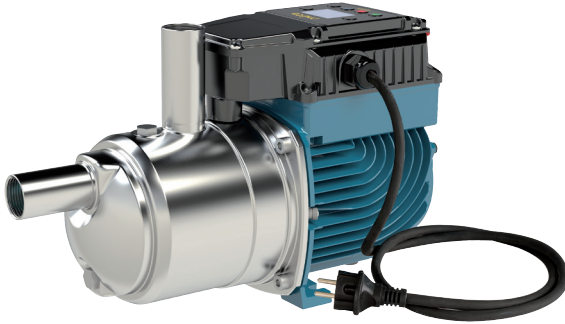
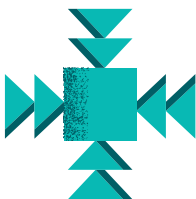




**EASY TO INSTALL**  
Plug And play solution



**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 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.

## 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

|            |      |      | Q = Flow           |    |      |      |      |      |      |      |     |      |      |     |
|------------|------|------|--------------------|----|------|------|------|------|------|------|-----|------|------|-----|
|            |      |      | m³/h               | 0  | 1    | 2    | 3    | 4    | 5    | 6    | 6,5 | 7    | 8    | 8,4 |
| Model      | 230V | P1   | l/min              |    | 16,6 | 33,3 | 50   | 66,6 | 83,3 | 100  | 108 | 117  | 133  | 140 |
|            | A    | kW   | H (m) = Total head |    |      |      |      |      |      |      |     |      |      |     |
| META SMALL | 2,8  | 0,65 |                    | 55 | 50   | 37,3 | 28,5 | 20,5 | 11,3 | -    | -   | -    | -    | -   |
| META       | 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.

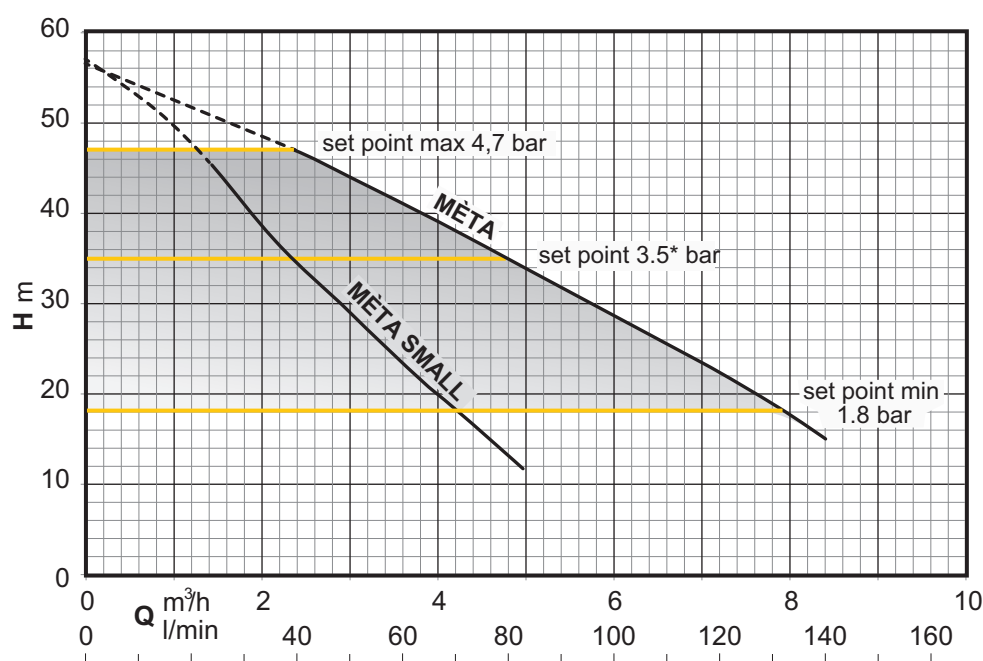
H: Total head in m.

Test results with clean cold water, without gas content.

A safety margin of + 0.5 m is recommended for the NPSH value.

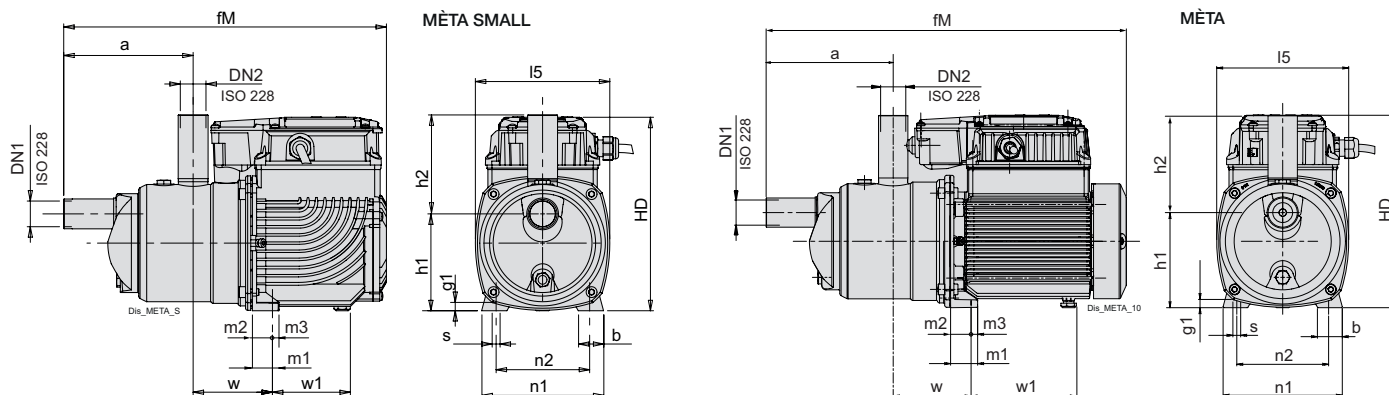
Tolerances according to UNI EN ISO 9906:2012

