

# LXC



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



### Main features

The LXC ultrasonic bulk water meter is designed with high accuracy and a wide range of sizes, suitable for applications such as water supply network metering, DMA flow metering, and district aggregation metering.

Made with durable materials, the bulk meter provides reliable water measurement for industrial and agricultural processes, especially under harsh conditions.

By integrating various IoT communication technologies, this meter enables operators to collect data across the entire water supply network, facilitating the transition toward smart water utility infrastructure as part of a smart city

### Specifications

Wide measuring range  $Q3/Q1 = R500$ . Ultra-low starting flow prevents apparent losses. Flexible flanges ensure easy field installation.

Bidirectional flow measurement prevents water tampering. The large, user-friendly LCD display shows accumulated volume, instantaneous flow rate, and extensive alarm information.

No wearing parts, ensuring excellent long-term stability and reliability. Integrated pressure monitoring (optional)

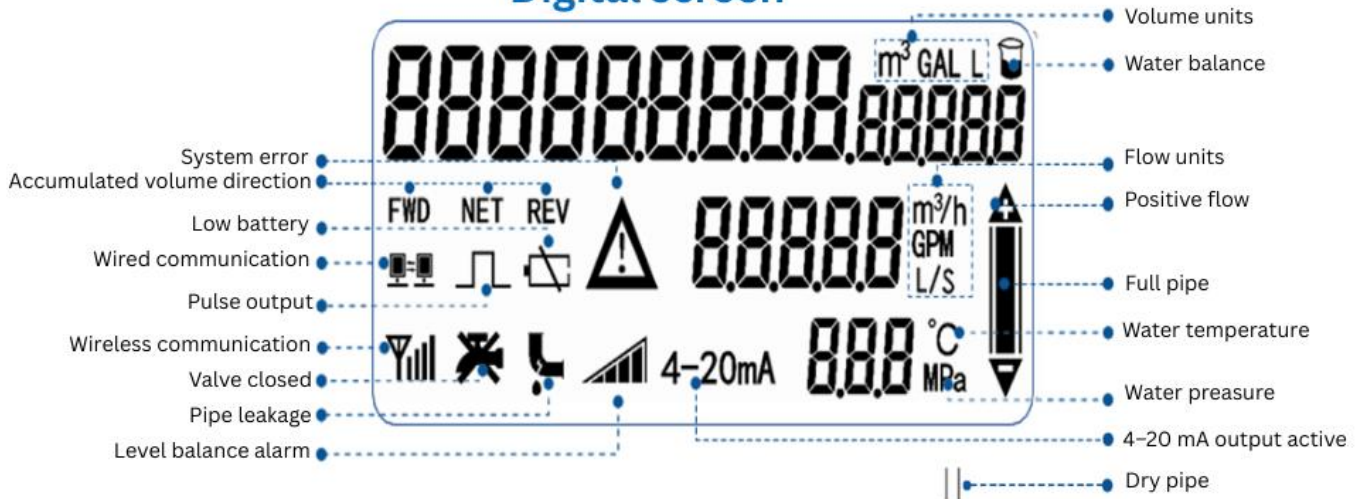
Vacuum-sealed electronic chamber to prevent glass fogging. Battery-powered operation with a service life exceeding 10 years.

Supports a wide range of communication technologies such as wireless GPRS, RS485, NB-IoT, among others.

Protection grade: IP68 submersible. Dry-pipe detection and pipeline leakage detection.



## Digital screen



## Communication interfaces

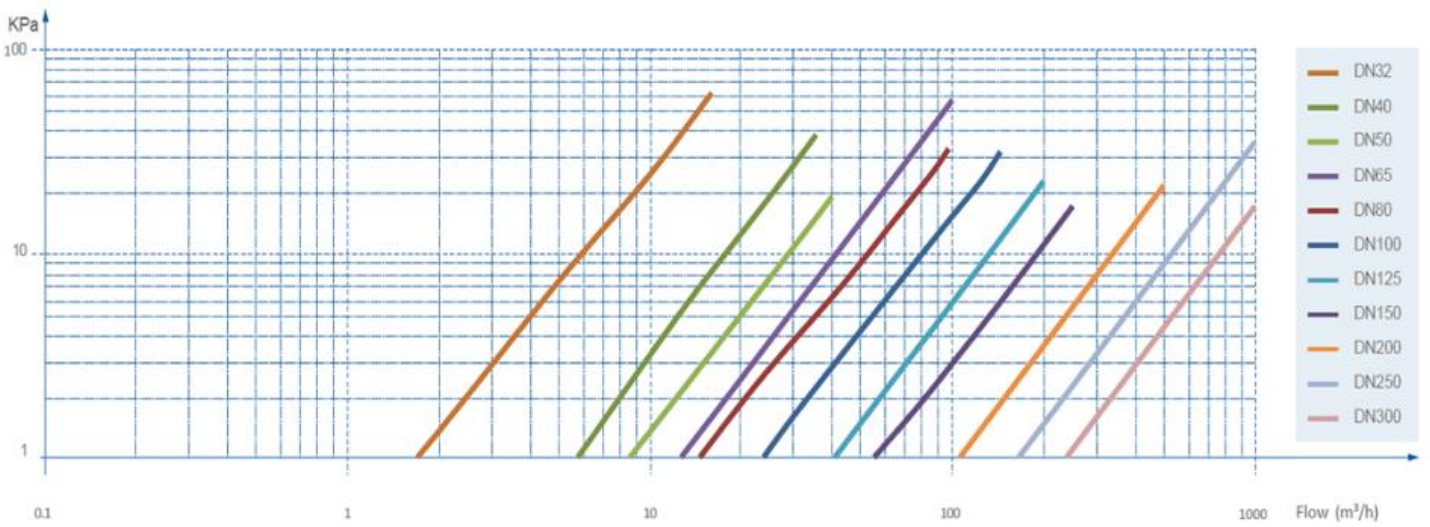
Pulses	Opto-coupled high-speed pulse output, suitable for pulse verification. Hall-effect pulse output, suitable for accumulated volume detection.
4-20mA	4-20 mA current output corresponding to the instantaneous flow limit. The 20 mA flow value can be configured.
RS485	Low-power RS485 communication mode with standard Modbus protocol.
M-bus	Communication bus with EN13757 protocol.
NB-IoT	Operation in the licensed band at 180 kHz, allowing direct implementation in LTE networks to enable communication aligned with new standards.
Mobile	Wireless remote communication via 3G/4G; no data concentrator is required for data collection.

