



Water



Heat / Cooling

GWF



WPDH BMF

Woltman meter



Your benefits

- Robust, high grade wear resistant materials:
Excellent measuring stability and reliability
- Removable measuring insert:
Retrofittability and replaceability guaranteed

Applications

- Measurement of high, relatively constant flow rates
- Measuring of
 - Desalinated / demineralized water
 - Caustic soda up to 20%
 - Saline water up to 10%
 - Chlorinated water up to 1%
 - Glycol-water solutions up to 30%
 - Caustic solutions up to pH value 9

Properties

- Non-ferrous metal design
- Universal installation position
- Straight flow section 3xDN
- Register can be turned through 355°
- Maximum operating pressure PN 16 bar
- Temperature up to 130 °C
- Rotor is hydrodynamically balanced
- Symmetrical calibration ring
- Powder coating provides optimum corrosion protection
- Flood proof standard pulser register (IP68) with ports for two Reed-RD-Pulsers and one Opto-OD-Pulser

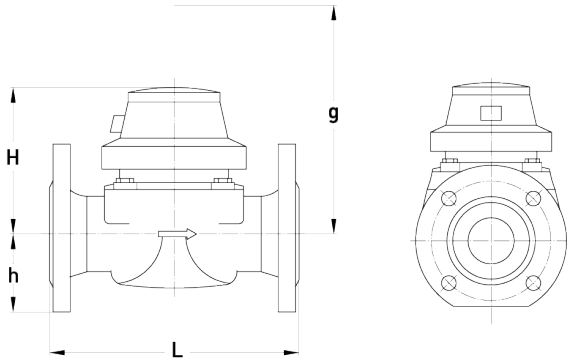
Technical Data

Nominal diameter	DN	mm	50	65	80	100	125	150	200
Operating pressure	PN	bar	16	16	16	16	16	16	16
Nominal flow rate	Q _n	m ³ /h	15	25	45	70	100	150	250
Overload flow rate (1x24 h)	Q _{max}	m ³ /h	30	60	90	140	200	300	500
Transitional flow rate ±3%	Q _t	m ³ /h	1,8	2,0	3,2	4,8	8	12	20
Minimum flow rate ±5%	Q _{min}	m ³ /h	0,6	1,0	1,4	2,0	3,5	4,5	8
Starting flow		app. m ³ /h	0,25	0,3	0,35	0,6	1,1	1,7	2
Temperature		max. □ °C	130	130	130	130	130	130	130

Dimensions and weights									
Length	L	mm	200	200	225	250	250	300	350
Height	H	mm	120	120	150	150	160	177	206
Height	h	mm	73	85	95	105	118	135	162
Dismantling height of measuring unit	g	mm	200	200	270	270	280	356	441
Meter weight		app. kg	7,7	10	14	18	20,5	35,5	50,5
Measuring unit weight		app. kg	1,4	1,4	3	3	3	5,5	7,5
Body weight		app. kg	6,3	8,6	11	15	17,5	30	43

PTB approval									
Nominal flow rate	Q _n	m ³ /h	15	25	40	60	100	150	250
Overload flow rate (1x 24 h)	Q _{max}	m ³ /h	30	50	80	120	200	300	500
Transitional flow rate ±3%	Q _t	m ³ /h	2,25	3,75	6	9	15	22,5	37,5
Minimum flow rate ±5%	Q _{min}	m ³ /h	0,6	1,0	1,6	2,4	4	6	10
Metrological class			B	B	B	B	B	B	B

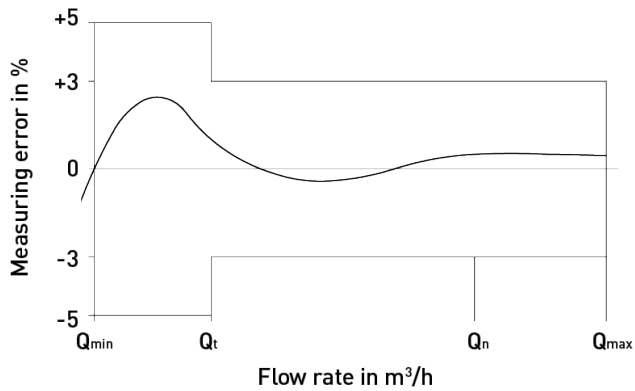
Dimension Diagram



Materials

Body	Non-rusting steel
Measuring unit	Plastic
Rotor	Plastic
Other materials	Non-rusting steel

