

## Czech Metrology Institute Notified Body No. 1383

V 3112

Okružní 31, 638 00 Brno, Czech Republic tel. +420 545 555 111, fax +420 545 222 728

# **EU-TYPE EXAMINATION CERTIFICATE**

Number: TCM 142/18 - 5594

# Addition 2

This addition replaces all previous versions of this certificate in full wording.

Page 1 from 7 pages

In accordance:

with Directive 2014/32/EU of the European Parliament and of the Council on the harmonisation of the laws of the Member States relating to the making available on the market of measuring instruments (implemented in Czech Republic by Government Order No. 120/2016 Coll.).

Manufacturer:

Wenling Younio Water Meter Co., Ltd. No. 1039 Jiulong Street, Wenling, Zhejiang

317500 Zheijang

China

For:

water meter - Woltman, dry dial

type: LXLC

Accuracy class: 2

Temperature class: T30, T50

Valid until:

9 September 2028

**Document No:** 

0511-CS-A035-18

**Description:** 

Essential characteristics, approved conditions and special conditions, if any, are described in

this certificate.

Date of issue:

21 July 2020

Certificate approved by:



RNDr. Pavel Klenovský

#### 1 Characteristics of instrument:

The water meters type LXLC are designed to measure, memorise and display the volume at metering conditions of water passing through the measurement transducer in the sense of the Directive 2014/32/EU of the European Parliament and of the Council of the harmonisation of the laws of the Member States relating to the making available on the market of measuring instruments (implemented in Czech Republic by Government Order No. 120/2016 Coll.), as amended.

The water meters type LXLC are horizontal Woltman meters. The water meters type LXLC consist of a cast iron body with connecting flanges and a measuring unit and a dry mechanical indicating device. The measuring unit is connected to the body by a flange cover which is fixed by screws and sealed by a rubber o-ring.

The measuring unit consists of a plastic holder with bushes for an impeller and a straightener, an impeller with a stainless steel shaft, a transmission with magnetic coupling to an indicating device, a flange cover made of iron with an adjusting screw, a plastic register cover fixed by a pin, a dry mechanical indicating device and an upper plastic lid. The water meters type LXLC are equipped with a dry indicating device. The reading consists of numbered rollers with six drums and three rotary pointers. The meters are equipped with a star wheel with six arms. The adjustment is realized by adjusting screw. The access to the adjusting screw is protected by sealed plastic register cover.

The water meters type LXLC can be installed to operate in horizontal position only with the indicating device positioned at the top.

#### 2 Main characteristics:

Basic technical data of water meters type LXLC from DN 50 to DN 200:

Basic technical data of water meters type LXLC from	DN 50 to	DN 200:					
Nominal diameter:	50	65	80	100	125	150	200
$Q_1$ [m <sup>3</sup> /h]:							
$Q_2$ [m <sup>3</sup> /h]:							
$Q_3$ [m <sup>3</sup> /h]:	flowrates are shown in Table flowrates						
$Q_4$ [m <sup>3</sup> /h]:							
<i>Q</i> <sub>3</sub> / <i>Q</i> <sub>1</sub> :	100; 80; 63; 50; 40						
Accuracy class:		2					
Maximum permissible error for the lower flowrate zone	±5%						
Maximum permissible error for the upper flowrate zone	± 2 % for water having a temperature ≤ 30 °C ± 3 % for water having a temperature > 30 °C						
Temperature class:	T30 or T50						
Water pressure class:		MAP10					
Pressure loss class:	ΔP 63						
Orientation limitation:	horizontal with the indicating device at the top						
Indicating range [m³]:	999 999			9 999 999			
Resolution of the indicating device [dm³]:	0.5				5		
Connection type:	flange						
Flow profile sensitivity classes:	U10D5						
Length [mm]:	200	200	225	250	250	300	350

Basic technical data of water meters type LXLC - Flowrates

Dasic (ccililical data of	water meters type I	TALC - Prowrates			
Manufacturer:	Wenling Younio	Water Meter Co., 1	Ltd.		
Model number:	LXLC				
Nominal diameter:			50	-	
$Q_1$ [m <sup>3</sup> /h]:	0.630	0.788	1.000	1.260	1.575
$Q_2$ [m <sup>3</sup> /h]:	1.008	1.260	1.600	2.016	2.520
$Q_3$ [m <sup>3</sup> /h]:	63.0	63.0	63.0	63.0	63.0

