

WESAN WS 233

BULK WATER METER | WOLTMAN

HYDROMETER



APPLICATION

For measuring of fluctuating flows in the utility sector.

FEATURES

- ▶ Calibratable and exchangeable measuring insert
- ▶ For horizontal installation
- ▶ Outstanding long-term accuracy even under extreme loads
- ▶ Extended measuring range better than metrological class
- ▶ Complete head unit with counter and sensors can be rotated by 350° for easier reading
- ▶ Encapsulated counter of glass/copper IP 68
- ▶ Integrated measurement outputs as standard
- ▶ Sensors for remote readout (digital) and flow measurement (analogue) can be retrofitted on site without affecting calibration
- ▶ Up to two different digital outputs and one analogue output simultaneously

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GENERAL

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Medium temperature range	°C	0 ... 30
Temperature safety	°C	0 ... 50
Ambient operating temperature	°C	0 ... 55
Ambient storage temperature	°C	0 ... 55
Nominal pressure	PN bar	16*
Protection class		IP 68

* See also special versions.

TECHNICAL DATA

Nominal diameter	DN	mm	50	65	80	100	150
Nominal flow rate (DIN ISO 4064)	Q _n	m ³ /h	15	25	40	60	150
Permissible continuous load (HY)	Q _n	m ³ /h	25	25	55	90	200
Maximum flow rate (short-term)	Q _{max}	m ³ /h	50	50	110	180	350
Transition flow rate	Q _t	m ³ /h	1	1.2	1.5	1.5	5
Minimum flow rate	Q _{min}	m ³ /h	0.2	0.2	0.25	0.3	0.8
Starting flow rate		l/h	60	60	90	90	150
Flow rate at 0.1 bar pressure loss		m ³ /h	19	21	42	70	160

PULSE OUTPUTS

Nominal diameter	DN	mm	50	65	80	100	150
Reed switch 570* - pulse value 1		l/pulse	100	100	100	100	1000
Reed switch 570* - pulse value 2		l/pulse	1000	1000	1000	1000	10000
Special pulse value		l/pulse	2.5 / 5 / 10 / 25 / 50	2.5 / 5 / 10 / 25 / 50	2.5 / 5 / 10 / 25 / 50	2.5 / 5 / 10 / 25 / 50	25 / 50 / 100 / 250 / 500
IR pulse transmitter 573*		l/pulse	1	1	1	1	10

* For more information about reed switch 570 and IR pulse transmitter 573 please have a look at the specific datasheet.

DISPLAY RANGE

Nominal diameter	DN	mm	50	65	80	100	150
0.5 l ... 999,999 m ³			•	•	•	•	
5.0 l ... 9,999,999 m ³							•