# Typical error curves

Meter performance curve DN100



# Pressure loss curves



## Technical specifications

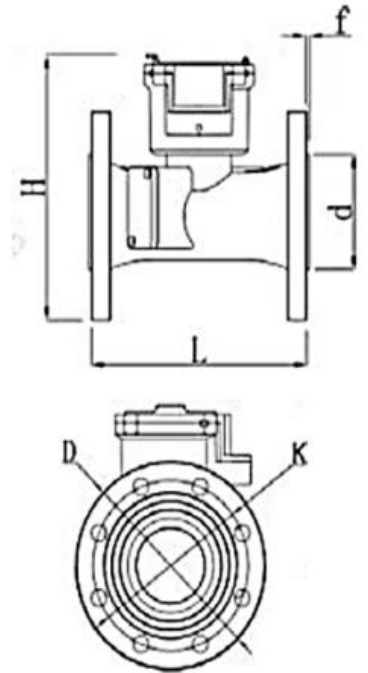
Available sizes	DN50-DN600
Standards	ISO4064/EN14154
R = Q3/Q1	R500
Accuracy class	Class 2
Pressure loss	$\Delta p_{16}$
Maximum working pressure	1.6MPa
Accumulated volume resolution	0.0001~ 999999999.99999 m <sup>3</sup>
Operating conditions	Temperature: -25~55°C, Humidity $\leq$ 100%(RH)
Temperature class	T30/T50
Flow profile sensitive class	U0D0
Climatic and mechanical environmental security level	O
Electromagnetic environment class	E2
Power supply	3.6 V lithium battery with a service life exceeding 10 years
Protection grade	IP68
Construction	Materials: Cast iron body with epoxy resin coating / stainless steel flanges
Data storage	For error, alarm, and measurement data: data logging capacity of up to 14 × 24 records per hour, 366 per day, and 72 per month
Communication interface	1.M_BUS 2.RS485 3. Pulses 4.NB-IoT 5.4-20mA 6.GPRS/4G

## Operating parameters

Meter size (mm)	Dynamic range	Overload flow rate Q4	Permanent (nominal) flow rate Q3	Transitional flow rate Q2	Minimum flow rate Q1	Starting flow rate Q0
DN (mm)	R	(m <sup>3</sup> /h)	(m <sup>3</sup> /h)	(m <sup>3</sup> /h)	(m <sup>3</sup> /h)	(L/h)
50	500	50	40	0.128	0.08	7
65		50	40	0.128	0.08	12
80		78.75	63	0.2016	0.126	18
100		125	100	0.32	0.2	28
125		200	160	0.512	0.32	44
150		312.5	250	0.8	0.5	64
200		500	400	1.28	0.8	113
250		787.5	630	2106,00	1.26	177
300		1250	1000	3.2	2	254
400		2000	1600	5.12	3.2	452
500		3125	2500	8,00	5	707
600		5000	4000	12.8	8	1018

## Installation dimensions

Nominal diameter (mm)	Dimensions (mm)		Flange dimensions (mm)					Weight (KG)
	L Length	H Height	Outer diameter	Hole center distance	Hole diameter x number of holes	Sealing surface		
						d	f	
DN50	200 o 270	253	165	125	18 x 4	99	2	11.2 o 13.2
DN65	200	263	185	145	18 x 4	118	2	14.3
DN80	225 o 300	270	200	160	18 x 8	132	2	16.5 o 18.5
DN100	250 o 360	280	220	180	18 x 8	156	2	20.3 o 23.3
DN125	250	295	250	210	18 x 8	184	2	25.4
DN150	300	313	285	240	22 x 8	231	2	30.5
DN200	350	360	340	295	22 x 8	266	2	43.5
DN250	450	410	395	350	22 x 12	319	2	66.6
DN300	500	445	445	400	22 x 12	370	2	86.3
DN400	600	570	565	515	26 x 16	480	2	127.5
DN500	600	680	670	620	26 x 20	582	2	155.9
DN600	800	790	780	725	30 x 20	682	2	276.7



### DOCUMENT'S VERIFICATION AND APPROVAL

