



Multimag TM II

Multijet Residential Meter - DN15 & DN20

Multimag TM II is a velocity meter multi-jet type, for cold water application.

It has been developed based on years of experience in the metering business and considering several different demands, creating a whole product family.

The value of the whole family is not only all the additional features presented in each version, but the metrology performance and the high robustness and durability.

Technology

Using high quality materials and exclusive measuring elements design, the water flows into the meters keeping the turbine balanced, reducing the wear and assuring stable metrological performance.

In addition to that the extra-dry registers, combined with magnetic transmission guaranty very durable accuracy.

Metrology

Multimag TM II is available in two different metrology classes, B and C in horizontal position according to ISO 4064 (1999).

Main Characteristics

- > Enhanced design and technologies with long-term reliability
- > High quality engineering materials
- > Register can be oriented to allow easily reading
- > 100% of the products are calibrated on electronic test benches and all results can be provided
- > Robust against different types of frauds

Approvals

Comply with different international standards, such as.

- > ABNT NM212 (South America)
- > EEC 75/33 (Europe)
- > IS:779:1994 (India)
- > ISO 4064 (and derived standards)
- > NOM-012-SCFI (Mexico)
- > Portaria INMETRO 246 (Brazil)
- > SANS 1529-1:2003 (South Africa)
- > SNI 2547-2008 (Indonesia)



> Benefits

- Reliability
- Robustness
- Different versions
- Operate in several conditions

Registers

The Multimag TMII meters can be equipped with different registers types, allowing different configurations appropriate to each installation conditions.



> Plastic Registers

Excellent cost-benefit with good performance. The inclined version is indicated to avoid the meters to be installed inclined position.



> Copper Can Registers

Very robust against frauds, completely hermetical, indicated for severe environmental conditions, and pits subjected where the meters get submersion.



> Cyble Versions

Pre-equipped registers (Copper Can Cyble or Plastic Cyble), with Cyble target, ready for installation of Cyble modules, for AMR (Automated Metering Reading)

All registers manufactured by Itron are certified in International Protection Rating.

- **Plastic Registers** – Protected against temporary immersion (IP67)
- **Copper Can** – Protected against prolonged effects of immersion under pressure (IP68)

Available Versions



Standard Version

The Standard version is the simplest one in the family. The meter has a plastic cover that is fixed through plastic lock. It allows easy maintenance.



Anti-Fraud 3G

The Anti-Fraud 3G version was developed in order to prevent and identify frauds attempt. It has a red ring placed under the cover which can not be disassembled without breaking it. If any attempt of opening the meter, the cover gets broken and the red ring can easily be viewed.



Fixed Lock

The fixed Lock version is based on the Anti-Fraud concept, however adding and a fix protection of the regulator that gets completely covered, not allowing any access to it.



Robust Version

This version is fully metallic, being the most robust against tamper, and severe environmental conditions. The opening of the meter is only possible by using special and dedicated tools.



Multimag Cyble

The increase of automated metering reading (AMR) required the Multimag Cyble that uses pre-equipped register. It is anti fraud meter ready to remote reading and a cover with four safe points to fix the Cyble modules.

