

SC7



Ultrasonic bulk
water meter for
potable water –
Industrial use
(R500)

Main features

Any application requiring high accuracy across all flow rates for revenue billing.

Municipal water and water distribution networks.

Wastewater, irrigation water, reclaimed water, and rainwater.

Commercial buildings: shopping centers, campuses, hospitals, industrial parks, airports, and facilities.

Industrial water: steel plants, heavy manufacturing plants, power plants, food and beverage industries.

It is specially designed for municipal, commercial, and industrial water metering applications where demand is high and traditional mechanical water meters fail.

The SC7 ultrasonic water meter stands out due to its robust design, multi-path technology, wide dynamic range, long-life battery with field-replaceable function, among other features.

The SC7 series can operate reliably even when water contains high levels of particles or when the environment is hostile.

Application

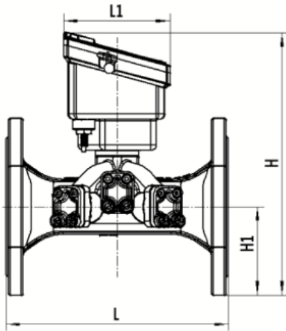
- Robust mechanical design - Submersible (IP68)
- Bidirectional
- Flexible data formats including flow direction, flow rates, and volumes
- Temperature monitoring and low-temperature alarm
- Pressure monitoring
- Large 8-digit LCD display
- 10-year battery life with battery status indication
- Special patented body design to enhance R-value
- Data logger with 480 daily records, 36 monthly records, and 16 yearly records
- Approvals: MID / ISO 4064:2005
- Extensive communication capabilities
- Multiple alarm functions for low battery and system errors
- Built-in pressure sensor (optional)

Technical characteristics

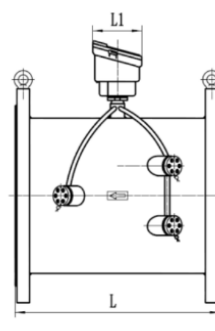
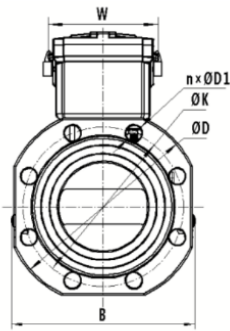
Nominal size	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250	DN300	DN350	DN400	DN500	DN600
Material	Ductile iron body and ductile iron flanges				Stainless steel body with stainless steel flanges or carbon steel flanges								
R	400/500	400/500	400/500	400/500	400/500	400/500	400/500	400/500	400/500	400/500	400/500	400/500	400/500
Overload flow rate Q4 (m ³ /h)	31,25/50	50	78,75	125	200	312,5	500	787,5	1250	1250	2000	3125	5000
Nominal flow rate Q3 (m ³ /h)	25/40	40	63	100	160	250	400	630	1000	1000	1600	2500	4000
Transitional flow rate Q2 (m ³ /h)	0,08/0,128	0,128	0,2016	0,32	0,512	0,8	1,28	2016	3,2	3,2	5,12	8	12,8
Minimum flow rate Q1 (m ³ /h)	0,05/0,08	0,08	0,126	0,2	0,32	0,5	0,8	1,26	2	2	3,2	5	8

- Metrological class: Class 2 (according to ISO 4064:2005 / OIML R49)
- Environmental class: Class C (Class B optional)
- Ambient temperature: 5 ~ 55 °C
- Permissible flow temperature: 0,1 ~ 50 °C (T50, T30)
- Enclosure protection: IP68
- Electromagnetic class: Class E1 (class E2 optional)
- Maximum flow reading (m³): 99,999,999.99999
- Pressure loss: Δp_{25} / kPa
- Alarm: Low battery and system error
- Power supply: 3.6 V lithium battery (optional 220 V AC, 24 V DC)
- Communication interface: Infrared, M-Bus, RS485
- Wireless interface: Wireless M-Bus (T1 868 MHz), LoRaWAN, NB-IoT, GPRS 4G CAT1
- Output: Pulse, 4–20 mA
- Removable integrator: No
- Installation method: Any angle
- Straight pipe requirement: U3, D0
- Other: During measurement, the meter must be completely filled with water

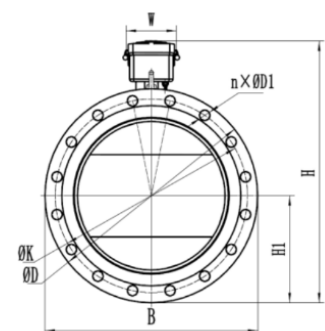
Dimensions



DN50-DN125



DN125-DN600



Nominal pressure	DN (mm)	L	L1	H	H1	W	B	n x ØD1
PN16	50	200	120	240	60	123	172	4 x Ø18
	65	200	120	260	70	123	190	4 x Ø18
	80	225	120	280	90	123	205	8 x Ø18
	100	250	120	300	100	123	230	8 x Ø18
	125	250	120	380	125	123	250	8 x Ø18
	150	300	120	400	130	123	285	8 x Ø22
PN10	200	350	120	470	170	123	340	8 x Ø22
	250	450	120	525	198	123	395	12 x Ø22
	300	500	120	575	223	123	445	12 x Ø22
	350	500	120	635	253	123	505	16 x Ø22
	400	600	120	690	283	123	565	16 x Ø26
	500	600	120	790	335	123	670	20 x Ø26
	600	800	120	895	390	123	780	20 x Ø30

*Reference dimensions.

DOCUMENT'S VERIFICATION AND APPROVAL