$Q_4$ [m <sup>3</sup> /h]:	78.75	78.75	78.75	78.75	78.75
$Q_3/Q_1$ :	100	80	63	50	40
Nominal diameter:			65		
$Q_1$ [m <sup>3</sup> /h]:	0.630	0.788	1.000	1.260	1.575
$Q_2$ [m <sup>3</sup> /h]:	1.008	1.260	1.600	2.016	2.520
$Q_3 [m^3/h]$ :	63.00	63.00	63.00	63.00	63.00
$Q_4 [m^3/h]$ :	78.75	78.75	78.75	78.75	78.75
$Q_3/Q_1$ :	100	80	63	50	40
Nominal diameter:			00		
	1.000	1.250	80	2.000	2.500
$Q_1 \text{ [m}^3/\text{h]}$ :	1.600	1.250	1.587	2.000	2.500
$Q_2 \text{ [m}^3/\text{h]}$ :		2.000	2.540	3.200	4.000
$Q_3 \text{ [m}^3/\text{h]}$ :	100	100	100	100	100
$Q_4 \text{ [m}^3/\text{h]}$ :	125	125	125	125	125
$Q_3/Q_1$ :	100	80	63	50	40
Nominal diameter:			100		
$Q_1$ [m <sup>3</sup> /h]:	1.600	2.000	2.540	3.200	4.000
$Q_2$ [m <sup>3</sup> /h]:	2.560	3.200	4.063	5.120	6.400
$Q_3$ [m <sup>3</sup> /h]:	160.00	160.00	160.00	160.00	160.00
$Q_4$ [m <sup>3</sup> /h]:	200.00	200.00	200.00	200.00	200.00
$Q_3/Q_1$ :	100	80	63	50	40
Nominal diameter:	<u> </u>		125		
$Q_1$ [m <sup>3</sup> /h]:	2.500	3.125	3.968	5.000	6.250
$Q_2$ [m <sup>3</sup> /h]:	4.000	5.000	6.349	8.000	10.000
$Q_3 [m^3/h]$ :	250.00	250.00	250.00	250.00	250.00
$Q_4 \text{ [m}^3\text{/h]}$ :	312.50	312.50	312.50	312.50	312.50
$Q_3/Q_1$ :	100	80	63	50	40
Nominal diameter:			150		
$Q_1$ [m <sup>3</sup> /h]:	4.000	5.000	150 6.349	8.000	10,000
$Q_1 \text{ [m /n]}.$ $Q_2 \text{ [m^3/h]}:$	6.400	8.000	10.159	12.800	10.000
$Q_2 \text{ [m /h]}.$ $Q_3 \text{ [m^3/h]}:$	400.00	400.00	400.00	400.00	16.000
$Q_4 \text{ [m}^3\text{/h]}$ :	500.00	500.00	500.00	500.00	500.00
$Q_3/Q_1$ :	100	80	63	500.00	40
Z3 Z1·	100	00	60	30	1 40
Nominal diameter:			200		
$Q_1$ [m <sup>3</sup> /h]:	6.300	7.875	10.000	12.600	15.750
$Q_2$ [m <sup>3</sup> /h]:	10.080	12.600	16.000	20.160	25.200
$Q_3$ [m <sup>3</sup> /h]:	630.00	630.00	630.00	630.00	630.00
$Q_4$ [m <sup>3</sup> /h]:	787.50	787.50	787.50	787.50	787.50
$Q_3/Q_1$ :	100	80	63	50	40

#### 3 Tests

Technical tests of the water meters type LXLC were performed in compliance with the International Recommendation OIML R 49 Edition 2013 (E) with conformity to ISO 4064, Test Report No. 6015-PT-P0034-19 which replaces Test Report No. 6015-PT-P0037-18.

## 4 Conformity marks and inscription:

The water meters type LXLC shall be clearly and indelibly marked with the following information:

- Water meter type
- Unit of measurement (m<sup>3</sup>)
- Numerical value  $Q_3$  in m<sup>3</sup>/h ( $Q_3 \times ... \times$ ) and the ratio  $Q_3 / Q_1$ ,
- EU-type examination certificate number
- Manufacturer's name, registered trade name or registered trade mark
- Post address of manufacturer
- Year of manufacture, two last digits of the year of manufacture, or the month and year of manufacture
- Serial number (as near as possible to the indicating device)
- Direction of flow, by means of an arrow (shown on both sides of the body or on one side only provided the direction of flow arrow is easily visible under all circumstances)
- Letter H↑ (horizontal position with the indicating device at the top)
- Maximum admissible pressure (MAP ××)
- The temperature class  $(T \times \times)$
- The pressure loss class  $(\Delta P \times \times)$
- The installation sensitivity class (Ux Dx)
- CE marking and metrology marking in line with the Directive 2014/32/EU

These markings shall be visible without dismantling the water meter after the instrument has been placed on the market or put into use. Examples are in Figure 4 and Figure 5.

## 5 Additional specifications:

The water meters type LXLC shall be put onto the market in line with the procedure of conformity assessment according to the Annex D or F of the Directive 2014/32/EU as well as in compliance with the technical description of this report and shall be tested in accordance with the requirements determined in ISO 4064-1:2017, respectively OIML R 49-1:2013.

A metrological test may only be performed by a producer, or a notified body respectively in line with the conformity assessment procedure by the D or F Annexes of the Directive 2014/32/EU, respectively.

