



EU - type examination certificate

Number **T10382** revision 7
Project number 3744075
Page 1 of 1

Issued by

NMi Certin B.V.,
designated and notified by the Netherlands to perform tasks with
respect to conformity assessment procedures mentioned in article 17
of Directive 2014/32/EU, after having established that the measuring
instrument meets the applicable requirements of Directive
2014/32/EU, to:

Manufacturer

Apator Metrix
S.A.
Grunwaldzka 14
83-110 Tczew
Poland
Diaphragm gas meter

Measuring
instrument

Type

: UG T
UG T HybridSmart

Manufacturer's mark or name

: Apator Metrix S.A.

Destined for the measurement
of

: Gas volume

Accuracy class

: Class 1,5

Environment classes

: M1 / E1

Ambient temperature range

: - 25 °C / +55 °C

Gas temperature range

: - 25 °C / +40 °C

Location

: Closed/Open

Further properties are described in the annexes:

- Description T10382 revision 7;
- Documentation folder T10382-6.

Valid until

9 September 2031

Initially issued

9 September 2011

Remark

This revision replaces the earlier versions, including its documentation
folder.

Issuing Authority

NMi Certin B.V., Notified Body number 0122
11 March 2024

Certification Board

NMi Certin B.V.
Thijssseweg 11
2629 JA Delft
The
Netherlands
T +31 88 636 2332
certin@nmi.nl
www.nmi.nl

This document is issued under the provision
that no liability is accepted and that the
manufacturer shall indemnify third-party
liability.

The designation of NMi Certin B.V. as
Notified Body can be verified at [http://
ec.europa.eu/growth/tools-](http://ec.europa.eu/growth/tools-databases/nando/)
[databases/nando/](http://ec.europa.eu/growth/tools-databases/nando/)

Reproduction of the complete
document only is permitted.

This document is digitally
signed and sealed. The digital
signature can be verified in the
blue ribbon at the top of the
electronic version of
this certificate.



1 General information about the gas meter

All properties of the gas meter, whether mentioned or not, shall not be in conflict with the legislation.

The meter is executed as follows:

- A gas meter with a mechanical register, indicating the volume at base conditions only, conform paragraph 2.1 of ANNEX IV (MI-002).

1.1 Essential parts

Description	Documentation	Remarks
Construction - 1,15 dm ³ - 1,2 dm ³ - 1,9 dm ³	10382/6-01 10382/6-01 10382/6-01	
Diaphragm - 1,15 dm ³ and 1,2 dm ³ - 1,9 dm ³	10382/6-02 10382/6-03	Material 401615P or 401617P, manufacturer EFFBE. Material 0P3NV/205, manufacturer SMI (type CSQ3).
Valve and valve seat - valve - valve seat	10382/6-04 10382/6-05	Material Delgra 90 and Delgra 100, manufacturer Elchi. Slider rods material brass or plastic (PBT). Coupling sleeve material brass or stainless steel.
Temperature compensation - 1,15 dm ³ - 1,2 dm ³ - 1,9 dm ³ - 2,0 dm ³	10382/6-07 10382/6-08 10382/6-09 10382/7-01 and 10382/7-02	

1.2 Essential characteristics

1.2.1 Approved meter types : UG T and UG T HybridSmart

G-value	Maximum Q_{max} [m ³ /h]	Minimum Q_{min} [m ³ /h]	Minimum Q_t [m ³ /h]	Cyclic Volume [dm ³]
4	6	0,040	0,6	1,15 or 1,20 or 1,90 or 2,0
2,5	4	0,025	0,4	1,15 or 1,20 or 1,90
1,6	2,5	0,016	0,25	

If higher values are chosen for Q_{min} and/or lower values for Q_{max} , it has to be taken into account that $Q_{max} / Q_{min} \geq 150$. For Q_t it has to be taken in account that the minimum value is not lower than the minimum value as indicated in the table above and that $Q_t \leq 0,1 Q_{max}$.

