



Cold  
water

**GWF**



# WPKD

Woltman meter  
for cold water up to 50 °C  
DN 50, 65, 80, 100, 125, 150, 200, 250, 300

## Your benefits

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

## Application

- Measurement of high, relatively constant  
flow rates, e.g.:
  - Downstream of pumps or at transfer  
points
  - Reservoir inflows and outflows
  - Industrial processes

## Features

- Universal installation position
- Straight flow section 3xDN
- Register can be turned through 355°
- Maximum operating pressure PN16 bar
- Temperature up to 50 °C
- Rotor is hydrodynamically balanced
- 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-resolution pulse generator Reed RD  
 Documentation: Reed-RD-Pulser - EPe10206
- High-resolution pulse generator Opto OD  
 Documentation: Opto-OD-Pulser - EPe10205

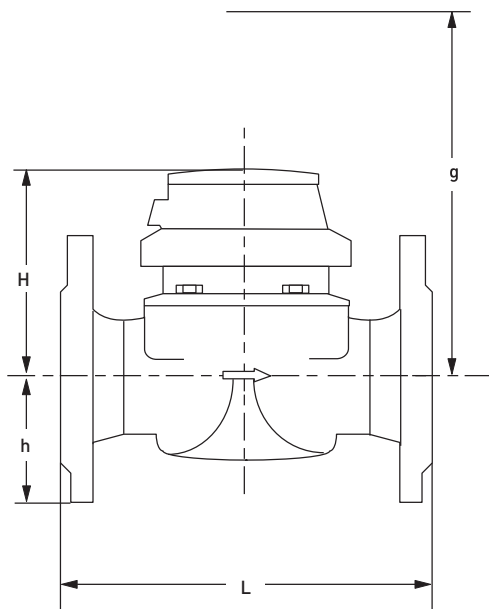
## Technical Data

			50	65	80	100	125	150	200	250	300
Nominal diameter	DN	mm	50	65	80	100	125	150	200	250	300
Operating pressure	PN	bar	16	16	16	16	16	16	16	16	16
Nominal flow rate	Q <sub>n</sub>	m <sup>3</sup> /h	50	70	120	230	250	450	800	1250	1400
Overload flow rate (1x24h)	Q <sub>max</sub>	m <sup>3</sup> /h	90	120	200	300	350	600	1200	1600	2000
Transitional flow rate ±2%	Q <sub>t</sub>	m <sup>3</sup> /h	0,7	0,8	0,8	1,8	2	4	6	11	15
Minimum flow rate ±5%	Q <sub>min</sub>	m <sup>3</sup> /h	0,3	0,4	0,5	0,8	1	1,8	4	6	12
Temperature		max. °C	50	50	50	50	50	50	50	50	50

Dimensions and weights			200	200	225	250	250	300	350	450	500
Length	L	mm	200	200	225	250	250	300	350	450	500
Height	H	mm	120	120	150	150	160	177	206	231	256
Height	h	mm	73	85	95	105	118	135	162	194	226
Dismantling height of measuring unit	g	mm	200	200	270	270	280	356	441	446	491
Meter weight		app. kg	7,7	10	14	18	20,5	35,5	50,5	72,3	99,3
Measuring unit weight		app. kg	1,4	1,4	3	3	3	5,5	7,5	7,5	7,5
Body weight		app. kg	6,3	8,6	11	15	17,5	30	43	63,8	91,8

EEC approval			15	25	40	60	100	150	250	400	600
Nominal flow rate	Q <sub>n</sub>	m <sup>3</sup> /h	15	25	40	60	100	150	250	400	600
Temperature		max. °C	30	30	30	30	30	30	30	30	30
Metrological class			B	B	B	B	B	B	B	B	B

