



Medis Cyble™

Single-Jet meter for all water conditions, ready for advanced AMR

Medis Cyble is a single-jet water meter with excellent performances of metrology and resistance in all water conditions, also if charged. The meter can be easily transformed anytime into an advanced communicating device thanks to the application of the whole range of Itron Cyble communicating modules.

FEATURES AND BENEFITS

- » Turbine Type Water Meter, Extra-Dry
 - Cold Water
 - Compact and Easy to Install
 - MID Approved
- » Pre-equipped for Communication

The Technology

Medis Cyble combines the turbine single-jet technology with the proven reliability of the extra-dry register. No parts of the register are in contact with the water flow thanks to the high performance magnetic transmission.

Communication

Medis Cyble is always pre-equipped with the proven Cyble technology, making it possible to mount plug-and-play Cyble modules at any time. This opens the meters up to a large range of advanced and reliable AMR systems:

- » Radio walk-by systems
- » Radio fixed data collection systems
- » M-Bus wire systems (walk-by or fixed network)
- » or any other system based on universal pulse outputs

Metrological Performance

The meter is approved according to the Directive CE-2004-22 (MID) as Q3 2,5 and 4,0 m³/h.

Good metrology maintained also when installed inclined up to 45°.

Reliability

The Medis Cyble hydraulic have been strongly validated in the most difficult installation conditions. Excellent feedbacks after 5 years in the field.

Main features

- » Specific design of bushings and supports to avoid deposits in case of charged water
- » Frictionless high-end technical materials to assure the best sensitivity at low flow rates
- » Robustly designed, pressurized parts able to pass the strongest resistance tests (PN 16) in both static and dynamic conditions
- » Shock-resistant material for register and meter closure. Patented fastenings protection to ensure easy interface with the Cyble modules in any conditions

- » 100% manufactured in the EEC in strict compliance with most severe quality and environmental standards
 - ISO 9001 -:2008
 - ISO 14001 -:2004
 - Directive 2004/22/EC,

Easy reading

- » 360° possible rotation of the register for comfortable reading in any position
- » 8 numbered rollers with high contrast for easy and error-free reading up to 99999,999 m³
- » Register with hermetically sealed enclosure in order to keep all inside parts perfectly clean and protected throughout the entire lifetime of the product.

Approvals and Standards

- » MID - Directive 2004/22/EC
- » European Standard EN14154 – 2005
- » ISO 4064

and compliant with

- » International Standard ISO 4064 – 2005

WORKING PRINCIPLE

Medis Cyble is composed of two main sections: the hydraulic part that allows the measurement of the water flow and the register that totalizes and displays the measured water volume.

Transmission between the two parts is achieved by magnetic coupling, without any mechanic connection between the wet and the dry parts.



Cyble RF (wireless, radio frequency)



Cyble Sensor (Pulse output)



Cyble M-Bus



Potentiality of the Cyble AMR interface

- Optimised reading and billing without the necessity of accessing the meter
- Leak detection
- Study of consumer's habits
- Reverse flow detection
- Fraud detection

Safe reading

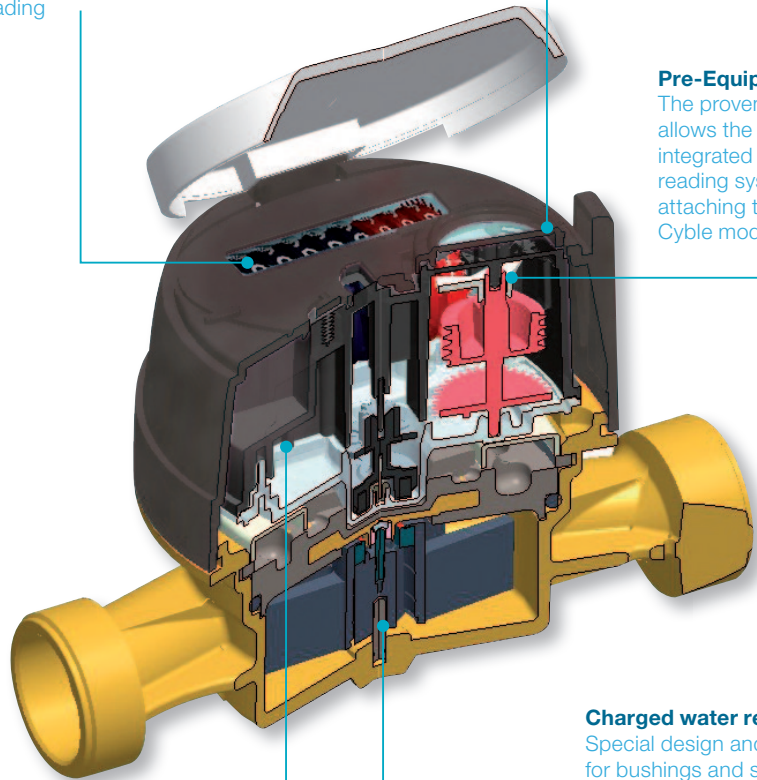
Eight numbered rollers to ensure easy and error-free reading

