



Aquadis+

A New Standard for Volumetric Water Meters

Aquadis+ is a world-class piston type volumetric water meter, designed for the best metering and billing in residential applications.

FEATURES AND BENEFITS

- » Long-term performance
 - Long-lasting high accuracy
 - High Efficiency
 - Any installation position
 - Permanent Readability
- » New Design Features
 - Enhanced Robustness
 - Pre-equipped for Communication
 - Compact
 - Easy Handling

Efficiency

Focusing on reliable and long-term performance, Aquadis+ offers maximised revenue collection provided by an innovative design to maintain high efficiency over time.

The Technology

The working principle of Aquadis+ is based on the combination of an extra dry register (no gears in the water), associated with a hermetical measuring element, using the concept of magnetic transmission.

Communication Device

Pre-equipped for future communication through Cyble.

Approvals and Standards

Aquadis+ is approved at Q3 1,6, 2,5 and 4m³/h from Ratio 50 to 400 according with:

- » MID, Directive 2004/22/EC of the European Parliament
- » European Standard EN14154
International Standard ISO 4064
- » Recommendations OIML R49

Aquadis+ is compliant with regulations for products to use in contact with water intended for human consumption. Aquadis+ has approvals granted by the following laboratories:

- » ACS (France)
- » Belgaqua (Belgium)
- » Kiwa (Netherlands)
- » WRAS (United Kingdom)
- » KTW - DVGW W270 (Germany)

Hermetically Sealed Register* (Counter)

Glass lens and copper can register, condensation and water proof (IP 68), allows permanent readability

* option for plastic case, for specific applications



Communication

Pre-equipped with the proven Cyble target allowing the meter's integration into remote reading systems by adding the relevant module



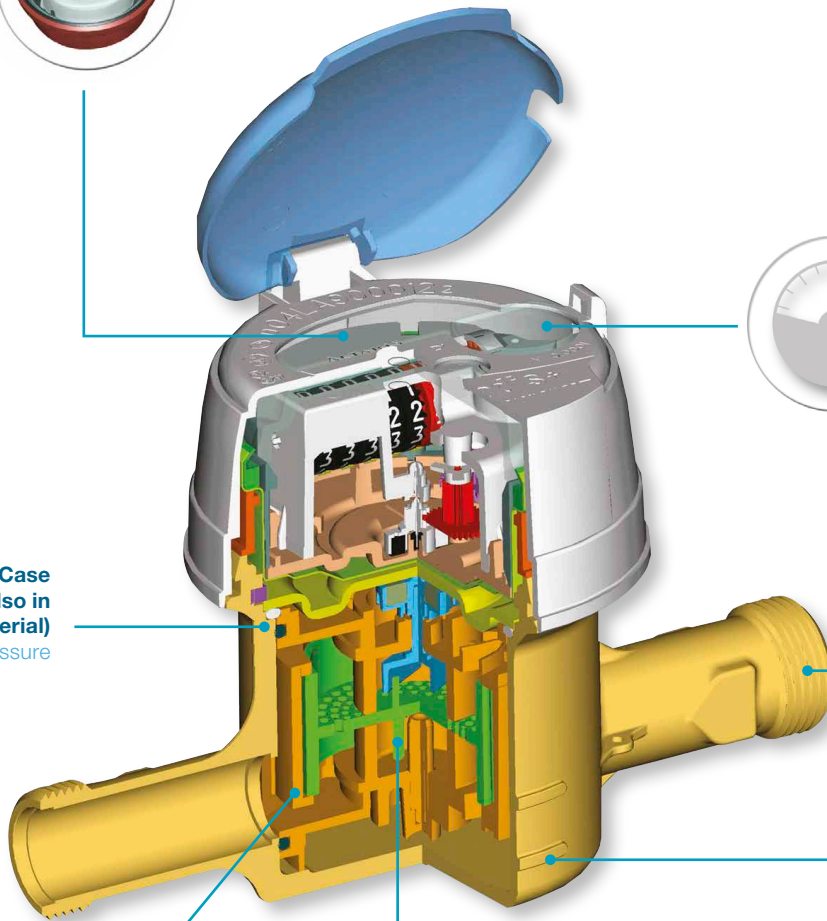
Robust Case (available also in thermoplastic material)

