TÜRK STANDARDLARI ENSTİTÜSÜ

TURKISH STANDARDS INSTITUTION

TÜRKAK

Ürün
TS EN ISO/IEC 17065
AB-0009-U

EU - TYPE EXAMINATION CERTIFICATE

2014/32/EU Measuring Instruments Directive

CERTIFICATE NO: 1783-MID-0184

In accordance with Measuring Instruments Directive dated February 26, 2014 and numbered 2014/32/EU of the European Union Parliament harmonised by "Ölçü Aletleri Yönetmeliği (Measuring Instruments Directive)" numbered 2014/32/AB which was published in Official Journal of Turkish Republic dated 29.06.2016 and numbered 29757:

Manufacturer	**: NINGBO ZLINK TECHNOLOGY CO., LTD**
	: 1 Songcui Road, Dongqianhu Tourist Holiday Resort, Ningbo, Zheijang CHINA
Essential requirements Applied	**: MID Annex I and Annex MI-001**
Name of Measuring Instrument	**: Ultrasonic Water Meter**
Type	**: LXC** **Environmental Classes** **- Mechanic M1** **- Electromagnetic E2**
Project Number	**: 3058-22/361689**
Conformity Assessment Report	**: 3058-MID-0184/2025-01**
Date of issue	**: 23.06.2025 (First Issue: 17.08.2023)**
Valid until	**: 17.08.2033**
Total Page Number	**: 12**

Dr. Alkan HAFÇI
Director of Directives
Ankara, 23.06.2025 Rev02

This Certificate is valid with its annexes and seal of "TSE- Notified Body number-1783"

1. General Information about Water Meter

1.1 Designation

The residential water meter type LXC is static meter operating on ultrasonic measurement technology. The ultrasonic water meter adopts the time difference method to measure the flow; that is, installed at the upstream and downstream of the measuring transducer (pipe section) respectively. The transducer is used to transmit and receive ultrasonic signals mutually. Since the ultrasonic signal and the water flow signal are superimposed, the propagation speed of the sound wave in the forward and reverse flow is different. Therefore, the running time of the upstream and reverse ultrasonic signals in the water is different. The flow velocity of the fluid can be calculated by measuring the difference of the time. And then converted to flow rate, so as to achieve flow measurement. Ultrasonic water meter is designed to measure reverse flow, the volume passed during reverse flow is recorded separately. The reverse flow can be turned off if needed.

1.2 Design

Essential Parts of the Meter

- Electronic board
- LCD display (9 digits)
- Lower Body
- Transducer

1.3 Metrological Characteristic

Measurement of the water volume passing through

1.4 Software

Software Version: V 4.5.0.0.2

Checksum: C-000916b

1.5 Supplementary equipment

NB-IoT

GPRS/3G/4G / CAT 1

RS485/M-Bus

Pulse

LoRa /LoRaWAN/ Sigfox/WM-Bus

Wi-SUN

1.6 Equipment out of the scope of MID

Not applicable

2. Technical and metrological data

Tip /Type	-	LXC-15, LXC-20, LXC-25, LXC-32, LXC-40				
Anma Çapı DN */Nominal Diameter*	mm	15	20	25	32	40
Sürekli Debi Q_3 */Permanent Flowrate*	m^3/h	2.5	4.0	6.3	10	16
Minimum Debi Q_1 */Minimum Flowrate*	m^3/h	0.00625	0.010	0.01575	0.025	0.04
Geçiş Debisi Q_2 */Transitional Flowrate*	m^3/h	0.01	0.016	0.0252	0.04	0.064
Aşırı Yükleme Debisi Q_4 */Overload Flowrate*	m^3/h	3.125	5	7.875	12.5	20
Ölçme Aralığı Q_3 /Q_1 */Ratio*	-	160/250/400				
Bağlantı */Connection Thread*	mm	G½"B	G¾"B	G1"B	G¼"B	G½"B
Boy L */Construction Length*	mm	110/115 /165	130/190 /195	225/260	260	245/300
Basınç Kaybı Sınıfı /Pressure Loss Class		Δp 63				
Sıcaklık Sınıfı T */Temperature Class*	°C	T50				
Maksimum Çalışma Basıncı */Maximum Working Pressure*	bar	16				
Bağlantı Şekli */Connection Position*	-	H/V				
Üst Ölçme Alanında Maksimum İzin Verilen Hata $Q_2 \leq Q \leq Q_4$ */ Maximum Permissible Error in upper flow rates*	%	±2 (≤ 30 °C) ±3 (> 30 °C)				
Alt Ölçme Alanında Maksimum İzin Verilen Hata $Q_1 \leq Q < Q_2$ */ Maximum Permissible Error in lower flow rates*	%	±5				
Skala Aralığı /Scale Interval	-	0.0001				
Gösterge Kapasitesi /Capacity of calculator	m^3	99999.9999				
Çevresel Sınıf /Environment Class	-	Class B/O				
Elektromanyetik Sınıf /Electromagnetic Class	°C	E2				
Sınıf/Class	-	Class2				
Bağlantı koşulları /Installation Conditions	-	U0 D0				
Ters Akış Uygunluğu /Reverse flow		It is designed to measure both forward and reverse flow.				

