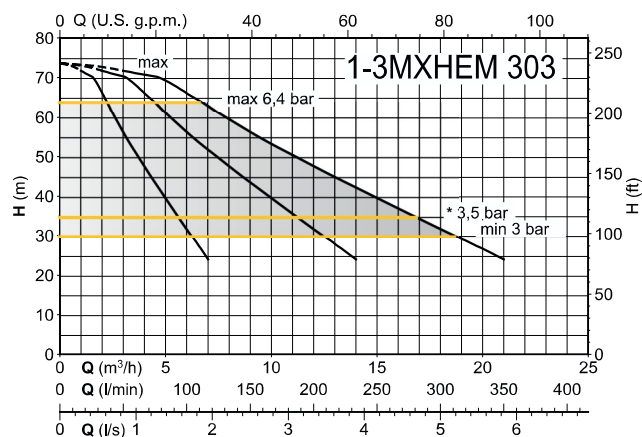
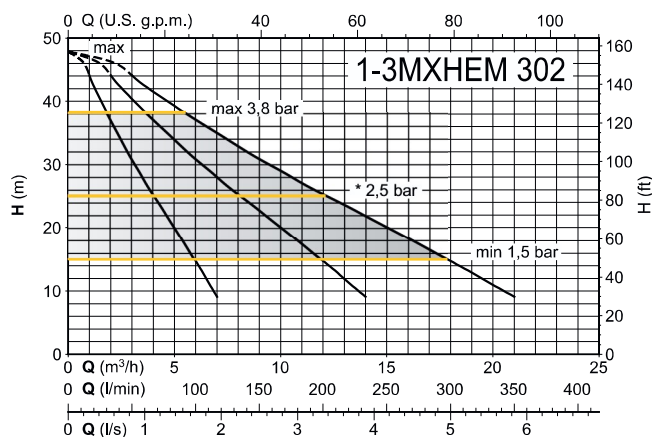
Tolerances according to UNI EN ISO 9906:2012

Dimensions and weight



TYPE			mm									
	DN1	DN2	a	a1	fg	h2	h3	h9	lc	m4	n4	w4
BSM3V 3 MXHEM 302	G 2 1/2	G 2	375	40	691	186	186	585	750	800	406	223
BSM3V 3 MXHEM 303	G 2 1/2	G 2	375	40	691	186	186	585	750	800	406	223
BSM3V 3 MXHEM 304	G 2 1/2	G 2	397	40	740	186	186	585	750	800	406	223
BSM3V 3 MXHEM 602	G 3	G 2 1/2	444	48	768	193	186	600	750	800	406	223
BSM3V 3 MXHEM 603	G 3	G 2 1/2	444	48	795	193	186	600	750	800	406	223

Characteristic curves



 Constant pressure mode

* Factory settings