Aquadis+

Rotary piston volumetric type water meter - Now with extended flow range

Aquadis+ is an MID 2004/22/EC approved piston type meter for commercial & industrial billing applications.

FEATURES AND BENEFITS

» MID approved
» Very low starting flow
» Pre-equipped for communication

The Technology

Aquadis+ combines the advantages of piston type technology together with proven reliability of the extra dry registers. No gear is in contact with water.

The high technology implemented to manufacture measuring chambers ensures stable and durable accuracy of Aquadis+ meter.

Metrological Performances

» Very low starting flow allows leakage detection
» Large measuring range

Robustness

» Robust hermetically sealed IP68 register TVM (copper can/mineral glass enclosure) to withstand all field conditions.
» Plastic register TSN equipped with wiper to ensure readability in tough humid conditions (optional for DN25/30)
» Maximum admissible working pressure is 16 bar

Easy Reading

» Rotation close to 360° on site
» Large numbered rollers with good contrast for excellent reading capability

Communication Device

Pre-equipped for communication through Cyble.

WORKING PRINCIPLE

The Aquadis+ has two main components: the hydraulics that allows measurement of the water and the register that displays the measured water volume.
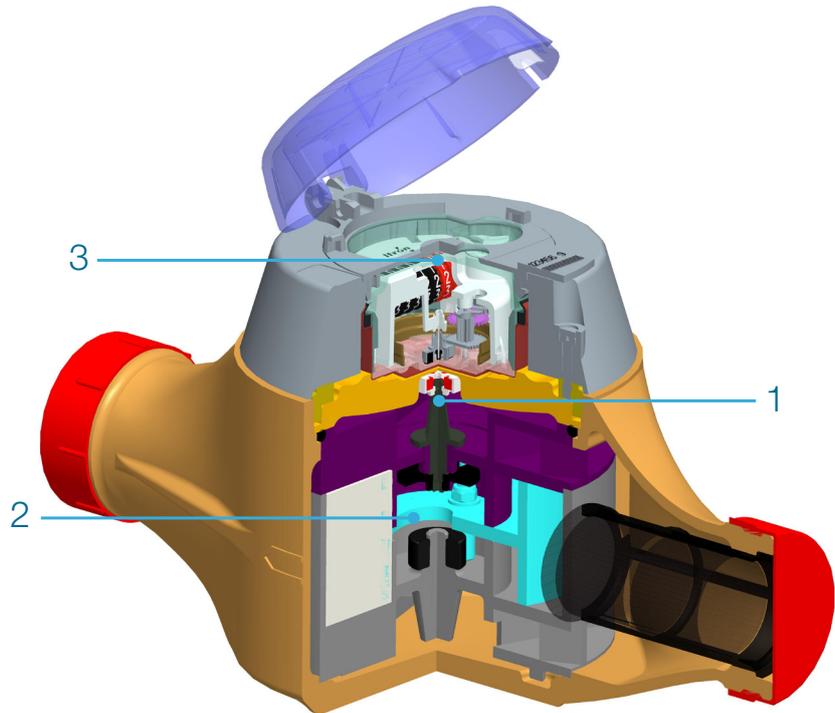
Transmission interface between those components is achieved by a strong magnetic coupling 1.

Aquadis+ is a piston type volumetric meter 2. Each rotation of the piston in the measuring chamber represents a given volume of water passing through.

With extra-dry registers 3, gears are protected by water and air proof enclosure.

Copper can/mineral glass register (TVM)

Glass Metal register (TVM) DN25 to 65 meters

COMMUNICATION

The Aquadis+ is supplied pre-equipped with Cyble Target

Allows communication and remote reading through:

» Pulse output (Cyble Sensor)
» M-Bus protocol (Cyble M-Bus)
» Radio frequency wireless link (Cyble AnyQuest and EverBlu)

Key Advantages of Cyble Technology

» No need for additional investment on the meter to implement remote reading

» Itron standardized meter interface, irrespective of meter technology and widely spread on Itron water meters range
» Reliability brought by electronic switch (no wear or bouncing)
» Reverse flow management
» Principle proven on the field with a 20 years experience
» Pre-equipment being immune to magnetic tampering

