

Multi Jet Water Meter

- Cold (30°C) - WRAS Approved and MID R80 as per 2004/22/EC
- Hot (90°C) - MID R80 as per 2004/22/EC
- Internal strainer
- Super dry, sealed register
- Available with pulse output
- Suitable up to 16 Bar working pressure
- Suitable for horizontal installation

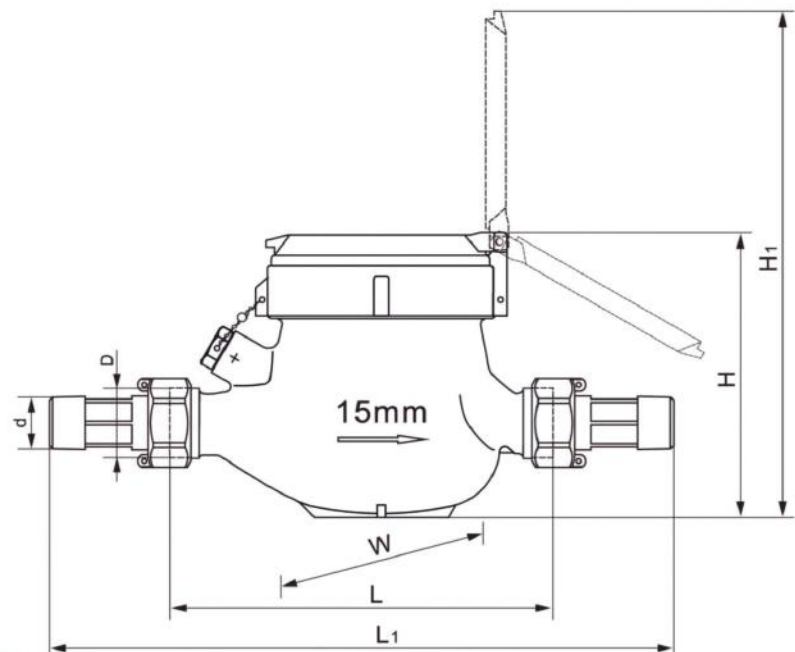


Technical Data

Dimensions

Diameter	DN	15	20	25	32	40	50
Body Thread	D	G $\frac{3}{4}$ B	G1B	G1 $\frac{1}{4}$ B	G1 $\frac{1}{2}$ B	G2B	G2 $\frac{1}{2}$ B
Connector Thread	d	R $\frac{1}{2}$	R $\frac{3}{4}$	R1	R1 $\frac{1}{4}$	R1 $\frac{1}{2}$	R2
Body Length	mm	L	165	190	260	260	300
Overall Length	mm	L1	259	294	380	384	448
Width	mm	W	94	94	98	98	145
Height	mm	H	107.5	107.5	117.5	117.5	141.5
Working Height	mm	H1	191	191	206.5	206.5	256.5
Weight	kg		1.5	1.6	2.4	2.9	5.1

