



EU - TYPE EXAMINATION CERTIFICATE



No. SK 15 - 103 MI-001 Rev. 3

This revision replaces all previous versions of this Certificate in full wording

Issued by **Slovenská legálna metrologia, n. o.** Notified Body number **1432**
Geologická 9966/1,
821 06 Bratislava-Podunajské Biskupice
Slovak Republic

Products certification body

Hviezdoslavova 31, 974 01 Banská Bystrica
Slovak Republic

In accordance with Annex II, Module B to Regulation of the Government of the Slovak Republic No 145/2016 Coll. on making available of measuring instruments on the market, in the wording of the Regulation of the Government of the Slovak Republic No 328/2019 Coll., which implements, in Slovakia, the Directive 2014/32/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of measuring instruments as later amended (MID).

Applicable essential requirements Annex I and Annex III to MID

Manufacturer **Apator PoWoGaz S.A.**
Jaryszki 1c, 62-023 Żerniki
Poland

Applicant **manufacturer**

Measuring instrument **Water meter**

Type **JS**
Trade mark see Descriptive annex


Environment classes
- climatic (+5 to + 55)°C
- mechanical M1
- electromagnetic E1

Description and documentation The principal technical and metrological data, characteristics, instrument description and approval conditions are set out in the Descriptive annex to this EU - type examination certificate (13 pages), which is part of this EU - type examination certificate. The test reports, designs, schematic diagrams and documentation used during certification process are stored in the reference folder Apator Powogaz-JS-01 to 03.

Valid until **11 December 2035**

Date of issue 11 December 2025




Ing. Dušan Šmigura, PhD.
Representative of Notified Body



Where the instrument is subject to other Directives covering other aspects, this EU - type examination certificate is valid, assuming that the instrument conforms to the provisions of those Directives. Without written permission of the notified body this certificate may be reproduced only as a whole.

1. Designation

The mechanical vane-wheel single-jet water meters series **JS** (types JS50, JS65, JS80, JS100) are designed to measure, memorise and display the volume of water passing through the measurement transducers at metering conditions. The water meters are intended for the measurement of clean water volume in residential and commercial use.

The water meters series JS shall be installed to operate in the horizontal position only with the indication device positioned at the top. The water meters are not designed to measure the reverse

The versions of the water meters series JS are marked:

- JSXX (basic type), XX is the value of diameter DN (50, 65, 80 or 100).
- JSXX-YY, YY is the marking for the non-essential parts of water meters in point 2. These parts are outside the scope of Annex III of the MID.

2. Description

Essential parts of the water meters series JS

- the cast – iron body of water meter with inlet and outlet connection;
- the measuring mechanism – the measuring insert with the impeller with an axle perpendicular to the flow direction;
- the dry type mechanical register with 999999,999 digits - 6 drums and 3 pointers with gearing mechanism, inside air-tight housing;
- magnetic coupling for the connection of the measuring mechanism with the mechanical register;
- adjustment device – executed by turn of ribs positioned in the measuring insert.

Non-essential parts of water meter:

- strainer in the inlet of the meter (optionally);
- non - return valve (optionally);
- radio module (optionally);
- optionally parts according to table below:

JSXX-YY, where YY is	Descriptions of the supplementary fittings
NK	reed contact pulse transmitter
NO	optoelectronic pulse transmitter
NKO	reed contact pulse transmitter and optoelectronic pulse transmitter
NOP	adapted for the installation of the optoelectronic pulse transmitter (NO)
NKOP	adapted for the installation of the reed contact pulse transmitter (NK) and/or optoelectronic pulse transmitter (NO)
NK-01	reed contact pulse transmitter with rotary counter
NO-01	optoelectronic pulse transmitter with rotary counter
NKO-01	reed contact pulse transmitter and optoelectronic pulse transmitter with rotary counter
NOP-01	adapted for the installation of the optoelectronic pulse transmitter (NO) with rotary counter
NKOP-01	adapted for the installation of the reed contact pulse transmitter (NK) and/or optoelectronic pulse transmitter (NO) with rotary counter
NK-02	reed contact pulse transmitter mounted in IP68 counting mechanism
NKP-02	adapted for the installation of the reed contact pulse transmitter (NK) mounted in IP68 counting mechanism
08	mechanism ready for optical and inductive technology reading with IP68 protection (IP68)

2.1 Metrological functions

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

2.2 Software

- not applicable

2.3 Optional equipment and functions subject to MID requirements

- not applicable

2.4 Integrated equipment and functions not subject to MID

By means of the parts listed in point 2. Non-essential parts of this descriptive annex, no legally relevant data may be changed. The parts listed are outside the scope of Annex III of the MID.

