U-WR2

Viewshine Ultrasonic Meter For Potable Water – Residential Use R500

General Introduction

Residential ultrasonic water meter that integrates smart wireless communication, advanced data analysis, and excellent metrological performance. With no moving parts, it maintains stable accuracy and ensures a longer design life of up to 15 years compared to traditional mechanical meters.
Certifications: MID B+D, OIML, water quality test report, and Resolution 0501 of 2017 issued by the Ministry of Housing, City, and Territory.

U-WR2 is equipped with M-Bus, Wireless M-Bus, LoRaWAN Class A, NB-IoT, and pulse output communication options.

Outstanding Performance

Multiple communication options make the U-WR2 a truly smart device.
It overcomes the limitations of mechanical water meters—without moving parts, the U-WR2 delivers precise and stable measurements over time. Its technology detects the lowest flow rates and is ready to meet the challenges of future smart water metering networks.
The U-WR2 offers higher accuracy, a wider dynamic range, and easier installation.

- R250/R400/R500/R800
- Minimum flow rate: 1.5 L/h
- U0/D0
- No air measurement
- Vertical and horizontal installation
- Nominal working pressure (PN): 16 bar

Non-Revenue Water Protection

Integrated with smart wireless communication, data analysis, and excellent metrological performance, the U-WR2 significantly reduces non-revenue water and delivers greater benefits to utility providers.

Technical information

Performance under extreme conditions: Suitable for operation under normal conditions with a maximum pressure of 32 bar

Accessory description: Includes a set of couplings for installation

Packaging recommendations: Packaging unit of up to 10 meters to optimize transport and storage

Lubricant recommendations: N/A

Description of tests to evaluate hydraulic performance: Tests conducted in accordance with NTC ISO 4064.

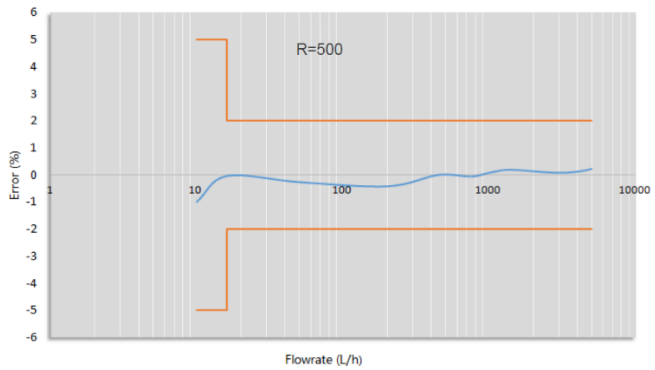
- Static pressure: The hydraulic pressure is increased for a specified period without causing leaks or deformation in the meter.
- Indication errors: A volume of water is passed through the meter and collected in volumetric containers. The indication errors are calculated by comparing the readings from the meter under reference conditions with those from a calibrated reference device (volumetric container).

Preventive and corrective maintenance instructions: No maintenance required.

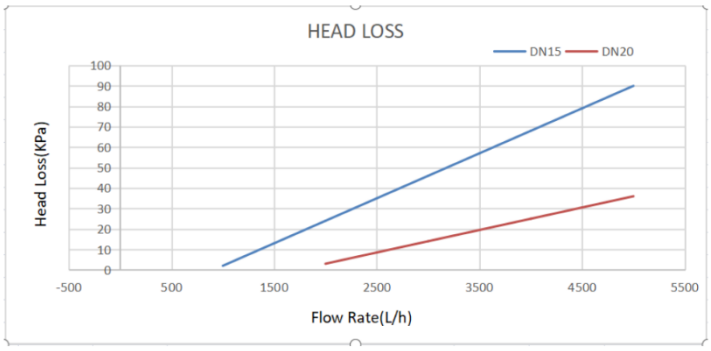
Technical characteristics

	DN15	DN20
Ranges and Capacities		
Q_3	1.6 / 2.5 m³/h	2.5 / 4.0 m³/h
Q_4	3.125 m³/h	5.0 m³/h
Q_2	10 L/h	16 L/h
Q_1	6.25 L/h	10 L/h
$Q_{Initial}$	1 -1.5 L/h	
Dynamic Range	R250/ R400/ R500	
Standards	ISO4064:2014 / OIML: R49-2013	
Body Material	PPS	
Mechanical Properties		
Environmental classification	Class O	
Protection class	IP68	
Average temperature	0.1~50℃(T50)	
Temperature class	-10~55℃	
Working pressure	PN16	
Metrological characteristics		
Maximum permissible error	±5% in range $Q_1 \leq Q < Q_2$ ±2% in range $Q_2 \leq Q \leq Q_4$	
Pressure loss	0.4bar @ Q_3	0.25bar @ Q_3

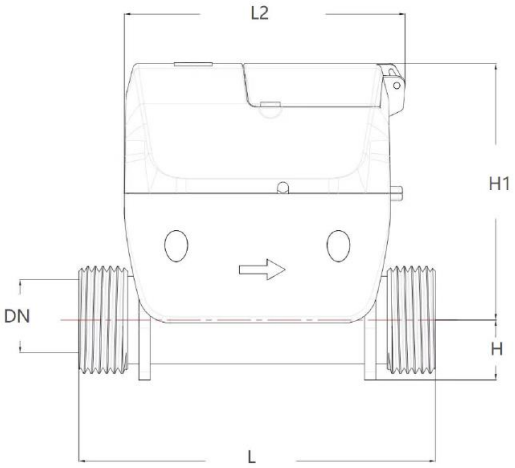
Typical Curve



Pressure Loss Curve



Dimensions



DN	L (mm)	Meter Thread	Pipe Thread	Turbo Extension	L2(mm)	H(mm)	H1(mm)	Type
15	110	G 3/4 B	R 1/2	None	86.6	16	78.1	A1
	115	G 3/4 B	R 1/2	None	86.6	16	78.1	A1
20	110	G1B	R 3/4	None	86.6	18.5	79.1	A2
	115	G1B	R 3/4	None	86.6	18.5	79.1	A2

Certifications

Certificado No. CPC-07500-1-B-19
Esquema 5

DOCUMENT´S VERIFICATION AND APPROVAL