

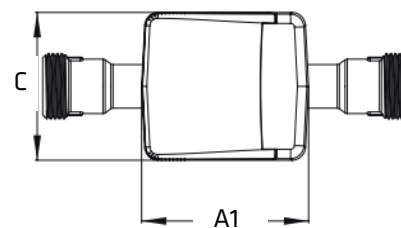
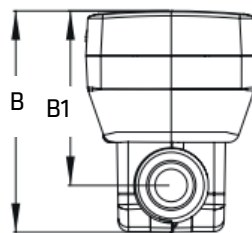
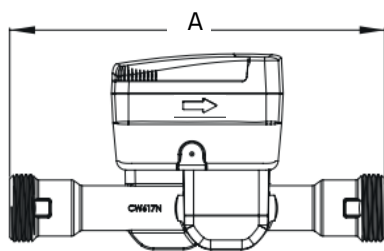
# TOPAS<sup>®</sup> SONIC

## Residential water meter

Technical datasheet  
Technisches Datenblatt  
Fiche technique  
Scheda tecnica



| 1. Technical measurement data and dimensions | Unit of measure   | Diameter DN (mm) |       |           |           |       |           |
|--|-------------------|------------------|-------|-----------|-----------|-------|-----------|
|  |                   | 15               | 20    | 25        | 32        | 40    | 50        |
| Nominal flow Q3                              | m <sup>3</sup> /h | 2.5              | 4     | 10        | 10        | 16    | 25        |
| Maximum flow Q4                              | m <sup>3</sup> /h | 3.125            | 5     | 12.5      | 12.5      | 20    | 31.25     |
| Transition flow Q2                           | L/h               | 8                | 12.8  | 32        | 32        | 51.2  | 80        |
| Minimum flow Q1                              | L/h               | 5                | 8     | 20        | 20        | 32    | 50        |
| Starting Flow                                | L/h               | 2.5              | 4     | 10        | 10        | 16    | 25        |
| Ratio Q3/Q1                                  | -                 | 500              | 500   | 500       | 500       | 500   | 500       |
| Total length (A)                             | mm                | 110              | 190   | 260       | 260       | 300   | 300       |
| Height (B1)                                  | mm                | 77               | 77    | 77        | 77        | 77    | 77        |
| Total Height (B)                             | mm                | 98               | 98    | 98        | 101       | 107   | 115       |
| Width (C)                                    | mm                | 76               | 76    | 76        | 76        | 76    | 76        |
| Housing Length (A1) (mm)                     | mm                | 87               | 87    | 87        | 87        | 87    | 87        |
| Weight (kg)                                  | kg                | 0.8              | 1     | 1.4       | 1.5       | 1.9   | 2.4       |
| Thread                                       | -                 | G3/4" B          | G1" B | G1 1/4" B | G1 1/2" B | G2" B | G2 1/2" B |



### 2. Power supply

|                 |   |
|-----------------|---|
| Battery powered | 3.6 VDC Lithium batteries / supercap.                             |
| Lifetime        | up to 16 years <sup>1</sup> (15 years operation + 1 year storage) |

<sup>1</sup> depending on sending interval of radio telegram, telegram length and operating temperature

### 3. Storage conditions

|                     |   |
|---------------------|---|
| Storage temperature | from -20°C to +70°C (max. 2 weeks with T>35°C)<br>from -13°F to +158°F (max. 2 weeks with T>95°F) |
|---------------------|---|

### 4. Operating conditions

|                  |       |
|------------------|-------|
| Nominal pressure | PN 16 |
| Protection class | IP 68 |



|                         |  |                     |
|-------------------------|--|---------------------|
| Medium                  | potable water                                      |                     |
| Medium temperature      | from 0.1°C to +50°C                                | from 32°F to +122°F |
| Environment temperature | from 1°C to +70°C                                  | from 34°F to +158°F |
| Environment class       | B (Indoor installation) / O (Outdoor installation) |                     |
| Mechanical class        | M1   |                     |
| Electromagnetic class   | E2   |                     |
| Sensitivity             | U0D0   |                     |
| Flow Measurement        | bi-directional                                     |                     |

## 5. Technical data display

|                         |  |
|-------------------------|--|
| Display indication      | LCD 10 digits  |
| Units                   | m <sup>3</sup> , L, hour, min, sec   |
| Value display           | Volume, Flow, Reverse flow, Display test, Events and alarms status, F/W version                            |
| Events codes and alarms | Reverse flow, Low battery, Leakage, Air bubbles, Burst, Frost, Heat, Dry, Over temperature, No consumption |

## 6. Communication interfaces

|  |   |
|--|---|
| Wired communication<br>(cable length 1.5m) | Open collector<br>M-Bus   |
| Wireless communication                     | WM-Bus 434MHz (OMS v4) T1 mode<br>WM-Bus 868MHz (OMS v4) T1 mode<br>LoraWAN EU868MHz<br>NFC (configuration) |

## 7. Modifiable parameters with ParamApp (Android application)

|                           |  |
|---------------------------|--|
| Display sequence duration | Net volume, Forward volume, Reverse volume, Actual flow rate, Active events or alarms codes                      |
| Measurement unit          | Volume, Flow rate  |
| Events                    | Burst, Leak threshold, Leak time, Over temperature, No consumption threshold                                     |
| Communication             | WM-Bus telegram interval, Wired M-Bus Baudrate, Primary address, Secondary Address, LoraWAN interval, LoraWAN ID |

## 8. Approvals and certificates / Certifications and regulations

|                         |                |
|-------------------------|----------------|
| MID Certification       | MID 2014/32/UE |
| Drinking water approval | ACS, WRAS      |
| Market approval         | CE marking     |

