

# MTWD-N

## Multi-jet dry dial meter for hot water

The MTWD-N multi-jet meter guarantees a reliable collection of meter data for individual consumption billing and can optionally be retrofitted with a pulser.

The meter is equipped with an 8-digit register and 1 l/pulse as standard or is available with a 7-digit register and 10 l/pulse.

Optionally available with brass register box.



### Performance characteristics at a glance

- Multi-jet dry dial meter with protected magnetic coupling
- For horizontal and vertical installation, also available in standpipe and downpipe design on request
- Register cap made of UV-resistant polymer plastic
- Brass body according to UBA (Federal Environment Office) list
- Register rotatable 355°
- Operating pressure MAP 16
- Approved in accordance with MID

### Applications

- For the consumption measurement of hot and unpolluted drinking water or service water up to 90°C

### AMR options

- Can be retrofitted with pulser:
  - Standard pulse value 1 l/pulse
  - Optional 10 l/pulse

# MTWD-N

Technical data				Riser / Down			Riser	
Permanent flowrate	Q <sub>3</sub>	m <sup>3</sup> /h	2.5	4	4	6.3	6.3	10
Comparable to nominal flowrate (EEC)	Q <sub>n</sub>	m <sup>3</sup> /h	1.5	2.5	2.5	3.5	3.5	6
Attainable measuring range	Q <sub>3</sub> /Q <sub>1</sub>	R	80H	80H/40V	R80H	80H/40V	R80H	80H/40V
Standard measuring range <sup>1</sup>	Q <sub>3</sub> /Q <sub>1</sub>	R	80H	80H/40V	R80H	80H/40V	R80H	80H/40V
Comparable to metrological class (EEC)	Class	-	B-H	B-H/A-V	B-H	B-H/A-V	B-H	B-H/A-V
Overload flowrate <sup>2</sup>	Q <sub>4</sub>	m <sup>3</sup> /h	3.13	5	5	7.88	7.88	12.5
Transitional flowrate <sup>2</sup>	Q <sub>2</sub>	l/h	50H	80H/160V	80	126H/252V	126	200H/400V
Minimum flowrate <sup>2</sup>	Q <sub>1</sub>	l/h	31H	50H/100V	50	79H/158V	79	125H/250V
Start-up flow rate	-	l/h	<10	<10	<10	<18	<18	<18
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°C - 90°C	0.1°C - 90°C	0.1 - 90	0.1°C - 90°C	0.1 - 90	0.1°C - 90°C
Operating pressure	MAP	bar	0.3 - 16	0.3 - 16	0.3 - 16	0.3 - 16	0.3 - 16	0.3 - 16
Pulse value	-	l/pulse	1/10	1/10	1/10	1/10	1/10	1/10
Pressure loss class at Q <sub>3</sub>	Δp	bar	Δ0.63	Δ0.63	Δ0.63	Δ0.63	Δ0.63	Δ0.63
Mechanical environmental condition	-	-	M2	M2	M2	M2	M2	M2
Climatic condition <sup>3</sup>	-	°C	5°C - 55°C	5°C - 55°C	5 - 55	5°C - 55°C	5 - 55	5°C - 55°C
Flow profile sensitivity	-	-	U0/D0	U0/D0	U0/D0	U0/D0	U0/D0	U0/D0

## Dimensions and weights:

Nominal diameter	DN	mm	15	20	20	25	25	25
		inch	½"	¾"	¾"	1"	1"	1"
Overall length without connectors <sup>1</sup>	L2	mm	165/170	190	105	260	150	260
Overall length with connectors approx.	L1	mm	245/250	286	201	378	268	378
Thread meter G x B	D1	inch	¾"	1"	1"	1 ¼"	1 ¼"	1 ¼"
Thread connector R x	D2	inch	½"	¾"	¾"	1"	1"	1"
Width approx.	B	mm	95	95	95	95	95	95
Height approx.	H1	mm	120	120	140	120	160	120
	H2	mm	35	25	-	35	-	40
Weight approx.	-	kg	1.3	1.6	1.7	2.1	2.1	2.1

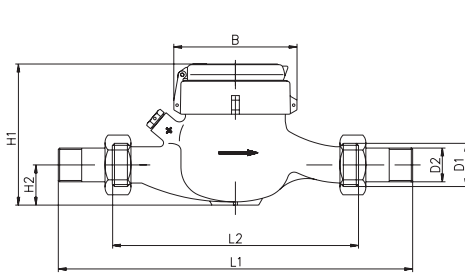
<sup>1</sup> Other measuring ranges (R) and overall lengths on request

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

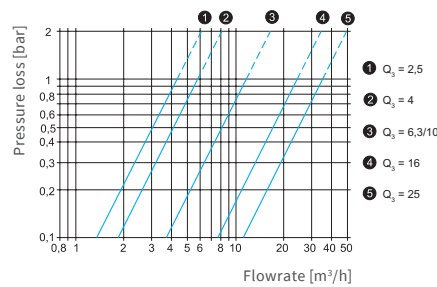
<sup>3</sup> Condensation possible

<sup>4</sup> Only available as factory tested version

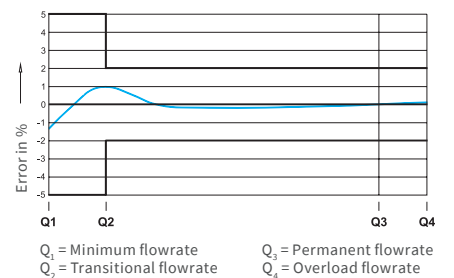
Attention: not all versions are available in all markets



