

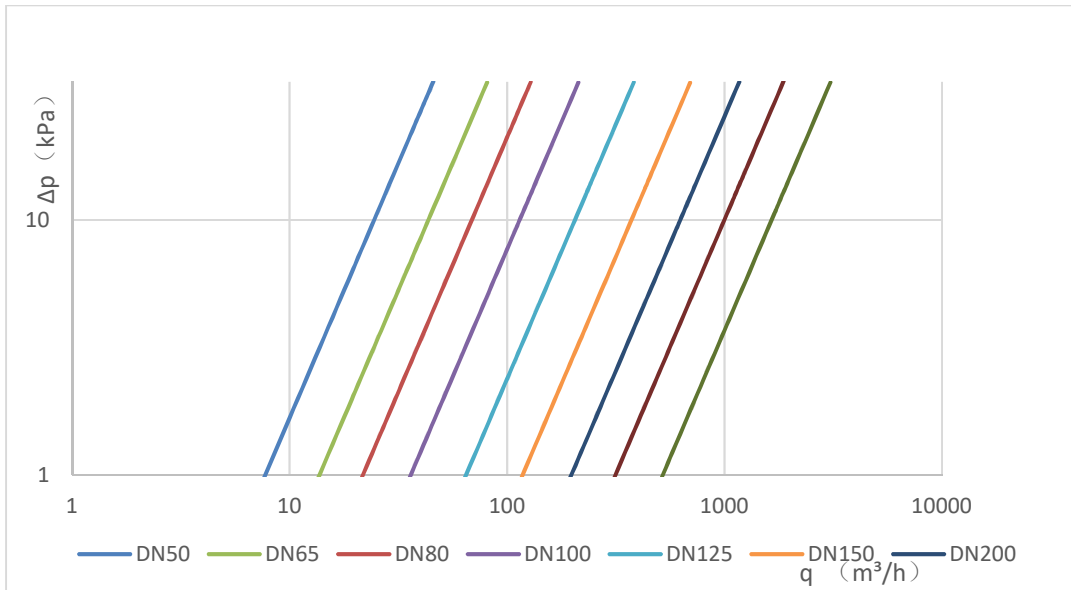


**FEATURES**

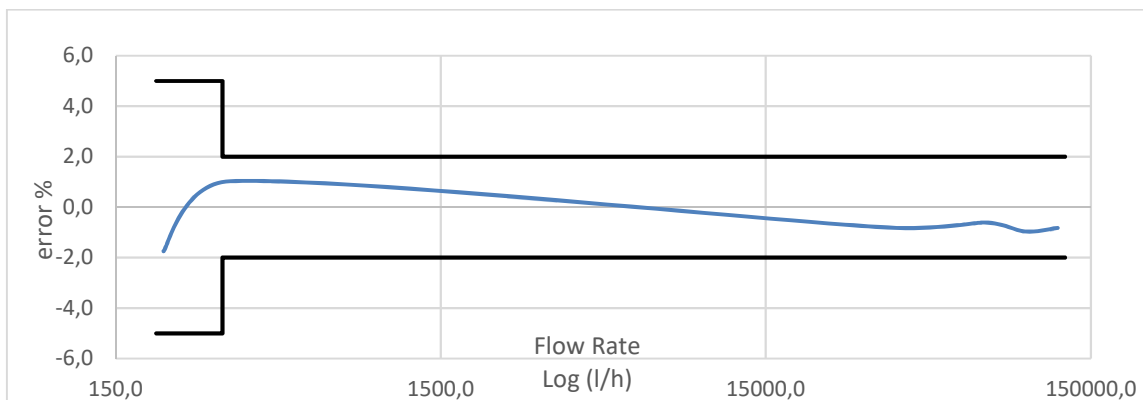
**Ultrasonic water meter**

- Ideally suited for bulk metering
- Sizes available: DN 50 to DN 200
- Maximum operating temperature: 50 °C
- Liquid crystal display
- Magnetically operated switch
- Low starting rate; minimum flow rate is 1/3 of the flow rate of traditional water meters (10 liters / hour)
- Temperature detection and alarm symbols
- Alarm for anomalous water use
- Ultrasonic signal quality detection
- No moving parts, wear-resistant, long-term operation
- May be installed in any position
- Battery service life: 13 years
- Protection rating IP68
- A pulse output comes as a standard
- Directive 2014/32/EU approved

**HEAD LOSS**



**ERROR CURVE**



## HYDRAULIC PERFORMANCE

Accuracy class	2	
Q <sub>3</sub> /Q <sub>1</sub> ratio	500:1 (further R values on request)	
Maximum reading m <sup>3</sup> h	DN50-DN100	9999999,99999
	DN 125-DN 200	99999999,99999
Maximum working pressure	1,6 MPa	
Temperature class	T50	
Flow profile sensitivity classes	H U3-D0	
	V U10-D5	
Protection rating	IP68 (IP65 with external power supply)	
Power supply	3,6 V lithium battery	
Battery service life	13 years	
Environmental and mechanical conditions	Class C (class B, class I optional)	
Electromagnetic class	Class E1 (class E2)	
Liquid	Water	
Installation position	Any	

