On-wall water meters

At home in lots of apartments: The Techem water meter with mature single-jet technology in two versions.

Two different versions – one objective: reliable and mature technology for precise metering and simple installation in almost any application area. The on-wall water meter works using the single-jet principle, lots of versions make it into a true all-rounder.

In a nutshell

- Integration in the radio system, also retrospectively
- High measurement accuracy and measurement stability thanks to its sophisticated design
- radio 4 with an optical interface and flow direction recognition
- Low pressure loss and a high level of operational safety thanks to single-jet technology
- Suitable for cold water up to 30°C or hot water up to 90°C
- Suitable for wash stands and kitchen sinks, accessories for corner valves and fittings
- Special screw connections and extensions for different construction lengths
- Approved in accordance with the European Measuring Instruments Directive (MID)

radio 4 model

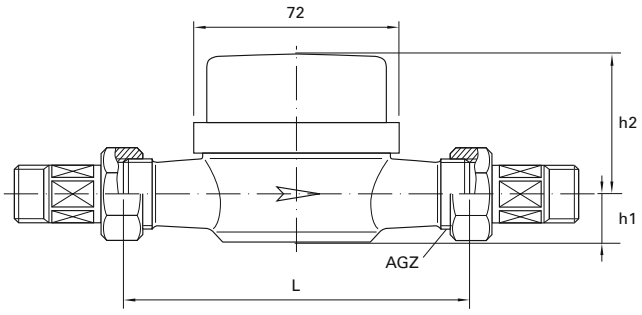
Thanks to a contact-free and non-wearing capacitive scan, it records the flow parameters of the mechanical meter, saving them in the radio module. The consumption values on the due date, the mid-month figures and month-end figures, as well as the meter data are transmitted by radio.

vario 3 model

The version of the counter mechanism with an integrated modulator plate in vario 3 makes it possible to retrofit a radio module for wireless data transmission of the consumption data. The retrofitting is quite easy and uncomplicated.

Technical data

Nominal temperature:		up to (°C)				
Cold water meter:		30	30	30	30	30
Hot water meters:		90	90	90	90	90
Nominal flow rate Q3:	l/h	2.5	2.5	2.5	2.5	4.0
Lowest flow Q1: horizontally/vertically:	m³/h	62.5/ 62.5	62.5/ 62.5	62.5/ 62.5	62.5/ 62.5	100/ 100
Start-up flow rate: horizontal approx.:	l/h	8	8	8	8	15
Start-up flow rate: vertical approx.:	l/h	14	14	22	22	22
Measurement range horizontally/vertically:		R40H/ 40V	R100H/ 50V	R40H/ 40V	R160H/ 63V	R160H/ 63V
Pressure loss at Q3 approx.:	bar	0.56	0.56	0.56	0.56	0.52
Flow coefficient:	m³/h	3.2	3.2	3.2	3.2	5.05
Nominal pressure PN :	bar	10	10	10	10	10
Display range:		0.1 litre to 9,999 m³				
Construction length L:	mm	80	110	130	130	130
Connection thread on meter according to ISO 228-1:	AGZ	G ¾B	G ¾B	G ¾B	G 1B	G 1B
Hight h1:	mm	15	16	17	17	17
Hight h2: AP vario 3	mm	58	54	54	54	54
Hight h2: AP radio 3	mm	68	64	64	64	64
IP protection class:		65	65	65	65	65
Battery life (radio 4)		10 years + reserve				
Environmental conditions		EN 14154 Class B				



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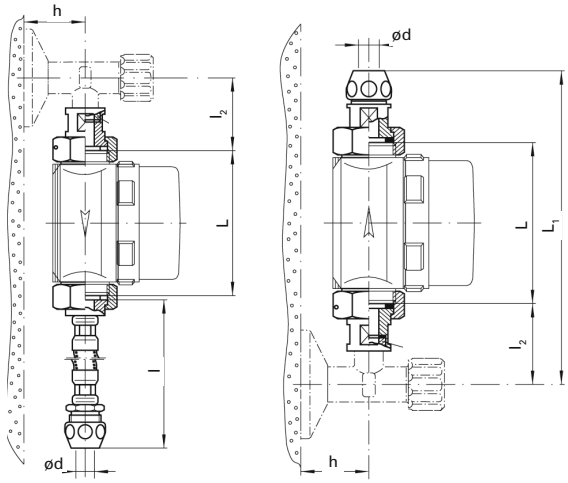