3. Marking

The following data shall be marked on the water meter

- Manufacturer's name and/or registered trademark,
- Address of Manufacturer
- Unit of measurement (m3)
- Type of water meter,
- Year of production and serial number,
- Continuous flowrate Q_3 and Q_3/Q_1 ratio (R),
- Maximum operating pressure,
- Connection Position,
- Temperature class,
- EU-Type examination certificate number,
- Conformity marking according to the regulation in regards to the measuring instruments
- The flow direction shall be marked on a water meter's body in the form of an arrow
- Battery life

3.1 Registered trademark of the manufacturer

The manufacturer uses the following figure inscription commercial trademark on water meters

ZLINK

4. Sealing

In case of the meter electronic part being opened and water tamper may happen, the meter cover couldn't be opened without damaging the meter sealing. There are two plastic sealing on the meter cover.

5. Terms of Production, putting into use and usage

5.1 Production

- no special terms identified for production

5.2 Putting into use

- Water meters must be installed in the plumbing as mentioned in installation instructions and/or user's manual of the manufacturer.
- No terms identified for straight pipe lengths at the inlet and exit of the meter, flow profile class of the meter was determined according to EN ISO 4064-1:2014.
- Type tests of the meter were carried out according to EN ISO 4064-2:2014 and OIML R 49-2.

5.3 Requirements for usage

- must be used in accordance with the terms of the user's manual given by the manufacturer.

6. Documentation used within the scope of assessment

- Test report numbered Y20238231 and dated 27.07.2023 issued by Ningbo Institute of Measurement and Testing.
- Test report numbered Y20238232 and dated 27.07.2023 issued by Ningbo Institute of Measurement and Testing.
- Test report numbered Y20238233 and dated 27.07.2023 issued by Ningbo Institute of Measurement and Testing.
- Test report numbered Y20245009 and dated 10.01.2024 issued by Ningbo Institute of Measurement and Testing.
- Test report numbered Y20240110-A and dated 10.01.2024 issued by Ningbo Institute of Measurement and Testing.
- Test reports numbered Y20254211, Y20254212, Y20254213 and dated 21.05.2025 issued by Ningbo Measurement and Testing.
- Manufacturer's technical file, technical drawings, component lists

7. Standards and regulations used within the scope of assessment

7.1 Regulations, harmonized standards and mandatory normative documents

- Measuring Instruments Directive numbered 2014/32/AB published in the Official Journal dated 29.06.2016 and number 29757
- EN ISO 4064-1:2014
- EN ISO 4064-2:2014
- EN ISO 4064-3:2014
- EN ISO 4064-4:2014
- EN ISO 4064-5:2014
- OIML R 49-1:2013
- OIML R 49-2:2013

7.2 Reference documents

- WELMEC Guide 7.2

8. Conclusion

Structural, technical and metrological parameters of the meter must be compatible with the documentation submitted with this EU-Type Examination Certificate. The meter must meet the requirements of the Measuring Instruments Directive numbered 2014/32/EU of the European Union Parliament and the Council and the Measuring Instruments Directive numbered 2014/32/AB published in the Official Journal dated 29.06.2016 and number 29757 of Turkish Republic.

