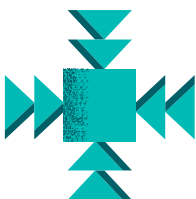


**EASY TO INSTALL**  
Plug And play solution



**ECONOMIC SAVING**  
High efficiency asynchronous motor  
Up to 450Wh less energy consumption compared to a standard solution



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

# Variable speed pressure boosting system with integrated control

## Construction

Self-priming booster set with built in frequency converter.

MÈTA is a plug and play solution, the pump is equipped with an integrated pressure transducer, an integrated check valve and a built-in pressure vessel.

The Vsd controls the start and stop of the pump and allows to keep a constant pressure.

Boosting sets with 2 pumps

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 domestic use, for garden use and irrigation.

## Features

- integrated frequency converter
- built-in pressure vessel
- high efficiency asynchronous motor
- motor power control
- programmable re-start pressure
- no hydraulic losses due to the measuring devices
- 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

## 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.

## Motor

2-pole induction motor.

Nominal speed 4500 rpm (5800 rpm per MÈTA SMALL)

- Motor: variable speed

Frequency: 50-60 Hz

Single-phase 220-240V~50Hz/220V~60Hz, with thermal protector.

Cable: H07RN8-F, 3G1,5 mm<sup>2</sup>, 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.

## Materials

Components	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	Cr-Ni steel 1.4305 EN 10088 (AISI 303)
Suction casing	PPO-GF20 (Noryl)
Stage casing	PPO-GF20 (Noryl) (Cr-Ni steel AISI 304 for MÈTA SMALL)
Impeller	Cr-Ni steel 1.4301 EN 10088 (AISI 304)
Membrane	Butyl
Tank cover	POM - POLYACETAL
Membrane cap	POM - POLYACETAL
Non-return valve	POM - POLYACETAL
Plug	Cr-Ni steel 1.4305 EN 10088 (AISI 303)
Mechanical seal	Carbon - Ceramic - NBR

## Performance

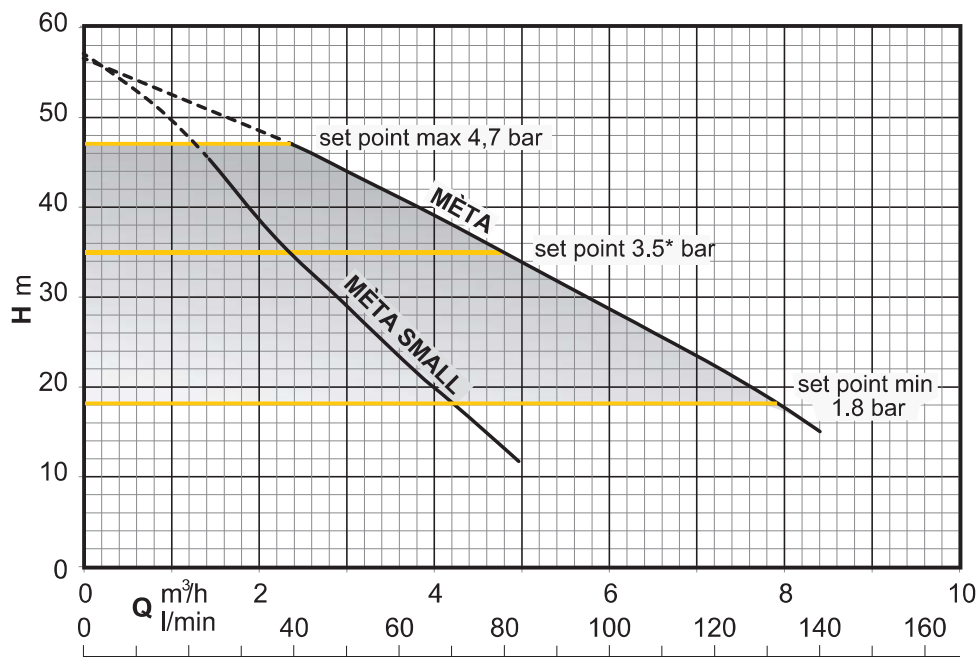
### Single-phase

Model	230V A	P1 kW	Q = Flow											
			m <sup>3</sup> /h l/min	0	1	2	3	4	5	6	6,5	7	8	8,4
MÈTA SMALL	2,8	0,65	55	50	37,3	28,5	20,5	11,3	-	-	-	-	-	
MÈTA	5,9	1,35	55	-	48	43,5	38,7	33,8	28,6	26	23,4	18,2	15	