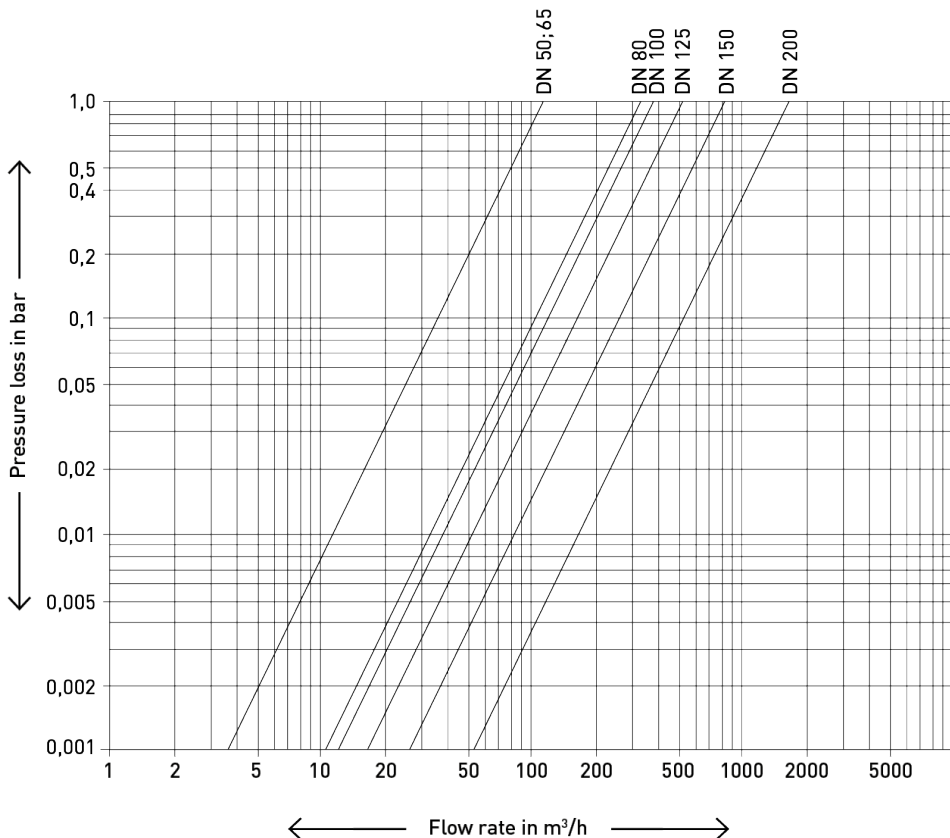
Measuring error curve



Installation

Pipeline	horizontal	
	vertical	
	diagonal	
Meter head	upwards	
	sideways	

Typical Head Loss Curve



Installation requirements

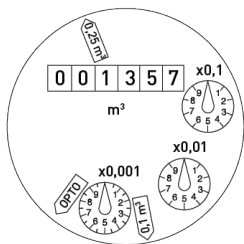
3xDN straight pipe upstream of the meter. No abrupt restrictions directly downstream of the meter.

Pulse value table

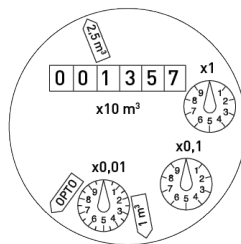
Pulse generator	Register type	DN 50...125 m ³	DN 150...200 m ³
Reed RD 02	4/10 4/40	0,25 and 0,1 0,25 and 0,025	2,5 and 1 2,5 and 0,25
Opto OD 02	4/10 4/40	0,001	0,01
Opto OD 04	4/10 4/40	0,01	0,1

Dial

DN 50 – DN 125



DN 150 – DN 200



Nominal diameter	DN	50–125	150–200
Smallest reading	m ³	0,0005	0,005
Maximum register reading	m ³	1'000'000	10'000'000