WPD PTFE

Bulk water meter with PTFE (Teflon) internal and external coating for industrial application with aggressive water

Water meters are provided by default for the use of the medium drinking water. According to the Drinking Water regulation, the pH value must not have below 6.5 and not above 9.5.
If aggressive water is used (the pH value alone can not determine the aggressiveness of the water) then, all metal parts that come into contact with the medium must be protected to prevent them from corrosion.
We have decided to use PTFE coating in this area of application because of its excellent properties.

Performance characteristics in overview

- Type Woltman parallel
- All metal parts that come into contact with the medium have PTFE coating to protect them from corrosion
- Nominal sizes DN50 to DN150
- For horizontal and vertical installation
- Highest precision and reliability even in case of low flow rates
- Flood-proof (IP68) hermetically sealed glass/copper register
- Low starting flow and high overload security
- Wide mesuring range, low pressure loss
- Hydraulic bearing relieve
- Long-term measuring stability
- Swirl-reducing inlet
- No straight inlet or outlet needed (U0/D0) according to OIML R49 and DIN EN ISO 4064
- Prepared for remote reading
- Register rotatable 355 °
- Operating pressure MAP 16
- Approved according to MID

Applications

- For the consumption measurement of cold and clean service water up to 50 °C
- For measuring high flow rates

AMR options

- Can be retrofitted with a mechanical pulser
- Can be combined with stationary GSM system
- Retrofittable with EDC module (Electronic Data Capture):
  - EDC LPWAN radio module (868 MHz) for LoRaWAN®
  - EDC wireless M-Bus radio module (868 MHz)
  - EDC combined M-Bus and pulse module

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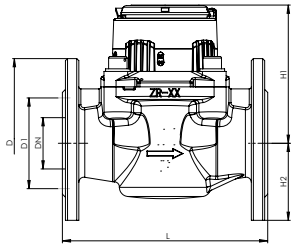
Technical data								
Nominal diameter	DN	mm	**50**	**65**	**80**	**100**	**125**	**150**
Permanent Flowrate	Q_3	m^3/h	25	40	63	100	100	250
Attainable measuring range	Q_3/Q_1	R	R200H50V	R200H80V	R315H125V	R315H200V	R315H200V	R315H200V
Standard measuring range [1]	Q_3/Q_1	R	R160H50V	R160H63V	R160H63V	R160H63V	R160H63V	R160H63V
Overload Flowrate	Q_4	m^3/h	31.25	50	78.75	125	125	312.5
Minimum Flowrate [2]	Q_1	m^3/h	0,16/0,5	0,25/0,64	0,40/1,0	0,63/1,59	0,63/1,59	1,56/3,97
Transitional Flowrate [2]	Q_2	m^3/h	0,25/0,8	0,40/1,02	0,63/1,6	1,0/2,54	1,0/2,54	2,5/6,35
Start-up flow rate	-	m^3/h	0.065	0.065	0.11	0.15	0.15	0.35
Display range	min	l	0.5	0.5	0.5	0.5	0.5	5
	max	m^3	999,999	999,999	999,999	999,999	999,999	999.999 x10
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	0,3 - 16	0,3 - 16	0,3 - 16	0,3 - 16	0,3 - 16	0,3 - 16
Pulse value Reed	-	l/pulse	100	100	100	100	100	1000
Pulse value modulator disc	-	l/pulse	10	10	10	10	10	100
Pressure loss class at Q_3	Δp	bar	0.10	0.16	0.10	0.16	0.16	0.10
Mechanical environmental condition	-	-	M2	M2	M2	M2	M2	M2
Climatic ambient conditions [4]	-	°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

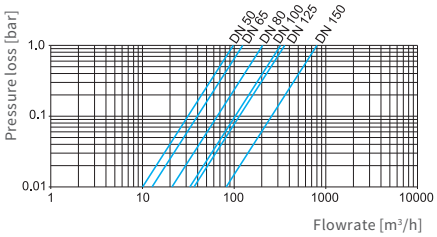
Dimensions and weights:								
Nominal diameter	DN	mm	**50**	**65**	**80**	**100**	**125**	**150**
Overall length [1]	L	mm	200	200	225	250	250	300
Height	H1	mm	135	135	143	152	152	183
Height	H2	mm	75	85	95	105	115	135
Total height approx. [3]	H1+ H2	mm	210	220	238	257	267	318
Installation height of the measuring unit	H3	mm	230	230	256	266	266	373
Flange diameter	D	mm	165	185	200	220	250	285
Bolt circle diameter	D1	mm	125	145	160	180	210	240
Number of bolts	-	pcs.	4	4	8	8	8	8
Screw size	-	mm	M16	M16	M16	M16	M16	M20
Bolt diameter	-	mm	19	19	19	19	19	23
Weight approx.	-	kg	9.1	11.8	13.4	16.9	20.1	31.5

[1] Other measuring ranges and overall lengths on request
[2] Values refer to standard measuring range
[3] Total height WPDE PTFE/WPHDE PTFE + 20mm
[4] Condensation possible

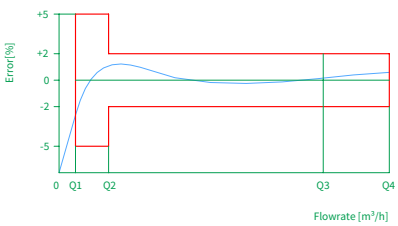
Flange according to ISO 7005-2. Other flanges on request
Attention: not all versions are available in all markets



Dimensions



Pressure loss curve



Error curve

ZENNER International GmbH & Co. KG

Heinrich-Barth-Straße 29 | 66115 Saarbrücken | Germany

Telefon +49 681 99 676-30
Telefax +49 681 99 676-3100
E-mail info@zenner.com
Internet www.zenner.com