OIML Member State SLOVAKIA	**OIML Certificate No.** **R49/2013-A-SK1-25.12**

OIML CERTIFICATE ISSUED UNDER SCHEME A

OIML Issuing Authority

Name: **Slovak Legal Metrology (SLM)**
Address: Geologická 9966/1,
821 06 Bratislava-Podunajské Biskupice, Slovakia
Product Certification Body
Hviezdoslavova 31
974 01 Banská Bystrica, Slovakia
Person responsible: Dušan Šmigura, Director of PCB

Applicant

Name: **Ningbo Zlink Technology, Co., Ltd.**
Address: 1 Songcui Road, Dongqianhu Tourist Holiday Resort,
Ningbo, Zhejiang
China

Manufacturer

Name: **Ningbo Zlink Technology, Co., Ltd.**
Address: 1 Songcui Road, Dongqianhu Tourist Holiday Resort,
Ningbo, Zhejiang
China

Identification of the certified type *(the detailed characteristics are defined in the additional pages)*

Water meter type **LXC15, LXC20, LXC25**

Designation of the module *(if applicable)*

Ultrasonic water meters with electronic indication device

This OIML Certificate attests the conformity of the above identified type (represented by the sample(s) identified in the OIML type evaluation report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

OIML R 49, Edition (year): 2013
For accuracy class: 2

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OIML Certificate No.
R49/2013-A-SK1-25.12

This OIML Certificate relates only to metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML Recommendation identified above.

This OIML Certificate does not bestow any form of legal international approval.

The conformity was established by the results of tests and examinations provided in the associated:

- OIML Type Evaluation Report No. 2025/ER037/SK1 dated 16th October 2025 that includes 17 pages

The technical documentation relating to the identified type is contained in documentation file name: „Technical documentation file Ningbo Zlink_LXC_00“ dated 16th October 2025 that includes a sum of documents 103 pages.

OIML Certificate History

Revision No.	Date	Description of the modification
0	16th October 2025	Certificate first issued

Identification, signature and stamp

The OIML Issuing Authority

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Dušan Šmigura

Date: 16th October 2025

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Important note: Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate is issued, partial quotation of the Certificate and of the associated OIML type evaluation report(s) is not permitted, although either may be reproduced in full.

1. Designation

The ultrasonic water meters **LXC15, LXC20, LXC25** are designed to measuring, memorizing and displaying the volume of water passing through the measurement transducers at metering conditions. The water meters are intended for the measurement of volume of clean water in residential use.

The water meters LXC15, LXC20, LXC25 are residential compact ultrasonic water meters with electronic indication device. The measurement is based on ultrasonic bidirectional transit-time principle.
The flow is measured by the difference in time-of-flight of ultrasonic pulses with flow (downstream) and opposite to flow (upstream).

The water meters LXC15, LXC20, LXC25 can be installed to operate in horizontal or vertical positions. The water meters are not designed to measure the reverse flow.

2. Description

2.1 Parts of the water meters LXC15, LXC20, LXC25:

Essential parts of the water meters:

Flow sensor:
- the brass cylindrical body with inlet and outlet firmly connected with the plastic housing for the calculator;
- the inner plastic elements (pipe support-down and pipe support-up) placed in the cylindrical bass body;
- two reflection sheeds installed in the centre of the pipe;
- two ultrasonic transducers at the upstream and downstream of the measurement channel (pipe section) to transmit and receive ultrasonic signals.

Calculator and indication device:
- the plastic housing of the calculator with indication device directly mounted on the flow sensor;
- the PCBA board;
- the electronic scrolling LCD display with 9 digits and indication range of 99999.9999 m^3. The sub-multiples of a cubic meter are indicated on the LCD display by four smaller digits after decimal point;
- one non-replaceable lithium battery, lifetime 15 years.

Non-essential parts of the water meters:

- stainless steel ball valve;
- motor;
- communication: optical port, pulse output, NB-IoT/GPRS/3G/4G/Cat1, MBus/RS485, LoRa/LoRaWan/Sigfox/WM-Bus.

2.2 Metrological functions

- measuring, memorizing and displaying the volume of water passing through the water meter.

2.3 Operation and presentation of legal data

a) the total measured volume (m^3);
b) flow rate (m^3/h).

The following displays are available on the automatic scroll display:
- accumulated volume (m^3);
- instantaneous flow rate (m^3/h);
- Year-Month-Day;
- Hour-Minute-Second;
- accumulated volume with high resolution (m^3);
- instantaneous flow rate with high resolution (m^3/h);
- error code;
- serial number;
- software version;
- checksum;
- display test (an "eights" test);
- display test (a "blanks" test).