**P1:** Maximum power input.  
**P2:** Rated motor power output.  
**H:** Total head in m.

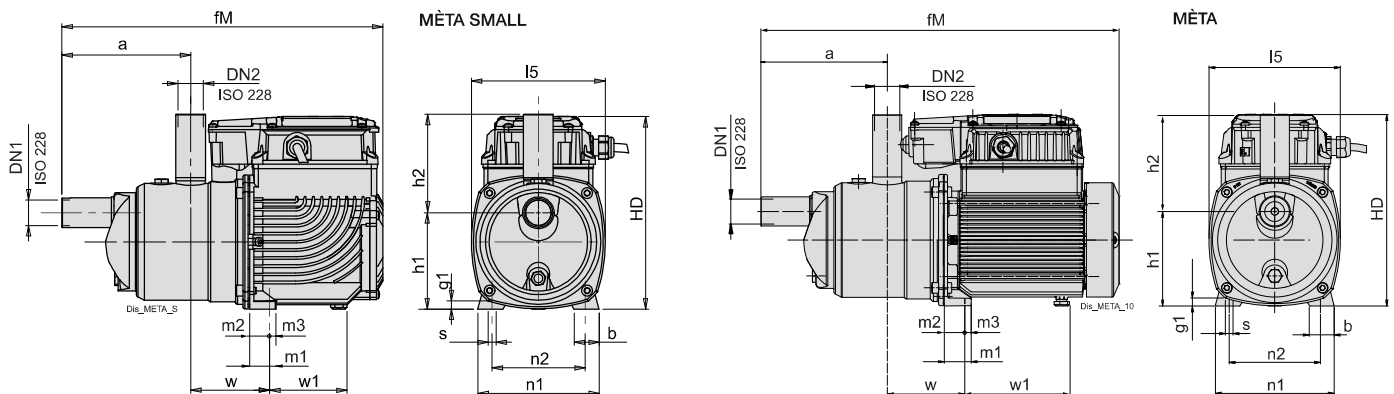
**Test results with clean cold water, without gas content.**  
 A safety margin of + 0,5 m is recommended for the NPSH value.  
 Tolerances according to UNI EN ISO 9906:2012

### Characteristic curves



\* Factory settings

### Dimensions and weights



TYPE	mm																Kg Weight	
	DN1	DN2	a	b	fM	g1	h1	h2	HD	l5	m1	m2	m3	n1	n2	s		w
MÈTA SMALL	G 1	G 1	155	30	387	10	116	119	235	161	33	25	8	146	112,5	9	95	9,8
MÈTA	G 1	G 1	155	30	440	10	116	119	235	161	33	25	8	146	112,5	9	95	12,7

