EU TYPE EXAMINATION CERTIFICATE

No. PL-MI002-1450CQ0004

Instytut Nafty i Gazu – Państwowy Instytut Badawczy (INiG-PIB)
being the notified body under the number 1450 for
the Directive 2014/32/EU hereby states that the measuring instrument:

Diaphragm gas meters

type: **2UG G6 2UGT G6**

Digitally signed by Ceban Sergiu
Date: 2026.01.08 20:38:18 EET
Reason: MoldSign Signature
Location: Moldova
MOLDOVA EUROPEANĂ

being manufactured by: **APATOR METRIX S.A.**
ul. Grunwaldzka 14
83-110 Tczew, Polska

in: **APATOR METRIX S.A.**
ul. Grunwaldzka 14
83-110 Tczew, Polska

meets the essential requirements covered by the Directive 2014/32/UE of The European Parliament and of the Council of 26th February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of measuring instruments (OJEU of 2014 L 96) on the basis of EU type examination according to Annex IV (MI-002) of Directive 2014/32/EU and at the same time the requirements of Regulation issued by Minister of Development of 2nd June 2016 on requirements for measuring instruments, Annex no. 2 (Polish Journal of Laws of 2016 item 815)

document of reference: **PN-EN 1359:2017-11 [EN 1359:2017]**

test reports: 6/GM/2019p, 8/GM/2020P, 6/GM/2022; 33/GM/2022, 7/GM/2023, 32/GM/2025, 56/GM/2025, 57/GM/2025, 58/GM/2025
issued by:
Zespół Laboratoriów Badawczych Sieci, Instalacji i Urządzeń Gazowych
Instytutu Nafty i Gazu – Państwowego Instytutu Badawczego

pages: **7**

certificate is valid until: **16th December 2035**

Certification Office Manager
Magdalena Swat

Instytut Nafty i Gazu – Państwowy Instytut Badawczy

Director of Instytut Nafty i Gazu - Państwowy Instytut Badawczy
Jan Brożek

7th issue Kraków, 17-12-2025

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Appliance

Diaphragm gas meters

Models

2UG G6 2UGT G6

Case version

UG-EN UG-DE UG-MG

Design of the instrument

Diaphragm gas meter type 2UG and 2UGT consists of three units: measurement (battery), case and index.

Measurement unit body (battery) consists of measuring chambers protected by walls, each chamber operates moving diaphragms (bellows) that are connected from both sides of the body by the distribution duct with separate inlets and a common outlet duct. In the body there are two shafts coupled with diaphragm discs, and at the opposite side with a crankset, timing mechanism and an outlet bevel differential for the magnetic drive.
The 2UGT G6 gas meter is equipped with mechanical temperature compensation (bimetal).

Case unit comprises of two individually shaped upper and lower deep drawn vessels, when cross-sectioned resemble a rectangular form. The vessels have flanges, which are mated together and tightly connected by band clip creating a sealed unit. Connectors are placed securely within the upper part and the outlet connector of the battery is fitted securely to the outlet connector inside the upper part. The magnetic clutch sub-assembly is placed inside the front face of the upper part and the body of index units bevel differential (gearing) is then with magnetic drive.

Index unit has a body with two shafts for number drums and pinions. The initial number drum is coupled with a gear train drive transmission which rotates the number drums. In addition, a fascia plate is mounted to the body and an index window is secured over the fascia plate and body. The Index window allows the usage reading from number drums.

Technical documentation – list of figures			
1	Gas meter 2UG G6	fig No. MN000000(.XX)*	main assembly drawing
2	Gas meter 2UGT G6	Fig No. MN00000T(.XX)*	main assembly drawing

**XX – according to reference chart*

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Technical data

Gas meter trade name	Gas meter size	Maximum flowrate Q_{max}	Minimum flowrate Q_{min}	Cyclic volume V_c	Distance between connections
-	-	m^3/h	m^3/h	dm^3	mm
1	2	3	4	5	6
2UG G6	G6	10	0,06	2,2	0 ÷ 250
2UGT G6	G6	10	0,06	2,0	0 ÷ 250