3. Technical and metrological data

Meter type	Unit	JS50		JS65		JS80		JS100	
Nominal diameter DN	mm	50		65		80		100	
Permanent flowrate Q_3	m ³ /h	25		40		63		100	
Minimum flowrate Q_1	m ³ /h	0,079	0,156	0,127	0,25	0,2	0,394	0,317	0,625
Transitional flowrate Q_2	m ³ /h	0,127	0,25	0,203	0,4	0,32	0,63	0,508	1,0
Overload flowrate Q_4	m ³ /h	31,25		50		78,75		125	
Ratio Q_3/Q_1	-	315	160	315	160	315	160	315	160
Ratio Q_2/Q_1	-	1,6							
Construction length L	mm	270 / 300		300		300/350		350/360	
Connection	-	flange							
Installation orientation	-	H							
Water temperature range	°C	0,1 to 50							
Water temperature range class	-	T30, T50							
Maximum working pressure P_{max}	bar	16							
Pressure loss	bar	0,63							
Pressure loss class Δp	-	Δp 63							
Maximum permissible error in upper flowrates range $Q_2 \leq Q \leq Q_4$	%	± 2 (at $\Theta \leq 30^\circ\text{C}$) ± 3 (at $\Theta > 30^\circ\text{C}$)							
Maximum permissible error in lower flowrates range $Q_1 \leq Q < Q_2$	%	± 5							
Scale interval	m ³	0,0005							
Capacity of calculator	m ³	999999,999							
Mechanical class	-	M1							
Climatic class	°C	+ 5 to + 55							
Electromagnetic class	-	E1							
Flow profile sensitivity class	-	U0D0							

4. Interfaces and compatibility conditions

- reed contact pulse transmitter (optionally);
- opto or inductive - electronic pulse transmitter (optionally);
- radio module (optionally);
- another according to point 2.4.

5. Marking and inscriptions

The following data shall be marked on the water meter:

- manufacturer's name or mark;
- manufacturer's postal address (article 8, point 6 of Directive 2014/32/EU);
- type of water meter;
- measuring unit m^3 ;
- year of manufacture or the month and year of manufacture;
- serial number (as near as possible to the indicating device);
- flowrate Q_3 and ratio Q_3/Q_1 (R);
- maximum admissible pressure (MAP);
- flow direction shall be marked on a water meter's body in form of an arrow;
- letter H, if the meter can only be operated in the horizontal position;
- temperature class (T);
- pressure loss class (Δp);
- environmental classification;
- electromagnetic environmental class;
- mechanical class;
- EU - type examination certificate number;
- CE marking and supplementary metrology marking according to Article 21 and Article 22 of Directive 2014/32/EU (CE marking and supplementary metrology marking following with number of a notified body);

All inscriptions on the meter shall be in the EU official language; the international abbreviations and generally accepted symbols are acceptable.

The markings and inscriptions shall comply with the requirements of cl. 9, Annex I to Directive No. 2014/32/EU of European Parliament and Council.

5.1 Designation of trademarks on the water meters

- manufacturer uses following trademarks on its water meters:



6. Security measures

The water meter is protected against unauthorised manipulation by one seal (lead or plastic seal with a wire) securing the counter shelter and the water meter body. The wire with the lead or plastic seal permanently connects cover shelter (through the hole) to the one meter body screw (through the hole) such a way that the water meter cannot be dismantled without destruction. The sealing of the water meter is shown on the Figure 5.

7. Requirements on production, putting into use and utilization

7.1 Requirements on production

-no special requirements identified

7.2 Requirements on putting into use

- water meter shall be installed in accordance with the requirements stated in the user manual issued by the manufacturer;
- requirements for straight pipeline length in upstream and downstream are specified. Flow profile sensitivity class of the water meters is U0, D0 according to OIML R49-1: 2013;
- initial verification tests of the water meters are recommended to carry out in line with point 10 of OIML R49-2: 2013.

7.3 Requirements for utilization

- in accordance with the requirements of the manufacturer`s documentation.

8. Documentation used for assessment purposes

- Evaluation report No 69/1432/25 MI-001, of 2025-12-11, issued by SLM NB 1432;
- Manufacturer`s technical documentation stored in folders Apator Powogaz_JS-00 to 03.