3. Software specification

Legally relevant software version and checksum for water meters LXC15, LXC20, LXC25:

Software versions	Checksum	Remarks
V 4.1.0.6.5	C-0008c51	-

The checksum and software version can be checked using the scrolling display in the form:
Software version: V---4.1.0.6.5
Checksum: C-0008c51

4. Accountable alarms

If a fault condition occurs and the measurement stops, follow the user manual issued by the manufacturer.

5. Technical and metrological data

Water meter type		LXC15	LXC20	LXC25
Characteristics	Unit			
Nominal diameter DN	mm	15	20	25
Permanent flowrate Q_3	m^3/h	2,5	4	6,3
Minimum flowrate Q_1	m^3/h	0,005 0,00625 0,010 0,015625	0,008 0,010 0,016 0,025	0,0126 0,01575 0,0252 0,039375
Transitional flowrate Q_2	m^3/h	0,008 0,010 0,016 0,025	0,0128 0,016 0,0256 0,040	0,02016 0,0252 0,04032 0,063
Overload flowrate Q_4	m^3/h	3,125	5	7,875
Ratio Q_3/Q_1	R	500 400 250 160		

Water meter type		LXC15	LXC20	LXC25
Characteristics	Unit			
Ratio Q_2/Q_1	-	1,6		
Connection thread	mm	G ¾ B	G1 B	G1 ¼ B
Construction length *L*	mm	110/115/130/165	130/190/195	160/225/260
Installation orientation	-	H/V		
Water temperature range (temperature class)	°C	0,1 to 50 (T50)		
Maximum admissible pressure MAP	bar	16		
Pressure loss class Δp	bar -	0,63 Δp 63		
Maximum permissible error in upper flowrates range $Q_2 \leq Q \leq Q_4$	%	± 2 (at $\Theta \leq 30°C$) ± 3 (at $\Theta > 30°C$)		
Maximum permissible error in lower flowrates range $Q_1 \leq Q < Q_2$	%	± 5		
Capacity of calculator	m^3	99999,9999		
Capacity of calculator (high resolution)	m^3	999,999999		
Scale interval (normal resolution of the indicating device)	m^3	0,0001		
Scale interval (high resolution)	m^3	0,000001		
Accuracy class	-	2		
Mechanical class	-	M1		
Climatic class	°C	- 25 to + 55		
Electromagnetic class	-	E1		
Climatic and mechanical environmental conditions (class)	-	O (fixed meters installed outdoors)		
Flow profile sensitivity class	-	U0D0		
Battery	-	non-replaceable li-battery Umax=3,6 V life		

6. Marking and inscriptions

The following data shall be marked on the water meter:

a) unit of measurement (m^3);
b) flowrate Q_3 and ratio Q_3/Q_1 (R);
c) type of water meter;
d) manufacturers name or trademark;
e) year of manufacture or the month and year of manufacture;
f) serial number;
g) the flow direction shall be marked on a water meter's body in form of an arrow;
h) maximum admissible pressure (MAP);
i) temperature class (T);
j) pressure loss class (Δp);
k) H/V – water meter can operate in the horizontal and vertical position;
l) the latest date by which the meter shall be replaced;
m) environmental classification (can be given on a document supplied separately);
n) electromagnetic environmental class (can be given on a document supplied separately);
o) type approval sign according to national regulations.

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Manufacturer uses the following trademark on the water meter:

ZLINK

7. Security measures

The water meters LXC15, LXC20, LXC25 shall be protected against unauthorized manipulation and opening by two plastic seals on the wire connecting the top cover of calculator to the water meter counter cover (contains the water meter body), Fig. 3.

