

BAYLAN

WATER METERS

Ultrasonic Water Meters



GENERAL

- MID Certified • No measurement of air • Reverse flow detection
- Radio Frequency automatic remote reading • IP 68 protection class
- M-Bus & wM-Bus interfaces • Modbus interfaces (Optional)
- Ultrasonic working principle assures very high sensitivity even at low flow
- Meters are protected against tampering by Seal Stickers with BAYLAN brandname hologram, approved by Metrology Institute
- Internal hourly data logging facility for collecting past records (up to 1 month)
- Calibration is done inside the electronic circuit digitally by software parameters, which is not possible to modify externally
- The compact design uses ultrasonic measurement technology
- Due to the lack of moving parts, high measurement accuracy
- Suitable for potable water • Advanced service network
- Very good sensitivity in initial starting • Suitable for cold water up to 50°C
- Wide dynamic measuring range and low pressure loss
- Solid stainless steel reflector • Can be mounted all positions desired
- Lithium battery, 10 years lifetime • 3 years of warranty
- Service and spare parts available for 10 years



MAIN TECHNICAL DATA

Max. Permissible Error in Upper Flow Rates $Q2 \leq Q \leq Q4$: $\pm 2\%$ ($\leq 30^\circ\text{C}$), $\pm 3\%$ ($> 30^\circ\text{C}$)

Max. Permissible Error in Lower Flow Rates $Q1 \leq Q \leq Q2$: $\pm 5\%$

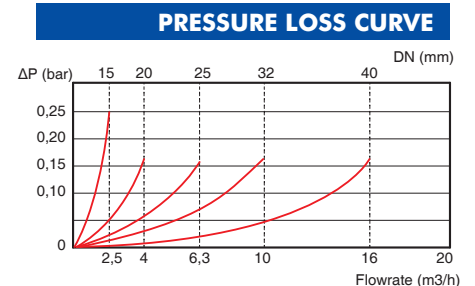
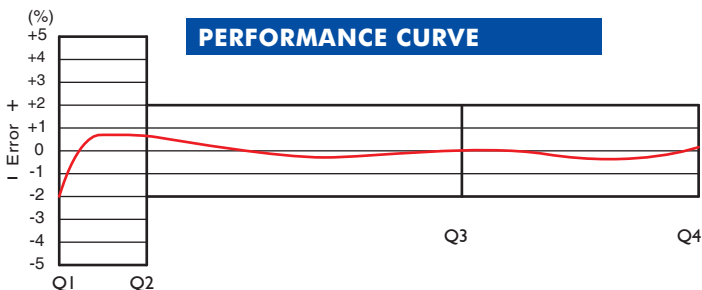
Max. Water Temperature: 50°C - Max. Working Pressure: 16 bar

Environmental Classes= Climatic : $-10^\circ\text{C}/+55^\circ\text{C}$ - Mechanic: M1/O - Electromagnetic: E2

| METER SIZE DIA (mm) | TYPE | Q ₃ / Q ₁ | Q4 | Q3 | Q2 | Q1 | PRESSURE LOSS CLASS | SMALLEST READING RESOLUTION | MAX. REGISTRATION CAPACITY |
|---------------------|------|---------------------------------|-----------------------|--------------|-------------------|-----------|---------------------|-----------------------------|----------------------------|
| | | | MAX FLOW | NOMINAL FLOW | TRANSITIONAL FLOW | MIN. FLOW | | | |
| | | | m^3/h | | | | bar | m^3 | |
| 15 | U-1 | ≤ 500 | 3,125 | 2,5 | 0,008 | 0,005 | 0,25 | 0,00001 | 999999 |
| 20 | U-2 | ≤ 500 | 5 | 4 | 0,0128 | 0,008 | 0,16 | 0,00001 | 999999 |
| 25 | U-3 | ≤ 500 | 7,875 | 6,3 | 0,020 | 0,0126 | 0,16 | 0,00001 | 999999 |
| 32 | U-4 | ≤ 500 | 12,5 | 10 | 0,032 | 0,020 | 0,16 | 0,00001 | 999999 |
| 40 | U-5 | ≤ 500 | 20 | 16 | 0,0512 | 0,032 | 0,16 | 0,00001 | 999999 |

DIMENSIONS & WEIGHTS

| METER SIZE DIA (mm) | TYPE | D CONNECTING DIAMETER | H METER HEIGHT | h AXIS HEIGHT | L LENGTH | B WIDTH | LB LENGTH WITH CONNECTION | LCD SCREEN LENGTH | LCD SCREEN ANGLE | UNIT WEIGHT |
|---------------------|------|-----------------------|----------------|---------------|----------|---------|---------------------------|-------------------|------------------|-------------|
| (mm) | | | | | | | | | | kg |
| 15 | U-1 | G 3/4 B | 129 | 19,2 | 110/130 | 80 | 190/210 | 47x15 | 30° | 0,80 |
| 20 | U-2 | G1 B | 129 | 19,2 | 130 | 80 | 210 | 47x15 | 30° | 0,80 |
| 25 | U-3 | G1 1/4 B | 139 | 24 | 160 | 80 | 240 | 47x15 | 30° | 0,85 |
| 32 | U-4 | G1 1/2 B | 147 | 25 | 180 | 80 | 260 | 47x15 | 30° | 1,30 |
| 40 | U-5 | G2 B | 152 | 32,6 | 200 | 80 | 280 | 47x15 | 30° | 1,70 |



