Aquadis+

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

Aquadis+ is an 2014/32/EU module H1 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

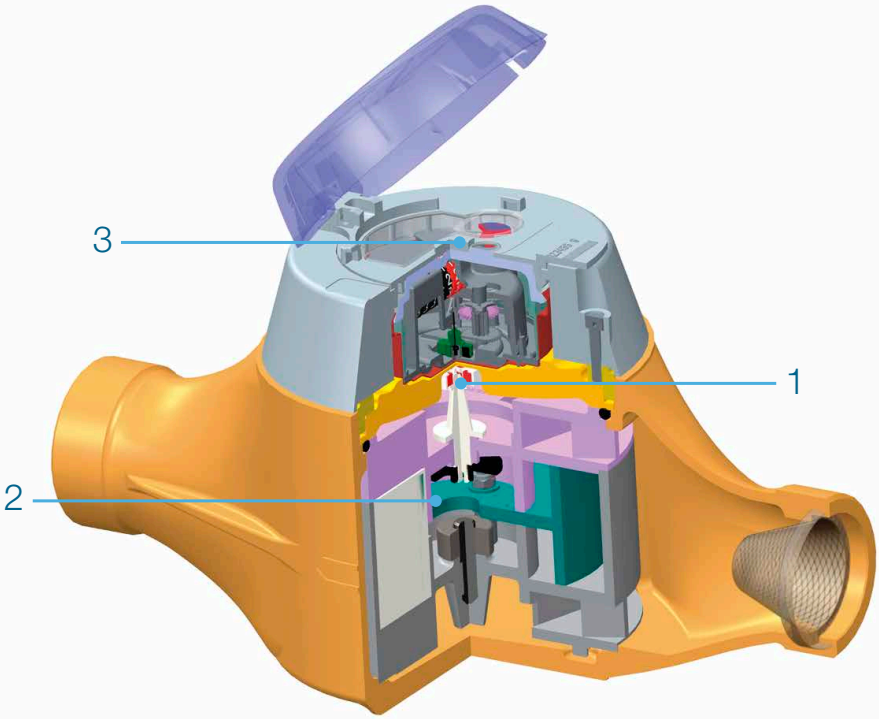
The Aquadis+ has two main components: the hydraulics that allows measurement of the water and the register that displays the measured water volume.

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

EverBlu Cyble fitted on Aquadis+ meter

COMMUNICATION

The Aquadis+ is supplied pre-equipped with Cyble Target

Allows communication and remote reading through:

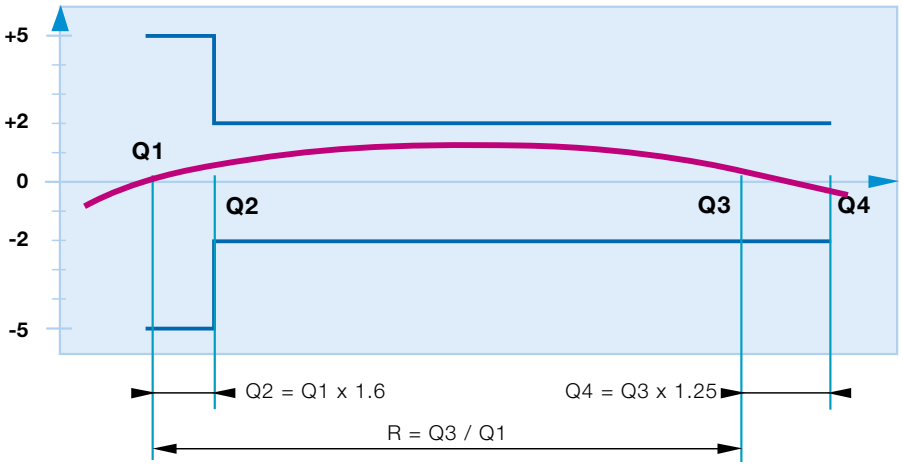
- Pulse output (Cyble Sensor)
- M-Bus protocol (Cyble M-Bus)
- Radio frequency wireless link (Cyble AnyQuest and EverBlu)