Gas meter class	1,5
Mechanical Class.....	M1
Electromagnetic environment class	E1
Maximum operating pressure p_{max}	50kPa (0,5bar)
Ambient temperature range t_m	-25÷55°C
Gas temperature range t_g	-25÷55°C *for 2UG G6*, -25÷40°C *for 2UGT G6*
Resistance to high ambient temperature...	T (at 10kPa /0,1bar/ according to EN 1359:2017)
Index measuring range	99999,999 m^3
1 impulse value	0,01 m^3
Nominal cyclic volume	2,2 dm^3 *for 2UG G6*, 2,0 dm^3 for *2UGT G6*
Distance between connections	UG-EN: 000 mm or 130 mm or (6") 152,4 mm or 160 mm UG-DE: 220 mm or 250 mm UG-MG: 130 mm or (6") 152,4 mm or 160 mm
Nominal size of connector	DN20 ÷ DN50
Membrane type	EFFBE (material 401617P) or SMI (material CSQ3) *2UGT G6 only* EFFBE (material 401617P)
Weight	~2,8 ÷ 3,0 kg (depending on case version)
Family of gases	Gaseous fuels: family 1, 2 & 3 acc. to EN 437

Interfaces and compatibility conditions

Gas meter may be connected to reed relay low frequency impulse transmitter type NI-3 produced by Apator Metrix. This transmitter may cooperate with gas volume conversion devices or devices that record the flowrate corresponding to 1 impulse. 1 impulse value is 0,01 m^3.

Requirements on production, putting into use and utilisation

Production.

During production the following checks and inspections are being carried out:

- 100% inspection of incoming goods (the quantity inspection), statistical quality inspection;
- tests during production: measurement check, 100% leak test, statistical check of torque and statistical check of bending moment,
- final tests: checking internal and external tightness, marking, checking the operation of meter (selection of change gears), calibration.

Final tests consists also of checking the permissible errors of indication and pressure absorption in accordance with paragraph A.2.1. of EN 1359/A1:2006.

Installation, utilisation and repair.

Requirements concerning installation, utilisation and repair are described in operation and maintenance manual provided with the gas meter.

Control of the measuring tasks of the instrument in use

Gas meters are subject to conformity assessment according to directive 2014/32/EU (MID). In order to make a proof of performed conformity assessment the appropriate manufacturer's symbols are being stamped. Separate national legislation determine the date when gas meter should be submitted to next legalization after completion of conformity assessment.

Security measures

Gas meter UG may be secured by different means:

1) Through the index window.

   Down right on the transparent index window, the seal symbol "Mx" is printed before the index window is mounted. The index is locked by an index blockage when the index window is mounted. This locking can be released only if the index window is removed and thereby broken.

2) Securing by a seal.

   On the right side of the index, there is a possibility to apply a seal with manufacturer's symbol "Mx". This seal, too, prevents the opening of the index.

3) It is possible to secure the appliance using both of a/m ways, but the manufacturer's symbol "Mx" is printed only on 1 seal.

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Marking requirements

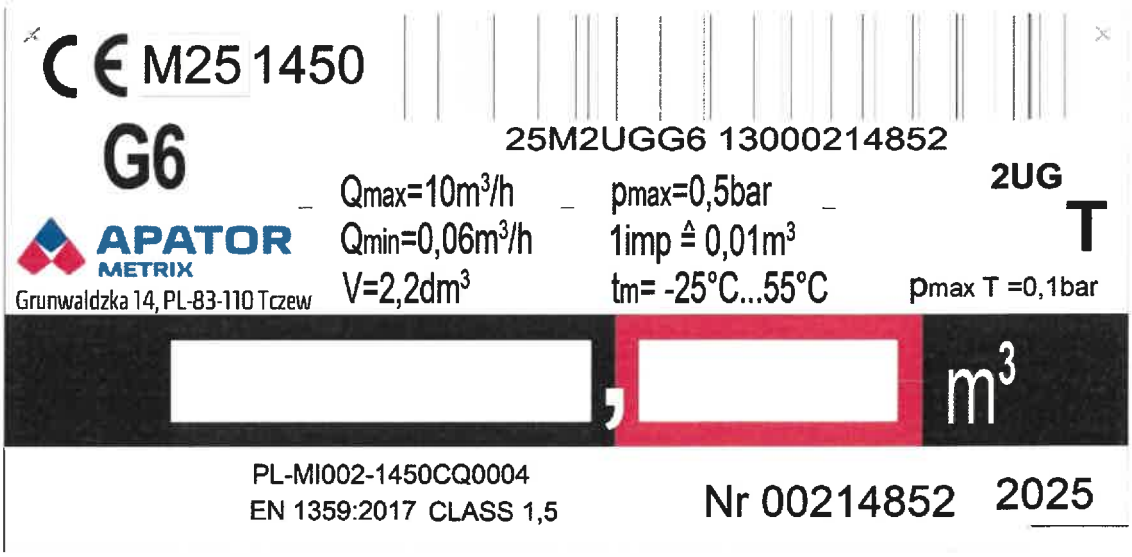
Each gas meter should bear a marking plate on index or as a separate plate having at least the following information:

a) identification mark or manufacturer's name;
b) CE mark, additional metrology marking, identifying number of notified body;
c) accuracy class of the meter;
d) meter's serial number and year of production;
e) maximum flowrate Q_{max} (m^3/h);
f) minimum flowrate Q_{min} (m^3/h);
g) maximum working pressure, p_{max} (bar);
h) nominal cyclic volume, V (dm^3) ;
i) number and issue year of standard of object;
j) ambient temperature range, if higher than -10°C to 40°C;
k) gas temperature range, if different from ambient temperature range;
l) additional marking required by legislation, e.g. the number of type examination certificate;

If gas meter is resistant to high ambient temperature it should be additionally mark with „T" symbol.
Marking should be visible and permanent in normal operating conditions of gas meter.
If gas meter is intended to use outdoors, it should be additionally marked with the symbol H3.

Labelling and inscriptions

Gas meter marking



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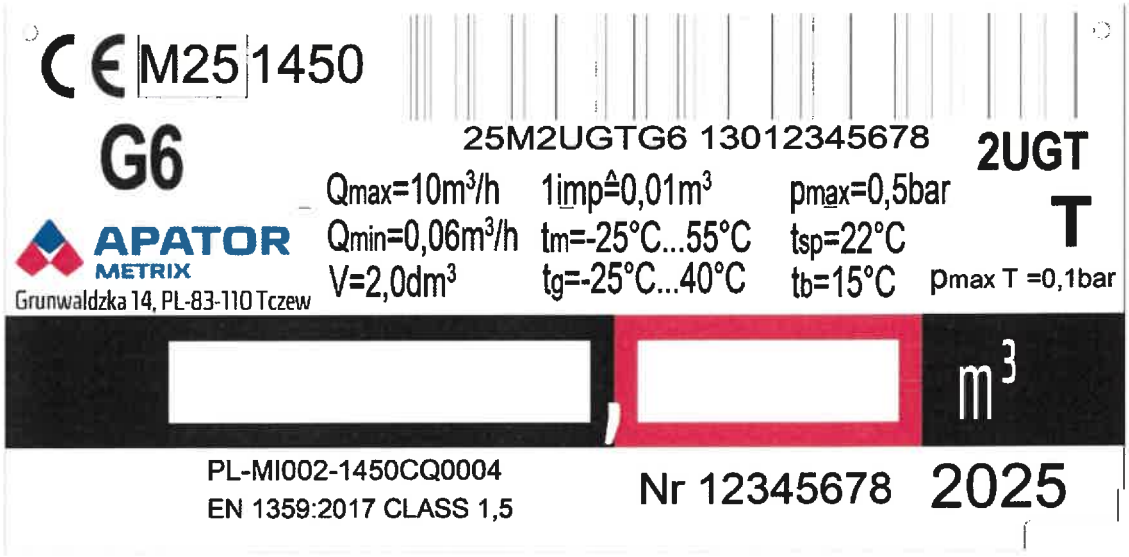
Labelling and inscriptions

Gas meter marking



Manufacturer's mark

Kraków, 17-12-2025

Certification Office
Manager
Magdalena Swat

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Table of certificate's revisions PL-MI002-1450CQ0004		
Issue No.	Description of introduces changes	Date
1	------	7-12-2015
2	Introducing of an alternative use of SMI membrane	21-01-2019
3	Change in the entry for nominal size of connector and deleting the table on page 2	14-05-2020
4	Information on the electromagnetic class E1 added, removal of marking K2v and membrane type notation corrected	08-09-2022
5	Change of reference documents (harmonised standards) and adding the supplementary test reports on page 1	27-02-2023
6	Extension of the scope of the certificate to include 2UGT G6 gas meters	02-10-2025
7	Prolongation of the certificate for a further 10 years and removal of the 2UG G4 gas meter from the scope of the certificate	17-12-2025