Robustness

Shock resistant thermoplastic
Removable protection over the Cyble module fastening (patented)

Pre-Equipment

The proven Cyble target allows the meter to be integrated into a remote reading system by attaching the relevant Cyble module



Extra Dry

All gears and rollers are enclosed inside the hermetically sealed case No moving parts except the turbine are in contact with the water

Charged water resistant

Special design and materials for bushings and supports make the meter not affected by deposits in case of charged water

KEY ADVANTAGES OF THE CYBLE TECHNOLOGY

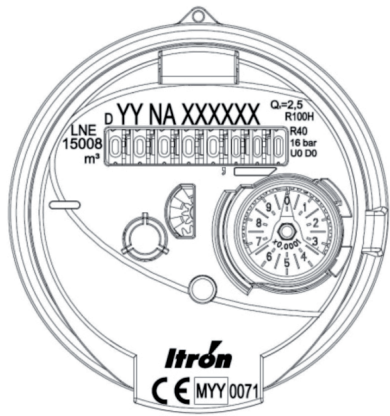
No need for additional investments on the meter itself to implement remote reading

- » Itron standard meter interface, irrespective of the meter technology and used on all Itron water meters from DN 15 to DN 500
- » Complete system portfolio from the radio module to the meter reading software and handheld terminals
- » Outstanding reliability proven by several million modules installed worldwide

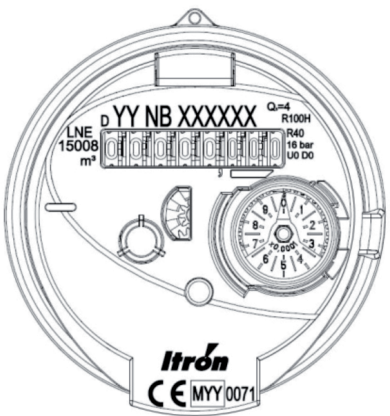
- » Electronic detection (no wear or bounce)
- » Back flow management
- » Not sensitive to magnetic fields
- » Perfect index correlation

For further info, refer to the specific leaflet

Nominale Diameter (DN)	mm		15	20
	inches		1/2"	3/4"
MID Metrology class (horizontal)			2,5 R100	4,0 R100
MID Metrology class (other positions)			2,5 R40	4,0 R40
Operating Temperature	T	°C	0,1° - 50°	
Starting Flow Rate		L/h	7	10,5
Minimum Flow Rate	Q1	L/h	25	40
Transitional Flow Rate	Q2	L/h	40	64
Nominal Flow Rate	Q3	L/h	2.500	4.000
Overload Flow rate	Q4	L/h	3.125	5.000
Pressure loss at Q4		bar	0,70	0,65
Maximum admissible pressure (MAP)		bar	16	
Flow profile sensitivity class		bar	UO / DO	
Indication range			99999,999	
Minimum scale interval			0,05	
Pre-equipment for communication			Cyble Technology	

