

MTKD-N / MTKD-M

Multi-jet dry dial water meter for cold water

In use by the million worldwide the MTKD provides a high technical standard and a high-quality workmanship.

The MTKD-M is equipped with an 8-digit-rollers and a modulator disc. In combination with ZENNER's EDC communication module, it enables electronic non-reactive scanning and built a basis for remote reading of meter data via radio (wireless M-Bus according to OMS), M-Bus or LPWA networks in the Internet of Things.

MTKD-N with 7- or 8-digit rollers for different pulse values and retrofittable with mechanic pulser.



Performance characteristics in overview

- Multi-jet dry dial meter
- for horizontal and vertical installation
- Non reactive, electronic pulse detection (MTKD-M)
- Register cap made of high-quality UV-resistant polymer plastic
- Available with flood-proof (IP68 hermetically sealed glass/copper register)
- Register rotatable 355°
- Approved in accordance with MID

Applications

- For the consumption measuring of cold potable water up to 50 °C

AMR options

- Model "-N" retrofittable with reed pulser (standard 10 l/pulse., optional 1 l/pulse)
- Model "-M" serially equipped with communication interface for EDC-module (Electronic Data Capture):
 - EDC-wireless M-Bus radio module according to OMS-Standard (868 MHz), EN 13757-4
 - EDC-LPWAN-radio module (868 MHz) for LoRaWAN™
 - EDC-wired M-Bus-module, EN 13757-3
 - EDC- pulse module with forward and reverse flow detection
 - EDC-combined M-Bus and pulse module

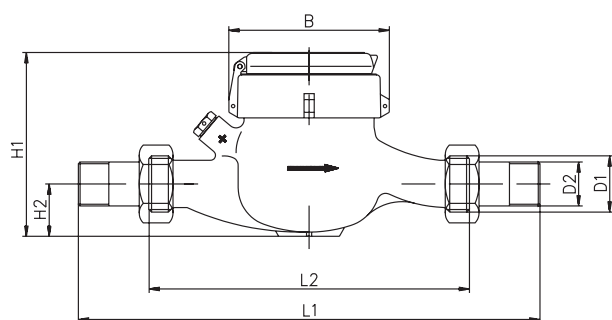
Technical data							
Permanent Flowrate	Q_3	m ³ /h	2.5	4	6.3	10	10
Comparable to nominal flow (EEC)	Q_n	m ³ /h	1.5	2.5	3.5	6	6
Attainable measuring range	Q_3/Q_1	R	100H	160H/40V	R40 160H	R50 160H	R50 160H
Standard measuring range ¹	Q_3/Q_1	R	R80H	R40 R80H	R40 R80H	R40 R80H	R40 R80H
Comparable to metrological class (EEC)	class		B-H	B-H / A-V	A / B-H	A / B-H	A / B-H
Overload Flowrate ²	Q_4	m ³ /h	3.13	5	7.88	12.5	12.5
Minimum flow ²	Q_1	l/h	31H	50H / 100V	158V / 79H	250V / 125H	250V / 125H
Start-up flow rate	-	l/h	<10	<10	<18	<18	<18
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	-	°C	0.1 - 50	0.1 - 50	0.1 - 50	0.1 - 50	0.1 - 50
Operating pressure	MAP	bar	16	16	16	16	16
Pulse value	-	l/pulse	1/10	1/10	1/10	1/10	1/10
Pressure loss class at Q_3	Δp	bar	0.63	0.63	0.63	0.63	0.63
Mechanical environmental condition	-	-	M2	M2	M2	M2	M2
Climatic condition ³	-	°C	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	mm	15	20	25	25	32
		inch	1/2"	3/4"	1"	1"	1 1/4"
Overall length ¹	L2	mm	165/170	190	260	260	260
Overall length with connectors approx.	L1	mm	245/250	286	378	384	384
Thread meter G x B	D1	inch	3/4"	1"	1 1/4"	1 1/4"	1 1/2"
Thread connector	D2	inch	1/2"	3/4"	1"	1"	1 1/4"
Width approx.	B	mm	95	95	95	95	95
Height approx.	H1	mm	120	120	120	120	120
	H2	mm	35	25	35	40	40
	H3	mm	15	15	15	15	15
Weight approx.	-	kg	1.2	1.3	2.1	2.1	2.1