Dimensions



Typical pressure loss curve



Typical error curve

# MTWD-N

Technical data			Riser			Riser	
Permanent flowrate	$Q_3$	m <sup>3</sup> /h	10	10	16	16	25 <sup>4</sup>
Comparable to nominal flowrate (EEC)	$Q_n$	m <sup>3</sup> /h	6	6	10	10	16
Attainable measuring range	$Q_3/Q_1$	R	80H/40V	R80H	80H/40V	R80H	80H/40V
Standard measuring range <sup>1</sup>	$Q_3/Q_1$	R	80H/40V	R80H	80H/40V	R80H	80H/40V
Comparable to metrological class (EEC)	Class	-	B-H/A-V	B-H	B-H/A-V	B-H	B-H/A-V
Overload flowrate <sup>2</sup>	$Q_4$	m <sup>3</sup> /h	12.5	12.5	20	20	31.3
Transitional flowrate <sup>2</sup>	$Q_2$	l/h	200H/400V	200	320H/640V	320	501H/1000V
Minimum flowrate <sup>2</sup>	$Q_1$	l/h	125H/250V	125	200H/400V	200	313H/625V
Start-up flow rate	-	l/h	<18	<18	<40	<40	<45
Display range	min.	l	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
Temperature range	-	°C	0.1°C - 90°C	0.1 - 90	0.1°C - 90°C	0.1 - 90	0.1°C - 90°C
Operating pressure	MAP	bar	0.3 - 16	0.3 - 16	0.3 - 16	0.3 - 16	0.3 - 16
Pulse value	-	l/pulse	1/10	1/10	1/10	1/10	1/10
Pressure loss class at $Q_3$	$\Delta p$	bar	$\Delta 0.63$	$\Delta 0.63$	$\Delta 0.63$	$\Delta 0.63$	$\Delta 0.63$
Mechanical environmental condition	-	-	M2	M2	M2	M2	M2
Climatic condition <sup>3</sup>	-	°C	5°C - 55°C	5 - 55	5°C - 55°C	5 - 55	5°C - 55°C
Flow profile sensitivity	-	-	U0/D0	U0/D0	U0/D0	U0/D0	U0/D0

## Dimensions and weights:

Nominal diameter	DN	mm	32	25	40	40	50
		inch	1 ¼"	1"	1 ½"	1 ½"	2"
Overall length without connectors <sup>1</sup>	L2	mm	260	150	300	150/200	300
Overall length with connectors approx.	L1	mm	384	268	428	278/328	444
Thread meter G x B	D1	inch	1 ½"	1 ¼"	2"	2"	2 ½"
Thread connector R x	D2	inch	1 ¼"	1"	1 ½"	1 ½"	2"
Width approx.	B	mm	95	95	110	110	110
Height approx.	H1	mm	120	160	145	165	150
	H2	mm	40	---	50	---	60
Weight approx.	-	kg	2.2	2.1	3.6	4.0/4.9	4

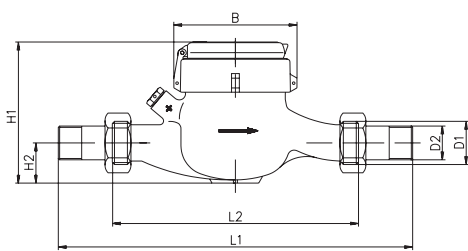
<sup>1</sup> Other measuring ranges (R) and overall lengths on request

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

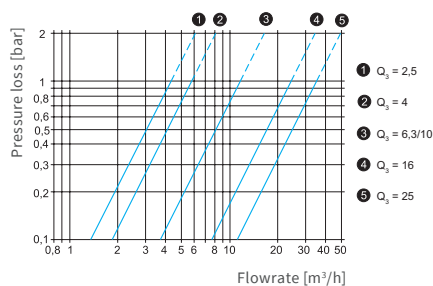
<sup>3</sup> Condensation possible

<sup>4</sup> Only available as factory tested version

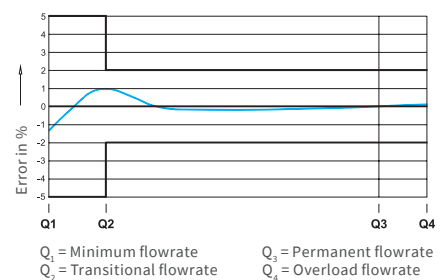
Attention: not all versions are available in all markets



Dimensions



Typical pressure loss curve



Typical error curve

**ZENNER International GmbH & Co. KG**

Heinrich-Barth-Straße 29  
66115 Saarbrücken  
Germany

Phone +49 681 99 676-30  
Fax +49 681 99 676-3100  
E-mail [info@zenner.com](mailto:info@zenner.com)  
Internet [www.zenner.com](http://www.zenner.com)