



Wide Measuring Range
Communication
Easy Reading

Aquadis

Rotary piston volumetric type water meter

- ▶ Class C
- ▶ Very low starting flow
- ▶ Copper can/mineral glass register
- ▶ Pre-equipped for communication



Aquadis is an EEC/ISO Class C piston type meter for residential and commercial & industrial billing applications.

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

- Class C in all positions
- Very low starting flow allows leakage detection
- Very large measuring range with Q_n/Q_{min} Ratio > 180 (Q_n 1.5)

Robustness

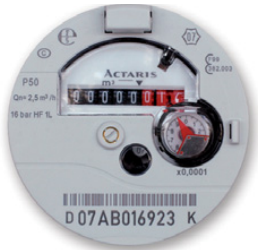
- Composite register TSN equipped with wiper to ensure readability in tough humid conditions (DN20/25/30 in option)
- Robust hermetically sealed IP68 register TVM (copper can/mineral glass enclosure) to face all field situations, DN20/25/30 in option and DN40-60/65 in standard
- Maximum admissible working pressure is 16 bar (12 bar for DN60/65)

Easy Reading

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

Communication Device

Pre-equipped for future communication through Cyble.



▶ Copper can/mineral glass register (TVM) DN20 meter



▶ Composite register (TSN) DN 25 to 30 meters



▶ Copper can/mineral glass register (TVM) DN 25 to 60/65 meters



▶ Cyble RF fitted on Aquadis meter

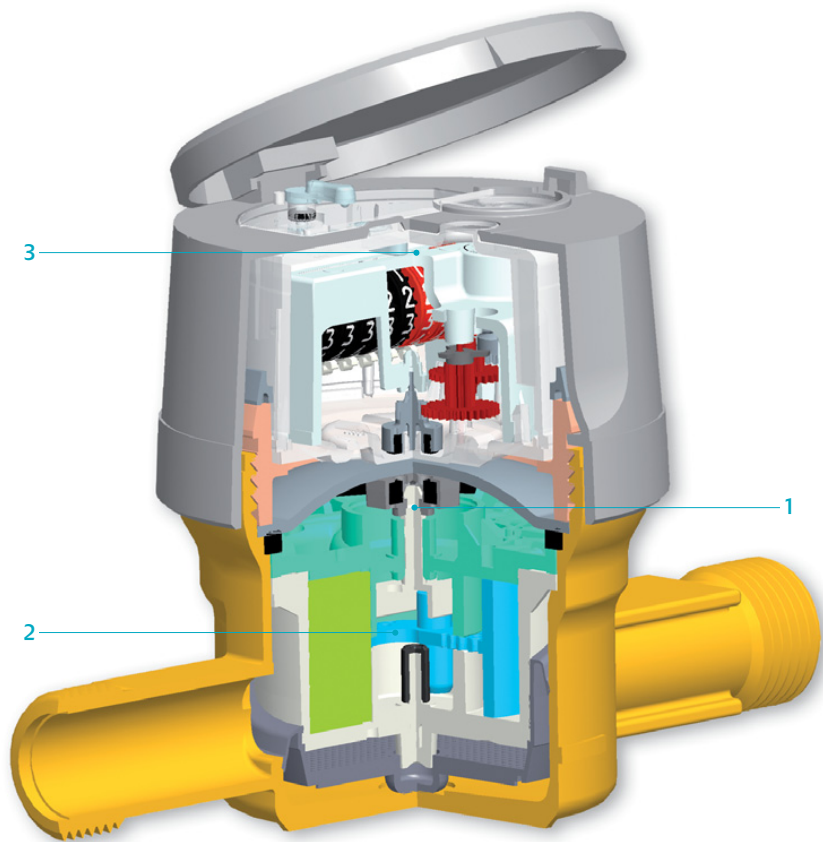
Working Principle

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.



