



HYDROMETER

Model BM/BMA

The Hydrometer is a combination of a water meter and a hydraulic valve in a single unit.

Features:

- Integrated design minimizes installation space.
- Specifically designed for use in automated remote control environments.
- Wide variety of flow and pressure regulation options.
- Double-chambered hydraulic valve designed for high-pressure operation.
- Rugged, heavy-duty construction.
- Low loss of head.
- Wide range of sizes - suitable for virtually any application

Discription

- The hydrometer combines a water meter and a hydraulic valve in a single unit.
- The valve is double-chambered and is especially designed for high-pressure operation.
- Pilot valves and solenoid valves enable remote and automatic transmission of hydraulic commands to the hydrometer.
- Hermetically sealed register.
- The impeller is the only moving part in contact with the water.
- The meter contains a rotating leakage indicator as well as a totalizer that displays cumulative volume.
- The meter electronically transmits flow data to the remote control computer.
- The hydrometer is available in globe type and angle type models in a variety of sizes.

Applications

The BM/BMA hydrometers series are designed for remote control irrigation and for industrial applications. The hydrometer is especially suited for automated operation. The hydrometer may be used in a variety of pressure and flow regulation applications such as:

- Pressure sustaining & reducing
- Flow regulation
- Combined pressure and flow regulation
- Dual stage operation

Technical Specifications

| | |
|---------------------------------|---|
| Maximum Working Pressure | 16 bar |
| Body | Polyester coated cast iron body Reinforced natural rubber valve diaphragm. |
| Connection | Flanges: AWWA, ISO, BS, other upon request Threaded: Male BSP 1 1/2"-2" Female BSPT or NPT 2" |

Available Sizes

BM - Globe type: 1 1/2", 2", 3", 4", 6", 8"

BMA- Angle type: 2", 3", 4", 6", 8"

Standard

EEC approval (class A)

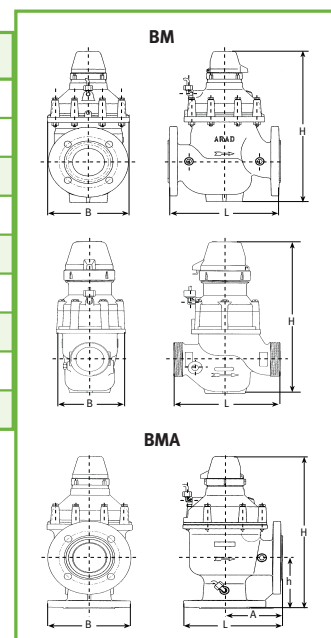
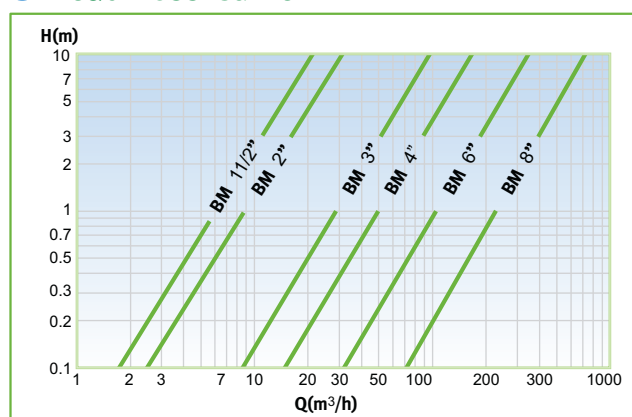


**Performance data:**

| Model BM/BMA | | Q _{max} Maximum flowrate (m ³ /h) | Q _n Nominal Flowrate (m ³ /h) | Q _t Transitional Flowrate (m ³ /h) | Q _{min} Minimum Flowrate (m ³ /h) | Minimum register capacity (m ³) | Minimum register capacity (liter) | Accuracy between Q _{max} & Q _t | Accuracy between Q _t & Q _{min} |
|--------------|-------|---|---|--|---|--|--------------------------------------|--|--|
| Nominal Size | | | | | | | | | |
| mm | inch | | | | | | | | |
| 40 | 1 1/2 | 30 | 20 | 1.3 | 0.8 | 10 ⁶ | 1 | ±2 | ±5 |
| 50 | 2 | 50 | 30 | 3 | 0.45 | | 1 | | |
| 80 | 3 | 130 | 65 | 8 | 1.2 | 10 ⁶ | 1 | | |
| 100 | 4 | 200 | 100 | 12 | 1.8 | | 10 | | |
| 150 | 6 | 300 | 150 | 30 | 4.5 | 10 ⁷ | 10 | | |
| 200 | 8 | 540 | 270 | 50 | 7.5 | | 10 | | |

Dimensions

| Model | BM-Globe type | | | | | | BMA-Angle type | | | | | |
|----------------------------|---------------|-------|-----|------|------|-----|----------------|-----|-----|------|-----|-----|
| Nominal size | (mm) | 40 | 50 | 80 | 100 | 150 | 200 | 50 | 80 | 100 | 150 | 200 |
| | (inch) | 1 1/2 | 2 | 3 | 4 | 6 | 8 | 2 | 3 | 4 | 6 | 8 |
| L - Length (mm) | | 160 | 190 | 285 | 325 | 500 | 600 | 158 | 3 | 277 | 440 | 525 |
| H - Height (mm) | | 262 | 330 | 420 | 435 | 645 | 765 | 350 | 243 | 450 | 645 | 675 |
| h - (mm) | | - | - | - | - | - | - | 122 | 430 | 176 | 300 | 280 |
| A - (mm) | | - | - | - | - | - | - | 96 | 140 | 162 | 250 | 300 |
| B - Width (mm) | | 120 | 120 | 205 | 230 | 380 | 450 | 120 | 140 | 230 | 380 | 450 |
| Weight (kg) | | 2 | 3.8 | 24.5 | 30.5 | 120 | 150 | 3.3 | 210 | 29.5 | 111 | 140 |
| Weight with couplings (kg) | | 3 | 5.2 | | | | | 4.7 | | | | |

**Head Loss Curve****Electrical output**

| Available Outputs (m ³ /pulse) | 1 1/2" | 2" | 3" | 4" | 6" | 8" |
|---|--------|----|----|----|----|----|
| 0.01 | • | • | • | | | |
| 0.1 | • | • | • | • | • | • |
| 1 | • | • | • | • | • | • |
| 10 | | | | • | • | • |

Installation Requirements

- The hydrometer can be installed in any position (horizontal, vertical or inclined).
- The meter must be always full of water while operating.
- Prior to the installation of a new meter, the pipeline must be flushed out.