



# EU-TYPE EXAMINATION CERTIFICATE

Number: TCM 142/22 - 5860

## Addition 3

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

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**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:** ADD Production  
str. Dragomirna 36, Chisinau  
PC: MD-2008, Republic of Moldova

**For:** water meter - ultrasonic, dry dial  
Type: WMP

Accuracy class: 2  
Temperature class: T30, T50

**Valid until:** 23 February 2032

**Document No:** 0511-CS-A002-22

**Description:** Essential characteristics, approved conditions and special conditions, if any, are described in this certificate.

**Date of issue:** 11 December 2024

**Certificate approved by:**



  
RNDr. Pavel Klenovský

## 1 Characteristics of instrument

The water meters type WMP 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 WMP are ultrasonic water meters with an electronic indicating device.

The water meters type WMP consist of a brass body with connecting screw threads, one pair of ultrasonic transducers and the electronic indicating device. The electronic indicating device is formed by LCD display shown volume. The water meter displays the volume resolution of 0.000 001 m<sup>3</sup> on the digital display. Water meter is without any buttons with LCD display and communication interfaces.

Ultrasonic water meter has a separation of software. The version of SWs and CRCs are displayed in the auto-rounding menu on LCD display in the time period in the form:

- CRC of legally relevant part
- SW version of legally relevant part

The water meters type WMP displays the indication of each volume on the display every time period.

The water meters type WMP are by powered battery 3.6V DC

The water meters can be installed to operate in positions horizontal position with the indicating device at the top and at the side and vertical position with flow from bottom to top and the internal dimensions of the water meter pipes are always the same for each dimension.

## 2 Main characteristics

Basic technical data of water meters type WMP:

Manufacturer:	ADD Production					
Model number:	WMP					
Nominal diameter:	15	20	25			
Type details:	flowrates are shown in Table <i>Basic metrological data (flowrates)</i>					
$Q_1$ [m <sup>3</sup> /h]:						
$Q_2$ [m <sup>3</sup> /h]:						
$Q_3$ [m <sup>3</sup> /h]:						
$Q_4$ [m <sup>3</sup> /h]:						
$Q_3$ [m <sup>3</sup> /h]:	1.6	2.5	2.5	4.0	4.0	6.3
$Q_3/Q_1$ :	800; 400; 250	1600; 800; 400; 250	800; 400; 250	1600; 800; 400; 250	800; 400; 250	1600; 800; 400; 250
$Q_2/Q_1$ :	1.6					
$Q_4/Q_3$ :	1.25					
Measuring principle:	ultrasonic					
Accuracy class:	2					
Maximum permissible error for the lower flowrate zone (MPE <sub>l</sub> ):	±5 %					
Maximum permissible error for the upper flowrate zone (MPE <sub>u</sub> ):	±2 %					
Temperature class:	T30 or T50					
Water pressure class:	MAP16					
Pressure loss class:	ΔP40	ΔP40	ΔP40	ΔP40	ΔP40	ΔP63
Reverse flow:	Not designed to measure					
Environmental class:	O (-25 to + 70 °C)					
Electromagnetic environment:	E1					

<i>Mechanical class:</i>	<i>M1</i>		
Maximum admissible temperature [°C]:	50		
Maximum admissible pressure [MPa]:	1.6		
Orientation limitation:	H↑ and H→ (horizontal position with the indicating device at the top and at the side) V↑ (vertical position with flow from bottom to top)		
<i>Indicating range [m³]:</i>	99 999	99 999	99 999
<i>Resolution of the indicating device [m³]:</i>	0.000 001	0.000 001	0.000 001
<i>Resolution of the device for rapid testing [m³]:</i>	-		
EUT testing requirements (OIML R 49-2:2013, 8.1.8):			
Category:	Ultrasonic water meter		
Case:	Case B		
Installation details:			
Connection type (screw thread):	G3 / 4"	G1	G1 / 1/4"
Minimum straight length of inlet pipe [mm]:	0		
Minimum straight length of outlet pipe [mm]:	0		
<i>Flow profile sensitivity class:</i>	<i>U0D0</i>		
Flow conditioner (details if required):	No		
Mounting:	in line meter		
Orientation:	H↑ and H→ (horizontal position with the indicating device at the top and at the side) V↑ (vertical position with flow from bottom to top)		
Other relevant information:	-		
<i>Protection degree</i>	<i>IP68</i>		
<i>Length [mm] – brass body:</i>	110 - 165	130 - 195	190 - 225
Installation details (electrical):			
Wiring instructions:	-		
Mounting arrangement:	-		
Orientation limitations:	-		
Power supply:			
Type (battery, mains AC, mains DC):	non replaceable battery		
$U_{max}$ (V):	3.6		
$U_{min}$ (V):	2.6		
Frequency:	-		
<i>Minimum battery life time [years]:</i>	16		
<i>Software version (of legally relevant SW):</i>	V80 V81		
<i>CRC checksum (of legally relevant SW):</i>	5A3210F1 9d3A5b4d		
Information specified by the manufacturer (information in the table below are not certified)			
Wireless communication	BLE, WMbus, LoRa		