### 6 Ensuring the integrity of the instruments:

One of the screws connecting the water meter body and the flange cover has to be sealed (Figure 1 and Figure 2). The removable indicating device has to be protected against manipulation by a seal fixing a pin near the connection of the upper plastic lid and the plastic register cover (Figure 1 and Figure 2). The seals are realized by a wire with a lead or plastic seal.

### 7 Drawing of the instrument:

Water meters type LXLC are manufactured according to the technical documentation of manufacturer. Technical documentation contains following drawings:

Document reference	Date	Brief description
YL0.635.072WX	12.7.2014	LXLC-50E4a - outline drawing
YL6.201.089	2.8.2014	LXLC-50E4a - register
YL1.635.070	3.6.2015	LXLC-50E4a - assembly drawing
YL1.635.194	5.4.2015	LXLC-50E4a - exploded view
YL0.635.084WX	12.7.2014	LXLC-65E4a - outline drawing
YL6.201.097	2.8.2014	LXLC-65E4a - register

YL1.635.085	3.6.2015	LXLC-65E4a - assembly drawing
YL1.635.195	5.4.2015	LXLC-65E4a - exploded view
YL0.635.085WX	12.7.2014	LXLC-80E4a - outline drawing
YL6.201.098	2.8.2014	LXLC-80E4a - register
YL1.635.086	3.6.2015	LXLC-80E4a - assembly drawing
YL1.635.196	5.4.2015	LXLC-80E4a - exploded view
YL0.635.086WX	12.7.2014	LXLC-100E4a - outline drawing
YL6.201.099	2.8.2014	LXLC-100E4a - register
YL1.635.087	3.6.2015	LXLC-100E4a - assembly drawing
YL1.635.197	5.4.2015	LXLC-100E4a - exploded view
YL0.635.112WX	12.7.2014	LXLC-125E4a - outline drawing
YL6.201.100	2.8.2014	LXLC-125E4a - register
YL1.635.123	3.6.2015	LXLC-125E4a - assembly drawing
YL1.635.198	5.4.2015	LXLC-125E4a - exploded view
YL0.635.104WX	12.7.2014	LXLC-150E4a - outline drawing
YL6.201.101	2.8.2014	LXLC-150E4a - register
YL1.635.110	3.6.2015	LXLC-150E4a - assembly drawing
YL1.635.199	5.4.2015	LXLC-150E4a - exploded view
YL0.635.137WX	12.5.2016	LXLC-200E4a - outline drawing
YL6.201.102	20.5.2016	LXLC-200E4a - register
YL1.635.203	6.8.2016	LXLC-200E4a - assembly drawing
YL1.635.201	7.8.2016	LXLC-200E4a - exploded view

# History of additions

Addition No.	Description	
Addition 0	Issuing certificate	
Addition 1	New figure 2	



Figure 1: The water meter type LXLC – view and sealing:

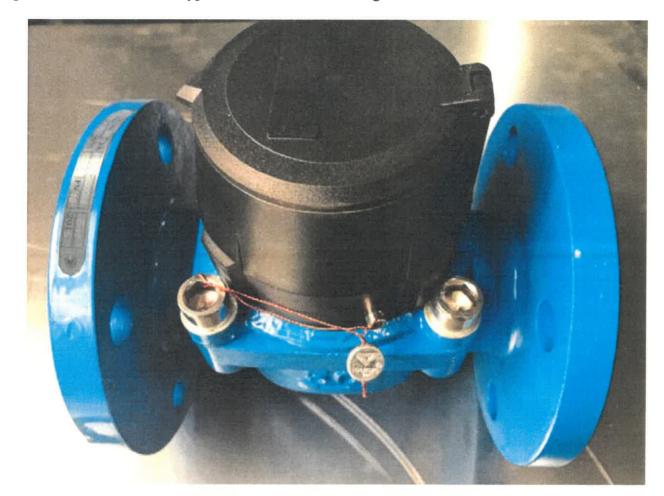
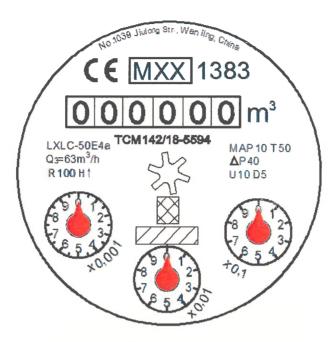
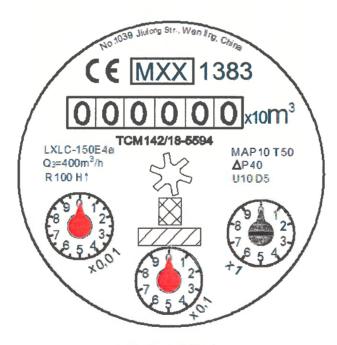


Figure 2: The dial plates of the water meter type LXLC DN 50 to DN 125:



LXLC-50E4a

DN 150 to DN 200:



LXLC-150E4a

Manufacturer's	logo	Or	name
Customer's	logo	OI I	na me