8. Figures

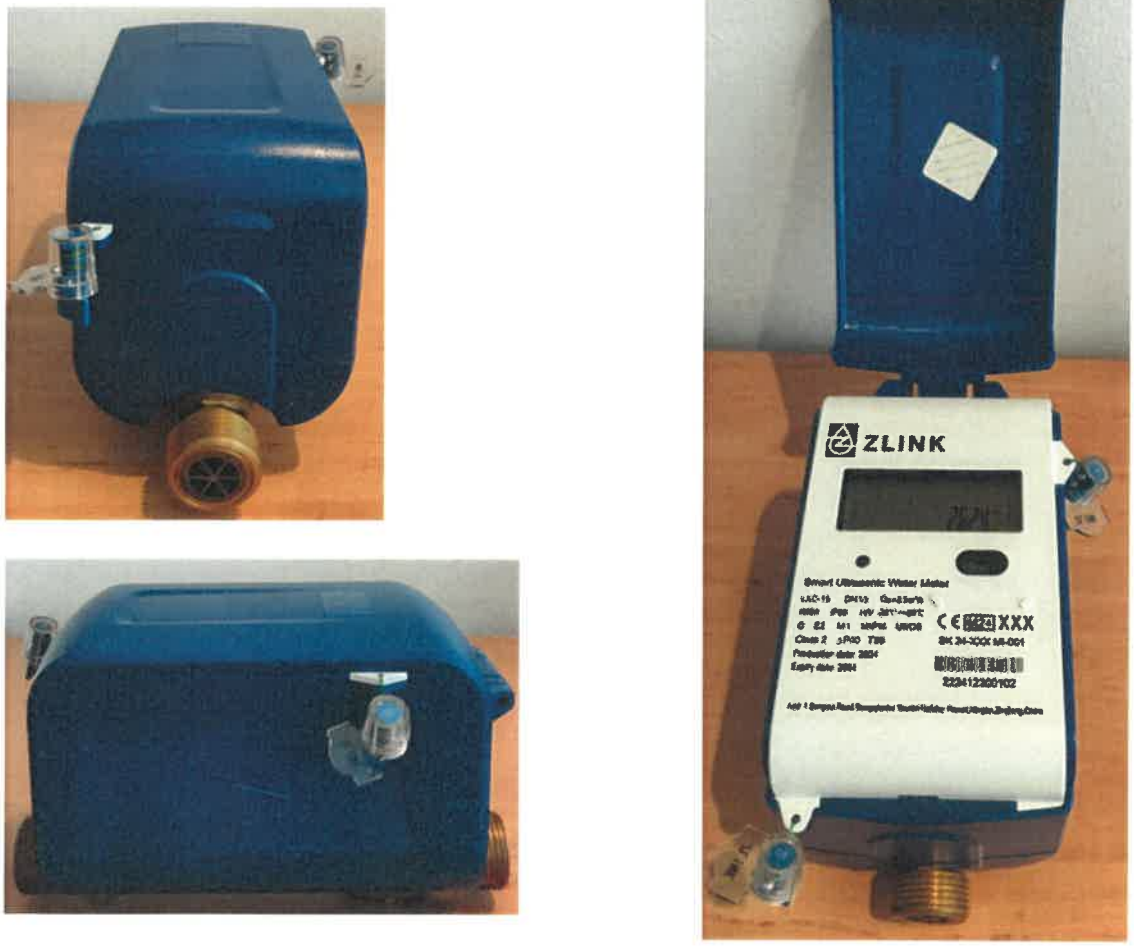

Fig. 1: Illustrative views of the water meters type LXC15, LXC20, LXC25

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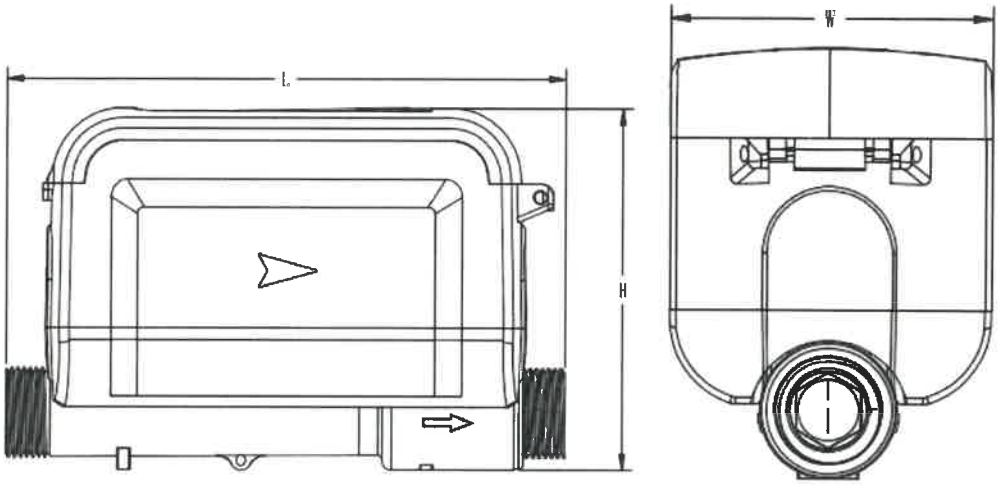
Dimensions in mm