Weight with cable length: 1,5 m

## Performance

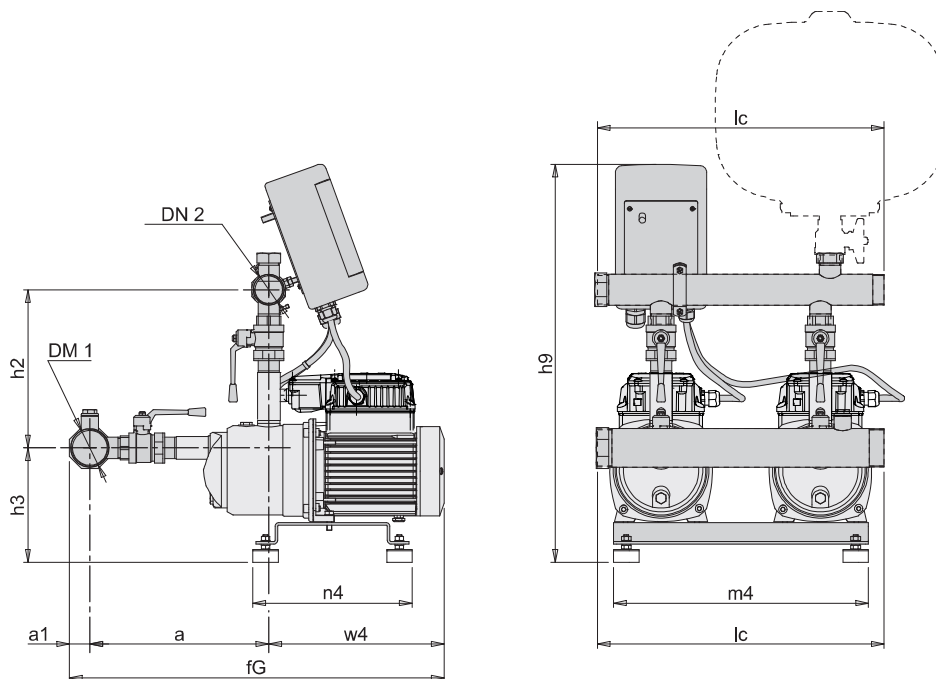
### Single-phase

Model	230V A	P1 kW	Q = Flow											
			m <sup>3</sup> /h l/min	0	2	4	6	8	10	12	13	14	16	16,8
BSM2V 2 META SMALL	2 X 2,8	2 X 0,65	55	50	37,3	28,5	20,5	11,3	-	-	-	-	-	
BSM2V 2 META	2 X 5,9	2 X 1,35	55	-	48	43,5	38,7	33,8	28,6	26	23,4	18,2	15	