AnyQuest Cyble fitted on Aquadis+ meter

Metrological Characteristics

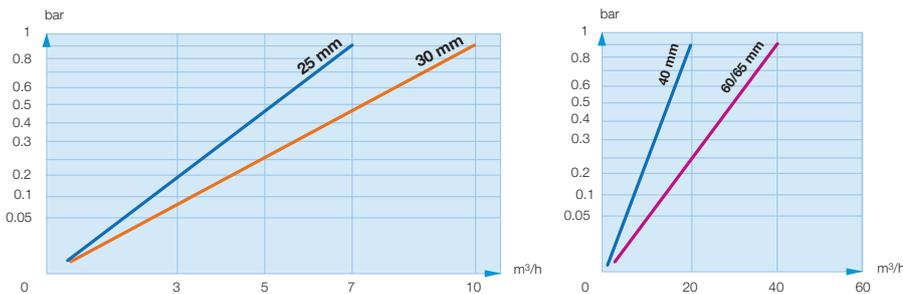| Nominal diameter (DN)		mm	25	30	40
		inches	1"	1" ¼	1" ½
Register version			Plastic (TSN) or Copper can/mineral glass (TVM)		Copper can/mineral glass (TVM)
MID Type Approval Number			LNE - 24811		LNE - 23697
Dynamic range MID (R) - all positions			315		315
Permanent flow rate	(Q3)	m³/h	6.3		16
Standard ratio	(Q3/Q1)		160		160
Minimum flow rate - R160	(Q1)	l/h	39		100
Transitional flow rate - R160	(Q2)	l/h	63		160
Overload Flow Rate	(Q4)	m³/h	7.9		20
Pressure Loss Class at Q3		bar	< 0.63		< 0.63
Pressure loss at Q4		bar	< 1		< 1
Maximum admissible pressure (MAP)	(MAP)	bar	16		16
Maximum admissible temperature		°C	+ 0.1.... + 30		+ 0.1.... + 30
Operating temperature		°C	+ 5.... + 55		+ 5.... + 55
Starting flow rate		l/h	4		11
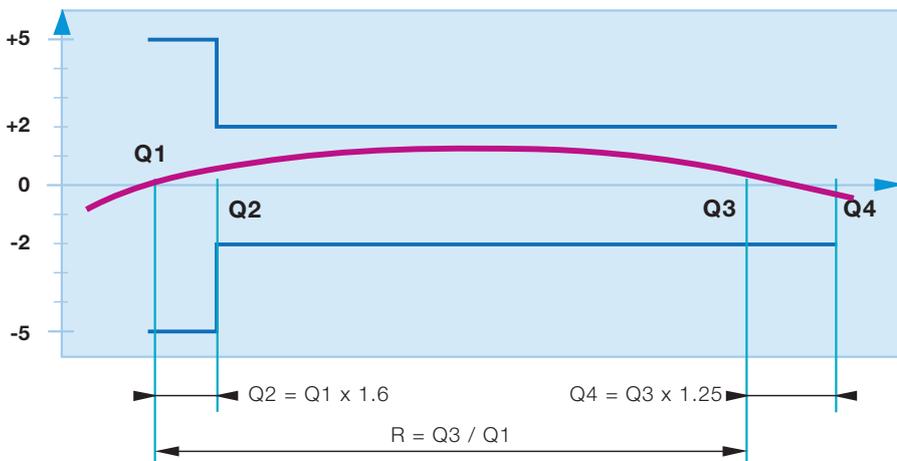
Aquadis+ DN30

According to MID, ISO standard and OIML recommendation, the metrology classes A, B, C, D are replaced by the value of the ratio (R) between nominal flow (Q3) and minimum flow (Q1).

Pulse Value

	HF Signal	LF Signal (according to K factor for Cyble Sensor Module)					
		K = 1	K = 2.5	K = 10	K = 25	K = 100	K = 1000
Meter range							
DN 25 to 40	1 L	1 L	2.5 L	10 L	25 L	100 L	1 m³

HEAD LOSS

Technical Specifications

| Nominal diameter (DN)	mm	25	30	40
Register version		TSN/TVM	TSN/TVM	TVM
Meter thread	inches	G 1" ¼ B	G 1" ½ B	G 2" B
	mm	33x42	40x49	50x60
A	mm	260	260	300
B	mm	156 / 142	156 / 142	180
C	mm	44	44	57
D	mm	110	110	140
Weight	Kg	3.2 / 3.5	3.3 / 3.6	6.2

In line version

OPTIONS (NON EXHAUSTIVE LIST)

Aquadis+ meters may be fitted with:

» Cyble modules from the factory (please refer to specific leaflet),

» Non return-valve for outlet pipe 25, 30 and 40 mm,

» Removable cap for DN 25 & 30.
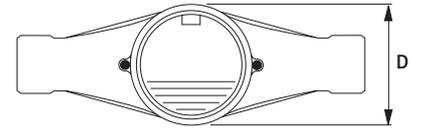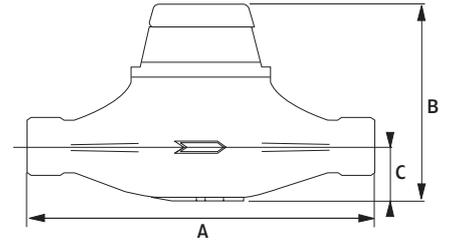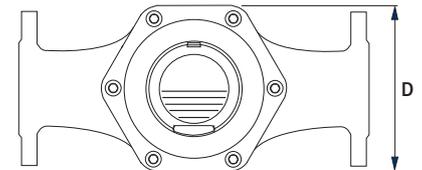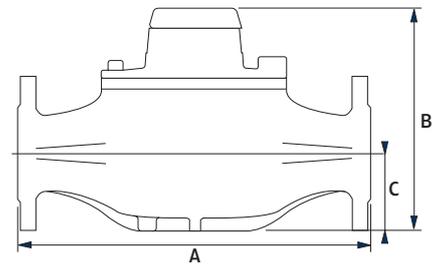
In line version

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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