9. Standards and regulations used for assessment purposes

9.1 Regulations, harmonized standards and normative documents

- Regulation of Government of the Slovak Republic No. 145/2016 Coll. relating to the making available on the market of measuring instruments as amended by Regulation of Government of the Slovak Republic no. 328/2019 Coll., which implements in Slovakia, the Directive 2014/32/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of measuring instruments as later amended (MID);
- OIML R 49-1, edition 2013 (E): Water meters for cold potable water and hot water.
Part 1: Metrological and technical requirements;

- OIML R 49-2, edition 2013 (E): Water meters for cold potable water and hot water. Part 2: Test methods;
- EN ISO 4064-1: 2017 Water meters for cold potable water and hot water. Part 1: Metrological and technical requirements;
- EN ISO 4064-2: 2017 Water meters for cold potable water and hot water. Part 2: Test methods;
- EN ISO 4064-5: 2017 Water meters for cold potable water and hot water. Part 5: Installation requirements;

9.2 Further applied standards and documents

- WELMEC Guide 13.1 Measuring Instruments Directive 2014/32/EU Common Application for Utility Meters (Version 2020);
- WELMEC Guide 13.3 Guide for sealing of Water and Thermal energy meters (Version 2021);
- WELMEC CT-001 Measuring Instruments Directive, Water Meters, Corresponding Tables OIML R 49 2013 – MID Annex I and III (MI-001) (Version 2019).

10. Final provisions on water meter

Construction, technical and metrological parameters of the water meters JS series must comply with the documentation presented within the process of type certification. All the characteristics of the measuring instrument (including those not mentioned) shall meet the respective requirements of Government Ordinance of the Slovak Republic No. 145/2016 Coll. relating to the making available on the market of measuring instruments, which implements, in Slovakia, the Directive 2014/32/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to the making available on the market of measuring instruments as later amended (MID).