¹Other measuring ranges (R) on request

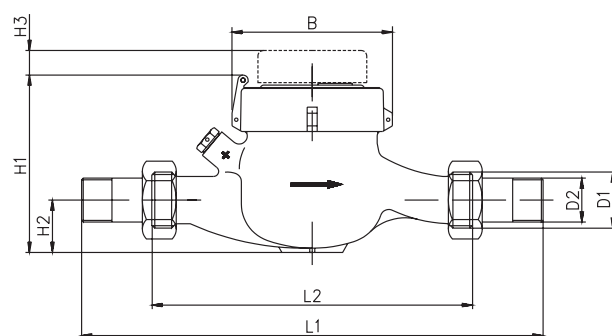
²The data refer to the standard measuring range

³Condensation possible

Attention: Attention: not all versions are available in all markets



Dimensions MTKD-N / MTKD-M



Dimensions MTKDI-N with pulser

Technical data

Permanent Flowrate	Q_3	m^3/h	16	25	25
Comparable to nominal flow (EEC)	Q_n	m^3/h	10	15	15
Attainable measuring range	Q_3/Q_1	R	R40 160H	125H/40V	125H/40V
Standard measuring range ¹	Q_3/Q_1	R	R40 R80H	80H/40V	80H/40V
Comparable to metrological class (EEC)	class		A / B-H	B-H / A-V	B-H / A-V
Overload Flowrate ²	Q_4	m^3/h	20	31.3	31.3
Minimum flow ²	Q_1	l/h	640V / 200H	313H / 625V	313H / 625V
Start-up flow rate	-	l/h	<40	<25	<25
Display range	min.	l	0.02	0.1	0.1
	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
Temperature range	-	°C	0.1 - 50	0.1 - 50	0.1 - 50
Operating pressure	MAP	bar	16	16	16
Pulse value	-	l/pulse	1/10	1/10	1/10
Pressure loss class at Q_3	Δp	bar	0.63	0.63	0.63
Mechanical environmental condition	-	-	M2	M2	M2
Climatic condition ³	-	°C	5 - 55	5 - 55	5 - 55
Flow profile sensitivity	-	-	U0/D0	U0/D0	U0/D0

Dimensions and weights:

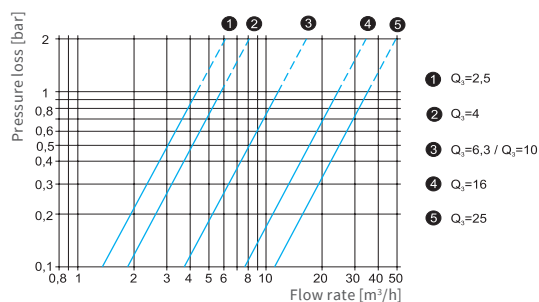
Nominal diameter	DN	mm	40	50	50
		inch	1 1/2"	2"	2"
Overall length ¹	L2	mm	300	300	270
Overall length with connectors approx.	L1	mm	428	444	---
Thread meter G x B	D1	inch	2"	2 1/2"	Flange
Thread connector	D2	inch	1 1/2"	2"	---
Width approx.	B	mm	110	110	110
Height approx.	H1	mm	150	150	175
	H2	mm	50	60	75
	H3	mm	15	15	15
Weight approx.	-	kg	4.0	4	9.5

¹Other measuring ranges (R) on request

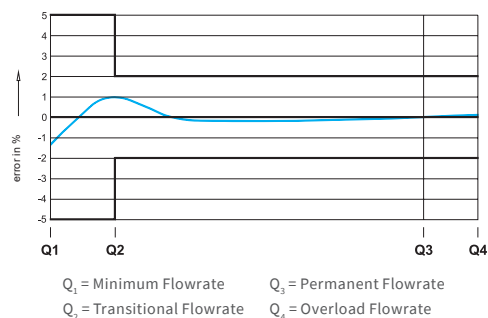
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Typical pressure loss curve



Typical pressure loss curve