**P1:** Maximum power input.  
**P2:** Rated motor power output.  
**H:** Total head in m.

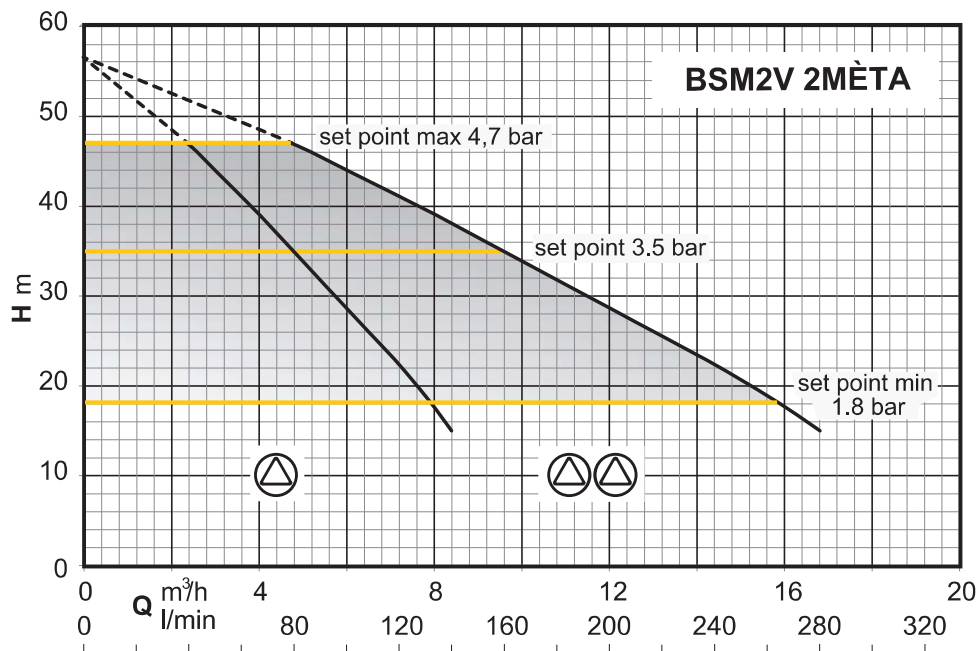
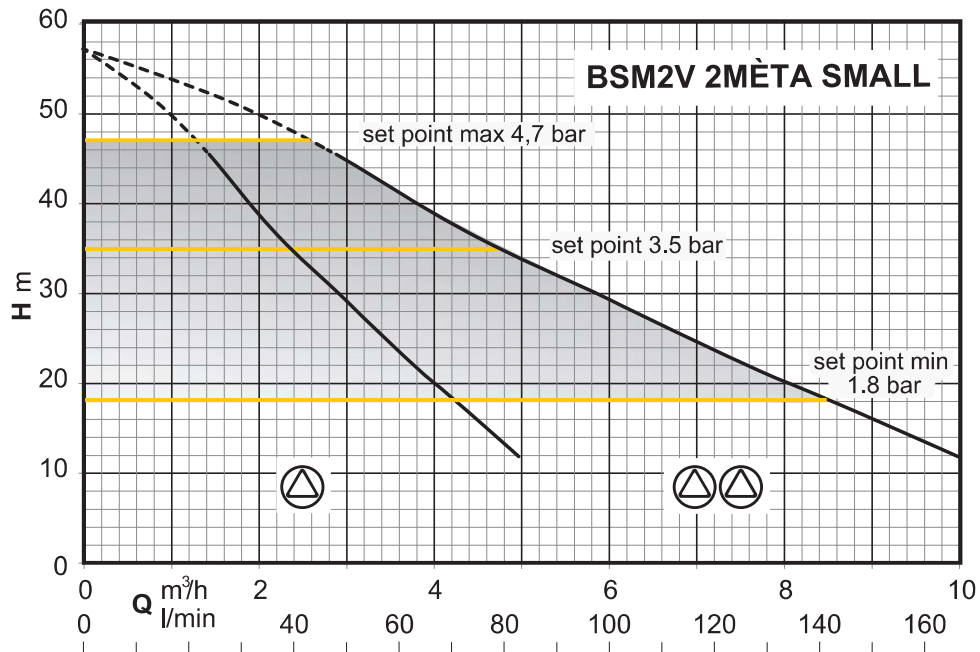
**Test results with clean cold water, without gas content.**  
 A safety margin of + 0,5 m is recommended for the NPSH value.  
 Tolerances according to UNI EN ISO 9906:2012

## Dimensions and weights



TYPE	DN		mm										Kg Weight
	DN1	DN2	a	a1	fG	h2	h3	h9	lc	m4	n4	w4	
BSM2V 2 META SMALL	G 2	G 1 1/2	291	32	555	248	179	625	450	400	250	232	31,6
BSM2F 2 META	G 2	G 1 1/2	291	32	608	248	179	625	450	400	250	285	37,2

## Characteristic curves



## Control Panel

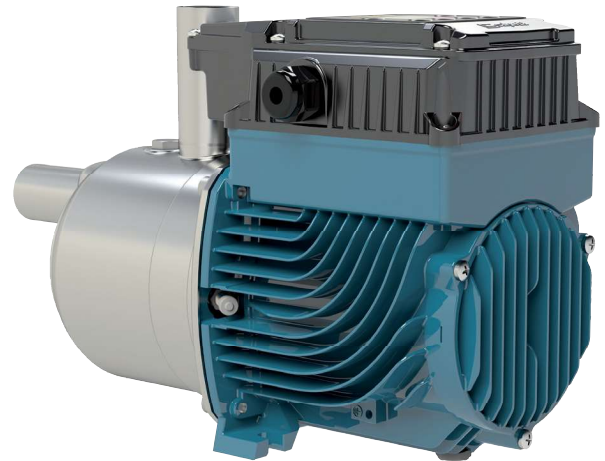


They allow to visualize:

- Initial screen (rUn, OFF, StB, Err)
- Motor Operating Frequency
- Delivery pressure measured by the transducer
- Supply current input
- Supply electrical power input
- Supply voltage

## mèta<sub>small</sub>

new design without cooling fan



## think outside the box