11. Figures



Fig. 1a: Illustrative view on the water meters JS

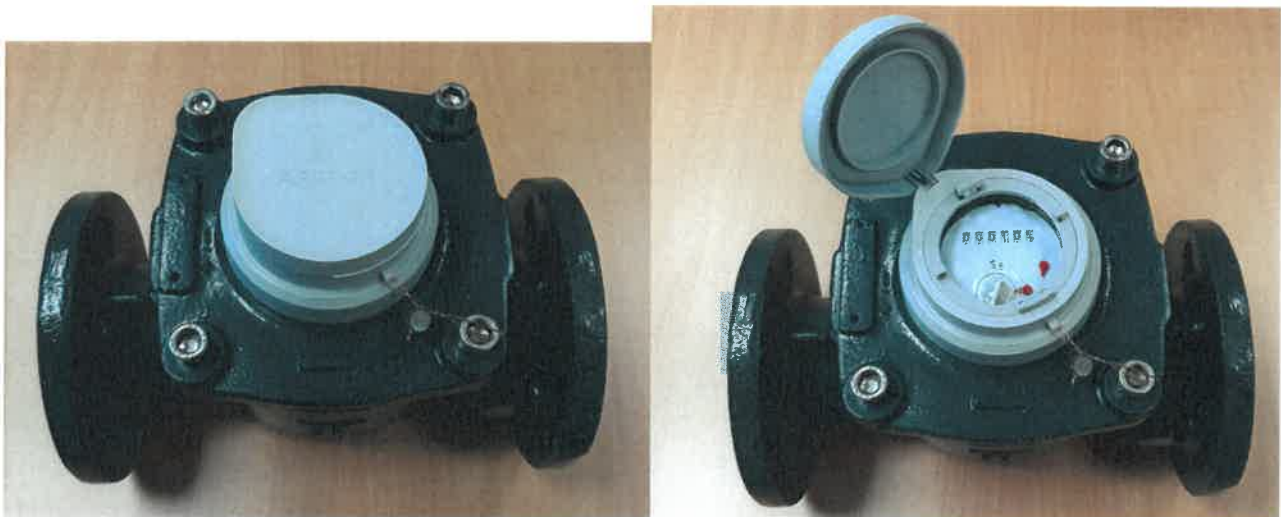


Fig. 1b: Illustrative view on the water meters JS...-08

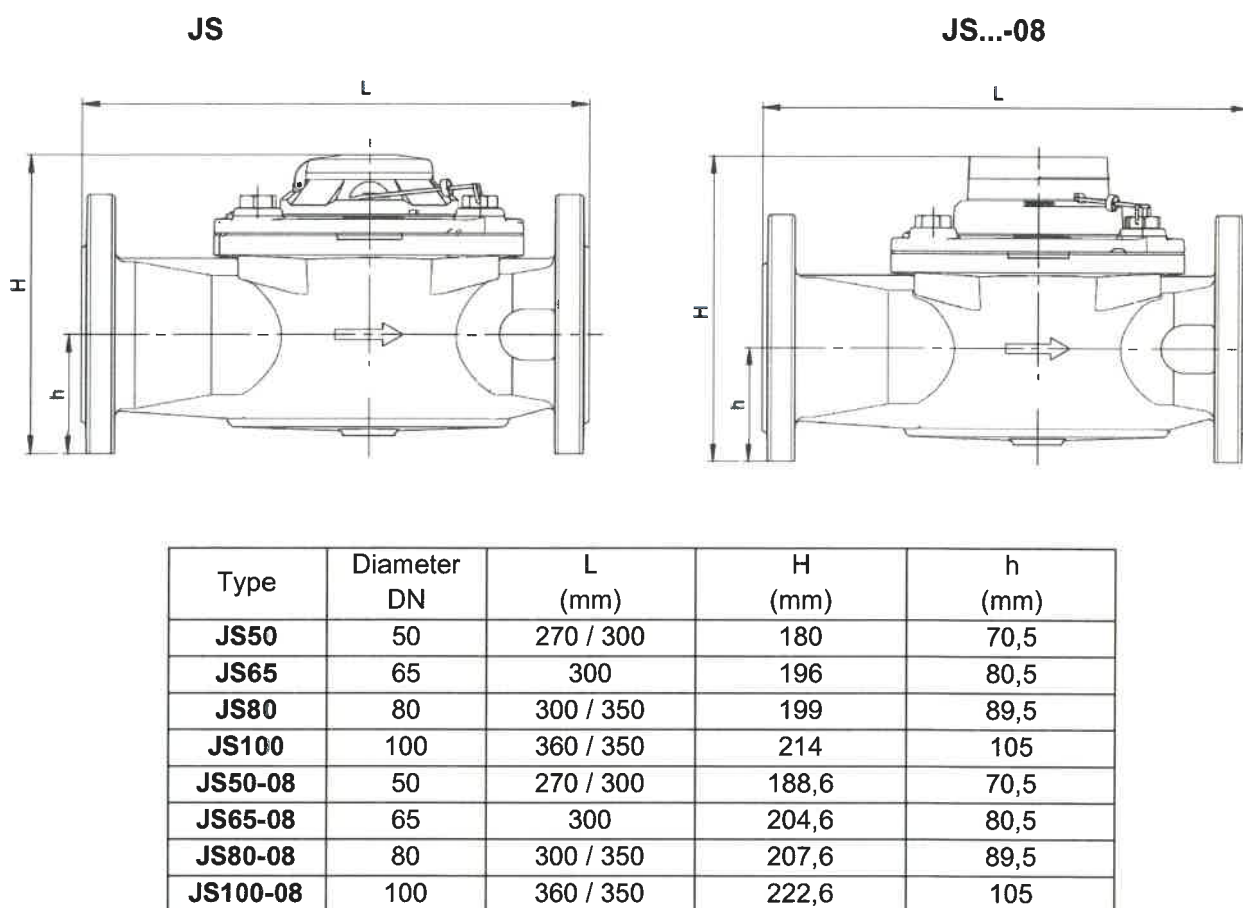


Fig. 2: Main dimensions of the water meters types JS and JS...-08