DN	L mm	W mm	H mm	Thread
DN15	110/115/130/165	80	107	G ¾ B
DN20	130/190/195	80	113	G1 B
DN25	160/225/260	80	114	G1 ¼ B

Fig. 2: Dimension of water meters LXC15, LXC20, LXC25

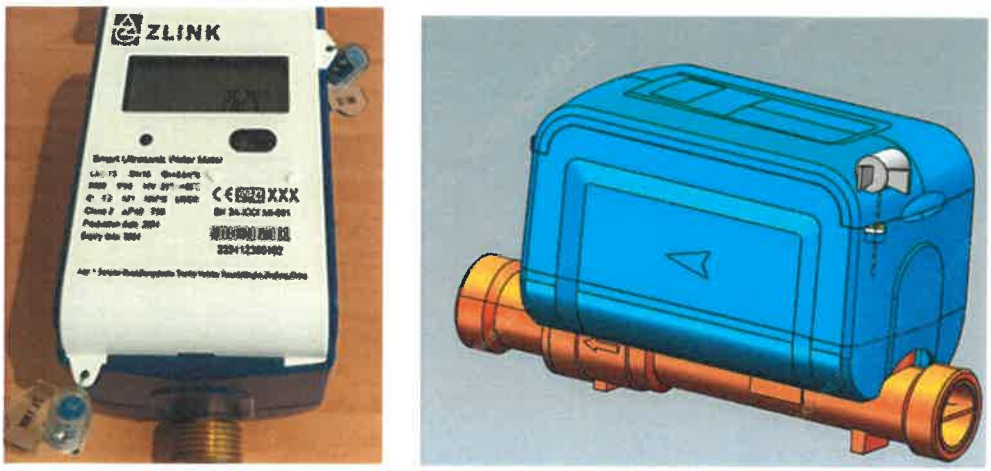
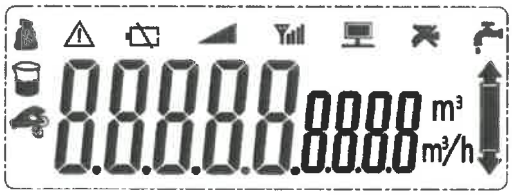


Fig. 3: Sealing



	Forward Flow		Reverse Flow
	Empty pipe		Alarm
	Meter balance (water)		Low Battery
	Optical Communication/Calibration		Signal strength
	New recharge	m³/h	Flow Rate Unit
	Valve closed	m³	Volume Unit
	Valve open		Volume display
	Meter balance (currecy)		instantaneous flow rate
	Classified alarms (from grade 1 to grade 3)		

Fig. 4: Display description

On request display via light	Description	Time on screen	Remark
	Displaying net cumulative volume	Default	-
	Displaying forward cumulative volume	10 s	It will return to the defaulted page if do not keep turning.
	Displaying reverse cumulative volume	10 s	It will return to the defaulted page if do not keep turning.
	Display Instantaneous flow rate	15 s	It will return to the defaulted page if do not keep turning.
	Display Year-Month-Day	5 s	Automatically switch from year-month-day page to hour-minute-second page. Each page lasts 5 seconds and switch twice.
	Display Hour-Minute-Second	5 s	
	Calibration mode for volume	8 hours	Keep dark on time page for at least 5s, enter into calibration mode; turn page into inst. flow rate. If keep dark on inst. flow rate for 5s, will go out of calibration mode
	Calibration mode for Instantaneous flow rate	-	

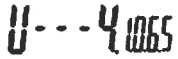
	Error code, the list is: Dry tube-0000 Over Flow rate-2000 Over temperature-1000 Battery under voltage-0001 Dry tube + battery under voltage-8001 Over Flow rate + Over temperature-3000 Over Flow rate + Over temp.+ batt. under voltage-3001	10 s	It will return to the defaulted page if do not keep turning.
	Display the first several numbers of meter number	5 s	It will return to the defaulted page if do not keep turning.
	Display the rest numbers of meter number	5 s	It will return to the defaulted page if do not keep turning.
	Software version	10 s	V 4.1.0.6.5 (same as meter display)
	Checksum	10	C-0008c51(same as meter display)
	Full screen	10	Automatically switch from full screen to blank screen, each page lasts 1 second
	Blank screen		

Fig. 5: The scrolling sequence of electronic LCD display of water meters LXC15, LXC20, LXC25