



Application

The W370 is a modern ultrasonic cold or hot water meter with a lead-free measuring tube, designed as a basis for a modern, digitalized water supply network.

Key Facts

- Ultrasonic measurement - precise, durable
- Optional upstream leak detection
- Large, easy readable display
- Data logger and Logbook
- NFC interface
- wM-Bus, LoRaWAN® or NB-IoT interface
- Lead free brass tube
- 15 years of battery lifetime with Intelligent battery management

Technical Data

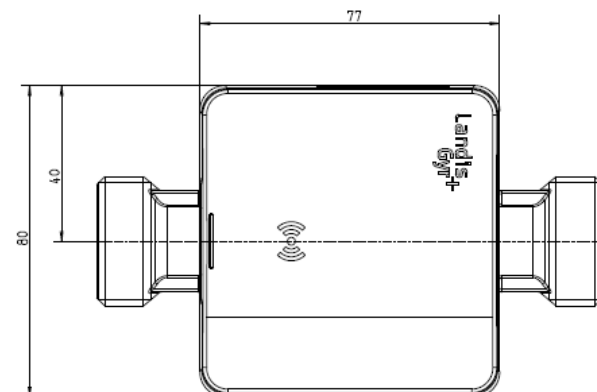
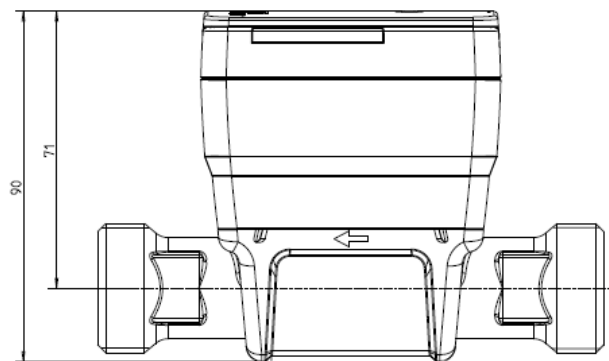
Metrology	
Measuring accuracy	Class 2 (OIML R49)
Dynamic range	R250, R160 (Max. R400)
Temperature class	T50 (cold water) T70 (warm water)
Measuring interval	1 Hz
Approvals	
Metrological	MID, NMI
Hygienic	UBA, WRAS, ACS, ICIM
Others	Australian WaterMark, RCM
Others	Complies with the Lead Free requirements of the National Construction Code Vol.3
Data storage	
Logbook	Yes: Tracking of 41 events (type, timestamp)
Datalogger	Yes
Datalogger data	Set of up to 9 values
Datalogger depth	15 years/72 months/400 days/744 hours
Installation	
Nominal size	DN15, DN20
Nominal flow	2.5 m ³ /h, 4 m ³ /h
Pressure class	MAP 16 (16 bar)
Orientation	V/H (any orientation)
Strainer	Yes
Non return valve	Yes (optional): single/double

Wetted surfaces	Lead free brass CW724R PA GF40 Stainless steel
Pressure loss	ΔP40, ΔP63
Environmental conditions	
Environment class	O (OIML R49) for outdoor installation
Mechanical class	M1 (MID)
Electromagnetical class	E2 (MID)
Ingress Protection	IP68
Max. height	2000 m above sea level
Operating temperature	-10 ... 65°C (inside housing)
Storage temperature	-20 ... 70 °C (inside housing)
UV protection	stabilized
Power supply	
Power supply	1x D cell lithium battery (5g lithium)
Battery lifetime	15 years + 2 year in storage mode
Display	
Resolution	Volume: 0.001 m ³
Digits	Volume: 9 (6.3) Flow: 5
Information	Volume, flow, alarms, flow direction, battery status, communication status, signal strength
Other	
App support	Yes (service app, consumer app)
Data security	X.509 certificate based access protection



Technical Data

Nominal flow Q3	2.5	2.5	2.5	2.5	4	4	4	4	[m³/h]
Overall length	110	165	134	190	105	130	154	190	[mm]
Connection	G ¾	G ¾	G ¾	G 1	G 1	G 1	G 1	G 1	
Nominal size	DN15	DN15	DN15	DN20	DN20	DN20	DN20	DN20	
Maximum flowrate Q4	3.125	3.125	3.125	3.125	5	5	5	5	[m³/h]
Minimum flowrate Q1 @ R250	10	10	10	10	16	16	16	16	[l/h]
Response threshold (variable)	2	2	2	2	3	3	3	3	[l/h]
Overflow	5	5	5	5	8	8	8	8	[m³/h]
Q3/Q1max	R250	R400, R250*	R400, R250*	R400	R400	R400	R250	R400	
Pressure loss class	400	400	400	400	630	630	630	630	[mbar]
Pressure loss	283	340	425	357	441	421	408	432	[mbar]
Vibration sensor (Leak detection)	-	-	-	available	-	-	available	available	
Weight	440	500	540	630	510	540	560	630	[g]



* T70



Communication (LoRa or wM-Bus or NB-IoT)

RF interface (LoRa® and wM-Bus Switchable)

LoRa®

Version 1.0.3

Frequency band 868 MHz

Class A (bidirectional)

Activation OTA or ABP

Payload format M-Bus

Transmission interval 1h, 8h, 12h, 24h

Automatic commissioning Yes

Downlink parameterisation Yes

wM-Bus

Standard Open Metering System Specification OMS (Version 4)
EN 13757-4; Mode T1, C1

Frequency band 868 MHz

Transmission power 10 dBm

Range

- Free field Up to 400 m

Battery lifetime Up to 15 a

Sending interval

- Mobile data reading 30 Seconds

- Stationary data reading 15 Minutes

- User defined data reading Acc. to telegram length 12 - 900 Seconds

Data telegram 8 predefined data telegrams

User defined data telegram with Service Software

NB-IoT

Standard NB1 & NB2

Carriers L+G (Vodafone), others on request

Protocol OMA LwM2M

Battery lifetime 15 a (@daily transmissions)

Over the air updates Yes (whole meter firmware)

3GPP Version 13, 14

Transmission intervals 8h, 12h, 24h

Automatic commissioning Yes

Downlink parameterisation Yes

Special functions
Instantaneous alarm transmission
Queuing (resume failed transmissions)
Downlink parameterisation
Dynamic data logger transmissions

Frequency bands
3 (1805-1880 MHz), 5 (869-894 MHz), 8 (925-960 MHz),
20 (791-821 MHz), on request: 28 (758-803MHz)