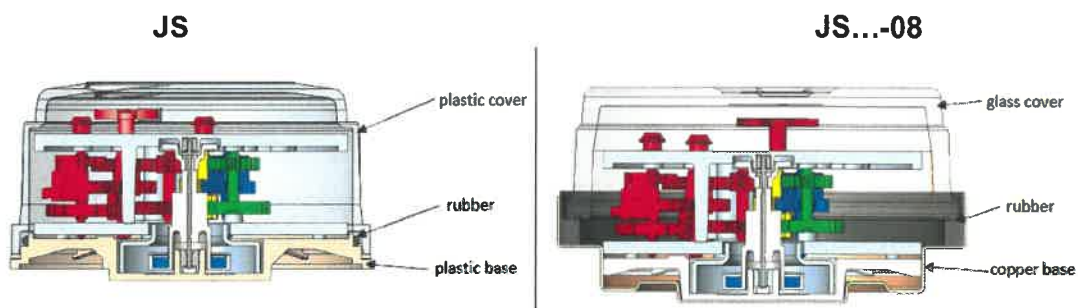


Fig. 3: The counting mechanism of the water meters types JS and JS...-08

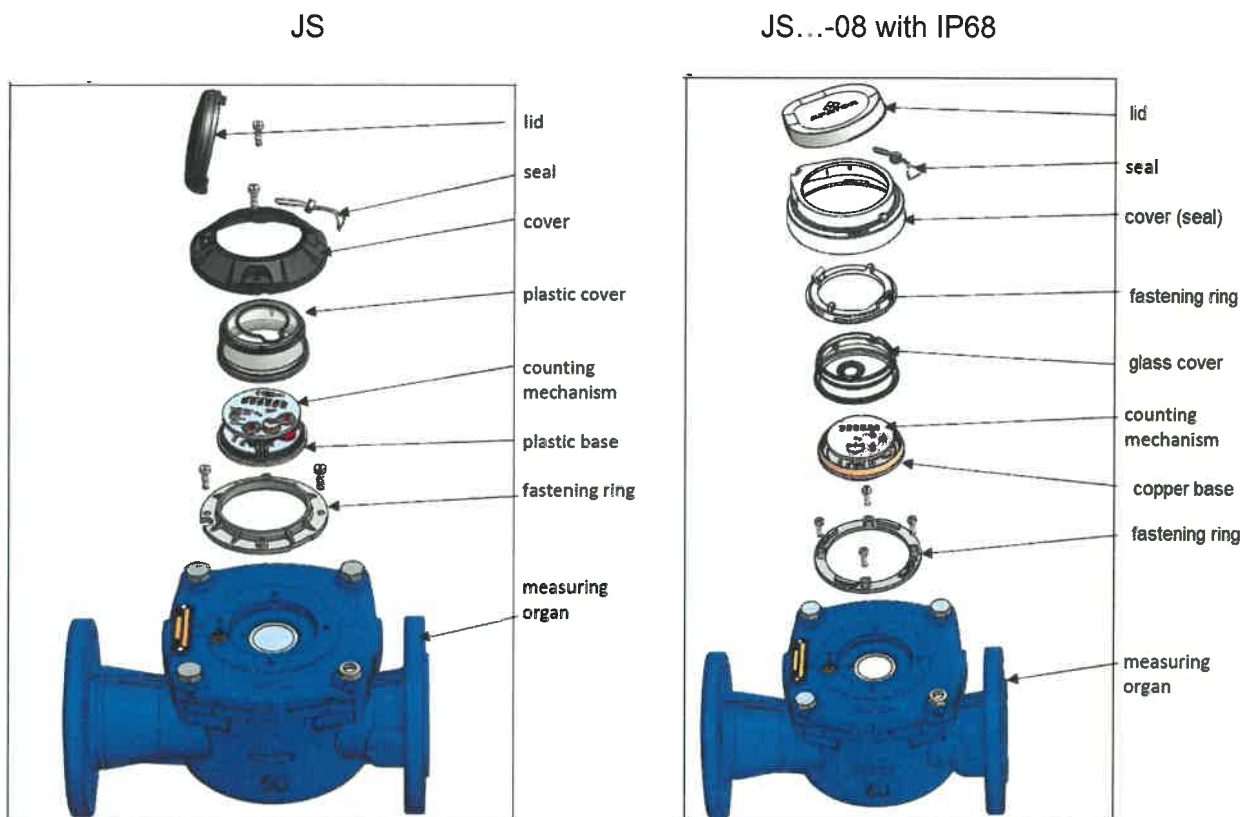


Fig. 4a: Illustrative exploded views of the water meters (body and calculator)

