

aquadis+

volumetric water meter



altecnic  
Caleffi group

# aquadis+ volumetric water meter



## Design

The Altecnic Aquadis+ range is a MID 2004/22/EC approved piston type meter for cold water applications offering a dependable and accurate reading of water consumption and is ideally suited for use in domestic premises and small commercial buildings.

## Technology

Aquadis+ combines the advantages of piston type technology together with proven reliability of the extra dry registers.

No gears are in contact with the water.

Hermetical measuring element using the concept of magnetic transmission.

## Hydraulic Performance

- Very low starting flow allows leakage detection.
- Large measuring range.

## Construction

- Hermetically sealed IP68 register TVM (copper can/mineral glass enclosure) to face all site situations.
- Plastic register TSN equipped with wiper to ensure readability in high humidity conditions, optional for DN25.
- Maximum admissible working pressure is 16 bar

## Easy Reading

- The dial can be rotated through 360° for easy reading in any position.
- Large numbered rollers with good contrast for easy reading.

## Communications

Pre-equipped for future communication through Cyble Target allowing remote reading through:

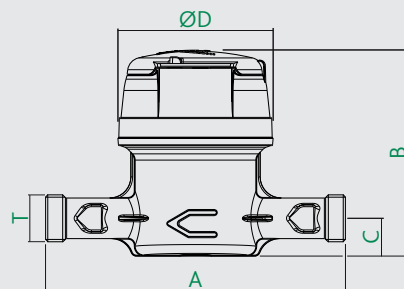
- Pulse output (Cyble Sensor).
- M-Bus protocol (Cyble M-Bus).
- Radio frequency wireless link (Cyble RF).

## Key Advantages of Cyble Technology

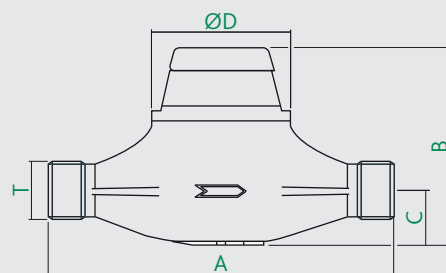
- No need for additional investment on the meter to implement remote reading.
- Standardized meter interface, irrespective of meter technology.
- Reliability brought by electronic switch (no wear or bouncing).
- Reverse flow management.
- Principle proven with 20 years experience.
- Pre-equipment being immune to magnetic tampering.

## Dimensions

### DN20



### DN25



Register	Size DN	T	A	B	C	D	kg
TVM	20	G1B	190	143	20	88	1.5
TSN/TVM	25	G1½B	260	156/142	44	110	3.2/3.5

## Product Range

### Product Code

PS-100002	¾" - DN20 water meter
PS-100004	1" - DN25 water meter
PS-P00002	¾" - DN20 water meter with pulse output
PS-P00003	1" - DN25 water meter with pulse output
TVM	Copper can/mineral glass register
TSN	Plastic register for high humidity conditions



Radio frequency cyble pulse unit fitted on Aquadis+ meter

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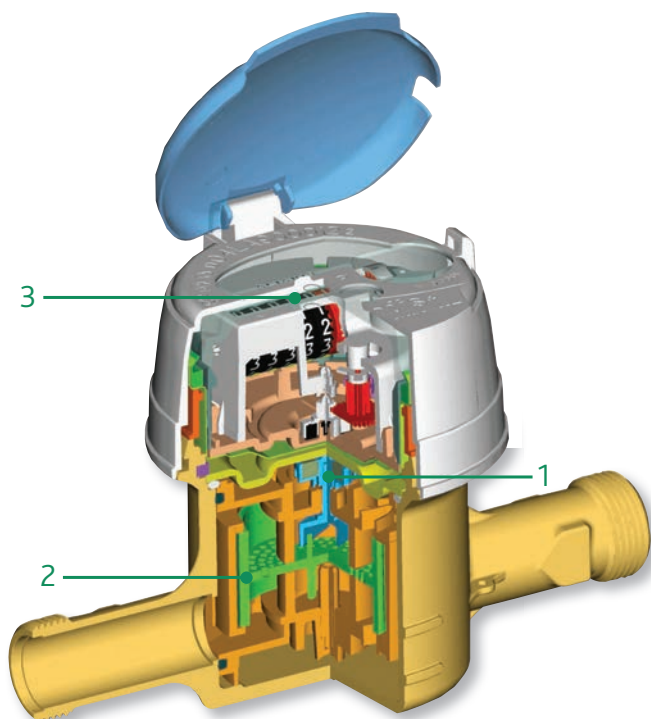
## Operating Principle

