



Multimag Cyble

Residential Multi-jet Meter - DN15 & DN20

The Multimag Cyble is an excellent multi-jet turbine water meter, ready for automated metering reading (AMR).

Following the increasing need of automation in the metering application, Multimag Cyble has been developed in order to provide very good and durable metrology performance combined with fully AMR capabilities.

FEATURES AND BENEFITS

- » Pre-equipped
- » Anti fraud register
- » Reliability
- » Robustness

Communication

Pre-equipped register that enables the use of Cyble communicating modules. At anytime the Cyble modules can be easily mounted, making it a powerful communicating device for several AMR systems:

- » Radio walk-by systems
- » Radio fixed data collection
- » M-bus wired systems
- » Any other system based on pulse outputs

Technology

Equipped with very robust hydraulic components combined with an extra-dry register and a magnetic transmission. It results in durable and reliable metrology performance.

Metrology Performance

Available in two different metrology classes, B and C in horizontal position according to ISO 4064 (1999).

The Class C version is much more accurate, measuring lower water flow rates, generating more reliable and precise data.

Anti Fraud Features

- » Copper Can Cyble Register
- » Exclusive and patented Anti Fraud 3G Cover
- » Protection Against Magnetic Tampering

Main Characteristics

- » Enhanced design and technologies combining high performance 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
- » All calibration results can be provided
- » INMETRO approval for Class B and C in horizontal position



Registers

It is made with a copper case and glass lens, hermetically sealed it is resistant against condensation and also water proof (IP68). As an option, it is available plastic version (IP67).

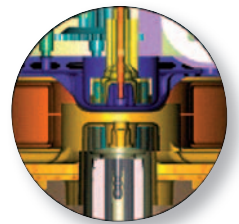
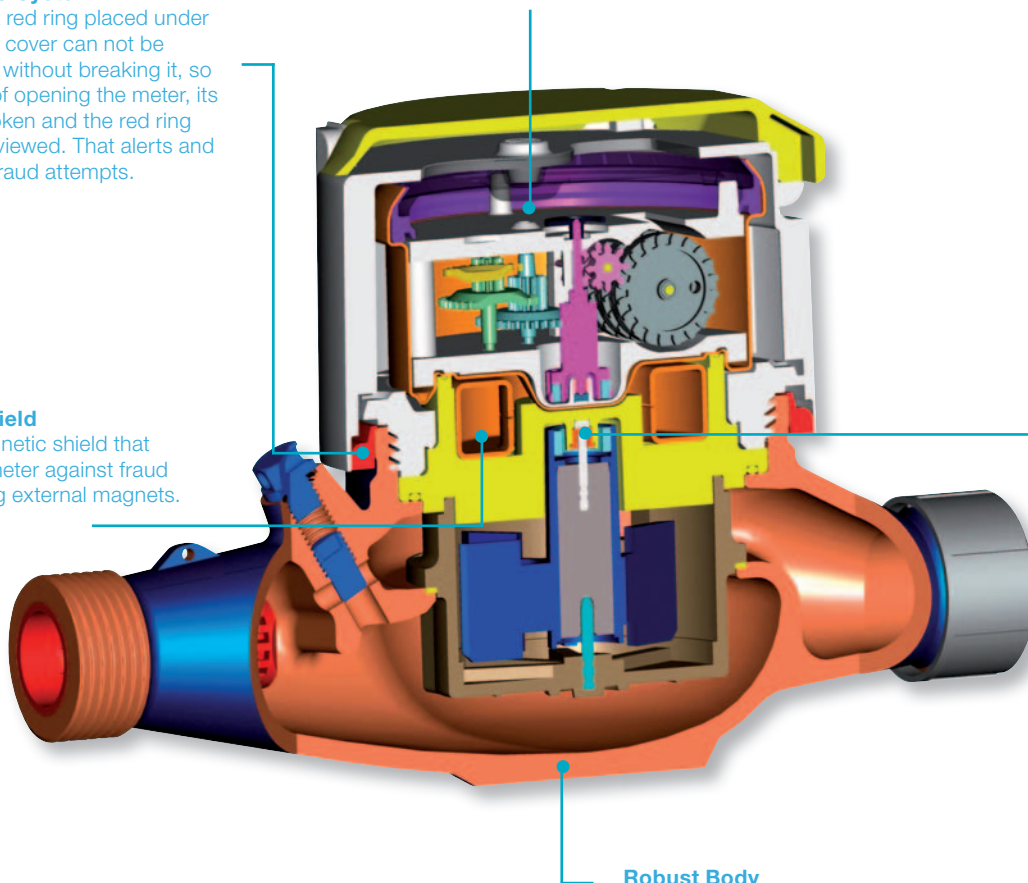
It is equipped with the Cyble target, that allows the mounting of any Cyble module.

Anti Fraud 3G System

It consists in a red ring placed under the cover. The cover can not be disassembled without breaking it, so any tentative of opening the meter, its cover gets broken and the red ring can easily be viewed. That alerts and identifies the fraud attempts.

Magnetic Shield

Exclusive magnetic shield that protects the meter against fraud attempts using external magnets.



Magnetic Transmission

The transmission between the turbine and extra-dry register is achieved by magnetic coupling ensuring a precise and reliable metering.