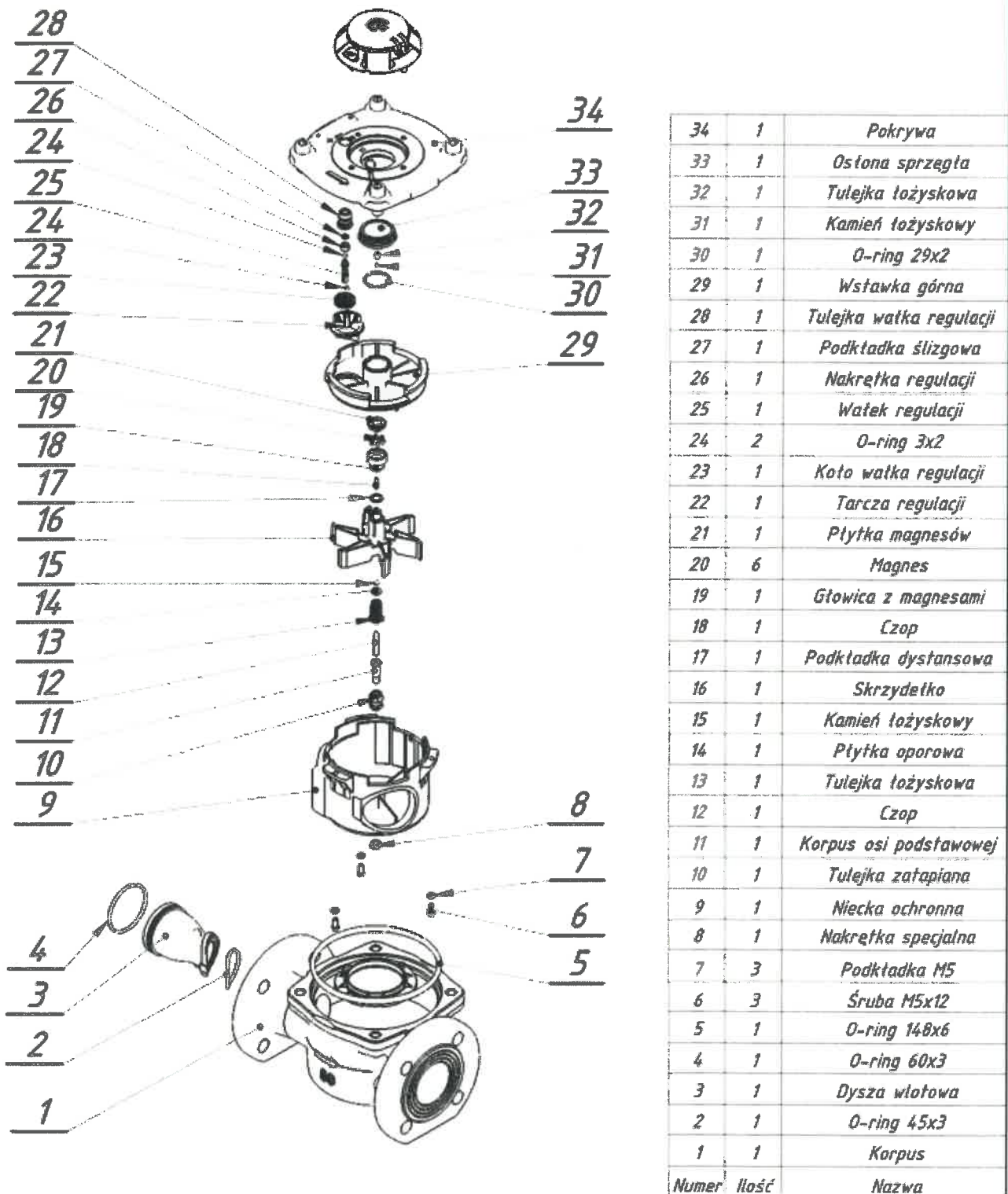


Fig. 4b Illustrative exploded view of water meter type JS50 to JS100
(sample DN50 - body with body components)