### Characteristic curves



\* Factory settings

### Dimensions and weights



| TYPE       | mm  |     |     |    |     |    |     |     |     |     |    |    |    |     |       |   |    | Kg     |
|------------|-----|-----|-----|----|-----|----|-----|-----|-----|-----|----|----|----|-----|-------|---|----|--------|
|            | DN1 | DN2 | a   | b  | fM  | g1 | h1  | h2  | HD  | I5  | m1 | m2 | m3 | n1  | n2    | s | w  | Weight |
| 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

|                    |         |          | Q = Flow           |    |      |      |      |      |      |      |     |      |      |      |  |
|--------------------|---------|----------|--------------------|----|------|------|------|------|------|------|-----|------|------|------|--|
|                    |         |          | m³/h               | 0  | 2    | 4    | 6    | 8    | 10   | 12   | 13  | 14   | 16   | 16,8 |  |
|                    |         |          | l/min              |    | 33,3 | 66,6 | 100  | 133  | 167  | 200  | 217 | 233  | 267  | 280  |  |
| Model              | 230V    | P1       | H (m) = Total head |    |      |      |      |      |      |      |     |      |      |      |  |
|                    | A       | kW       |                    |    |      |      |      |      |      |      |     |      |      |      |  |
| 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.

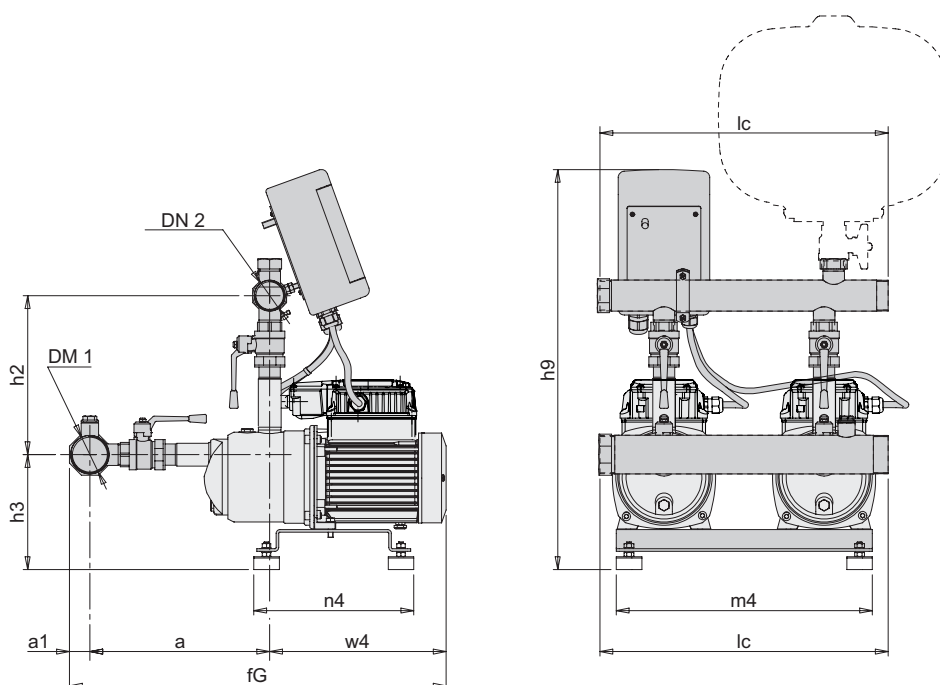
**H:** Total head in m.

**Test results with clean cold water, without gas content.**

A safety margin of + 0.5 m is recommended for the NPSH value.

