

WESAN WP H E

ELECTRONIC METER | WOLTMAN

DIEHL
Metering



APPLICATION

Fully electronic bulk water meter for extracting water from underground and stand hydrants.

FEATURES

- ▶ Calibratable and exchangeable measuring insert
- ▶ Electronic sensor control for recording flow rate
- ▶ Lithium battery, lifetime up to 12 years
- ▶ Optical ZVEI interface equipped as standard
- ▶ Adjustable reading date for billing
- ▶ Rotatable integrator
- ▶ Single-line 7-digit display for easy meter reading
- ▶ For horizontal or vertical installation
- ▶ Outstanding long-term accuracy through hydraulic bearing relief
- ▶ Version thread or solid coupling

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ELECTRONIC - BASIC FEATURES

WESAN WP H E	
Ambient class	OIML R49 class C / MID E2 + M1
Protection class	IP 54 or IP 68
Interfaces standard	Optical ZVEI
Interfaces optional*	M-Bus, L-Bus, pulse

* Possible combinations

- M-Bus / pulse
- L-Bus / forward pulse
- only M-Bus (IP54, standard delivery without M-Bus cable)

Note: HYDRO-SET Software for configuration of meters, readout of measured values and printout of meter logs. Available under www.diehl.com/metering (Products - downloads)

DISPLAY

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Display indication	LCD, 7-digit
Unit	m ³ /h - l/h - m ³ - l
Total values	9,999.999 - 999,999.9 - 99,999.99 - 9,999.999
Values displayed	Flow rate

VOLUME - / PULSE OPEN COLLECTOR

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Max. frequency	Hz	90
Max. input voltage	V	30
Max. input current	mA	27
Max. voltage drop at active output	V/mA	2/27
Max. current through inactive output	µA/V	5/30
Max. reverse voltage without destroying outputs	V	6
Pulse duration	ms	5.5
Min. pulse pause	ms	5.5

SUPPLY VOLTAGE

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Operating voltage	UN	VDC	3.0 (lithium battery)
Battery lifetime			12 years
Nominal power	PN	µW	30

INTERFACES - OVERVIEW

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Optical	ZVEI interface for communication, M-Bus protocol
M-Bus	According to EN 1434-3. Data reading and parametrization are via two wires with polarity reversal protection.
L-Bus	Interface for the radio module IZAR RADIO EXTERN
Pulse	Output for volume (open collector)

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PULSE INTERFACE - SPECIFICATION

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Pulse rates	l/pulse Decadic 1 ... 1000
Display	1 digit after comma
Pulse value 1	l/pulse 1 (factory setting)
Pulse value 2	l/pulse 100 (factory setting)
Pulse variants	Two forward pulses (factory settings); one forward and one backward pulse; pulse and direction signal

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GENERAL

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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
Display range		0.5 l ... 999,999 m ³

TECHNICAL DATA

Nominal diameter	DN	mm	50
Nominal flow rate (DIN ISO 4064)	Q _n	m ³ /h	15
Permissible continuous load (HY)	Q _n	m ³ /h	35
Maximum flow rate (short-term)	Q _{max}	m ³ /h	90
Transition flow rate	Q _t	m ³ /h	0.8
Minimum flow rate horizontal	Q _{min}	m ³ /h	0.3
Minimum flow rate vertical	Q _{min}	m ³ /h	0.5
Starting flow rate		l/h	90
Flow rate at 0.1 bar pressure loss		m ³ /h	35

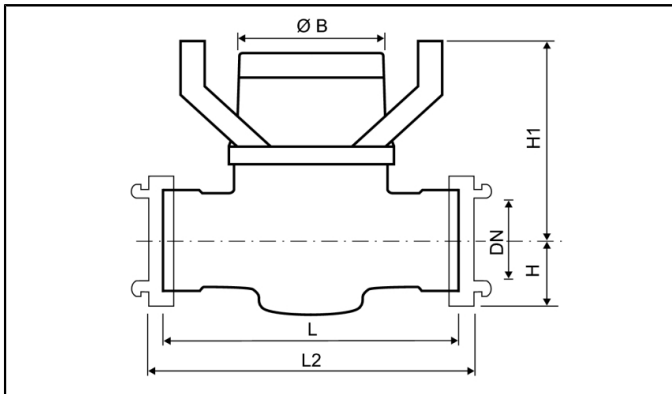
APPROVAL

Nominal diameter	DN	mm	50
National			6.132 / 03.20
Metrological class			A/B•H

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DIMENSIONS

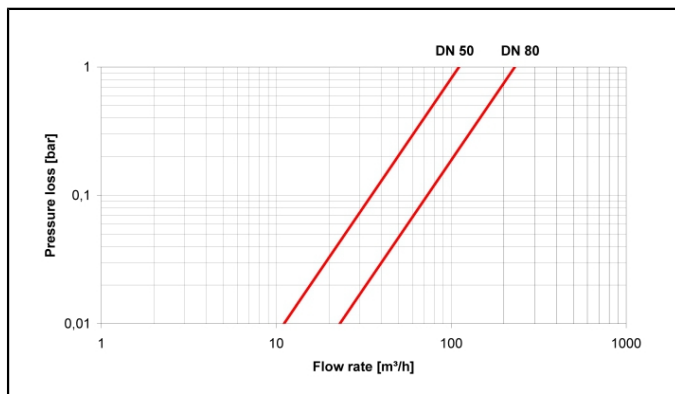


Nominal diameter	DN	mm	50
Overall length	L	mm	200
Overall length with coupling	L2	mm	245
Connection thread on meter		Inch	G2
Solid coupling			C
Height	H	mm	82
Height	H1	mm	140
Diameter	Ø B	mm	110
Width with carrying device		mm	180
Weight - version thread		kg	4.3
Weight - version solid coupling		kg	4.8

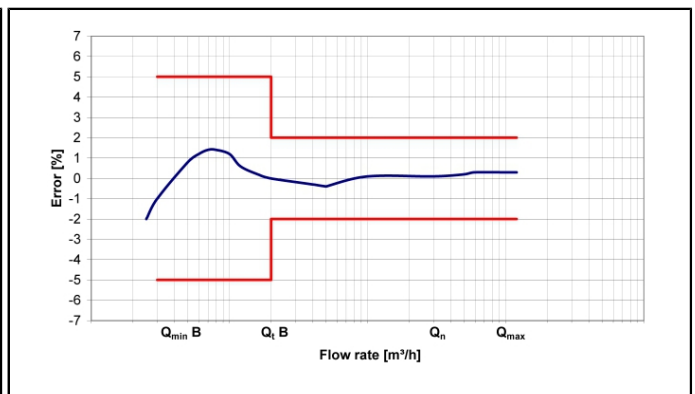
SPECIAL VERSIONS

- With B or C coupling
- With non-return valve

PRESSURE LOSS GRAPH / TYPICAL ERROR GRAPH



Pressure loss graph



Typical error graph