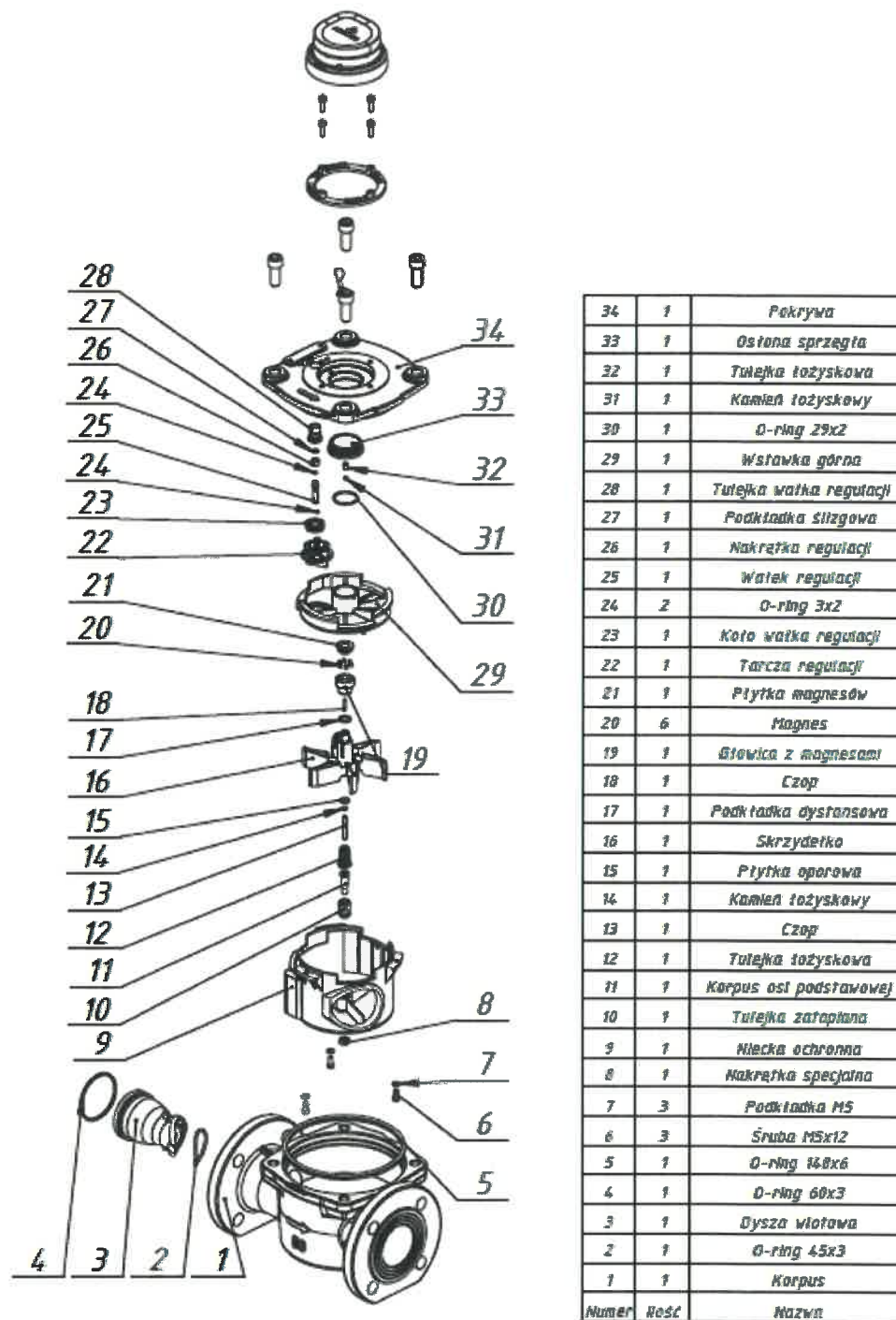
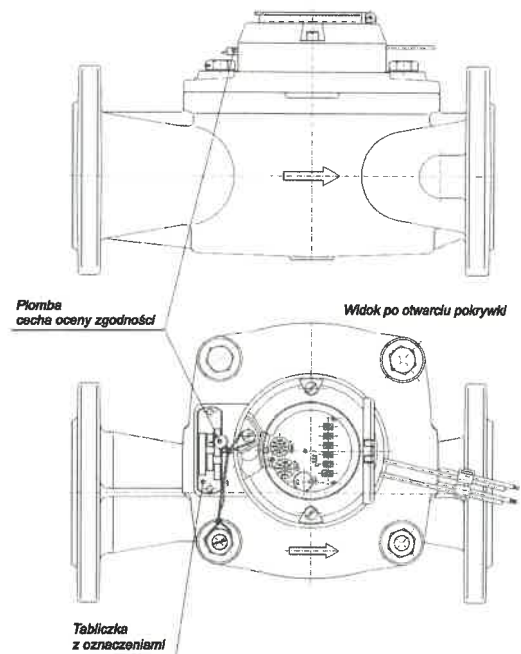
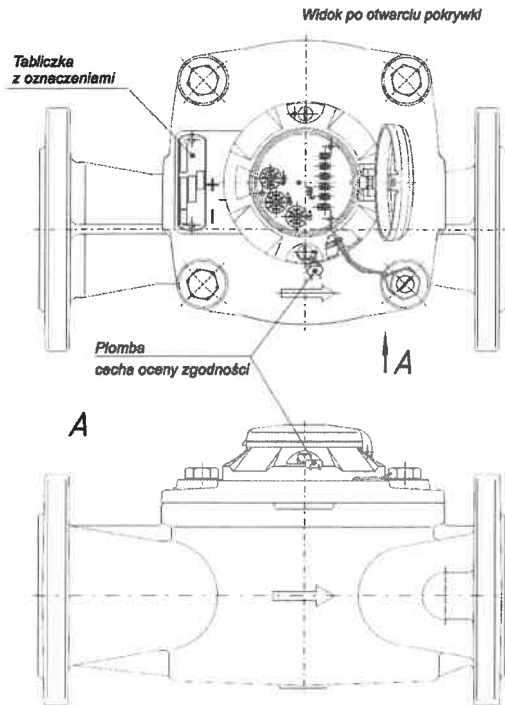