- | | | | | |
|-------|--------------------|-------------------|---|---------|
| 1.2.2 | maximum p_{\max} | Steel housing | : | 0,5 bar |
| | | Aluminium housing | : | 2 bar |

- 1.2.3 Indicated converted volume (optional)
The volume is converted through the following formula;

$$V_b = V_a * \frac{T_b}{T}$$

With T_b and T in Kelvin.

1.3 Essential shapes

- 1.3.1 The nameplate is bearing at least, good legible, the following information:
- CE marking including the supplementary metrological marking (M + last 2 digits of the year in which the instrument has been put into use);
 - Notified Body identification number, following the supplementary metrological marking;
 - type examination certificate no. T10382;
 - manufacturer's name, registered trade name or registered trade mark;
 - manufacturer's postal address;
 - serial number of the meter and year of manufacture;
 - Q_{\max} , Q_t and Q_{\min} ;
 - cyclic volume;
 - maximum working pressure p_{\max} ;
 - ambient temperature range;
 - gas temperature range;
 - accuracy class;
 - base temperature (t_b);
 - specific centre temperature (t_{sp});
 - resistance to high temperatures, marked with a 'T' (optional);

The following may be stated on either the nameplate or in the user manual:

- mechanical environment class;
- electromagnetic environment class.

Examples of the markings are shown in document no. 10382/6-10 and 10382/7-03.

- 1.3.2 Sealing: see chapter 2.

1.4 Conditional parts

- 1.4.1 **Housing** The gas meter has a housing, which has sufficient tensile strength. The cover is made of steel sheet, the lower and upper case are connected with each other by a clamp or the cover is made of aluminium alloy, the lower and upper case are connected with each other by screws. Examples of the different housing combinations are stated on drawings no. 10382/6-11, 10382/6-12 and 10382/6-13. The counter case is also connected to the upper case by screws. Examples of the bottom housing are depicted on drawings no. 10382/6-14, 10382/6-15, 10382/6-16, 10382/6-17, 10382/6-18 and 10382/6-19. Examples of the top housings are depicted in drawings no. 10382/6-20, 10382/6-21, 10382/6-22, 10382/6-23, 10382/6-24, 10382/6-25 and 10382/6-26.
- 1.4.2 **Transmission**
The transmission between the measuring part and the register is executed via a fixed mechanical coupling.
- 1.4.3 **Register**
The indication takes place in m³, by at least 5 drums before the comma and 3 drums after the comma. In drawings no. 10382/6-27 (UG T) and 10382/6-28 (UG T HybridSmart) examples of the counters are presented. The counter is adjustable via an adjusting wheel, see drawing no. 10382/6-29, 10382/6-30, 10382/6-31 and 10382/4-09.
- 1.4.4 **Shut-off valve (optional)**
The meter can be equipped with a shut-off valve which is mounted in the outlet of the meter. A drawing of the valve can be found in document number 10382/6-06.

1.5 Conditional shapes

- 1.5.1 **Connection**
The meter is executed with a double pipe connection. The diameter of the connections is at least 20 mm. The distance between the middle of the in- and outlet connection is 250 mm maximally.

The diameter of the single pipe connection is at least DN25.

1.6 Non-essential parts

- 1.6.1 **Reverse stop for preventing registration in reversed flow direction**
- 1.6.2 **Pulse generator**
- 1.6.3 **Hybrid Smart (optional)**
External encoder type "GWFCoder" connected to the output shaft on the mechanical index. See document 10382/6-28.
- 1.6.4 **Radio module (HybridSmart only).**



Description

Number **T10382** revision 7
Project number 3744075
Page 4 of 4

2 Seals

The following items of the meter are sealed:

- The entrance to the measuring part is sealed with one or more seals.
- The entrance to the register is sealed with one or more seals.

See drawing no. 10382/6-33 for an example of the sealing.