



WSDH

Woltman meter
for hot water up to 130°C
DN 50, 65, 80, 100, 150

Our strength: Your benefit

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

Application

- Measurement of medium to low flow rates
with variable flow profiles
- As volume measuring part for heat calculation the meter is suitable for installation
in central and district heating applications

Features

- Horizontal installation position
- No straight flow section required before the meter
- Register can be turned through 355°
- Maximum operating pressure PN 16 bar
- Temperature up to 130°C
- Powder coating provides optimum corrosion protection
- Flood proof standard pulser register (IP68) with ports
for two Reed-RD-Pulsers and one Opto-OD-Pulser

Options

- High-pressure series up to PN 40 bar
- Special version for 180/200°C available up to DN 100

Technical Data

Nominal diameter	DN	mm	50	65	80	100	150
Operating pressure ¹⁾	PN	bar	16	16	16	16	16
Nominal flow rate	Q _n	m ³ /h	15	25	40	60	150
Overload flow rate (1x24h)	Q _{max}	m ³ /h	30	60	85	125	300
Transitional flow rate ±3%	Q _t	m ³ /h	1,5	2,5	2,5	4	12
Minimum flow rate ±5%	Q _{min}	m ³ /h	0,25	0,3	0,3	0,5	0,8
Starting flow		app. m ³ /h	0,06	0,07	0,1	0,15	0,5
Temperature ²⁾		max. °C	130	130	130	130	130

¹⁾ High-pressure series PN 40 upon request

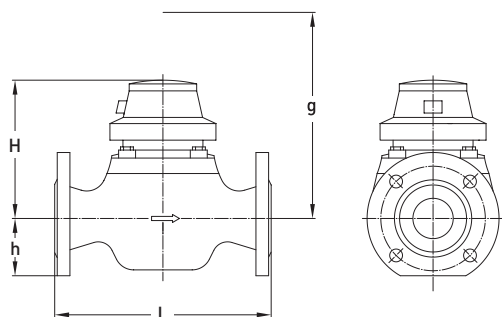
²⁾ Overloadable up to 150°C

Dimensions and weights (PN 16)							
Length	L	mm	270	300	300	360	500
Height	H	mm	151	161	161	191	301
Height	h	mm	80	100	100	110	180
Dismantling height of measuring unit	g	mm	281	301	301	341	581
Meter weight		app. kg	13,5	17,5	19,5	32,5	91,5
Measuring unit weight		app. kg	2,5	2,5	2,5	7,5	17,5
Body weight		app. kg	11	15	17	25	74

Dimensions and weights (PN 40)							
Length	L	mm	270	300	300	360	500
Height	H	mm	171	171	171	211	311
Height	h	mm	80	100	100	115	180
Dismantling height of measuring unit	g	mm	291	311	311	381	581
Meter weight		app. kg	19,5	24,5	27,5	48,5	114,5
Measuring unit weight		app. kg	4,5	4,5	4,5	12,5	31,5
Body weight		app. kg	15	20	23	36	83

PTB approval							
Nominal flow rate	Q _n	m ³ /h	15	25	40	60	150
Overload flow rate (1x24h)	Q _{max}	m ³ /h	30	50	80	120	300
Transitional flow rate ±3%	Q _t	m ³ /h	1,5	2,5	4	6	15
Minimum flow rate ±5%	Q _{min}	m ³ /h	0,3	0,5	0,8	1,2	3
Metrological class			C	C	C	C	C

Dimension Diagram



Materials

Body PN 16:

Body PN 40:

Measuring unit:

Rotor:

Other materials:

Cast iron

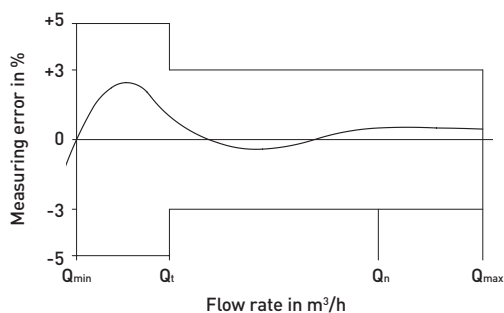
Nodular cast iron

Plastic

Plastic

Brass / non-rusting steel

Measuring error curve

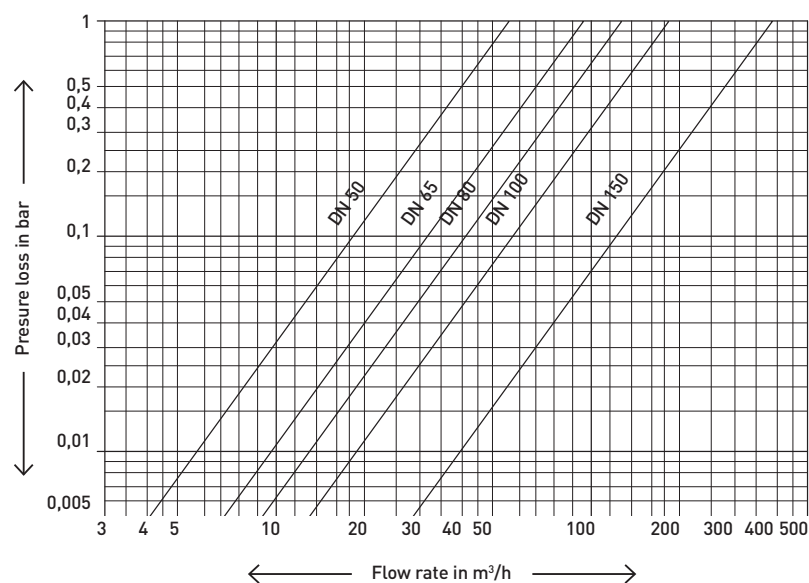


Installation

Pipeline: horizontal —

Meter head: upwards ↑

Typical Head Loss Curve



Installation requirements

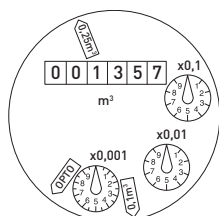
No abrupt restrictions directly downstream of the meter.

Pulse value table

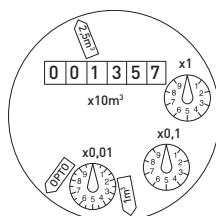
Pulse generator	DN50 ... 100 m³	DN150 m³
Reed RD 02	0,25 and 0,1 0,25 and 0,025	2,5 and 1 2,5 and 0,25
Opto OD 02	0,001	0,01
Opto OD 04	0,01	0,1

Dial

DN 50 – DN 100



DN 150



Nominal diameter	DN	50 – 100	150
Smallest reading	m³	0,0005	0,005
Maximum register reading	m³	1'000'000	10'000'000

DBe20400-2 – 05.10.2011
Subject to modification

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