Measuring ability	Starting flow 0.001 m <sup>3</sup> /h					
Manufacturer:	ADD Production					
Model number:	WMP					
Nominal diameter:	15	20	25			
Type details:						
Q <sub>1</sub> [m <sup>3</sup> /h]:	flowrates are shown in Table <i>Basic metrological data (flowrates)</i>					
Q <sub>2</sub> [m <sup>3</sup> /h]:						
Q <sub>3</sub> [m <sup>3</sup> /h]:						
Q <sub>4</sub> [m <sup>3</sup> /h]:						
Q <sub>3</sub> [m <sup>3</sup> /h]:	1.6	2.5	2.5	4.0	4.0	6.3
Q <sub>3</sub> /Q <sub>1</sub> :	800; 400; 250	1600; 800; 400; 250	400; 250	800; 400; 250	400; 250	800; 400; 250
Q <sub>2</sub> /Q <sub>1</sub> :	1.6					
Q <sub>4</sub> /Q <sub>3</sub> :	1.25					
Measuring principle:	ultrasonic					
Accuracy class:	2					
Maximum permissible error for the lower flowrate zone (MPE <sub>l</sub> ):	±5 %					
Maximum permissible error for the upper flowrate zone (MPE <sub>u</sub> ):	±2 %					
Temperature class:	T30 or T50					
Water pressure class:	MAP16					
Pressure loss class:	ΔP40	ΔP40	ΔP40	ΔP40	ΔP40	ΔP63
Reverse flow:	Not designed to measure					
Environmental class:	O (-25 to + 70 °C)					
Electromagnetic environment:	E1					
Mechanical class:	M1					
Maximum admissible temperature [°C]:	50					
Maximum admissible pressure [MPa]:	1.6					
Orientation limitation:	V↓ (vertical position with flow from top to bottom)					
Indicating range [m <sup>3</sup> ]:	99 999	99 999	99 999			
Resolution of the indicating device [m <sup>3</sup> ]:	0.000 001	0.000 001	0.000 001			
Resolution of the device for rapid testing [m <sup>3</sup> ]:	-					
EUT testing requirements (OIML R 49-2:2013, 8.1.8):						
Category:	Ultrasonic water meter					
Case:	Case B					
Installation details:						
Connection type (screw thread):	G3 / 4"	G1	G1	G1 / 1/4"		
Minimum straight length of inlet pipe [mm]:	0					

Minimum straight length of outlet pipe [mm]:	0		
Flow profile sensitivity class:	U0D0		
Flow conditioner (details if required):	No		
Mounting:	in line meter		
Orientation:	V↓ (vertical position with flow from top to bottom)		
Other relevant information:	-		
Protection degree	IP68		
Length [mm] – brass body:	110 - 165	130 - 195	190 - 225
Installation details (electrical):			
Wiring instructions:	-		
Mounting arrangement:	-		
Orientation limitations:	-		
Power supply:			
Type (battery, mains AC, mains DC):	non replaceable battery		
$U_{\max}$ (V):	3.6		
$U_{\min}$ (V):	2.6		
Frequency:	-		
Minimum battery life time [years]:	16		
Software version (of legally relevant SW):	V80 V81		
CRC checksum (of legally relevant SW):	5A3210F1 9d3A5b4d		
Information specified by the manufacturer (information in the table below are not certified)			
Wireless communication	BLE, WMbus, LoRa		
Measuring ability	Starting flow 0.001 m <sup>3</sup> /h		

**Table Basic metrological data (flowrates)**

Manufacturer:	ADD Production							
Model number:	WMP							
Nominal diameter:	15	15	15	15	15 and 20	15 and 20	15 and 20	20
Type details:								
$Q_1$ [m <sup>3</sup> /h]:	0.0020	0.0040	0.0064	0.0016	0.0031	0.0063	0.0100	0.0025
$Q_2$ [m <sup>3</sup> /h]:	0.0032	0.0064	0.0102	0.0025	0.0050	0.0100	0.0160	0.0040
$Q_3$ [m <sup>3</sup> /h]:	1.60	1.60	1.60	2.50	2.50	2.50	2.50	4.00
$Q_4$ [m <sup>3</sup> /h]:	2.00	2.00	2.00	3.13	3.13	3.13	3.13	5.00
$Q_3/Q_1$ :	800	400	250	1600	800	400	250	1600