Dimensional Drawing

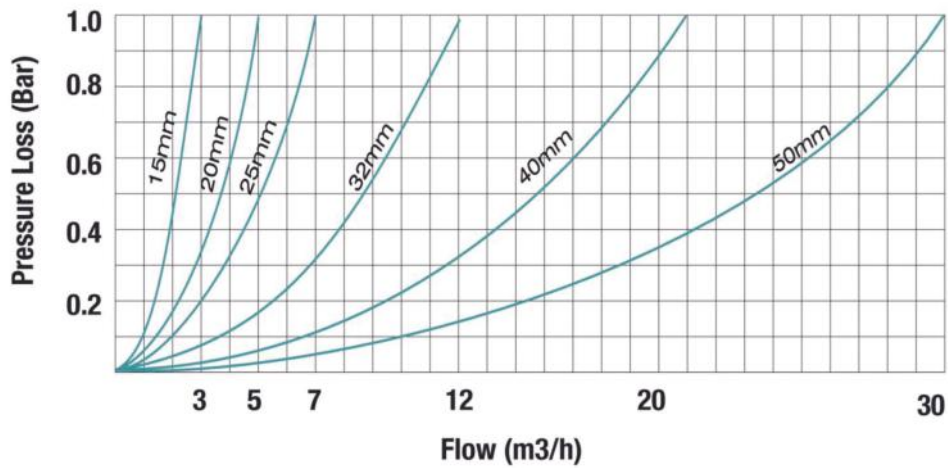


Flow Data

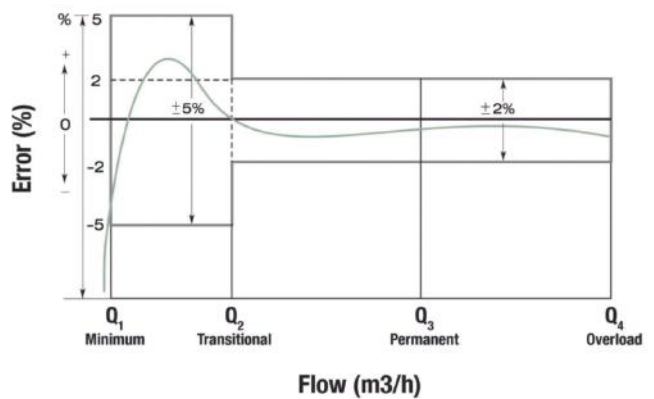
Diameter	DN	15	20	25	32	40	50	
Minimum Flowrate	Q_1	m3/h	0.0313	0.05	0.0788	0.125	0.2	0.313
Transitional Flowrate	Q_2	m3/h	0.05	0.08	0.126	0.2	0.32	0.5
Permanent Flowrate	Q_3	m3/h	2.5	4	6.3	10	16	25
Overload Flowrate	Q_4	m3/h	3.13	5	7.88	12.5	20	31.3

- Minimum Flow Rate (Q_1) (Q_{min} m3/h) - The absolute minimum flow required for the unit to function
- Transitional Flow Rate (Q_2) (Q_t m3/h) - Point at which the flow rate is high enough to get an accurate measurement
- Nominal Flow Rate (Q_3) (Q_N m3/h) - Typical application for every day usage
- Max Flow Rate (Q_4) (Q_{max} m3/h) - Refers to the emergency flow rate in the event of system failure. Damage may result

Pressure Loss Diagram



Accuracy Curve



INSTALLATION GUIDELINES FOR MULTI JET WATER METERS

Sizing and Selection:

- Maximum flow is only for use in emergencies, for about 1-2 minutes as it causes the bearings to overheat.
- Minimum flow only refers to the minimum flow required to operate and record on the meter. At these very low flows, the meter will not be accurate.
- All water meters should be sized between transitional flow (the point at which the meter is most accurate) and nominal flow (everyday flow rate).
- The meters are designed only for use with clean water. Sufficient filtration prior to the meter should be considered if the quality of water is compromised.

Installation:

- The preferred mounting position is horizontal. Installing meters in vertical pipe is possible – this will in effect reduce the accuracy of the meter by one accuracy class (an R80 meter becomes an R40 meter when installed vertically, for example). Ensuring that the flow rate is double the Q_t value can reduce the meter error.
- Under no circumstances whatsoever must the meters remain in situ whilst system flushing takes place.
- The dial must always be facing upwards. Never put the meter upside down as it will not function correctly.
- Water meters should always be fitted with a minimum of 5x pipe diameter both up and downstream. For example, a 2" (Dn50) water meter would have 10" (250mm) either side of the meter as straight pipe. This is to ensure accurate reading by reducing water turbulence. At higher pressures (above 8 bar), this should be increased to 10x pipe diameter.
- Note that there is a direction of flow arrow on the meter and the meter should be installed accordingly.
- It is recommended as good practice to fit a removable filter element before a water meter to protect the mechanism.
- Only clean water should be used that does not exceed the temperature specification of the meter. This is 30 degrees centigrade for cold meters and 90 degrees centigrade for hot meters.