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 RF)

Key Advantages of Cyble Technology

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

- Actaris standardized meter interface, irrespective of meter technology and widely spread on Actaris 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	20	25	30	40	60/65
	inches	3/4"	1"	1" 1/4	1" 1/2	2" 1/2
Register version		Composite (TSN) OR Copper can/mineral glass (TVM)			Copper can/mineral glass (TVM)	
E.E.C. metrology class		Class C all positions				
E.E.C. approval		F 99.00.382.003.0			F 99.00.382.006.0	
Max. admissible temperature	°C				30	
Max. temperature for short period	°C				50	
Max. admissible pressure	bar				16	12
Testing pressure	bar				25	20
Pressure loss group at Qmax	bar				1	
Nominal flow rate	Qn m ³ /h	1.5	2.5	3.5	5	10
Maximum flow rate	Qmax m ³ /h	3	5	7	10	20
Minimum flow rate	Qmin L/h	15	25	35	50	100
Transitional flow rate	Qt L/h	22.5	37.5	52.5	75	150
Starting flow rate	L/h	2		6	11	18
Accuracy ± 5%**	L/h	10		25	25	40
Accuracy ± 2%**	L/h	13		45	50	80
Indication range	m ³				10 ⁵	10 ⁶
Minimum scale interval	L				0.05	0.5
Communication pre-equipment					Cyble Technology	

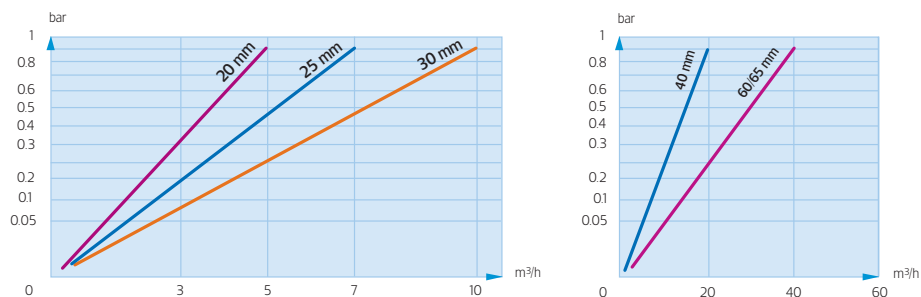
** Manufacturing average values.

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 20 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

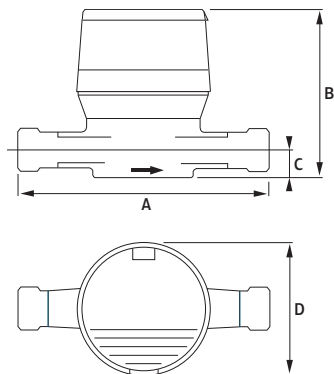
* For size 20 mm, 4/4 register divides by 10 the table values.

Head Loss

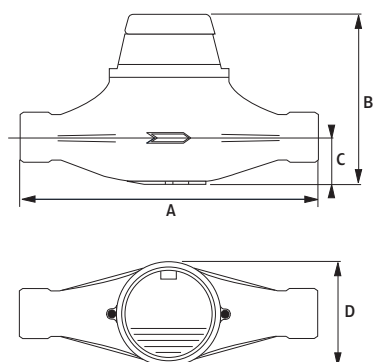


► Aquadis DN40 TVM

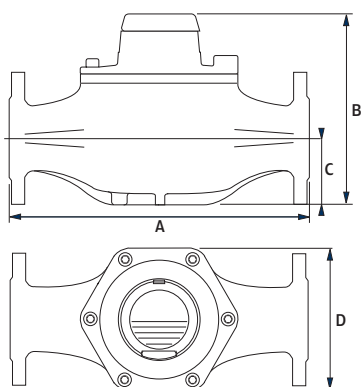
► DN 20



► DN 25-30-40



► DN 60/65



Dimensions

Nominal diameter (DN)	mm	20	25	30	40	60/65
Register version		TSN/TVM	TSN/TVM	TSN/TVM	TVM	TVM
Meter thread	inches	G 1" B	G 1" 1/4 B	G 1" 1/2 B	G 2" B	Flanges
	mm	26x34	33x42	40x49	50x60	PN 10/16
A	mm	190	260	260	300	420
B	mm	143	156/142	156/142	180	254
C	mm	18	44	44	57	93
D	mm	88	110	110	140	202
Weight	kg	1.3/1.6	3.2/3.5	3.3/3.6	6.2	22.6

Options (none exhaustive list)

Aquadis meters may be fitted with:

- Cyble modules from the factory (please refer to specific leaflet),
- Non return-valve for outlet pipe 20, 25, 30 and 40,
- Removable cap for in line meters DN 20, on TSN registers,
- Removable cap for DN ≥25.

For more information, please contact your local agency.

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