TECHNICAL DATA SHEET

Ikos Contador Volumétrico

Remote-reading water meter



Description

Remote-reading water meter (volumetric meter) that measures the total volume of water flowing through the pipe. It has a dry dial and sends data via M-BUS or RS485 to integrate water consumption into monitoring and control systems.

Features

- Remote reading via M-BUS or RS485 bus.
- Acquisition accuracy of 0.001 m^3.
- Communication compatible with CJ/T-188 or MODBUS-RTU.
- Fully sealed communications circuit, IP68.
- Communication module separate from the meter body.
- Available in DN 15, 20 and 25.

Technical specifications

Communication interface	M-BUS or RS485
M-BUS power supply	24 – 36 V
RS485 power supply	3.6 – 12 V
Communication parameters	2400, 8, E, 1
Communication protocol	CJ/T-188 or MODBUS-RTU
Maximum distance	1000 m
Acquisition accuracy	0.001 m^3
Protection	IP68
Environmental class	Class B
Electromagnetic compatibility	E1
Cold water temperature	0.1 – 30 °C
Hot water temperature	0.1 – 90 °C
Nominal pressure	MAP25
Pressure loss	Δp63
Maximum permissible error	Q1 ≤ Q < Q2: ±5 % · Q2 ≤ Q ≤ Q4: ±2 %
Material	**Bronze body**

Flow range

DN AND Q3/Q1 RATIO	Q4 (M^3/H)	Q3 (M^3/H)	Q2 (L/H)	Q1 (L/H)
DN 15 · Q3/Q1 80	3.125	2.5	50	31.25
DN 15 · Q3/Q1 100	3.125	2.5	40	25
DN 20 · Q3/Q1 80	5	4	80	50
DN 20 · Q3/Q1 100	5	4	64	40
DN 25 · Q3/Q1 80	7.875	6.3	126	78.75
DN 25 · Q3/Q1 100	7.875	6.3	100.8	63

Dimensions

DN	L1	L	B	H	THREAD D	THREAD D	WEIGHT
15	258	165	89	125	R1/2	G3/4	≈1.5 kg
20	298	195	91	125	R3/4	G1	≈1.7 kg
25	345	225	91	125	R1	G1 1/4	≈2.2 kg

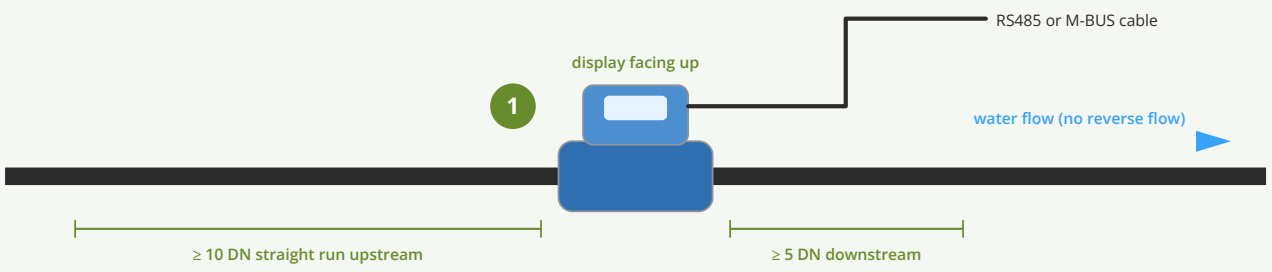
Dimensions in mm. 1 m cable on all sizes.

Connections

RS485 WIRE	SIGNAL
Red	5 V power supply
Black	GND
Yellow	A
Green	B

M-BUS: 2 wires, non-polarised connection (red and black conductors).

Installation



Ikos Contador Volumétrico · horizontal installation

- Choose the nominal diameter to match the pipe; the usual flow should be below or close to the meter's nominal flow.
- Install it horizontally with the display facing up (or on a vertical pipe, also with the display facing up).
- Leave a straight run of at least 10 DN upstream and 5 DN downstream, or fit an equivalent flow conditioner.
- Clean the inside of new pipes before installing it, so stones or debris do not block the meter.
- It does not measure reverse flow and has no check valve: fit one separately if needed.
- Connect it with fittings, seals and nuts, leaving room for maintenance, and protect it from direct sun, frost and flooding.
- If the remote reading differs from the meter reading, the meter's own reading prevails.