9. Annexes

Annex-1: Illustrative pictures of the water meter

Annex-2: Main board

Annex-3: Main Dimensions of the water meter

Annex-4: Demonstration of Sealing

Annex-5: Marking

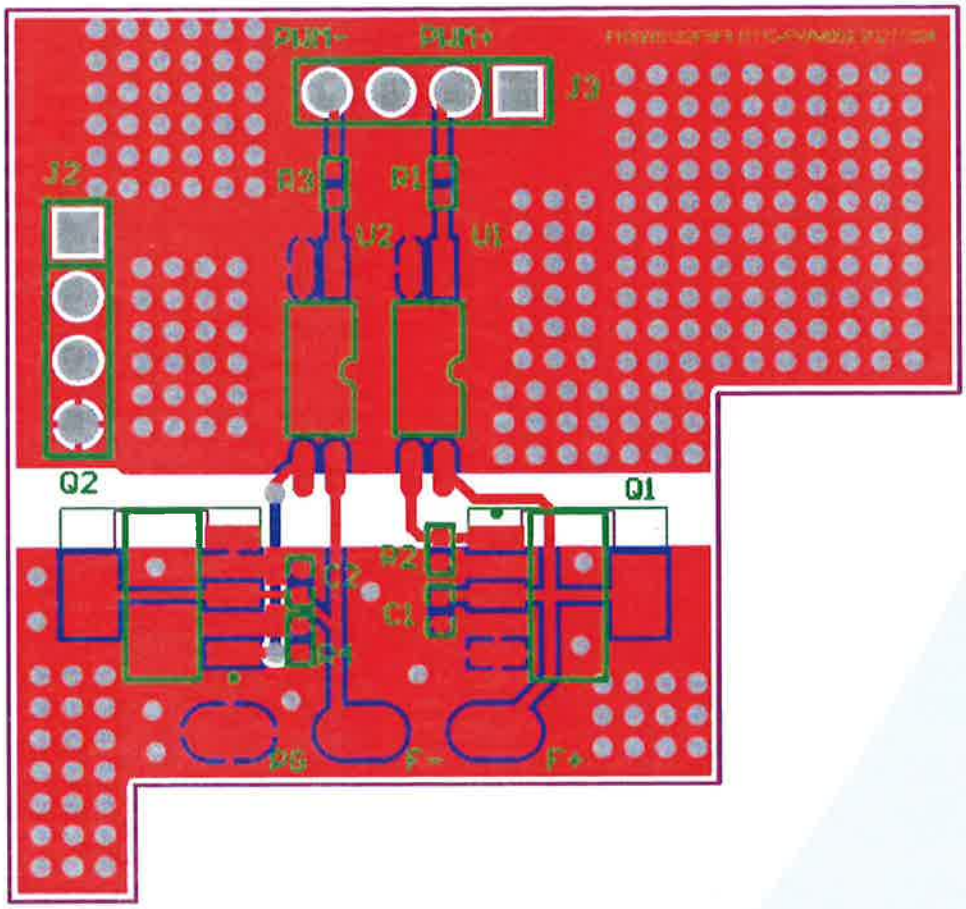
Annex-1:

Plastic Tube

Brass Tube

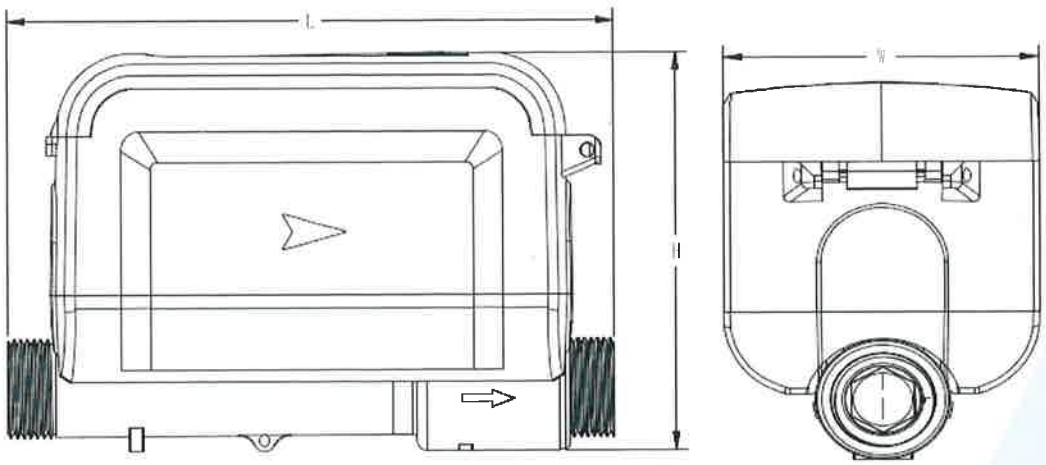
Illustrative pictures of the water meter

Annex-2:



Main Board

Annex-3:



Nominal diameter mm	Nominal diameter in	L mm	W mm	H mm
DN15	1/2	110/115/165	80	107
DN20	3/4	130/190/195	80	113
DN25	1	225/260	80	114
DN32	1 ¼	260	80	135
DN40	1 ½	245/300	80	140

Main Dimensions of the water meter

Annex-4:

Demonstration of Sealing

Annex-5:

Marking of water meter

REVISION PAGE

Rev. No	Date	Revision Reason
00	17.08.2023	First Issue
01	30.01.2024	Added plastic tube instead of brass and added T50 temperature class
02	23.06.2025	DN32 and DN40 diameter meters added to scope / 110 and 115 mm lengths added to DN15 diameter meters / 130 mm length added to DN20 diameter meters / Flow profile accuracy class updated from U10 D5 to U0 D0