

# ETKD-N /ETWD-N

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

The ETKD-N/ ETWD-N is a single-jet meter with a 7- or 8-digit register with protected magnetic coupling. Prepared for a mechanical reed switch. The individual advantage of the ETKD-N/ ETWD-N is an exceptionally compact design. With its very small height, the meter easily adapts to any installation situation. The ETKD-N/ ETWD-N guarantees reliable recording of meter data for individual consumption billing. Alternatively, the reed switch interface enables remote reading of the meter data via PDC via radio with LoRaWAN® or wM-Bus.

All materials, which are used in the drinking water section, comply with the required standards, guidelines and the current German drinking water approval (other country-specific drinking water approvals on request).



### Performance characteristics at a glance

- Single jet dry-dial meter with protected magnetic coupling
- For horizontal and vertical installation (also for ascending and descending pipes)
- With 8-rollers-register and magnet pointer with 1 l/pulse, optional with 7-rollers-register and magnet pointer with 10 l/pulse
- Register cap made of high-quality UV-resistant polymer plastic
- Protection cap can be retrofitted as an option
- Brass meter housing according to UBA (Federal Environment Office) list
- Register rotatable 355 °
- Operating pressure MAP 16
- Approved according to MID

### Applications

- For the consumption measurement of cold and unpolluted drinking water or service water up to 50 °C (ETKD)
- For the consumption measurement of hot and unpolluted drinking water or service water up to 90 °C (ETWD)

### AMR options

- Retrofittable with PDC module (PulseDataCapture):
  - PDC LPWAN radio module for LoRaWAN®
  - PDC wireless M-Bus radio module 868 MHz
- Retrofittable with reed switch:
  - 1 l/pulse at 8-rollers-register
  - 10 l/pulse at 7-rollers-register

## Technical data

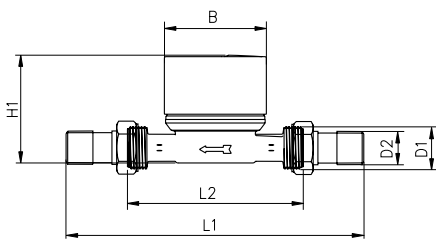
Permanent Flowrate	$Q_3$	$m^3/h$	1,6	2,5	2,5	2,5	4
Attainable measuring range	$Q_3/Q_1$	R	80H/40V	80H/40V	80H/40V	80H/40V	80H/40V
Standard measuring range <sup>1</sup>	$Q_3/Q_1$	R	80H/40V	80H/40V	80H/40V	80H/40V	80H/40V
Overload Flowrate <sup>2</sup>	$Q_4$	$m^3/h$	2,00	3,125	3,125	3,125	5
Transitional Flowrate <sup>2</sup>	$Q_2$	$l/h$	32H/64V	50H/100V	50H/100V	50H/100V	80H/160V
Minimal Flowrate <sup>2</sup>	$Q_1$	$l/h$	20H/40V	31H/63V	31H/63V	31H/63V	50H/100V
Start-up flow rate	-	$l/h$	<10	<10	<10	<10	<14
Display range	min	$l$	0,02	0,02	0,02	0,02	0,02
	max	$m^3$	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	Cold water	$^{\circ}C$	0.1-50	0.1-50	0.1-50	0.1-50	0.1-50
	Hot water	$^{\circ}C$	0.1-90	0.1-90	0.1-90	0.1-90	0.1-90
Operating pressure	MAP	bar	16	16	16	16	16
Pulse value	-	$l/imp.$	1/10	1/10	1/10	1/10	1/10
Pressure loss class at $Q_3$	$\Delta p$	bar	0,63	0,63	0,63	0,63	0,63
Mechanical environmental condition	-	-	M1	M1	M1	M1	M1
Climatic environment <sup>3</sup>	-	$^{\circ}C$	5 - 70	5 - 70	5 - 70	5 - 70	5 - 70
Flow profile sensitivity	-	-	U0/D0	U0/D0	U0/D0	U0/D0	U0/D0

## Dimensions and weights:

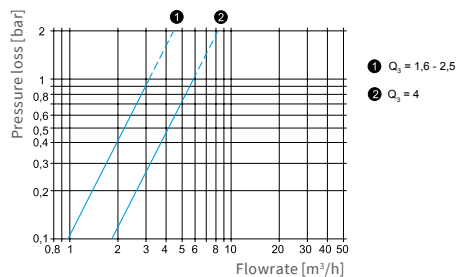
Nominal diameter	DN	mm	15	15	15	20	20
		inch	1/2" (7/8") <sup>4</sup>	1/2"	1/2" (7/8") <sup>4</sup>	3/4"	3/4"
Overall length	L2	mm	110/115/130	80	110/115/130	110/130	130
Overall length with connectors approx.	L1	mm	190/195/200	160	190/195/200	190/226	226
Thread meter G x B	D1	inch	3/4"	3/4"	3/4"	1"	1"
Thread connector	D2	inch	1/2"	1/2"	1/2"	3/4"	3/4"
Width approx.	B	mm	66	66	66	66	66
Height approx.	H1	mm	77	77	77	80	80
Weight approx.	-	kg	0,43/0,44/0,46	0,42	0,43/0,44/0,46	0,54/0,57	0,57

<sup>1</sup> Other measuring ranges (R) on request<sup>2</sup> The data refers to the standard measuring range<sup>3</sup> Condensation possible<sup>4</sup> Thread 7/8" on request

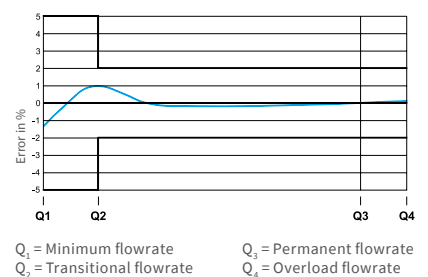
Attention: not all versions are available in all markets



Dimensions



Pressure loss curve



$Q_1$  = Minimum flowrate  
 $Q_2$  = Transitional flowrate  
 $Q_3$  = Permanent flowrate  
 $Q_4$  = Overload flowrate

Typical error curve

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