Manufacturer:	ADD Production							
Model number:	WMP							
Nominal diameter:	20 and 25	20 and 25	20 and 25	25	25	25	25	-
Type details:								
$Q_1$ [m <sup>3</sup> /h]:	0.0050	0.0100	0.0160	0.0039	0.0079	0.0158	0.0252	-
$Q_2$ [m <sup>3</sup> /h]:	0.0080	0.0160	0.0256	0.0063	0.0126	0.0252	0.0403	-
$Q_3$ [m <sup>3</sup> /h]:	4.00	4.00	4.00	6.30	6.30	6.30	6.30	-
$Q_4$ [m <sup>3</sup> /h]:	5.00	5.00	5.00	7.88	7.88	7.88	7.88	-
$Q_3/Q_1$ :	800	400	250	1600	800	400	250	-

### 3 Tests

Technical tests of the water meters type WMP were performed in compliance with the International Recommendation OIML R 49 Edition 2013 (E) with conformity to ISO 4064, Type Evaluation Report No. 0511-ER-V061-22 (with related Test Reports No. 194400-061/2022). Type Evaluation Report No. 0511-ER-V029-21 (with related Test Reports No. 6015-PT-P0002-22, EMC test report No. 8551-PT-E0118-21 and Software validation Test Report No. 6011-PT-SW004-22 according to WELMEC 7.2, 2020), Type Evaluation Report No. 0511-ER-V015-23 (with related Test Reports No. 6015-PT-P0007-24, Software validation test report No. 6011-PT-SW004-24), Type Evaluation Report No. 0511-ER-V049-24 (with related Test Report No. 6015-PT-P0025-24).

### 4 Conformity marks and inscription

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

- Water meter type (on plastic seal or via laser marking on the dial)
- 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 (on plastic seal or via laser marking on the dial)
- 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)
- Maximum admissible pressure (MAP  $\times\times$ )
- Letter H $\uparrow$  (horizontal position with the indicating device at the top), H $\rightarrow$  (horizontal position with the indicating device at the side), V $\uparrow$  (vertical position with flow from bottom to top),
- The temperature class (T $\times\times$ )
- The pressure loss class ( $\Delta P \times\times$ )
- CE marking and metrology marking in line with the Directive 2014/32/EU
- For a non-replaceable battery: the latest date by which the meter shall be replaced
- Environmental classification (B or O)
- Electromagnetic environmental class (E1)
- Software version / checksum (on digital display)

These markings shall be visible without dismantling the water meter after the instrument has been placed on the market or put into use. Example is in Figure 2.

### 5 Additional specifications

The water meters type WMP 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 EN 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

The water meter type WMP has a non-separable case and access to the metering part of the meter is inaccessible without visible damage of its case. The water meter can be fitted by an optional sealing by a wire with seal mark. The sealing is described in Figure 1.

