



OIML Member State  
SLOVAKIA

OIML Certificate No.  
R49/2013-A-SK1-25.14

### 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: **Hunan Moistein Intelligent Technology Co., Ltd.**  
Address: Unit 1, No. 29, Xinsong Robot Industrial Park, No. 8,  
Shuyuan East Road, Shuangma Street, Yuetang District,  
Xiangtan City, Hunan, China

#### Manufacturer

Name: **Hunan Moistein Intelligent Technology Co., Ltd.**  
Address: Unit 1, No. 29, Xinsong Robot Industrial Park, No. 8,  
Shuyuan East Road, Shuangma Street, Yuetang District,  
Xiangtan City, Hunan, China

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

Water meter type **MT-15P, MT-20P**

#### Designation of the module *(if applicable)*

Mechanical volumetric water meters

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



**OIML Certificate No.  
R49/2013-A-SK1-25.14**

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/ER012/SK1 dated 10<sup>th</sup> December 2025 that includes 17 pages

The technical documentation relating to the identified type is contained in documentation file name: „Technical documentation file Hunan Moistein\_MT-...P\_00“ dated 10<sup>th</sup> December 2025 that includes a sum of documents 29 pages.

**OIML Certificate History**

| Revision No. | Date                            | Description of the modification |
|--------------|---------------------------------|---------------------------------|
| 0            | 10 <sup>th</sup> December 2025. | Certificate first-issued        |

Identification, signature and stamp

**The OIML Issuing Authority**

.....  
Dušan Šmigura

Date: 10<sup>th</sup> December 2025



**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 mechanical water meters type MT-15P and MT-20P are designed to measure, memorise and display the volume of water passing through the measurement transducer at metering conditions. The water meters are intended for the measurement of volumes of clean water for residential and commercial use.

The water meters type MT-15P and MT-20P are a mechanical volumetric (rotary piston) water meters.

The water meters type MT-15P and MT-20P can be installed to operate in horizontal position and vertical position. The water meter is not designed to measure the reverse flow.

## 2. Description

### 2.1 Parts of the water meters type MT-15P and MT-20P:

Essential parts of the water meters:

- measuring chamber - included chamber, rotary piston and top plate with the transmission shaft for the connection of the measuring part with the register;
- liquid-sealed mechanical register with glycerine and indication device with 8 numbered drums:
  - o 4 drums black colour for cubic meters, 4 drums red colour for sub-multiples of a cubic meters (last drum with marked 0,00002 sub-multiples of a cubic meters);
- the plastic body with inlet and outlet connections.

Non-essential parts of water meter:

- internal check-valve;
- internal strainer;
- remote transmission device (optionally).

### 2.2 Metrological functions

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

## 3. Technical and metrological data

| Water meter type            |                   | MT-15P |       |         | MT-20P |        |       |
|-----------------------------|-------------------|--------|-------|---------|--------|--------|-------|
| Characteristics             | Unit              |        |       |         |        |        |       |
| Nominal diameter DN         | mm                | 15     |       |         | 20     |        |       |
| Permanent flowrate $Q_3$    | m <sup>3</sup> /h | 2,5    |       |         | 4      |        |       |
| Minimum flowrate $Q_1$      | m <sup>3</sup> /h | 0,025  | 0,020 | 0,01563 | 0,040  | 0,032  | 0,025 |
| Transitional flowrate $Q_2$ | m <sup>3</sup> /h | 0,040  | 0,032 | 0,025   | 0,064  | 0,0512 | 0,040 |
| Overload flowrate $Q_4$     | m <sup>3</sup> /h | 3,125  |       |         | 5      |        |       |
| Ratio $Q_3/Q_1$             | R                 | 100    | 125   | 160     | 100    | 125    | 160   |
| Connection thread           | mm                | G ¾ B  |       |         | G 1 B  |        |       |
| Construction length L       | mm                | 115    |       |         | 130    |        |       |
| Ratio $Q_2/Q_1$             | -                 | 1,6    |       |         |        |        |       |
| Installation orientation    | -                 | H/V    |       |         |        |        |       |

| Water meter type   |                | <b>MT-15P / MT-20P</b>  |
|--|----------------|---|
| Characteristics  | Unit           |   |
| Water temperature range<br>Temperature class                             | °C<br>-        | 0,1 to 50<br>T50  |
| Maximum admissible pressure MAP  | bar            | 16  |
| Pressure loss<br>class $\Delta p$  | bar<br>-       | 0,63<br>$\Delta p63$  |
| Maximum permissible error in upper flowrates range $Q_2 \leq Q \leq Q_4$ | %              | $\pm 2$ (at $\theta \leq 30^\circ\text{C}$ )<br>$\pm 3$ (at $\theta > 30^\circ\text{C}$ ) |
| Maximum permissible error in lower flowrates range $Q_1 \leq Q < Q_2$    | %              | $\pm 5$   |
| Capacity of calculator   | m <sup>3</sup> | 9999,9998   |
| Scale interval   | m <sup>3</sup> | 0.00002   |
| Accuracy class   | -              | 2   |
| Mechanical class   | -              | M1  |
| Electromagnetic class  | -              | E1  |
| Flow profile sensitivity class   | -              | U5D0  |

#### 4. Marking and inscriptions

The following data shall be marked on the water meter:

- a) unit of measurement (m<sup>3</sup>);
- 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 ( $\Delta p$ );
- k) H/V – water meter can operate in the horizontal and vertical position;
- l) type approval sign according to national regulations.