Fig. 4c Illustrative exploded view of water meter type JS50 to JS100 IP 68
(sample DN50 - body with body components)

JS50 - JS100

JS50 - JS100 NKO



JS50-08 to JS100-08

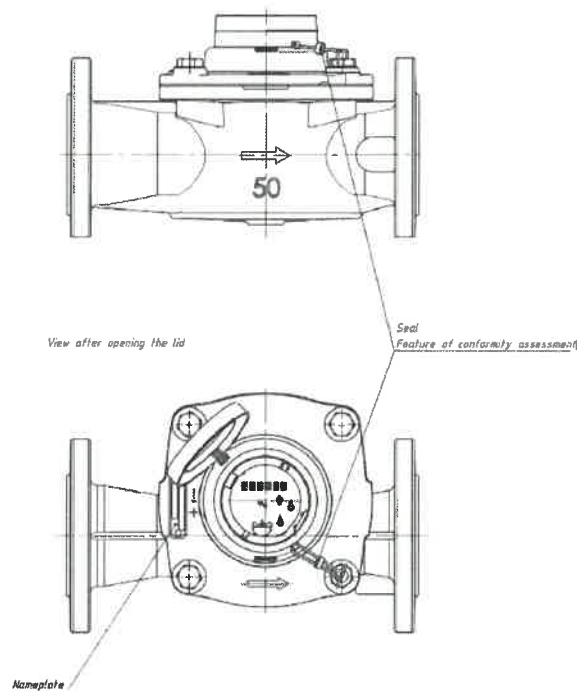


Fig. 5: Sealing of the water meters



Fig. 6a: Illustrative view of dial and marking of the water meters JS (samples for R315)

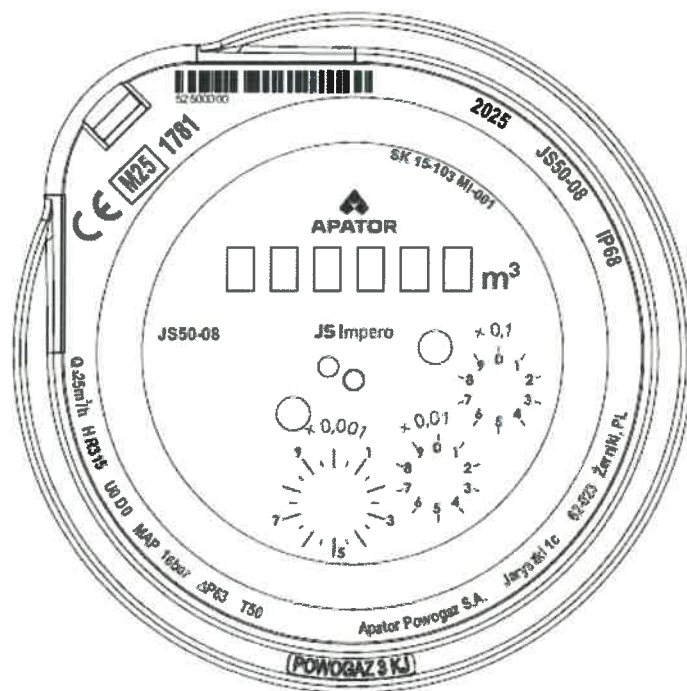


Fig. 6b: Illustrative view of dial and marking of the water meters JS...-08
(sample for DN50, R315)

12. History of certificate No. SK 15 – 103 MI-001

Rev.	add	Date of issue	Subject of amendment / extension
0	-	2015-12-10	First issue
1	-	2017-03-30	- assessment according to new MID Directive 2014/32/EU - add R160
2	-	2020-01-27	- new cover and components for cover - add data about IP68
2	1	2021-12-13	- add second manufacturer's address - add picture with new address
2	2	2022-04-29	- new manufacturer's address - add picture with new address
3	-	2025-12-11	- extension of the EU-type examination certificate validity by the ten years until 2035-12-11 - changed address of SLM NB 1432