High resistance to pressure

Effective and Easy Maintenance Filter

Prepared to contain major particles, easy to clean

Compact and Easy Handling

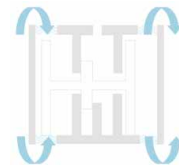


Aquadis+ DN15



Outstanding Accuracy and Long Term Performance

Hydro-dynamically balanced piston obtained by an innovative design of measuring elements enables not only detection and account of extremely low flows (typically, < 1L/h) in wide range of flow rates, but also long-lasting and stable accuracy.



OPTION

Aquadis+ meters may be fitted with:

- » Cyble modules from the factory (please refer to specific leaflet),
- » Non return-valve for outlet pipe,
- » Removable cap.

COMMUNICATION

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

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

Key Advantages of Cyble Technology

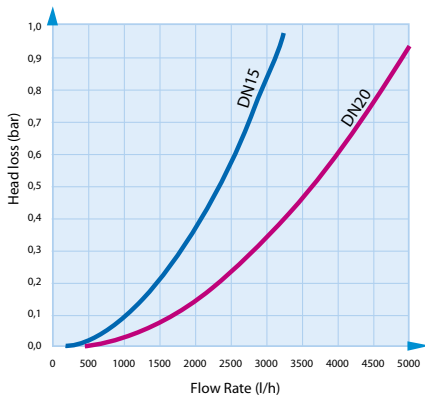
- » Itron standard meter interface
- » No need of additional investments on the water meter
- » Electronic detection principle (no wear or bounce)
- » Leak detection
- » Reverse flow detection
- » Fraud detection
- » Not sensitive to magnetic fields
- » Perfect index correlation

For further info, refer to the specific leaflet.



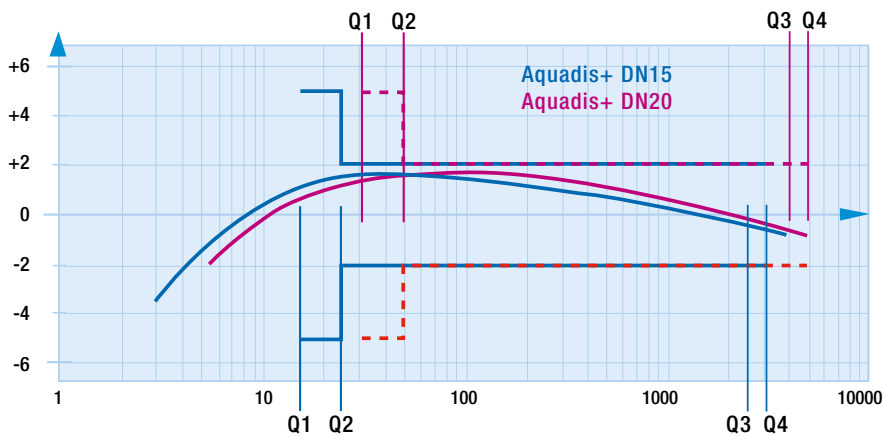
Cyble RF fitted on Aquadis+ DN15 meter

HEAD LOSS



Aquadis+ DN20

TYPICAL ACCURACY CURVE ACCORDING WITH R160 MID CHANNEL



The dynamic range is defined as the Ratio (R) between the Nominal and the minimum flowrates. The MID approval proves the Aquadis+ real capacity to withstand to higher nominal flows ($Q3 > Qn$).