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

Metrological Characteristics

Nominal diameter (DN)		mm	25		30		40	65
		inches	1"		1" ¼		1" ½	2" ½
Register version			Extra-dry plastic *or* Glass copper can	Glass copper can	Extra-dry plastic *or* Glass copper can	Glass copper can	Glass copper can	Glass copper can
MID Type Approval Number			LNE - 24811	LNE-23697	LNE - 24811	LNE-23697	LNE-23697	LNE - 23701
Dynamic range MID (R) - all positions			315	200	315	200	315	160
Permanent flow rate	(Q3)	m^3/h	6.3	10	6.3	10	16	25
Standard ratio	(Q3/Q1)		160	160	160	160	160	160
Minimum flow rate - R160	(Q1)	l/h	39	63	39	63	100	156
Transitional flow rate - R160	(Q2)	l/h	63	100	63	100	160	250
Overload Flow Rate	(Q4)	m^3/h	7.9	12.5	7.9	12.5	20	31.5
Pressure Loss Class at Q3		bar	< 0.63					
Pressure loss at Q4		bar	< 1					
Maximum admissible pressure (MAP)	(MAP)	bar	16					
Maximum admissible temperature		°C	+ 0.1.... + 30					+ 0.1.... + 50
Operating temperature		°C	+ 5.... + 55					
Starting flow rate		l/h	4	11	4	11	11	30



Aquadis+ DN25 Q3=10

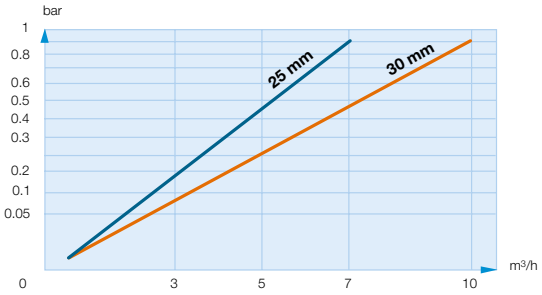
According to MID, ISO standard and OIML recommendation, the metrology classes A, B, C, D are replaced by the value of the ratio (R) between nominal flow (Q3) and minimum flow (Q1).

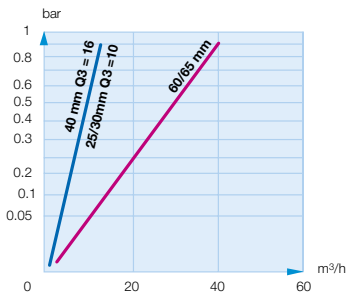
Aquadis+ DN65

Pulse Value

	HF Signal	LF Signal (according to K factor for Cyble Sensor Module)					
Meter range		K = 1	K = 2.5	K = 10	K = 25	K = 100	K = 1000
DN 25 to 40	1 L	1 L	2.5 L	10 L	25 L	100 L	1 m^3
DN 60/65	10 L	10 L	25 L	100 L	250 L	1 m^3	10 m^3

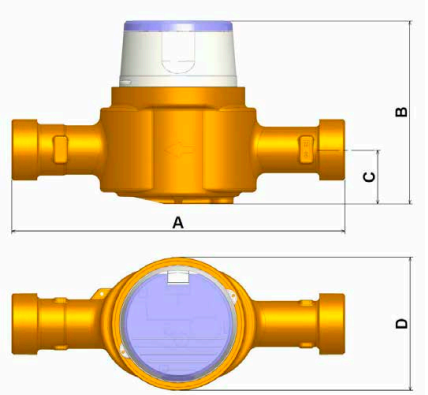
HEAD LOSS



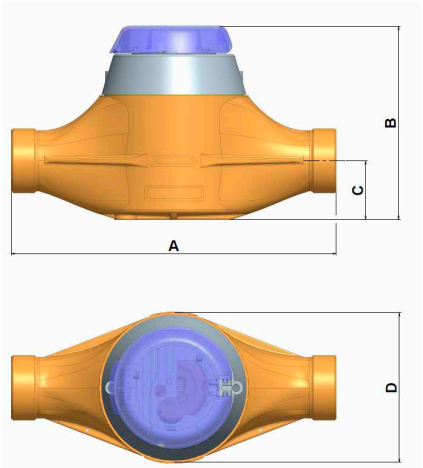


Technical Specifications

Nominal diameter (DN)	mm	25	25	30	30	40	65
Register version		**TSN/TVM Q3 = 6,3**	**TSN/TVM Q3 = 10**	**TSN/TVM Q3 = 6,3**	**TSN/TVM Q3 = 10**	**TVM**	**TVM**
Meter thread	inches mm	G 1" ¼ B 33x42	G 1" ¼ B 33x42	G 1" ½ B 40x49	G 1" ½ B 40x49	G 2" B 50x60	Flanges PN 10/16
A	mm	260	260	260	260	300	420
B	mm	143	178	143	178	180	254
C	mm	42	55	42	55	57	93
D	mm	104	140	104	140	140	202
Weight	Kg	2.6	5.4	2.6	5.4	6.2	22.6



Version Q3=6.3 Dn 25 /30"



Version Q3=10 Dn 25/30 and Q3=16 Dn 40

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.

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