

ST-15S / ST-20S RF / LoRa Remote Reading Ultrasonic Hot Water Meters



GENERAL

- MID Certificated
- Supports Wireless MBUS Protocol • RF Readings
- Integrated Lora module-chipset allows both LORA and FSK modulation
- Supports LoRaWAN™ - Class A Protocol
- Selectable Frequency Band EU 863-870 Mhz
- ETSI EN 300 220-2 V3.2.1 (2018-06) compliant
- Ultrasonic principle assures very high sensitivity even at low flow
- Battery life up to 10 years
- Suitable for hot water up to 90°C • Suitable for potable water
- No measurement of air • Reverse flow detection
- Wide dynamic measuring range and low pressure loss
- Solid stainless steel reflector • IP 68 protection class
- Can be mounted all positions desired
- Leakage control system • 3 years of warranty
- Service and spare parts available for 10 years
- Anti tampering sensor for meter removal
- Environmental Classes

Climatic : -10°C/+55°C | Mechanic: M1/O | Elektromagnetic: E2

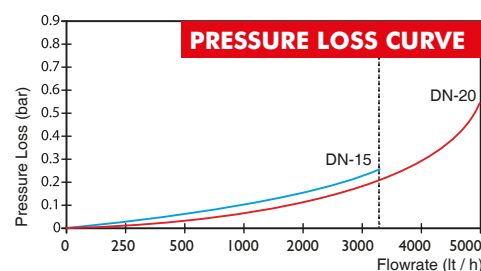
• Q2 ≤ Q ≤ Q4 Maximum Permissible Error

Class 2 Water Meters; % ± 2 (Water Temp. ≤ 30°C), % ± 3 (Water Temp. > 30°C)

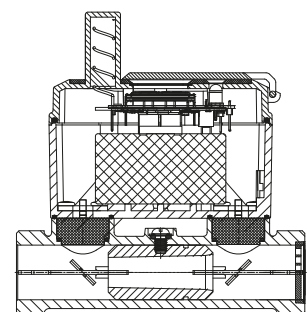
Class 1 Water Meters; % ± 1 (Water Temp. ≤ 30°C), % ± 2 (Water Temp. > 30°C)

• Q1 ≤ Q < Q2 Maximum Permissible Error

Class 2 Water Meters; % ± 5 | Class 1 Water Meters; % ± 3

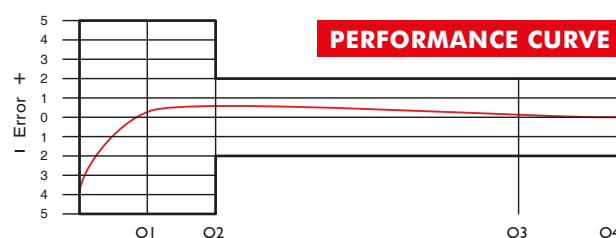


PRESSURE LOSS CURVE



PERFORMANCE DATA

Nominal Diameter		DN	15	20	
Overload Flowrate	Q4	m³/h	3,125	5	
Permanent Flowrate	Q3	m³/h	2,5	2,5	4
Transitional Flowrate	Q2	m³/h	0,005	0,005	0,008
Minimum Flowrate	Q1	m³/h	0,003125	0,003125	0,005
Q3/Q1 (MI-001 OIML R49)		-	≤800	≤800	≤800
Pressure Loss Class		bar	0,25	0,25	0,63
Mounting on the network		-	All Positions		
Maximum Registration Capacity		m³	999999,999		
Initial Flow	Qi	l/h	3		
Maximum Working Pressure		bar	16		
Maximum Working Temperature		°C	90		
Smallest Reading Resolution		m³	0,000001		
Accuracy Class		-	Class 1/Class 2		
Quantity per package		-	10		



PERFORMANCE CURVE

DIMENSIONS

Nominal diameter	DN	15	15	20	20	mm
Connecting diameter	D	G 3/4	G 3/4	G 1	G 1	B
Total overall meter height	H	115	115	120	120	mm
Axis height	h	13	13	17	17	mm
Length	L	110 115 130 145	165 170 190	110 115 130	165 190	mm
Length with connections	LB	190 195 210 225	245 250 270	190 195 210	245 270	mm
Width	B	80	80	80	80	mm
LCD Screen Length		50x22	50x22	50x22	50x22	mm
LCD Screen Angle		30°	30°	30°	30°	mm
Unit weight		0,42/0,50	0,51/0,58	0,52/0,60	0,70/0,78	kg
Package Weight (without connect)		5,00	5,90	6,00	8,80	kg
Package Weight (with connect)		6,60	7,50	7,90	10,70	kg
Package dimensions		22x43x17	24x47x23	22x43x17	24x47x23	cm