Registers Application

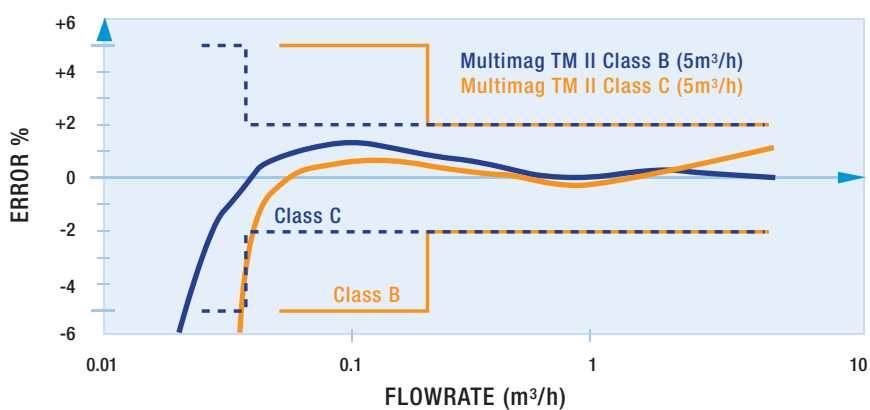
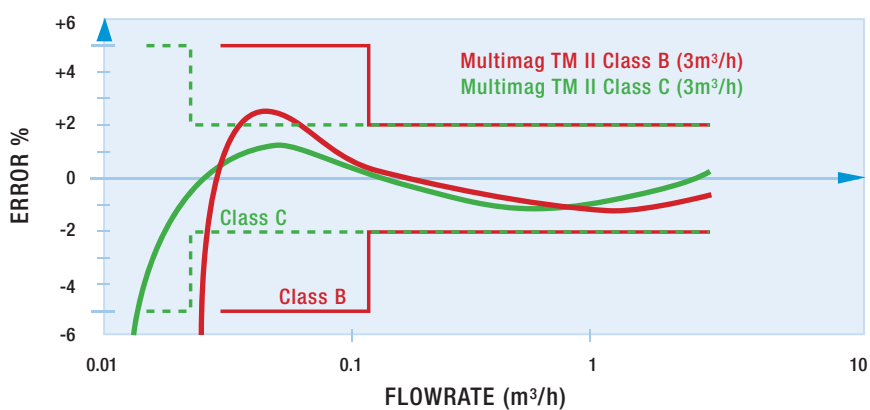


> Register Features

- The customer logo can be applied in the dial plate.



Metrology



> Body Features

- Painting: made in epoxy blue color (It can be done in other colors or without painting).
- Available in different bronze's alloy, including versions with reduced content lead.
- It allows Non Return Valve installation.
- Different thread connections available

Technical Characteristics

Nominal diameter (DN)	mm pol	15 1/2"		20 3/4"	
Lenght	mm	165 / 170 / 190		190	
Metrology*	Class	B	C	B	C
Typical Start-up	L/h	10	7	18	12
Minimum Flow Rate – Qmin	L/h	30	15	50	25
Transitional Flow Rate – Qt	L/h	120	22.5	200	37.5
Nominal Flow Rate – Qn	m³/h	1.5	1.5	2.5	2.5
Maximum Flow Rate – Qmax	m³/h	3	3	5	5
Maximum temperature	°C	40			
Maximum temperature (<1h)	°C	50			
Maximum Operating Pressure	bar	16			
Head Loss at Qmax	bar	< 1			
Maximum Reading	m³	9.999 or 99.999			
Minimum Reading	L	0.02			

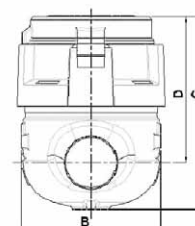
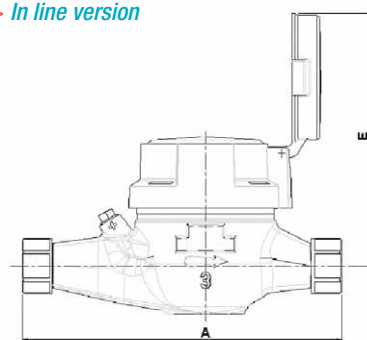
* Considering horizontal installation.

Dimensions**

Nominal diameter (DN)	mm pol	15 1/2"		20 3/4"	
Weight	Kg	1	1.1	1.19	
Threads	mm	G 3/4"	G 3/4"	G 1"	
A	mm	165 / 170	190	190	
B	mm	80	80	80	
C	mm	112	112	112	
D	mm	88	88	88	
E	mm	147	147	147	
Entry hole diameter	mm	12.7	12.7	23	

**Considering the Multimag Cyble Version

> In line version



About Itron Inc.

Itron Inc. is a leading technology provider to the global energy and water industries. Our company is the world's leading provider of metering, data collection and utility software solutions, with nearly 8,000 utilities worldwide relying on our technology to optimize the delivery and use of energy and water. Our products include electricity, gas and water meters, data collection and communication systems, including automated meter reading (AMR) and advanced metering infrastructure (AMI); meter data management and related software applications; as well as project management, installation, and consulting services. To know more, start here: www.itron.com

For more information, contact your local sales representative or agency.

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