Wash stand installation

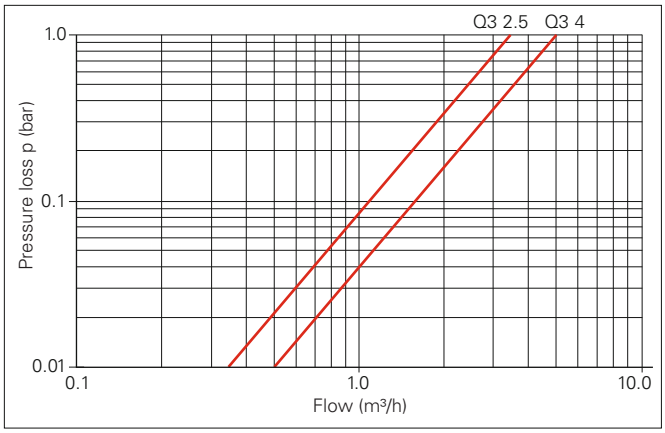
Wash stand installation
L = 80 mm
L1 = 204 mm
l = approx. 400 mm
l2 = 58 mm
h = 20 mm
ød = 10 mm

Technical data radio

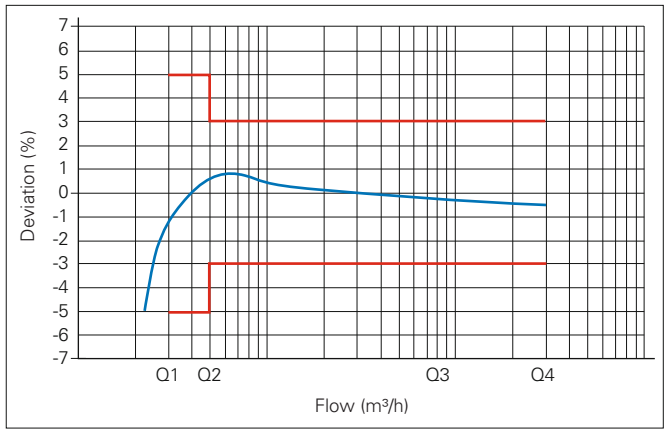
Radio mode		Proprietary
Radio data transmission		Due date value and status information, mid-month and month end consumption data from the previous 12 months
Transmitting frequency	(MHz)	868.95
Transmiting power	(W)	0.003 ... 0.015
Transmission period	(sec.)	0.008 ... 0.014
CE-conformity		According to guideline 2014/53/EU

Accessories

Screw connections with thread connection according to DIN 2999, also in chrome-plated design. Screw connections with solder connection and accessories for wash stand installation



Pressure loss curve



Typical error graph

Radio temperature sensor radio 4

Measure and display temperature values regularly and transmit via radio.

RF sensors measure the temperatures in the residences or on pipes, display them and make the measured values available for evaluation. Documentation of the provision of heat or temperature monitoring of the district heating recovery can be ensured for your residences or properties, costs and complaints can be avoided.

In a nutshell

- Accurate temperature measurement (tolerance typically ±0.2 K) several times per minute
- Calculation and storage of hourly temperature averages
- Display of the current temperature
- Radio transmission of the current temperature value
- Radio transmission of the last 24 hourly temperature averages
- Compact device: measurement of room temperatures
- Remote sensor device: recording of temperatures on pipes
- Software-supported manipulation and dismantling recognition
- OMS (Open Metering System) Standard radio telegrams
- Secure data transfer by encryption and CRC method

Intelligent and independent

The Techem temperature sensor works independently of the power grid. The devices detect thermal influencing, e.g. by heat accumulation or manipulation, and transmit them by radio.

Transparent and analytical

The temperature values regularly transmitted to Techem's computer centre provide clear information on the respective temperature level in a cost-effective manner. If desired, this can be used to provide real-time alarms according to customer criteria.

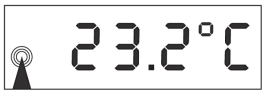
DATA SHEET

Radio temperature sensor radio 4

Technical data

Power supply	3V lithium battery
Lifetime	10 years + reserve
Ambient temperature	0 °C ... 80 °C
LC display	3-digit + symbols
Functional check	continuous self-monitoring through electronic manipulation and dismantling recognition
Service interface	optical for Techem servicing devices
Operating frequency	868.95 MHz
Transmitting power	0.003 ... 0.015 W
Transmission period	0.008 ... 0.014 sec.
Protection class	IP31 (mounted)
CE conformity	according to Directive 2014/53/EU (RED)

LCD display



Compact design for room temperatures

Remote sensor version for pipe temperatures