Robust Body

High pressure resistance. Compact and easy handling.



CYBLE MODULE FIXATION

The Cyble modules are mounted on the top of the register, its fixation is secured through 4 different points, including a screw that is sealed. That assures reliability and security for AMR.

ADAPTABILITY

Multimag TMII meters can be equipped with Cyble™ remote reading interfaces for automatic meter data collection offering:

- » Optimal reading and billing
- » Leak detection
- » Reverse flow detection
- » Fraud detection
- » Study of consumer habits

Cyble™ technology was designed to be adapted on every Actaris meter with a pre-equipped register.

Cyble™ technology advantages:

- » Reliability
- » Non sensitive to magnetic fraud
- » Field tested for more than 20 years



Cyble M-Bus



Cyble Pulse



Cyble RF

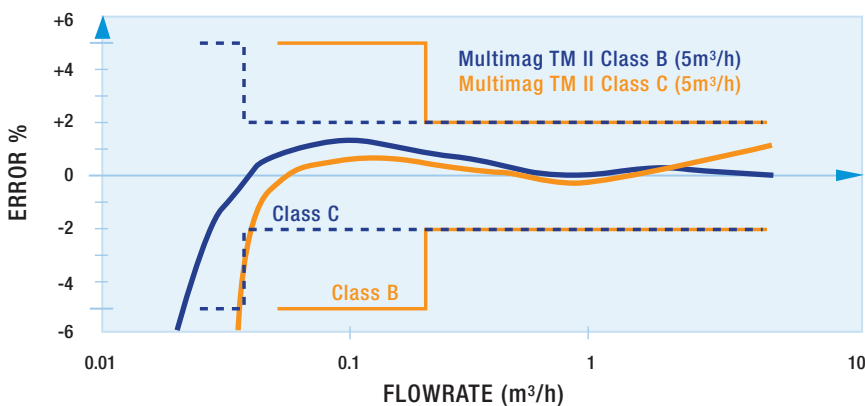
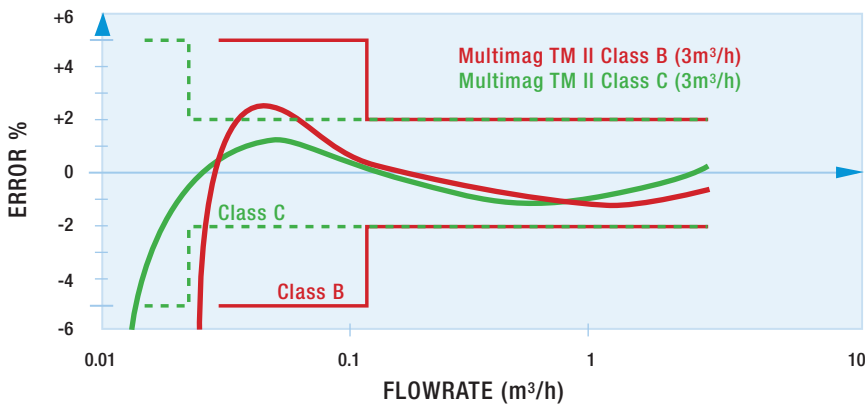


Handheld for walk-by system



Radio drive-by system

TYPICAL ACCURACY CURVE - MULTIMAG CYBLE

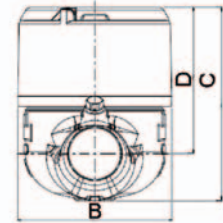
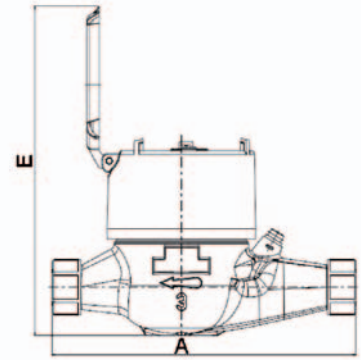


Multimag Cyble equipped with Cyble RF

Metrological Characteristics

Nominal diameter (DN)	mm	15		20	
	inches	½"		¾"	
Lenght	mm	165 - 170 - 190		190	
Metrology*	Class	B	C	B	C
Typical Start-up	L/h	10	7	18	12
Minimum Flow Rate	L/h	30	15	50	25
Transitional Flow Rate	L/h	120	22.5	200	37.5
Nominal Flow Rate	m³/h	1.5	1.5	2.5	2.5
Maximum Flow Rate	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

Dimensions

Nominal diameter (DN)	mm	15		20	
	inches	½"		¾"	
Weight	Kg	1		1.1	
Threads	mm	G ¾"		G 1"	
A	mm	165 / 170		190	
B	mm	80		80	
C	mm	112		112	
D	mm	88		88	
E	mm	147		147	



Our company is the world's leading provider of smart metering, data collection and utility software systems, with over 8,000 utilities worldwide relying on our technology to optimize the delivery and use of energy and water.

To realize your smarter energy and water future, start here: www.itron.com

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

ITRON WATER METERING

PT Meccoindo
EJIP Plot 6B-2
Lemah Abang, Bekasi 17550
West Java, Indonesia

Phone: +62 21 897 0270

Fax: +62 21 897 0271