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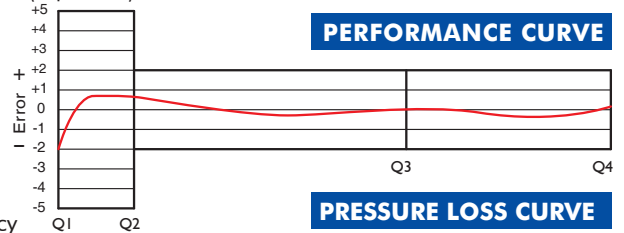


GENERAL

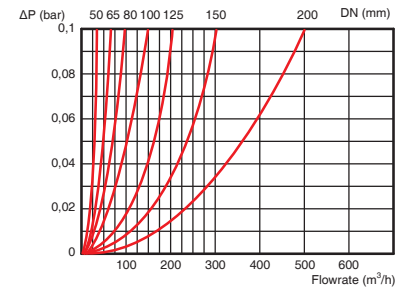
- MID Certified • Very good sensitivity at starting flow • Modbus or M-Bus interfaces (Optional)
- Ultrasonic working principle assures very high sensitivity even at low flow
- Reading through the center of the GPRS system, the collector of conformity (Optional)
- Integrated Lora module-chipset allows both LORA and FSK modulation (Optional)
- Via the LCD display providing access to meter data for billing and check out • Parametric 2 pulse outputs
- Meters are protected against tampering by Seal Stickers with BAYLAN brandname hologram, approved by Metrology Institute
- Internal hourly data logging facility for collecting past records (Optional)
- Suitable for potable water • Advanced service network
- Suitable for cold water up to 50°C
- No measurement of air • Reverse flow detection
- Wide dynamic measuring range and low pressure loss
- Can be mounted all positions desired
- IP 68 protection class
- Radio Frequency automatic remote reading (Optional)
- Due to the lack of moving parts, high measurement accuracy
- Calibration is done inside the electronic circuit digitally by software parameters, which is not possible to modify externally
- Lithium battery, 10 years lifetime • 3 years of warranty
- Service and spare parts available for 10 years



PERFORMANCE CURVE



PRESSURE LOSS CURVE



MAIN TECHNICAL DATA

Max. Permissible Error in Upper Flow Rates $Q_2 \leq Q \leq Q_4$: $\pm 2\%$ ($\leq 30^\circ\text{C}$), $\pm 3\%$ ($> 30^\circ\text{C}$)

Max. Permissible Error in Lower Flow Rates $Q_1 \leq Q \leq Q_2$: $\pm 5\%$

Max. Water Temperature: 50°C - Max. Working Pressure: 16 bar

Environmental Classes= Climatic : -10°C/+55°C - Mechanic: M1/O - Electromagnetic: E2

| METER SIZE DIA (mm) | TYPE | Q ₃ / Q ₁ | Q ₄ MAX FLOW | Q ₃ NOMINAL FLOW | Q ₂ TRANSITIONAL FLOW | Q ₁ MIN. FLOW | SMALLEST READING RESOLUTION | MAX. REGISTRATION CAPACITY |
|---------------------|------|---------------------------------|-------------------------|-----------------------------|----------------------------------|--------------------------|-----------------------------|----------------------------|
| | | | m ³ /h | | | | | |
| 50 | UW 6 | ≤ 400 | 31,25 | 25 | 0,100 | 0,063 | 0,00001 | 99999999 |
| 65 | UW 0 | ≤ 400 | 50 | 40 | 0,160 | 0,100 | 0,00001 | 99999999 |
| 80 | UW 1 | ≤ 400 | 78,75 | 63 | 0,252 | 0,158 | 0,00001 | 99999999 |
| 100 | UW 2 | ≤ 400 | 125 | 100 | 0,400 | 0,250 | 0,00001 | 99999999 |
| 125 | UW 3 | ≤ 400 | 200 | 160 | 0,640 | 0,400 | 0,00001 | 99999999 |
| 150 | UW 4 | ≤ 400 | 312,5 | 250 | 1,000 | 0,625 | 0,00001 | 99999999 |
| 200 | UW 5 | ≤ 400 | 500 | 400 | 1,600 | 1,000 | 0,00001 | 99999999 |

DIMENSIONS & WEIGHTS

| METER SIZE DIA (mm) | L LENGTH | B WIDTH | H HEIGHT | CONNECTING FLANGE | | | PACKAGE WEIGHT (Without Flange) (kg) | PACKAGE WEIGHT (With Flange) (kg) |
|---------------------|----------|---------|----------|--------------------|----------------------------|---------------------------|--------------------------------------|-----------------------------------|
| | | | | D2 (mm) FLANGE DIA | D1 (mm) FLANGE HOLE CENTER | CONNECTION BOLT (PCS-DIA) | | |
| 50 | 200 | 165 | 198 | 165 | 125 | 4 - M16 | 8,40 | 13,00 |
| 65 | 200 | 185 | 215 | 185 | 145 | 4 - M16 | 9,80 | 15,10 |
| 80 | 225 | 200 | 226 | 200 | 160 | 8 - M16 | 11,50 | 18,10 |
| 100 | 250 | 220 | 240 | 220 | 180 | 8 - M16 | 14,00 | 21,25 |
| 125 | 250 | 250 | 260 | 250 | 210 | 8 - M16 | 17,20 | 27,95 |
| 150 | 300 | 285 | 300 | 285 | 240 | 8 - M20 | 25,60 | 38,10 |
| 200 | 350 | 340 | 337 | 340 | 295 | 8 - M20 | 41,90 | 59,90 |

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