

AK-411 RF / LoRa®

Remote Reading

Ultrasonic Water Meters



ISO 4064-1

Test
TS EN ISO/IEC 17025
AS-0172

OUR MANAGEMENT
CERTIFICATES



GENERAL

- MID Certificated
- Supports Wireless MBUS Protocol • RF Readings
- Integrated LoRa® module-chipset allows both LoRa® and FSK modulation
- Supports LoRaWAN® - Class A Protocol • Built-in buzzer
- Selectable Frequency Band EU 863-870 Mhz
- Segment or Graphic LCD, backlit display option
- Ultrasonic principle assures very high sensitivity even at low flow
- Battery life up to 15 years
- Suitable for cold water up to 50°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
- Environmental Classes

Climatic : -25°C/+60°C | Mechanic: M1/O | Elektromagnetic: E2

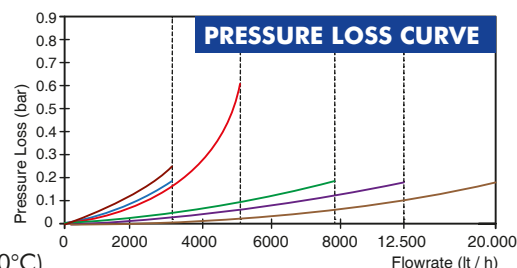
• Q2≤Q≤Q4 Maximum Permissible Error

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)

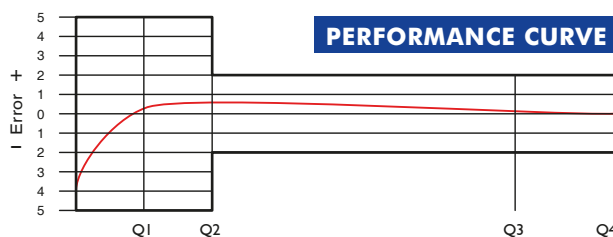
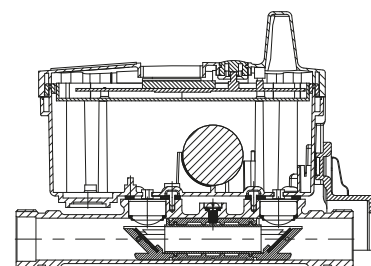
• Q1≤Q<Q2 Maximum Permissible Error

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



PERFORMANCE DATA

Nominal Diameter		DN	15	20		25	32	40
Overload Flowrate	Q4	m³/h	3,125	3,125	5	7,875	12,5	20
Permanent Flowrate	Q3	m³/h	2,5	2,5	4	6,3	10	16
Transitional Flowrate	Q2	m³/h	0,010	0,010	0,016	0,0252	0,040	0,064
Minimum Flowrate	Q1	m³/h	0,0062	0,0062	0,010	0,0158	0,025	0,04
Q3/Q1 (MI-001 OIML R49)		-	≤400	≤400	≤400	≤400	≤400	≤400
Pressure Loss Class		bar	0,16	0,25	0,63	0,16	0,16	0,16
Mounting on the network		-	All Positions					
Maximum Registration Capacity		m³	999999					
Initial Flow	Qi	l/h	3		</			



DIMENSIONS

Nominal diameter	DN	15	20	25	32	40	mm
Connecting diameter	D	G 3/4	G 1	G 1 1/4	G 1 1/2	G 2	B
Total overall meter height	H	147	147	153	161	170	mm
Axis height	h	19	19	21,9	24,9	32	mm
Width	B	91	91	91	91	91	mm
Length	L	190	190	225	230/260	200	mm
Length with connections	LB	270	270	345	360/390	330	mm
LCD Screen Length		55x30	55x30	55x30	55x30	55x30	mm
LCD Screen Angle		30°	30°	30°	30°	30°	mm
Unit weight		1,18	1,20	1,4/1,7	1,5/1,9	1,2/1,7	kg
Package Weight (without connec.)		6,75	6,85	8,42	9,00	7,90	kg
Package Weight (with connec.)		7,55	7,80	10,62	12,40	12,85	kg
Package dimensions		17x52x23	17x52x23	26x52x30	26x52x30	26x52x30	cm

