

# ETKD-M-CC R160

## Single-jet dry-dial meter for cold water

The ETKD R160 is a single-jet meter with a modular 8-digit register with protected magnetic coupling and glass/copper register (IP68). Also available with plastic register on request. The individual advantage of the ETKD-M-CC / ETWD-M-CC is an exceptionally compact design. With its low height, the meter easily adapts to any installation situation. The meter guarantees reliable recording of meter data for individual consumption billing.

The modulator disc 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.

### Performance characteristics at a glance

- Single-jet dry dial meter with protected magnetic coupling
- With 8-digit register and modulator disc ( $\geq 1$  l/pulse) for electronic, non-reactive scanning, as a basis for remote readout radio (wM-Bus, LPWAN), M-Bus or pulse
- For horizontal and vertical installation (also for ascending and descending pipes)
- All materials used in the drinking water sector comply with the required standards, guidelines, the current German Drinking Water Ordinance as well as the assessment principles of the Federal Environment Agency (UBA lists)
- Accuracy class R160 (corr. to class C)
- Equipped with glass/copper register (IP68) as standard
- Optionally available with plastic register (IP 64)
- Fitted with protective cap as standard
- Brass body according to UBA (Federal Environment Office) list
- Register rotatable 355°
- Operating pressure MAP 16
- Approved in accordance with MID



M-Bus

M-Bus

LoRaWAN

### Applications

- For the consumption measurement of cold and clean drinking water or service water up to 50 °C

### AMR options

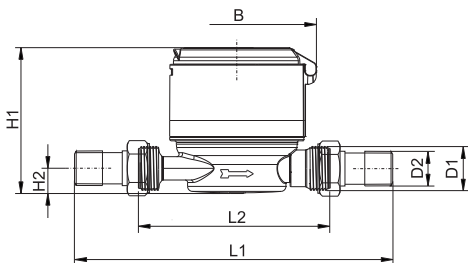
- As standard with communication interface for EDC modules (Electronic Data Capture):
  - EDC-LPWAN radio module (868 MHz) for LoRaWAN®
  - EDC-wireless M-Bus radio module according to DIN EN 13757-4
  - EDC-combined M-Bus and pulse module

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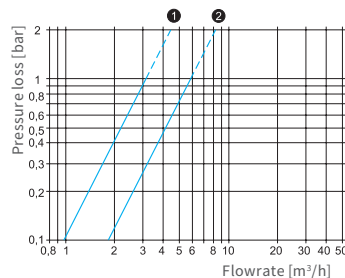
Technical data								
Permanent flowrate	$Q_3$	m <sup>3</sup> /h	1.6	1.6	2.5	2.5	4	4
Comparable to permanent flowrate (EEC)	$Q_n$	m <sup>3</sup> /h	1	1	1.5	1.5	2.5	2.5
Attainable measuring range	$Q_3/Q_1$	R	125H40V	125H40V	200H63V	200H63V	200H63V	200H63V
Standard measuring range <sup>1</sup>	$Q_3/Q_1$	R	100H40V	100H40V	160H63V	160H63V	160H63V	160H63V
Comparable to metrological class (EEC)	Class		B-H/A-V	B-H/A-V	C-H/A-V	C-H/A-V	C-H/A-V	C-H/A-V
Overload flowrate <sup>2</sup>	$Q_4$	m <sup>3</sup> /h	2	2	3.125	3.125	5	5
Transitional flowrate <sup>2</sup>	$Q_2$	l/h	26H/64V	26H/64V	26H/64V	26H/64V	40H/101V	40H/101V
min. Flowrate <sup>2</sup>	$Q_1$	l/h	16H/40V	16H/40V	16H/40V	16H/40V	25H/63V	25H/63V
Start-up flowrate	-	l/h	5	5	5	5	7	7
Display range	min.	l	0.02	0.02	0.02	0.02	0.02	0.02
	max.	m <sup>3</sup>	R8 99.999.999 R7 99.999.99	R8 99.999.999 R7 99.999.99	R8 99.999.999 R7 99.999.99	R8 99.999.999 R7 99.999.99	R8 99.999.999 R7 99.999.99	R8 99.999.999 R7 99.999.99
Temperature range	-	°C	0.1 - 50	0.1 - 50	0.1 - 50	0.1 - 50	0.1 - 50	0.1 - 50
Operating pressure	MAP	bar	16	16	16	16	16	16
Pulse value	-	l/pulse	1	1	1	1	1	1
Pressure loss class at $Q_3$	$\Delta p$	bar	$\Delta 0.25$	$\Delta 0.25$	$\Delta 0.63$	$\Delta 0.63$	$\Delta 0.63$	$\Delta 0.63$
Mechanical environmental condition	-	-	M1	M1	M1	M1	M1	M1
Climatic condition <sup>3</sup>	-	°C	5 - 55	5 - 55	5 - 55	5 - 55	5 - 55	5 - 55
Flow profile sensitivity	-	-	U0/D0	U0/D0	U0/D0	U0/D0	U0/D0	U0/D0

Dimensions and weights:								
Nominal diameter	DN	mm	15	15	15	15	20	20
		inch	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"
Overall length	L2	mm	110	165/170	110	165/170	115/130	190
Overall length with connectors approx.	L1	mm	190	245/250	190	245/250	211/226	286
Thread meter G x B	D1	inch	3/4"	3/4"	3/4"	3/4"	1"	1"
Thread connector	D2	inch	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"
Width approx.	B	mm	88	88	88	88	88	88
Height approx.	H1	mm	88	88	88	88	88	88
		H2	mm	15	15	15	15	16.5
Weight approx.	-	kg	0.55/0.61 <sup>4</sup>	0.70/0.76 <sup>4</sup>	0.55/0.61 <sup>4</sup>	0.70/0.76 <sup>4</sup>	0.68/0.74 <sup>4</sup>	1.23/1.29 <sup>4</sup>

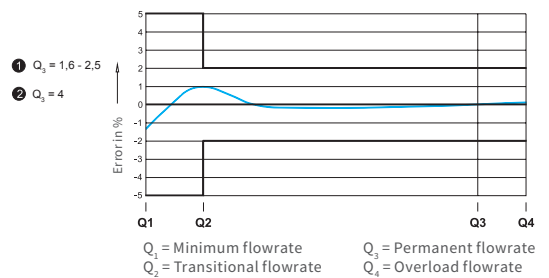
<sup>1</sup> Other measuring ranges (R) on request  
<sup>2</sup> Values refer to standard measuring range  
<sup>3</sup> Condensation possible  
<sup>4</sup> IP68 (CC) variant



Dimensions



Pressure loss curve



Typical error curve

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