

# RTKD-L-M / RTKD-L-M-CC

## Positive displacement dry dial meter for cold water in a plastic housing

The RTKD-L-M positive displacement meter records the flow rate according to the volumetric measuring principle. It offers a very high measuring range, excellent measuring stability and therefore guarantees extremely precise consumption recording. The RTKD-L-M features a very low starting flow and is permitted for all installation positions.

The meter is equipped with an 8-digit dry dial meter register and a modulator disc. This enables electronic, non-reactive scanning and is the basis for remote reading of meter data via radio with LoRaWAN® or wM-Bus (according to OMS). A combined M-Bus/pulse module is also possible.

The housing of the RTKD-L-M comprises glass-fibre reinforced plastic approved for drinking water with brass connection threads and is designed for an operating pressure of up to 16 bar.

### Performance characteristics at a glance

- Positive displacement dry dial meter
- For any installation position (except for overhead)
- Highest precision and reliability even in case of low flow rates
- Register cap made of UV-resistant plastic
- Optionally available with copper-glass counter (IP 68)
- Housing made of glass-fibre reinforced polymer plastic
- Register rotatable 355°
- Operating pressure MAP 16
- Approved in accordance with MID



### Applications

- For the consumption measurement of cold and unpolluted drinking water or service water up to 30°C

### AMR options

- As standard with communication interface for EDC modules (Electronic Data Capture):
  - EDC LPWAN radio module (868 MHz) for LoRaWAN®
  - EDC wireless M-Bus radio module according to OMS standard (868 MHz), EN 13757-4
  - EDC- combined M-Bus and pulse module

# RTKD-L-M (-CC)

## Technical data

|                                    |            |               |               |               |               |               |
|------------------------------------|------------|---------------|---------------|---------------|---------------|---------------|
| Permanent flowrate                 | $Q_3$      | 2.5           | 1.6           | 2.5           | 4             | 4             |
| Attainable measuring range         | $Q_3/Q_1$  | 400           | 250           | 400           | 400           | 400           |
| Overload flowrate                  | $Q_4$      | 3.13          | 2             | 3.13          | 5             | 5             |
| Transitional flowrate <sup>2</sup> | $Q_2$      | 10.2          | 10.2          | 10.2          | 16.0          | 16.0          |
| Min. flowrate <sup>2</sup>         | $Q_1$      | 6.4           | 6.4           | 6.4           | 10            | 10            |
| Start-up flow rate                 | -          | <2            | <2            | <2            | <2            | <2            |
| Display range                      | min.       | 0.02          | 0.02          | 0.02          | 0.02          | 0.02          |
|                                    | max.       | R8 99,999.999 |
| Temperature range                  | -          | 0.1 - 30      | 0.1 - 30      | 0.1 - 30      | 0.1 - 30      | 0.1 - 30      |
| Operating pressure                 | MAP        | 0.3 - 16      | 0.3 - 16      | 0.3 - 16      | 0.3 - 16      | 0.3 - 16      |
| Pulse value                        | -          | 1/10          | 1/10          | 1/10          | 1/10          | 1/10          |
| Pressure loss class at $Q_3$       | $\Delta p$ | $\Delta 0.63$ | $\Delta 0.40$ | $\Delta 0.63$ | $\Delta 0.40$ | $\Delta 0.63$ |
| Mechanical environmental condition | -          | M2            | M2            | M2            | M2            | M2            |
| Climatic condition <sup>3</sup>    | -          | 5 - 55        | 5 - 55        | 5 - 55        | 5 - 55        | 5 - 55        |
| Flow profile sensitivity           | -          | U0/D0         | U0/D0         | U0/D0         | U0/D0         | U0/D0         |

## Dimensions and weights:

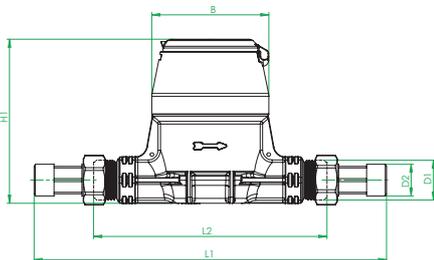
|  |    |         |         |                          |      |                            |
|--|----|---------|---------|--------------------------|------|----------------------------|
| Nominal diameter                               | DN | 15      | 15      | 15                       | 20   | 20                         |
|  |    | 1/2"    | 1/2"    | 1/2" (7/8") <sup>4</sup> | 3/4" | 3/4" (1 1/8") <sup>4</sup> |
| Overall length without connectors <sup>1</sup> | L2 | 110/115 | 165/170 | 165/170                  | 165  | 190                        |
| Overall length with connectors approx.         | L1 | 195/200 | 250     | 250                      | 261  | 285                        |
| Thread meter G x B                             | D1 | 3/4"    | 3/4"    | 3/4"                     | 1"   | 1"                         |
| Thread connector R x                           | D2 | 1/2"    | 1/2"    | 1/2"                     | 3/4" | 3/4"                       |
| Width approx.                                  | B  | 85      | 89.5    | 89.5                     | 95   | 95                         |
| Height approx.                                 | H1 | 129     | 120     | 120                      | 135  | 135                        |
| Weight approx.                                 | -  | 0.5     | 0.58    | 0.58                     | 0.73 | 0.74                       |

<sup>1</sup> Other measuring ranges (R) and overall lengths on request

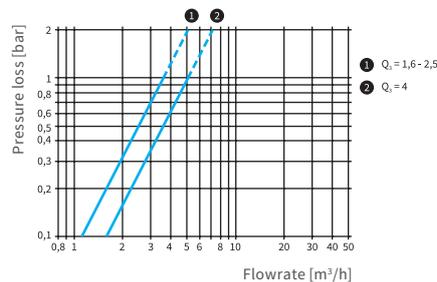
<sup>2</sup> The data refers to the attainable measuring range

<sup>3</sup> Condensation possible

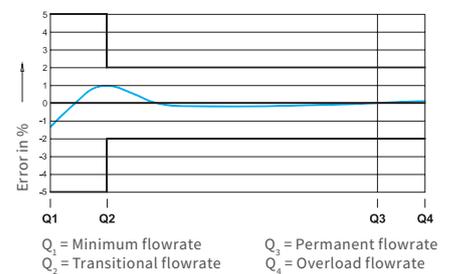
<sup>4</sup> DN15 housing 170 mm with 7/8" and DN20 housing 190 mm with 1 1/8" thread possible



Dimensions



Typical pressure loss curve



Typical error curve

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