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

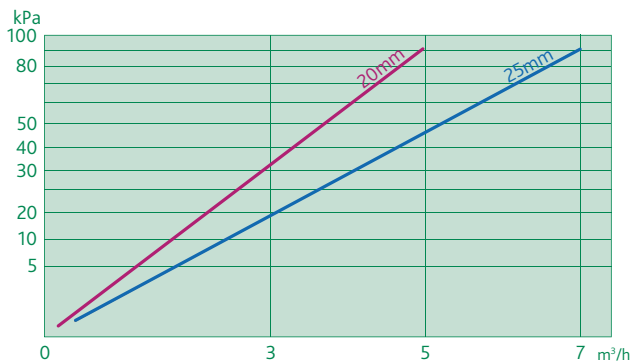
The transmission interface between these components is achieved by a strong magnetic coupling **1**.

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



## Headloss Charts



## Registers



Copper can/ mineral glass register (TMV)



Glass metal register DN25 (TVM)

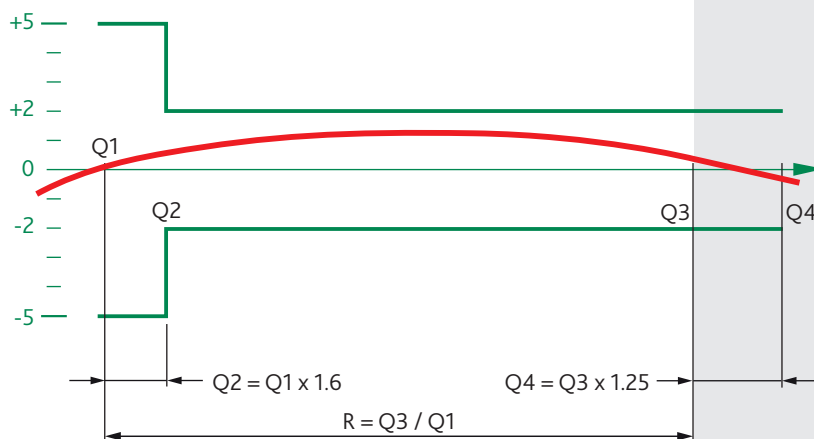
Aquadis meters may be fitted with:

- Cyble modules - factory fitted.
- Non return valves for outlet pipe.
- Removable cap for DN20 on TSN register.
- Removable cap for DN≥25.

## Technical Specification

Nominal Diameter DN		mm inches	20 ¾"	25 1"
Register Type			TVM	TSN/TVM
Dynamic range MID (R) - all positions			R160	R350
Permanent flow rate	Q3	m³/h	4	6.3
Standard ratio	Q3/Q1		160	160
Minimum flow rate	Q1	l/h	25	39
Transitional flow rate	Q2	l/h	40	63
Overload flow rate	Q4	m³/h	5	7.9
Pressure loss class at Q3		bar	<0.63	<0.63
Pressure loss at Q4	MAP	bar		<1
Maximum admissible pressure (MAP)	MAP	bar	16	16
Maximum admissible temperature	MAP	°C	0.1 to 50	0.1 to 30
Operating temperature	MAP	°C	0.1 to 50	5 to 55
Starting flow rate		l/h	2	4

## Accuracy



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 Values

Meter range	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
DN20 to DN25	1 L	1 L	2.5 L	10 L	25 L	100 L	1 m³

## E & O.E

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