Manufacturer uses the following trademark on the water meter:



#### 5. Security measures

The water meter shall be protected against unauthorized manipulation by one sealing mark securing the connection of housing of water meter against opening. (Fig. 3)



## 6. Figures



Fig. 1: Illustrative views of water meters type MT-15P and MT-20P



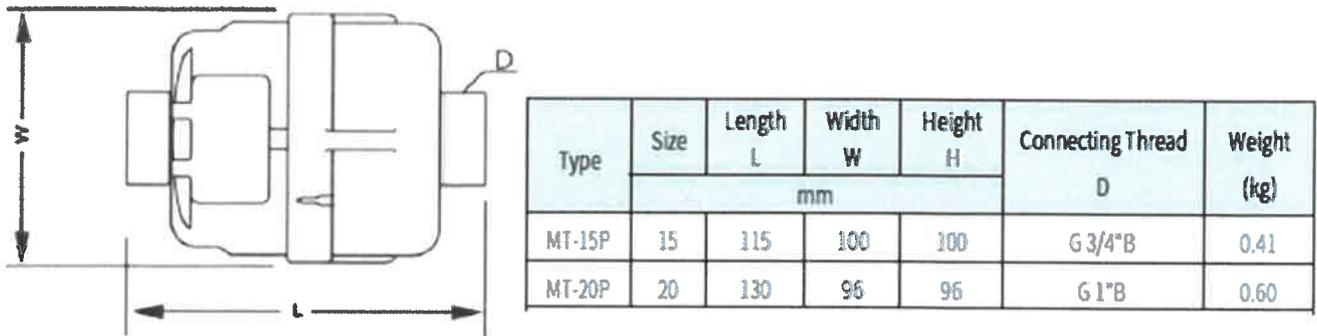


Fig. 2: Dimensions of water meters type MT-15P and MT-20P

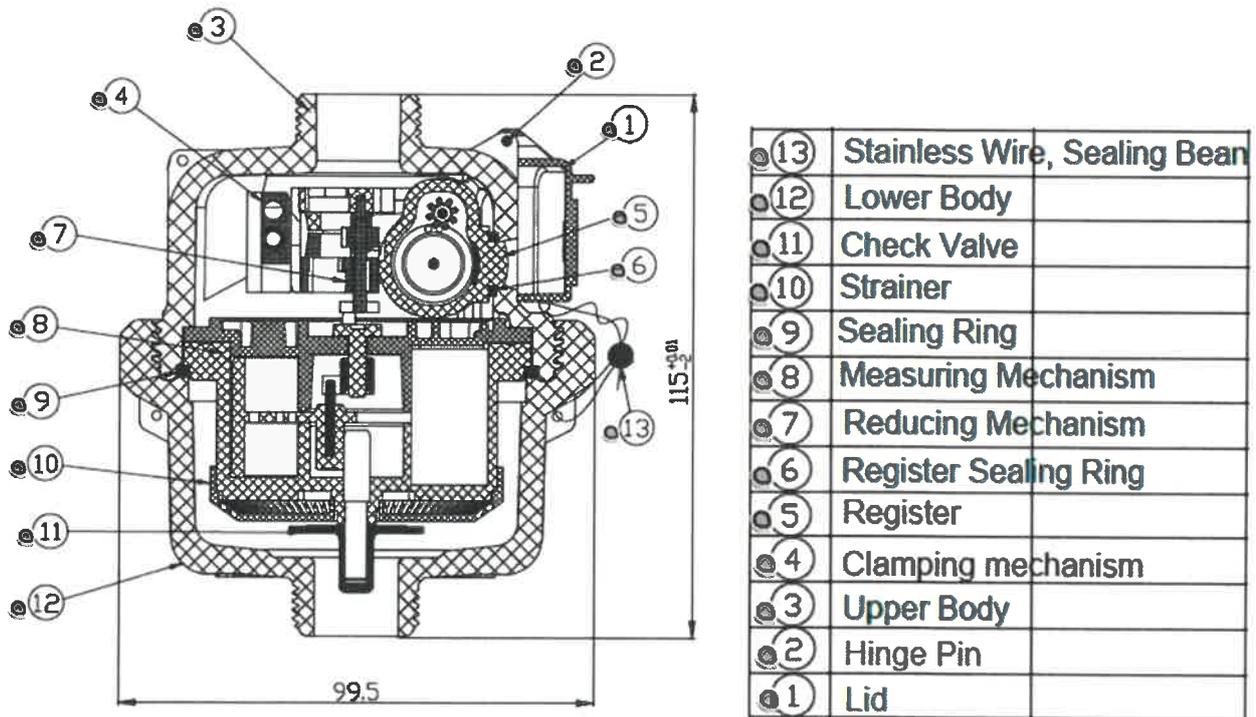


Fig. 3: Cross sections and sealing of water meters type MT-15P and MT-20P  
(sample DN15)





Fig. 4: Exploded view of meters type MT-15P and MT-20P

