

# MTWD-M-CC-FA

Multi-jet dry dial meter for hot water with flood-proof (IP68) hermetically sealed glass/copper register in a downpipe design

The current state of development of the MTWD-M-CC-FA guarantees the most precise measurement results, minimal bearing load and a long service life.

The MTWD-M-CC-FA is ideally suited to measuring tasks at temperatures up to 90 °C and fits perfectly into all installation locations provided for downpipe meters. By using special materials, outstanding measurement readings can be combined with a high maximum temperature. The register of the FA variants also works in horizontal position.

The meter is equipped with an 8-digit glass/copper register (IP68) 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.



## Performance characteristics at a glance

- Multi-jet dry dial meter with shielded magnetic coupling
- Water meter for downpipe installation
- Equipped with glass/copper register (IP68) as standard
- Brass body according to Federal Environment Office (UBA) list
- Register rotatable 355°
- Operating pressure MAP 16
- Approved in accordance with MID

## Applications

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

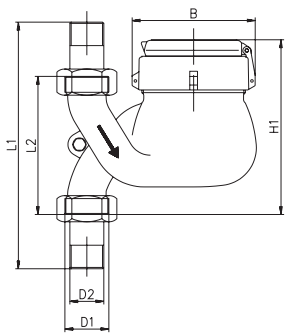
## AMR options

- 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

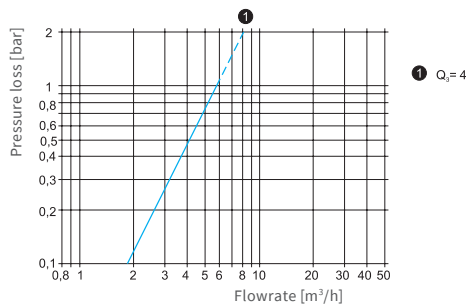
Technical data			
Permanent Flowrate	$Q_3$	$m^3/h$	4
Comparable to permanent flowrate (EEC)	$Q_n$	$m^3/h$	2.5
Attainable measuring range	$Q_3/Q_1$	R	R80H
Standard measuring range <sup>1</sup>	$Q_3/Q_1$	R	R80H
Comparable to metrological class (EEC)	Class	-	B-H
Overload Flowrate	$Q_4$	$m^3/h$	5
Transitional Flowrate <sup>2</sup>	$Q_2$	l/h	80
Minimum flowrate <sup>2</sup>	$Q_1$	l/h	50
Start-up flow rate	-	l/h	<10
Display range	min.	l	0.02
	max.	$m^3$	99.999.999
Temperature range	-	$^{\circ}C$	0.1 - 90
Operating pressure	MAP	bar	0.3 - 16
Pulse value	-	l/pulse	1
Pressure loss class at $Q_3$	$\Delta p$	bar	$\Delta 0.63$
Mechanical environmental condition	-	-	M2
Climatic condition <sup>3</sup>	-	$^{\circ}C$	5 - 55
Flow profile sensitivity	-	-	U0/D0

Dimensions and weights:			
Nominal diameter	DN	mm	20
		inch	3/4"
Overall length without connectors	L2	mm	105
Overall length with connectors approx.	L1	mm	201
Thread meter G x B	D1	inch	1"
Thread connector R x	D2	inch	3/4"
Width approx.	B	mm	95
Height approx.	H1	mm	140
Weight approx.	-	kg	1.7

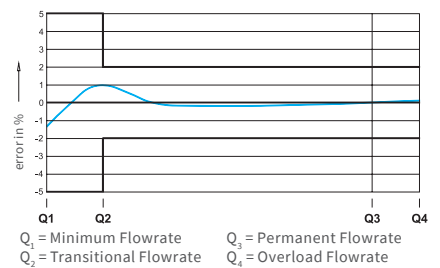
<sup>1</sup> Other measuring ranges (R) on request  
<sup>2</sup> The data refer to the standard measuring range  
<sup>3</sup> Condensation possible  
 Attention: Attention: not all versions are available in all markets



Dimensions



Typical pressure loss curve



Typical error curve

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