



## 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

#### Technical Specifications

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

#### Description

- 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

#### 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)

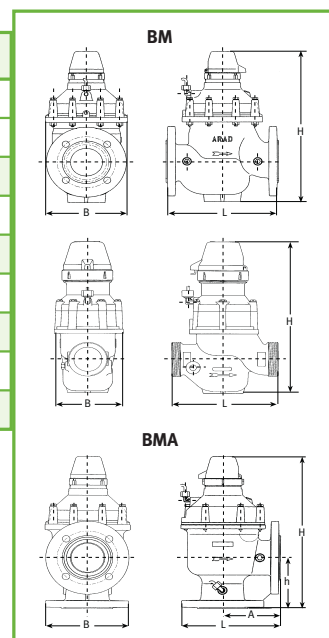


### Performance data:

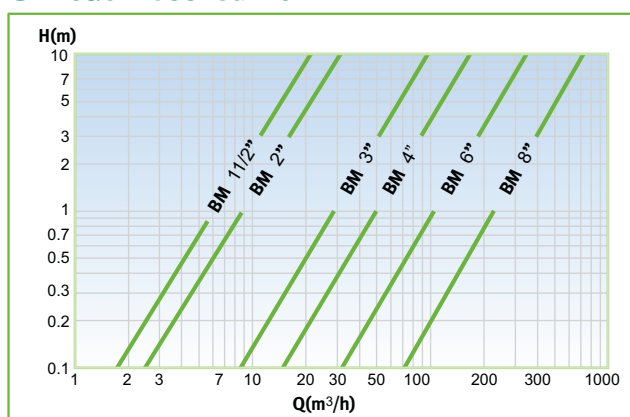
Model BM/BMA		Q <sub>max</sub> Maximum flowrate (m <sup>3</sup> /h)	Q <sub>n</sub> Nominal Flowrate (m <sup>3</sup> /h)	Q <sub>t</sub> Transitional Flowrate (m <sup>3</sup> /h)	Q <sub>min</sub> Minimum Flowrate (m <sup>3</sup> /h)	Minimum register capacity (m <sup>3</sup> )	Minimum register capacity (liter)	Accuracy between Q <sub>max</sub> & Q <sub>t</sub>	Accuracy between Q <sub>t</sub> & Q <sub>min</sub>
Nominal Size									
mm	inch								
40	1 1/2	30	20	1.3	0.8	10 <sup>6</sup>	1	±2	±5
50	2	50	30	3	0.45		1		
80	3	130	65	8	1.2	10 <sup>6</sup>	1		
100	4	200	100	12	1.8		10		
150	6	300	150	30	4.5	10 <sup>7</sup>	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 <sup>3</sup> /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.