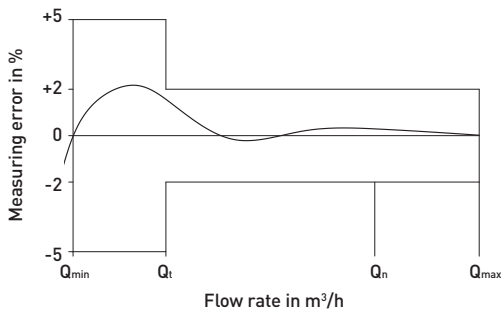
## Dimension Diagram



## Materials

Body:	Cast iron
Measuring unit:	Plastic
Rotor:	Plastic
Other materials:	Brass / non-rusting steel

## Measuring error curve



## Commission

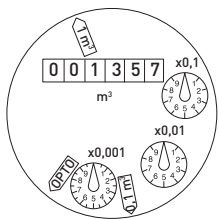
When commissioning the meter the measuring section must be filled slowly (bleed slowly).

## Installation

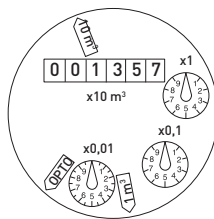
Pipeline:	horizontal	—
	vertical	
	diagonal	/
Meter head:	upwards	↕
	sideways	↔

## Dial

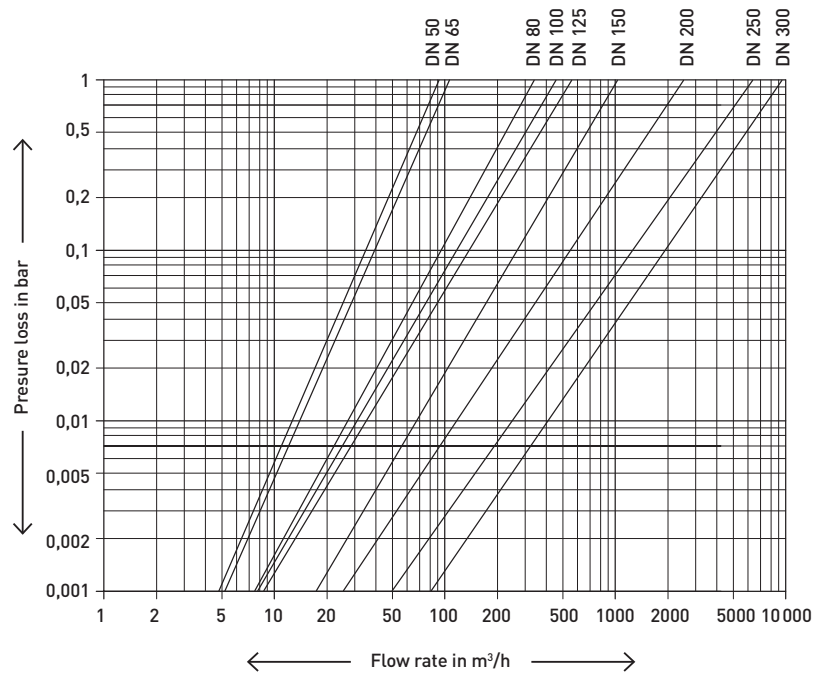
DN 50 – DN 125



DN 150 – DN 300

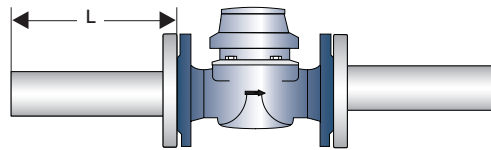


## Typical Head Loss Curve



## Installation requirements

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



Nominal diameter	DN	50 – 125	150 – 300
Smallest reading	m <sup>3</sup>	0,0005	0,005
Maximum register reading	m <sup>3</sup>	1'000'000	10'000'000

## Pulse values Reed-RD-Pulser

Meter sizes		DN 50...125 1 Pulse = ...Liter	DN 150... 300 1 Pulse = ...Liter
WPKD	Standard	100 1000	1000 10000
	with special register	10 1000	-

## Pulse values Opto-OD-Pulser

Meter sizes		DN 50...125 1 Pulse = ...Liter	DN 150... 300 1 Pulse = ...Liter
WPKD	Opto OD 01	1	10
	Opto OD 03	10	100

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