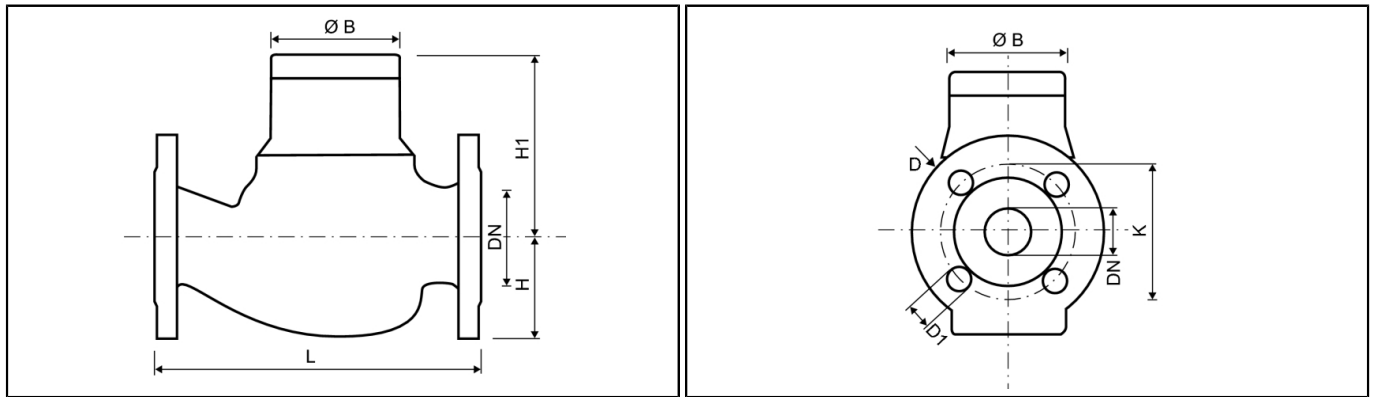
APPROVAL

Nominal diameter	DN	mm	50	65	80	100	150
EC			D 95 / 6.132.37	D 95 / 6.132.37	D 95 / 6.132.37	D 95 / 6.132.37	D 86 / 6.132.21
Metrological class			B•H	B•H	B•H	B•H	B•H

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DIMENSIONS



Nominal diameter	DN	mm	50	65	80	100	150
Overall length (DIN 19625)	L	mm	270	300	300	360	430 / 500
Overall length (DIN ISO 4064)	L	mm	300	300	350	350	500
Flange diameter	D	mm	165	185	200	220	285
Hole circle diameter	K	mm	125	145	160	180	240
Number of screwholes		pcs	4	4	4 / 8	8	8
Screw hole diameter	D1	mm	18	18	18	18	23
Height	H	mm	85	97	102	113	141
Height	H1	mm	135	135	180	190	351
Height to remove measuring insert		mm	240	240	330	340	620
Diameter	Ø B	mm	110	110	110	110	110
Meter width		mm	173	173	239	239	310
Weight		kg	14.5	17.7	24	28	79.5

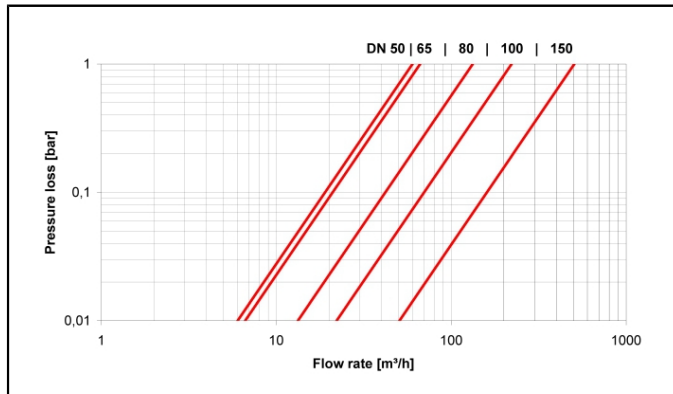
SPECIAL VERSIONS

- Versions with different nominal pressure on request
- Flange for ANSI and BS
- CuZn parts in V2A
- Temperature up to 90 °C
- Suitability for other media
- Special overall length
- Electronic counter module

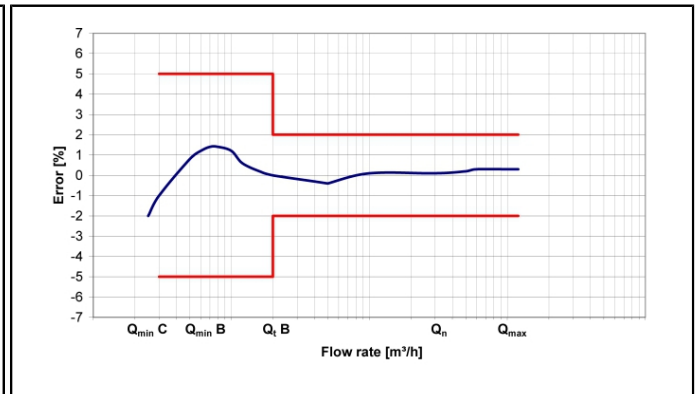
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PRESSURE LOSS GRAPH / TYPICAL ERROR GRAPH




Pressure loss graph



Typical error graph

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HYDROMETER GmbH · Postfach 1462 · 91505 Ansbach
Tel. +49 981 1806-0 · Fax: +49 981 1806-615 · info@hydrometer.de · www.hydrometer.de
Subject to technical adjustments

 smart in solutions