

WATER METERS

BLWMJ

Multi-Jet Dry Type (Velocity)



BLWMJ is impeller (turbine) water meter with dry type register for residential application with sizes from 5/8" to 1-1/2", accuracy meets **AWWA C708**, wet materials are **NSF/ANSI-61 and 372 certified**, NSF official listings as follows: <http://bit.ly/2u01tOi>

Operation:

Water flows through the meter's strainer (inlet and internal) and into the measuring chamber where it drives the impeller. A driving magnet transmits the movement of the impeller to a driven magnet located within the sealed register. The magnet is connected to a gear train which translates the impeller rotation into volume totalizers displayed on the register dial face.

Construction:

BLWMJ top loaded Water Meter consists of three basic components: main case, measuring chamber and a head ring. The main cases of all sizes are constructed by Reliable Polymer.

Characteristics:

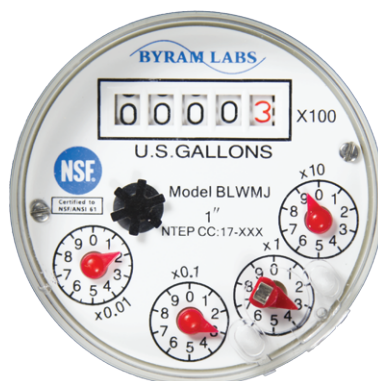
- All the Materials in contact with water, are well-known materials with strong resistance to corrosion
- The most Reliable Polymer from BASF for the body of the water meter;
- Cold Water Meter (BLWMJ-SDC) can be used safely in water temperatures up to 50°C (122°F)
Hot Water Meter (BLWMJ-SDH) can be used safely in water temperatures up to 80°C (176°F)
- The Impeller is the only moving parts in contact with water permitting the most reliable;
- The extra inlet filter at the inlet of the meter body permits cleaning it without breaking the metrological seal;
- The conception of the Magnetic Protection to against the external influences;
- Non Return Valve to avoid the reserve flow Rate **AS OPTION**;

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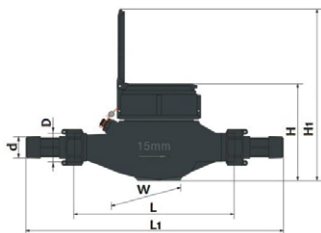
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Dial Plate Design in USG (m³ and CF AS OPTION):

5+4 dial for 5/8"~1"



Dimension: L1: the total length with connection and the gasket without compression.



Size	Inch	5/8"x1/2"	5/8"x3/4"	3/4"x1"	1"	1-1/2"
L	Inch	6-1/2&7-1/2	7-1/2	10-1/4	10-1/4	with adaptors=12
L	mm	165&190	190	260	260	300
L1	mm	259&294	294	380	384	375
D		3/4	1	1-1/4	1-1/4	2
d		R1/2	R3/4	R1	R1	R1-1/2
H	mm	107.5	107.5	117.5	117.5	141.5
H1	mm	191	191	206.5	206.5	256.5
W	mm	94	94	98	98	122
Weight	kgs	0.644 & 0.7	0.717	0.84	0.84	1.44
W. With Connectors	kgs	0.7&0.756	0.8	1	1	2

Remarks: Meters includes connectors(2pcs nuts+2pcs coupling+2pcs gaskets), nuts and coupling using the same polymer as the main case

