Model BM
Hydrometer

ARAD
Water Measuring Technologies

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

Description
- 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 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: 1½", 2", 3", 4", 6", 8"

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.
- Wide range of sizes - suitable for virtually any application

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 1½"-2" Female BSPT or NPT 2"

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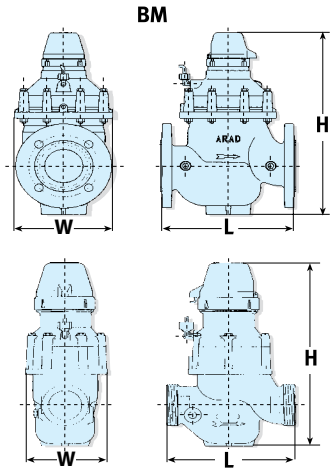
Performance data

Model BM		Qmax Maximum flowrate (m^3/h)	Qn Nominal Flowrate (m^3/h)	Qt Transitional Flowrate (m^3/h)	Qmin Minimum Flowrate (m^3/h)	Minimum register capacity (m^3/h)	Minimum register capacity (liter)	Accuracy between Qmax & Qt	Accuracy between Qt & Qmin
Nominal size									
(mm)	(inch)								
40	1 1/2	30	20	1.3	0.4	106	1	±2%	±5%
50	2	50	30	3	0.45	106	1		
80	3	130	65	8	1.2	106	1		
100	4	200	100	12	1.8	107	10		
150	6	300	150	30	4.5	107	10		
200	8	540	270	50	7.5	107	10		

Performance as per Class A Requirements

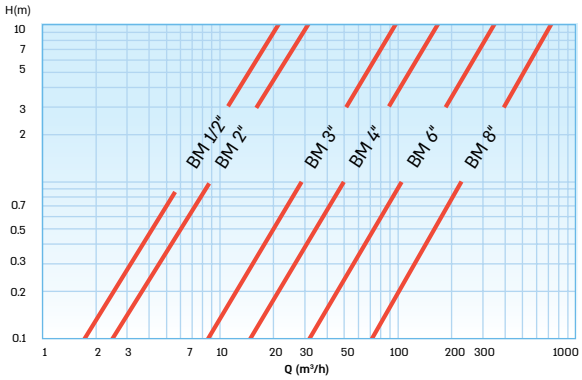
	Qmax Maximum flowrate (m^3/h)	Qn Nominal Flowrate (m^3/h)	Qt Transitional Flowrate (m^3/h)	Qmin Minimum Flowrate (m^3/h)
1 1/2 "	20	10	1	0.4
2"	30	15	4.5	1.2
3"	80	40	12	3.2
4"	120	60	18	4.8
6"	300	150	45	12
8"	500	250	75	20



Dimensions

Model		BM-Globe type					
Nominal size	(mm)	40	50	80	100	150	200
	(inch)	1.5	2	3	4	6	8
L - Length (mm)		160	190	285	324	500	600
H - Height (mm)		266	331	433	456	581	782
h - (mm)		-	-	-	-	-	-
A - (mm)		-	-	-	-	-	-
W - Width (mm)		124	124	205	230	380	450
Weight (kg)		4.5	6.5	24.5	30.5	120	150
Weight with couplings (kg)		5.5	8	-	-	-	-

Head Loss Curve



Electrical output

Available Outputs (m3/pulse)	1 ½"	2"	3"	4"	6"	8"
0.01	●	●	●			
0.1	●	●	●	●	●	●
1	●	●	●	●	●	●
10				●	●	●

Installation Requirements

- The meter should be installed in horizontal or vertical position
- The meter must be always full of water while operating
- Prior to the installation of a new meter, the pipeline must be flushed out

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