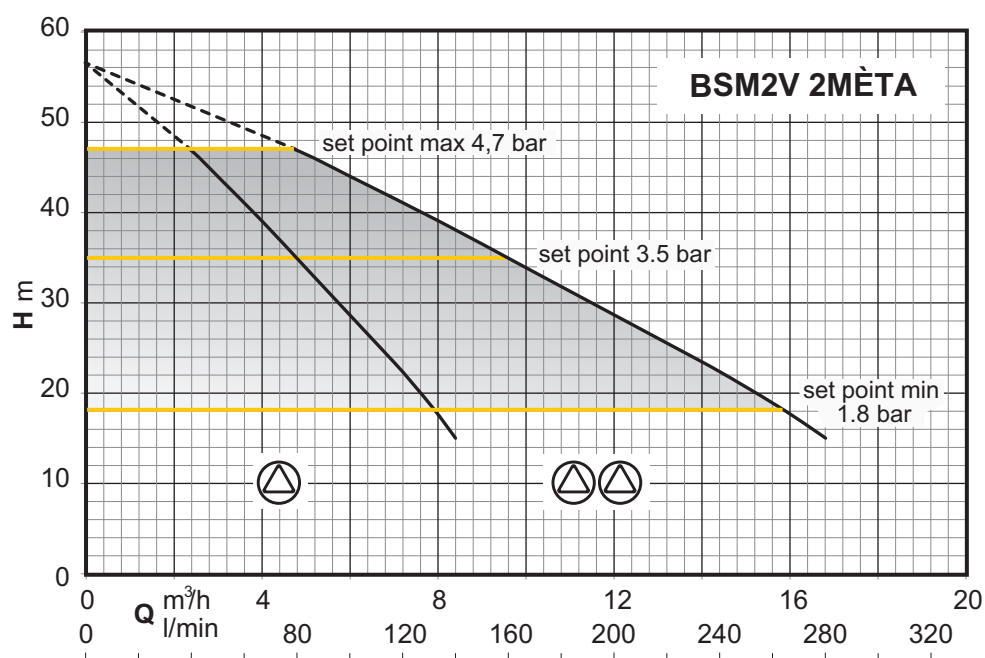
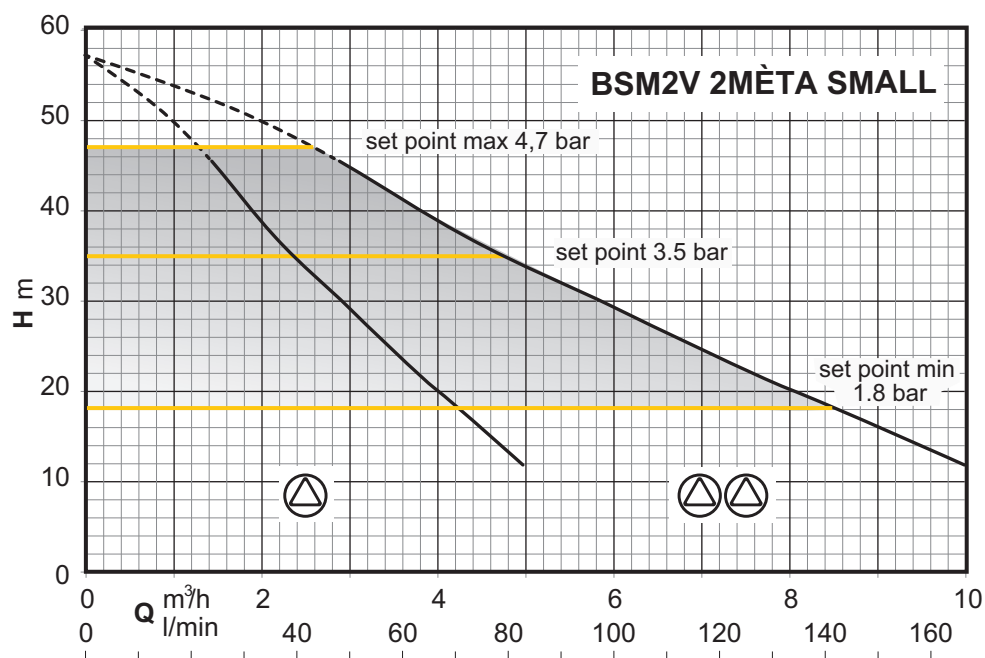
Tolerances according to UNI EN ISO 9906:2012

## Dimensions and weights



| TYPE               |     |         | mm  |    |     |     |     |     |     |     |     |     | Kg     |
|--------------------|-----|---------|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|--------|
|                    | DN1 | DN2     | a   | a1 | fG  | h2  | h3  | h9  | lc  | m4  | n4  | w4  | Weight |
| 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

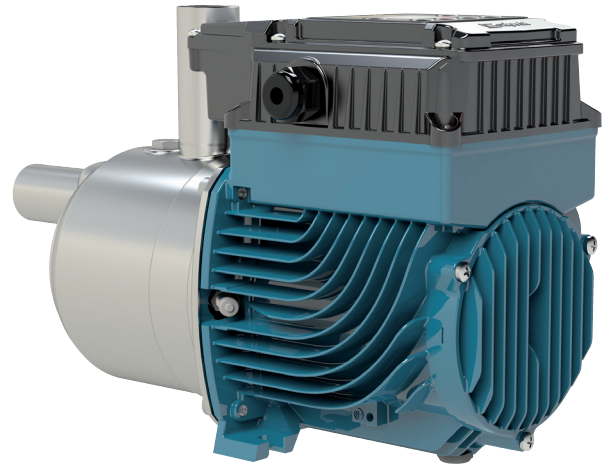


They allow to visualize:

- 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** small

new design without cooling fan



think outside the box