## SIZES

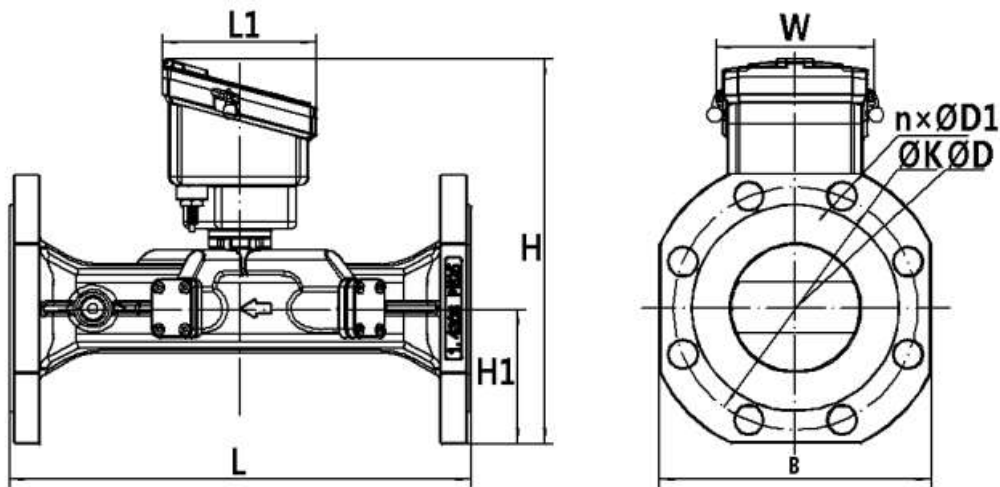
DN	mm	50	65	80	100	125	150	200
Q <sub>3</sub> /Q <sub>1</sub> ratio		500	500	500	500	500	500	500
Overload flow rate Q <sub>4</sub>	m <sup>3</sup> /h	31.25	50.00	78.75	125.00	200.00	312.50	500.00
Permanent flow rate Q <sub>3</sub>	m <sup>3</sup> /h	25.00	40.00	63.00	100.00	160.00	250.00	400.00
Transitional flow rate Q <sub>2</sub>	m <sup>3</sup> /h	0.080	0.128	0.202	0.320	0.512	0.800	1.280
Minimum flow rate Q <sub>1</sub>	m <sup>3</sup> /h	0.050	0.080	0.126	0.200	0.320	0.500	0.800
Head loss		25	25	25	25	25	25	25
Pulses/litre	P=L	1P=10L	1P=10L	1P=10L	1P=10L	1P=100L	1P=100L	1P=100L
Pulse duration*	ms	125	125	125	125	125	125	125

\* With flow > 4 pulses/sec: 50% period. With flow ≤ 4 pulses/sec: 125 ms

## DIMENSIONS

PN	PN10/PN16						PN10	PN16
	50	65	80	100	125*	150		
DN (mm)								
L	200	200	225	250	250	300	350	350
L1	120	120	120	120	123	120	120	120
H	245	250	275	290	380	400	470	470
H1	65	70	90	100	125	130	170	170
W	123	123	123	123	123	123	123	123
B	172	190	205	230	250	285	340	340
D	165	185	200	220	250	285	340	340
K	125	145	160	180	210	240	295	295
n×ØD1	4×Ø18	4×Ø18	8×Ø18	8×Ø18	8×Ø18	8×Ø22	8×Ø22	12×Ø22

\*DN 125 and DN 200: steel body (other DN's: cast iron body)



## CONNECTIONS

Wire	Signal	Description
White	Pulses	Pulse signal both with forward flow and backflow
Yellow	Direction	Contact closed = backflow
Green	Tampering	Contact open = tampering
Brown	Ground	Common ground signal
Grey	Forward pulses count	In the event of backflow, the meter internally counts the volume flowed. When the forward flow is restored, no pulses are generated until the value of the volume flowed is zero.

## HYDRAULIC PERFORMANCE

<b>Size</b>	<b>mm</b>	50	65	80	100	125	150	200
	<b>in</b>	2	2 ½	3	4	5	6	8

**Modulo B no.** RO-2275-19454

**Modulo D no.** 0119-SJ-A010-08

**Q<sub>3</sub>/Q<sub>1</sub> = R**  
**Referred to installation position** ≤ 500

**MID standard performance \***

<b>Q<sub>3</sub></b>	<b>m<sup>3</sup>/h</b>	25	40	63	100	160	250	400
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<b>Q<sub>4</sub></b>	<b>m<sup>3</sup>/h</b>	31,25	50	78,75	125	200	312,50	500
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**R** **500**

<b>Q<sub>1</sub></b>	<b>l/h</b>	50	80	126	200	320	500	800
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<b>Q<sub>2</sub></b>	<b>l/h</b>	80	128	201,60	320	512	800	1280
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\* Other values of R available upon request.

## TECHNICAL DATA

**Maximum permissible error between Q<sub>1</sub> and Q<sub>2</sub> (excluded)** +/- 5%

**Maximum permissible error between Q<sub>2</sub> (included) and Q<sub>4</sub>** +/- 2% with water temperature ≤ 30°C  
 +/- 3% with water temperature > 30°C

**Temperature class** T30,T50

**Flow profile sensitivity classes** U3 - D0

**Starting flow rate** l/h 10

**Head loss** ΔP25

**Nominal pressure** bar 16

**Maximum reading** m<sup>3</sup> 10.000.000

**Minimum reading** m<sup>3</sup> 0,001

<b>Indicative weight</b>	<b>kg</b>	10,3	13	16	17,25	25	28	35
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