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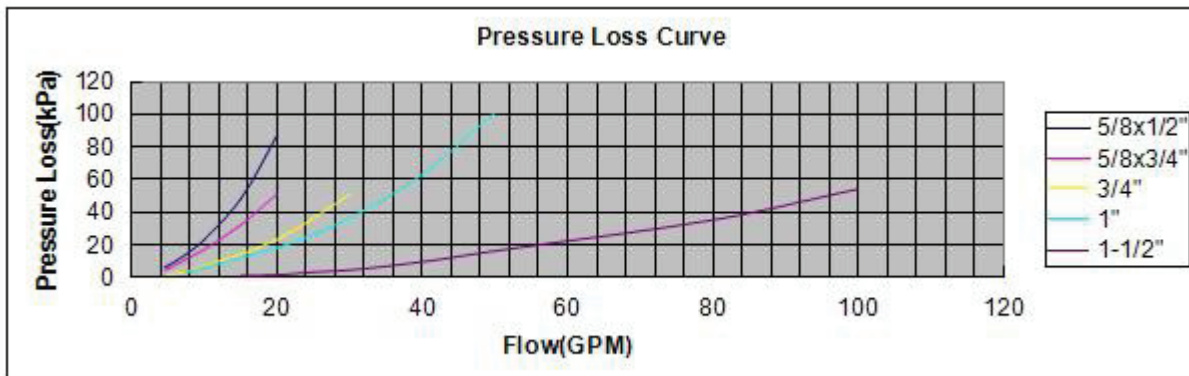
Main Technical Data:

Size	Inch	5/8"x1/2"	5/8"x3/4"	3/4"x1"	1"	1-1/2"
High Flow Rate	GPM	20	20	30	50	100
Continues Flow Rate		10	10	15	25	50
Low Flow Rate		1/4	/4	1/2	3/4	1-1/2
Normal Flow		1-20	1-20	2-30	3-50	5-100
Max. Reading	USG	9,999,999.99				9,999,999.9
Min. Reading	USG	0.005				0.05
Max. Working Pressure	PSI	150				
Max. Temperature	Deg. F	Model BLWMJ-SDC: 122 Model BLWMJ-SDH: 176				

Max. Permission Error:

Within the normal flow rate range is $\pm 1.5\%$;
At low flow rate is $\pm 3\%$.

Pressure Loss:



Pulse output pre-qiipped or Pulse output installed:

- Meter could be with magnet prepared at the preferred position
- Meter could be with the Pulse Emitter Device which consists of a plastic housing with single reed switch, and 1,5 m cable with 2 wires in Red and Black.
- Option with double reed switches and 1,5 m cable with 3 wires in Red, Black and Blue;
- Electric Data: $V_{max}=24AC/DC$; $I_{max}=0.1A$
- Capacity of the Pulse Emitter:

Magnet Position	Gallon/Pulse	
	5/8"x1/2", 5/8"x3/4" 3/4"x1", 1"	1-1/2"
x0,01	0,1	NONE
x0,1	1	1
x1	10	10
x10	100	100



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Installation Instructions

- Thoroughly flush the service line upstream of the meter to remove dirt and debris.
- Remove meter spud thread protectors.
Note: To protect meter spud threads, store the meter with thread protectors in place.
- Set the meter in the line. Install in a horizontal plane, with the register upright, in a location accessible for reading, service and inspection. Arrows on the side of the meter and above the outlet spud indicate the direction of flow.
- For accurate measurement, the tap height should be higher than the meter.
- Do not over-tighten connections; tighten only as required to seal. Do not use pipe sealant tape on meter threads.
- With upstream shut-off valve only: Open shut-off valve slowly, to remove air from meter and service line. Open a faucet slowly to allow entrapped air to escape. Close the faucet.
- With both upstream and downstream shut-off valves installed. To test the installation for leaks: Close the outlet (downstream) shut-off valve. Open the inlet (upstream) shut-off slowly until meter is full of water. Open the outlet (downstream) valve slowly until air is out of the meter and service line. Open a faucet slowly to allow entrapped air to escape. Close the faucet.



Maintenance/Repair

Preventative maintenance consists of periodic inspections and cleaning procedures. The procedures should be performed at regular intervals, and any defects discovered should be corrected before further operation of the meter.

Visually inspect the meter for missing hardware, broken register lens or other signs of wear or deterioration. Verify proper flow rate and pressure for meter. A loss in pressure, with the resulting flow rate decrease, may indicate the meter screen is clogged and requires cleaning.

Clean the strainer yearly, or as required, depending on water condition. Pull out the strainer or back flush the meter to loosen trapped particulates

The Series BLWMJ is not field serviceable and should be returned if repair is needed or being repaired under our correct instruction.