## 7 Drawing of the instrument

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

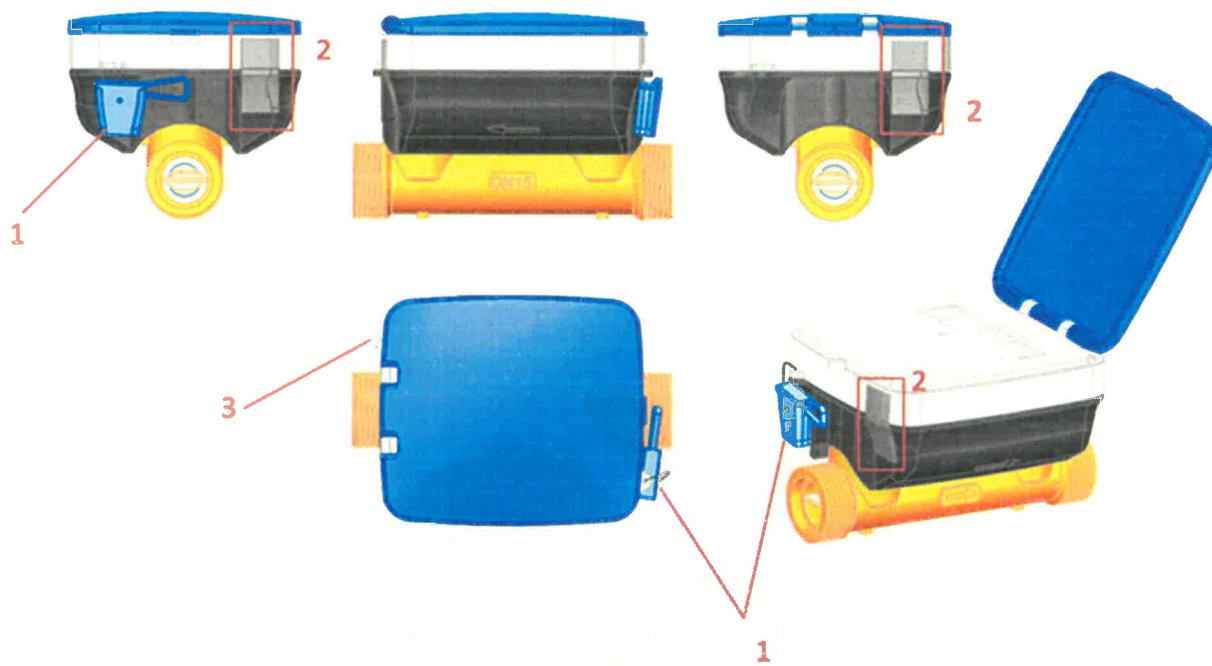
Document reference	Date	Brief description
ADDM.301556.085 mod.3	18.1.2022	Cover of display
ADDM.302465.005AD mod.1	18.1.2022	Pipe brass DN15 – 110 and 165 mm
ADDM.302465.006AD mod.2	18.1.2022	Pipe brass DN20 – 130 and 195 mm
ADDM.302465.007AD mod.2	18.1.2022	Pipe brass DN25 – 190 and 225 mm
ADDM.411152.506AD mod.5	18.1.2022	Water meter WMP15 and WMP20 - assembly drawing
ADDM.411152.507AD mod.5	18.1.2022	Water meter WMP25 – assembly drawing
ADDM.735224.447 mod.1	18.1.2022	Plastic case of water meter
ADDM.735224.458 mod.1	18.1.2022	Plastic case of water meter
V3.5	24.11.2021 by e-mail	User manual – ADDRA Smart Meter

## History of additions

Addition No.	Description
Addition 0	Issuing certificate
Addition 1	Addition protection degree IP68
Addition 2	New ratio R800 and R1600 and starting flow 0.001 m <sup>3</sup> /h
Addition 3	Addition new dimension DN25 and correction of typing error in the CRC checksum

Figure 1: The sealing of the WMP water meter

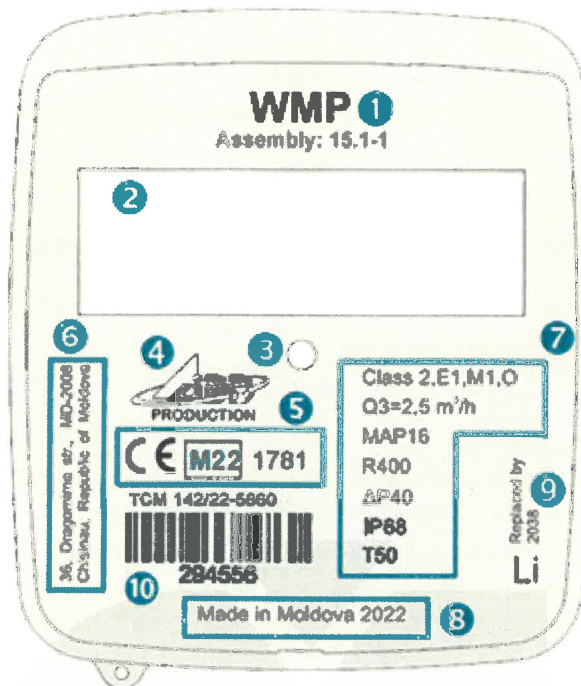
A non-separable cover closes the meter body. Any attempt to open the meter cover causes visible damages, such as breakage and cracks, which can appear in any part of the cover, especially that located close to the meter body. The damaged cover can no longer be used to close the meter.



- water meter WMP (photo):



Figure 2: Example of the dial with parameters of the water meter type WMP



1	Meter type
2	Display to view consumption data and states
3	Metrological LED
4	Meter manufacturer
5	CE mark and supplementary metrology marking
6	Manufacturer's postal address
7	Technical parameters
8	Place of manufacturing and date
9	Battery expiry date
10	Barcode with serial number