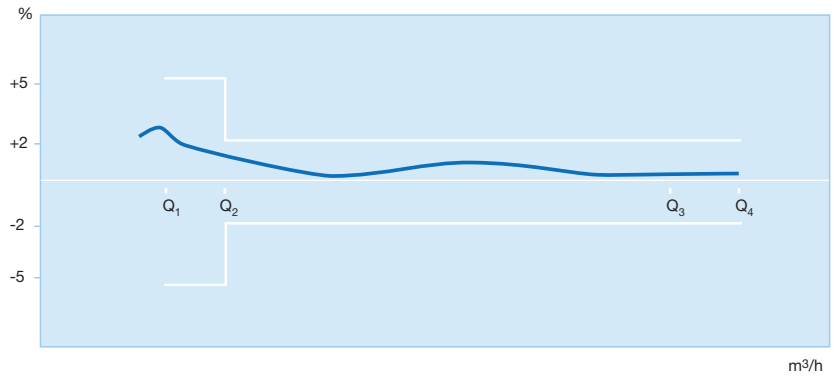


Marking for DN 15

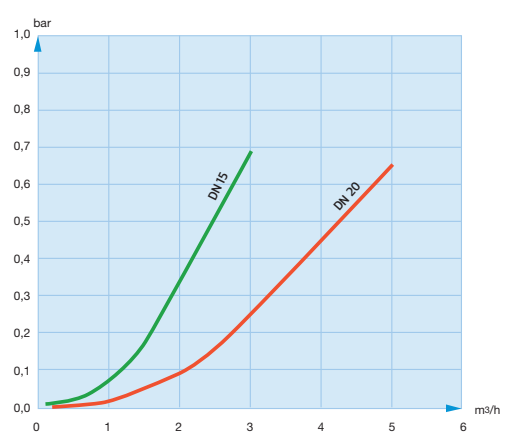


Marking for DN 20

TYPICAL ACCURACY CURVE



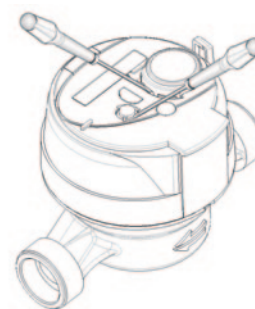
HEAD LOSS



Nominale Diameter (DN)	mm	15	20
Meter Threads		G 7/8" - 3/4", G 3/4" - 3/4" G 3/4" - 22x14h"	G1"
A	mm	100 - 115	115
B	mm	69	69
C	mm	13,20	16,60
D	mm	74	74
E	mm	33	33
F	mm	52	52
G	mm	104,6 - 112,1	112,1
H	mm	69	73,20
H'	mm	119,50	123,70

* with special threads 3/4" - 22*14"

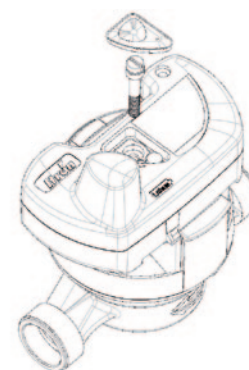
Cyble Module Installation



- step 1:**
Remove the 2 protections with a small screwdriver

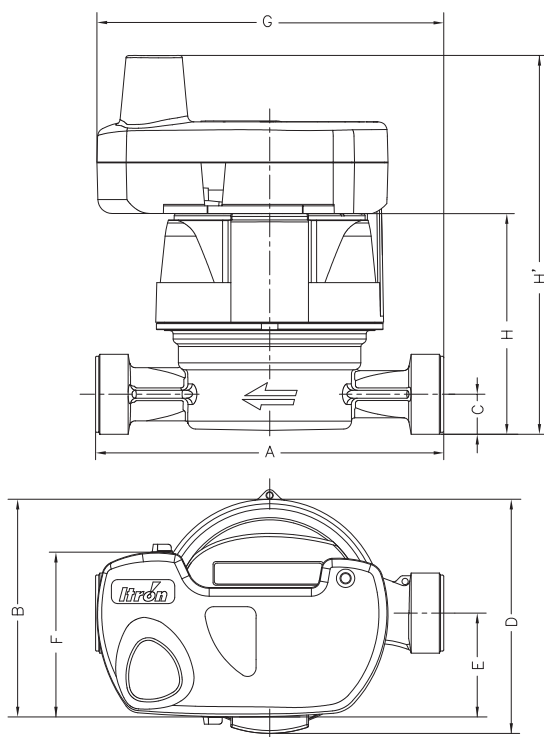


- step 2:**
Clip the module on the meter



- step 3:**
Fix the module with the screw and insert the seal supplied

DIMENSIONS



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.

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