



# Flodis

## Single jet turbine type water meter

- ▶ Single jet Class C
- ▶ Pre-equipped for communication
- ▶ Patented measuring chamber



Flodis is an EEC/ISO Class C single jet turbine type meter with extra dry register, pre-equipped for communication devices.

### The Technology

The meter combines the advantages of turbine type technology together with the proven reliability of the extra dry register. No parts of the register are in contact with the water passing through the meter.

### Metrological Performance

- Class C in horizontal position

### Reliability-Durability

- Stable accuracy in tough aggressive conditions
- The high quality of pivoting and levitation of the balanced turbine ensures exceptional endurance

- The turbine is the only component moving in water
- No need for external adjustment due to its design and high technology implemented in manufacturing

### Easy Reading

Flodis register combines the following advantages:

- Rotation close to 360° on site
- Large numbered rollers with good contrast for excellent reading capability
- Wiper ensures readability of the extra-dry register in tough humid conditions
- Case protection: IP 68

### Communication Device

- Pre-equipped for future communication through Cyble

## Working Principle

The Flodis has two main components; the hydraulics that allows measurement of the water flow and the register that displays the measured water volume.

Transmission interface between those components is achieved by a magnetic coupling **1**.

Flodis is a single jet velocity meter. Flow coming from the inlet, diverted by a specially shaped injector **2** drives the turbine **3**.

This technology is suitable for all types of distribution water quality.

Equipped with an upstream filter **4**, the Flodis is protected against impurities accidentally conveyed by water.

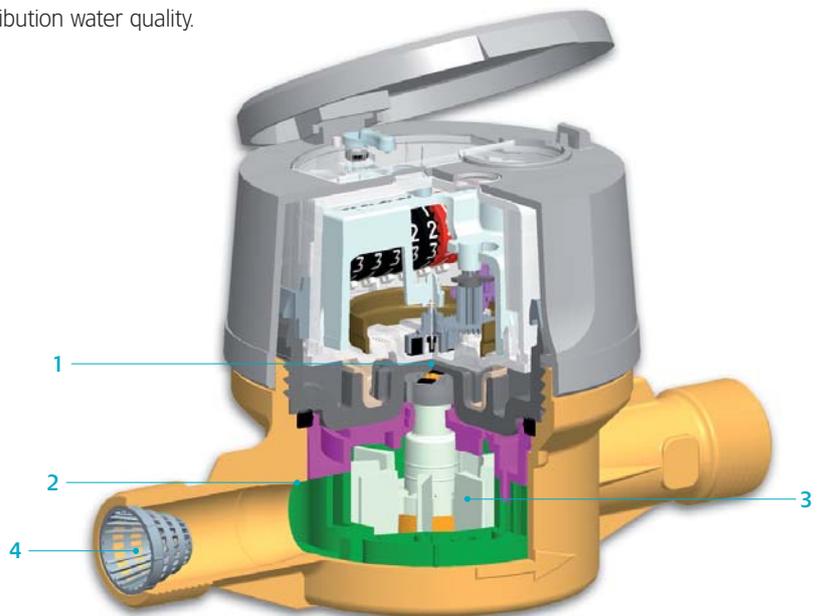
The magnetic coupling transmission, standard on the Flodis line, is accompanied by an extra-dry register.

Both gears and the register are in a waterproof and air proof enclosure.

The turbine is the only moving part of the meter in water.