Aquadis+ Manifold version



Aquadis+ DN15 composite version:
 - robust
 - lighter and ergonomic
 - resistant to dezincification

Technical Specifications

Nominal Diameter (DN)	mm	15 or 20	20
	inches	1/2" or 3/4"	3/4"

In compliance with MID

MID Accuracy Ratio (Q3/Q1) - all positions		50 / 400	63 / 400
MID Type Approval Number		LNE 13636	LNE 16467
Nominal Flow Rate	(Q3)	m ³ /h	1.6 2.5 2.5 4.0
Standard Ratio (*)	(Q3/Q1)		100 160 100 160
Minimum Flow Rate	(Q1)	l/h	16 15.6 25 25
Transitional Flow Rate	(Q2)	l/h	25.6 25 40 40
Overload Flow Rate	(Q4)	m ³ /h	2 3.125 3.1 5
Pressure Loss Class at Q3		bar	0.25 0.63 0.25 0.63
Maximum Admissible Pressure (MAP)		bar	16 16
Operating Temperature (T)		°C	0.1 / 50 0.1 / 50
Climatic Environment		°C	5 / 55 5 / 55

(*) Other Ratios available under specific request

Other Characteristics

Indication Range	m ³	99999,999	99999,999
Minimum Scale Interval	l	0.02	0.02
Typical Starting Flow Rate	l/h	1	2
Accuracy +/- 5%	l/h	3	5
Accuracy +/- 2%	l/h	5	8
Testing Pressure	bar	25	25
Maximum Accidental Water Temperature	°C	60 (<1h/day)	60 (<1h/day)

In compliance with EEC 75/33 - Expiring date May 2014

EEC Metrology Class	Class C all position				-
EEC approval number	F-04-G-297				-
Nominal Flow Rate	(Qn)	m ³ /h	0.75 1 1.5 0.75/1,5*	-	
Maximum Flow Rate	(Qmax)	m ³ /h	1.5 2 3 3	-	
Minimum Flow Rate	(Qmin)	l/h	7.5 10 15 7.5	-	
Transitional Flow Rate	(Qt)	l/h	11.25 15 22.5 11.25	-	
Maximum Admissible Pressure (PN)		bar	16	-	
Pressure Loss (Head Loss Group)		bar	1	-	
Maximum Operating Temperature (T)		°C	30	-	

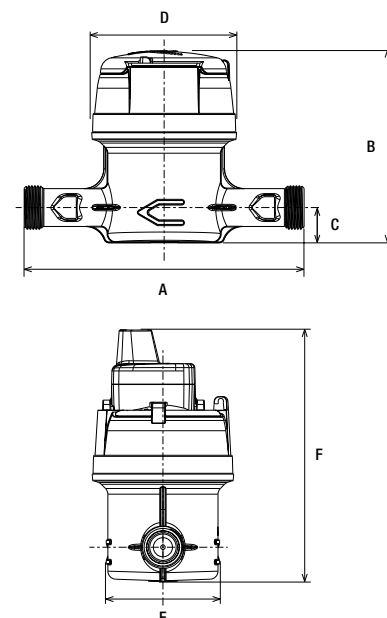
In compliance with British Standard 5728 - Expiring date October 2014

BS Metrology Class	Class D all position				-
Nominal Flow Rate		m ³ /h	1 1.5	-	
Maximum Flow Rate		m ³ /h	2 3	-	
Minimum Flow Rate		l/h	7.5	-	
Transitional Flow Rate		l/h	11.5	-	

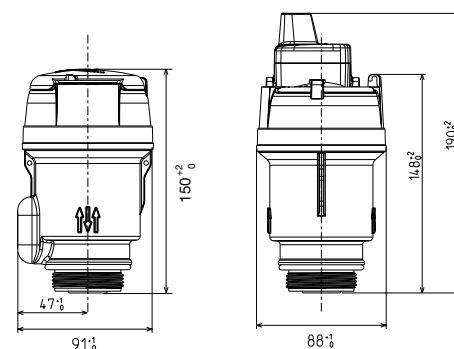
Dimensions

	mm	15 or 20	20
	Nominal Diameter		
Meter Thread	inches	G 3/4" G 1"	G 1"
	mm	20 x 27 26 x 34	26 x 34
A	mm	105/110/115* 130/165/190	190
B	mm	115	143
C	mm	22	20
D	mm	85	88
E	mm	68	70
F	mm	158	186

(*) Other available lengths: 134, 165, 170



In line version



Manifold version

Weight - Brass Version

Dimension	mm	15 or 20	20
Weight in line	Kg	0.75/0.95	1.5
Weight coaxial	Kg	1.12	-



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