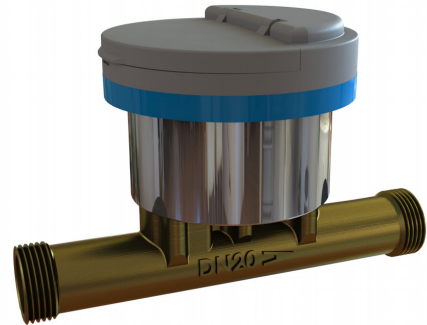


- >> Compact design
- >> High accuracy
- >> No moving parts
- >> Minimal pressure loss
- >> Not influenced by medium impurities, chemicals or magnetic interference
- >> Long battery life, more than 8 years
- >> Models for cold and hot water
- >> M-bus communication
- >> Optional Modbus communication



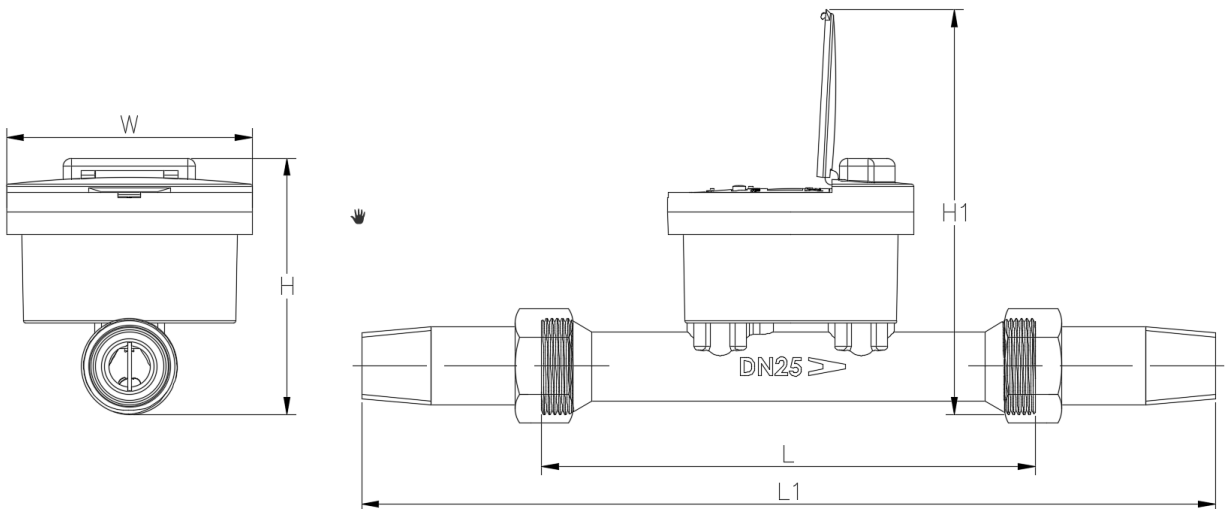
## Ultrasonic water consumption metering

FX-USWM-DNxx-xx-M ultrasonic water meter is a flow-measuring equipment which uses transient time ultrasonic signal to continuously measure, record and display flow rate of the measuring medium. Ultrasonic water meters with external threaded screw connection are available from DN15 pipe size with nominal flow of 2.5 m<sup>3</sup>/h up to DN40 pipe size and nominal flow of 16 m<sup>3</sup>/h. Hot water meters can measure water up to 90 °C temperature. Larger meters are available with flanged connection. Meters come with M-bus communication. Optional standalone meters with pulse outputs and networked models with Modbus communication are available.

### Technical features

Operating Temperature:	5° - 55°C
Measured Medium Temperature:	Cold water model: 0.1 - 50°C Hot water model: 0.1 - 90°C
Storing Temperature:	0 - 55°C
Operating Humidity:	<93%RH
Environmental class	A Class or B Class
Accuracy class:	Class 2
Dynamic Range:	Q3/Q1=100
Enclosure protection:	IP65
Pressure loss:	<25kPa@qp (nominal flow)
Maximum admissible working pressure:	1.6MPa
Material:	Copper
Rated voltage:	3.65VDC
Battery working life:	More than 8 years
Installation:	Horizontal or vertical installing is available (read the detail installation instruction)
Straight pipe section:	Mount a straight pipe section up to 5D upstream the meter and a straight pipe section up to
Manufacturing Process:	ISO9001

Nominal diameter		DN15	DN20	DN25	DN32	DN40
Dimensions	L (length) mm	165	190	260	260	300
	L1 (overall length with coupling) mm	261	296	382	386	431
	W (width) mm	81	81	81	81	81
	H1 (cover opened height) mm	167	172	177	186	197
	H (height) mm	102	107	112	121	132
Meter thread		G3/4"	G1"	G1 1/4"	G1 1/2"	G 2"
Coupling thread		R1/2	R3/4"	R1"	R1 1/4"	R1 1/2"
Nominal flow rate $Q_3$ (m <sup>3</sup> /h)		2.5	4	6.3	10	16
Transition flow rate $Q_2$ (m <sup>3</sup> /h)		0.04	0.07	0.1	0.16	0.26
Minimum flow rate $Q_1$ (m <sup>3</sup> /h)		0.025	0.04	0.063	0.1	0.16
Accuracy class	Class 2	Environmental class		C	Environmental rating	
Dynamic range	$Q_3/Q_1=100$	Electromagnetic environment class		EI	Pressure loss	
Pressure rating	MAP16, MAP10	Flow field sensitivity level		U5/ D3	Temperature rating	
					A Class or B Class	
					$\Delta p63$	
					Cold T 50, Hot T90	



## Part numbers

**FX-USWM-DN15-2.5-M**

**FX-USWM-DN20-4.0-M**

**FX-USWM-DN25-6.3-M**

**FX-USWM-DN32-10-M**

**FX-USWM-DN40-16-M**

**FX-USWM-DN15-2.5-H-M**

**FX-USWM-DN20-4.0-H-M**

**FX-USWM-DN25-6.3-H-M**

**FX-USWM-DN32-10-H-M**

**FX-USWM-DN40-16-H-M**

DN15, Nominal flow 2.5 m<sup>3</sup>/h, M-bus, cold water

DN20, Nominal flow 4.0 m<sup>3</sup>/h, M-bus, cold water

DN25, Nominal flow 6.3 m<sup>3</sup>/h, M-bus, cold water

DN32, Nominal flow 10 m<sup>3</sup>/h, M-bus, cold water

DN40, Nominal flow 16 m<sup>3</sup>/h, M-bus, cold water

DN15, Nominal flow 2.5 m<sup>3</sup>/h, M-bus, hot water

DN20, Nominal flow 4.0 m<sup>3</sup>/h, M-bus, hot water

DN25, Nominal flow 6.3 m<sup>3</sup>/h, M-bus, hot water

DN32, Nominal flow 10 m<sup>3</sup>/h, M-bus, hot water

DN40, Nominal flow 16 m<sup>3</sup>/h, M-bus, hot water

•Change –M ending to -MD ending to any type for Modbus or remove for standalone meter