► Flodis indicator



## Communication

### Flodis 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)

- 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

### 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



► Cyble RF fitted on Flodis meter

## Metrological Characteristics

Nominal diameter (DN)	mm	15	20	25	32	
EEC metrology class		C horizontal - B all other positions				
EEC approval		F-06-G-1277				
Maximum admissible temperature	°C	30				
Maximum temperature for short period	°C	50				
Maximum admissible pressure	bar	16				
Testing pressure	bar	25				
Pressure loss group at Qmax	bar	0.8				
Nominal flow rate	Qn	m <sup>3</sup> /h	1.5	2.5	3.5	6
Maximum flow rate	Qmax	m <sup>3</sup> /h	3	5	7	12
Minimum flow rate	Qmin	L/h	15	25	35	60
Transitional flow rate	Qt	L/h	22.5	37.5	52.5	90
Starting flow rate		L/h	5	6	10	12
Indicating range		m <sup>3</sup>	99999.999			
Minimum scale interval		L	0.05			
Communication pre-equipment			Cyble Technology			

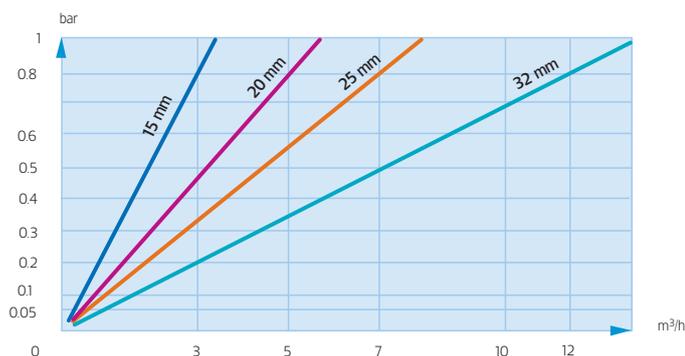
## Pulse Value

	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 15 to 32	1 L	1 L	2.5 L	10 L	25 L	100 L	1 m <sup>3</sup>

## Typical Accuracy Curve, Flodis DN15

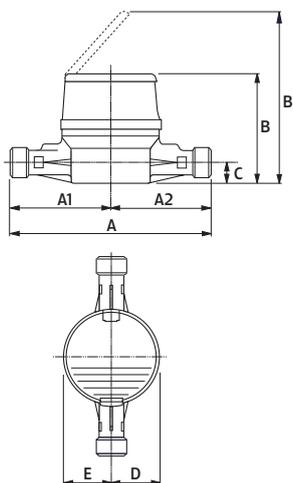


## Head Loss

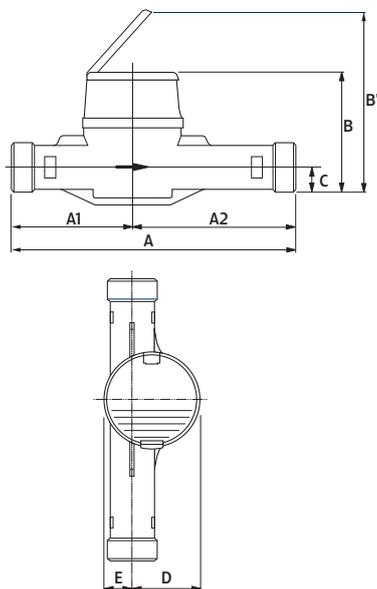


► Flodis DN32

► DN 15



► DN 20, 25 and 32



## Dimensions

Nominal diameter (DN)	mm	15	20	25	32
Meter thread	inches	G 3/4"	G 1"	G 1" 1/4	G 1" 1/2
	mm	20x27	26x34	33x42	40x49
A	mm	170*	190	260	260
A1	mm	85	95	110	110
A2	mm	85	95	150	150
B	mm	104	123	130	130
B'	mm	183	203	210	210
C	mm	21.5	22.5	39	39
D	mm	46	64	64	67
E	mm	46	28	28	25
Weight	kg	1	1.3	2	2.2

\* Other available lengths 115, 145, 165 mm (G 3/4"), 115 mm (G 3/4" 7/8") and 165, 190 mm (G 1").

## Options (none exhaustive list)

Flodis meters may be fitted with:

- Copper can register in case wiper is not accessible
- Non return-valve for outlet pipe
- Removable cap
- Equipped Cyble RF from the factory (please refer to specific leaflet)

For more information, please contact your local agency.

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