EC type-examination Certificate

Number **T10258** revision 6
Project number 14200172

Issued by	NMi Certin B.V., designated and notified by the Netherlands to perform tasks with respect to conformity modules mentioned in article 9 of Directive 2004/22/EC, after having established that the Measuring instrument meets the applicable requirements of Directive 2004/22/EC, to:
Manufacturer	Meter Italia S.p.A. Via Achille Grandi n. 39 41033 Concordia sulla Secchia Italy
Measuring instrument	A **Diaphragm Gas Meter**

Type	:	Ipn / S80 AT or MGxx AT; Ipn / S80 AL or MGxx AL; PhN 10 / 20 / 30 / 60 / 100 or MG40 / 65 / 100;
Manufacturer's mark or name	:	Meter Italia S.p.A.
Destined for the measurement of	:	Gas volume
Accuracy class	:	Class 1,5
Environment classes	:	M2 / E1
Location	:	See description §1.2
Temperature range	:	- 25 °C / +55 °C

Further properties are described in the annexes:
– Description T10258 revision 6;
– Documentation folder T10258-5.

Valid until	12 April 2020
Remarks	This revision replaces the earlier versions, except for its documentation folder.
Issuing Authority	**NMi Certin B.V., Notified Body number 0122** 1 February 2016

C. Oosterman
Head Certification Board

NMi Certin B.V.
Hugo de Grootplein 1
3314 EG Dordrecht
The Netherlands
T +31 78 6332332
certin@nmi.nl
www.nmi.nl

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 metering conditions, conform paragraph 2.1 of MI-002.

1.1 Essential parts

Description	Documentation	Remarks
Construction	10258/0-05, 10258/2-01, 10258/2-02, 10258/3-01, 10258/3-02	-
Diaphragm	10258/0-06	Material rubber coated polyester and NBR, manufacturer Reeves/Trellebor or EFFBE
Valve and valve seat	10258/0-06	Material fenolic resin and graphit, manufacturer Delgra or Vyncolit

1.2 Essential characteristics

1.2.1 See EC Type-examination certificate no. T10258 Revision 6 and the characteristics mentioned below:

Maximum p_{max}:	Ipn / S80 AT & MGxx AT	:	0,5 bar
	Ipn / S80 AL & MGxx AL	:	2,0 bar
	PhN 10 / 20 / 30 / 60 / 100 & MG 40 / 65 /100	:	0,5 bar
Location:	Ipn / S80 AT & MGxx AT	:	Open
	Ipn / S80 AL & MGxx AL	:	Open
	PhN 10 / 20 / 30 / 60 / 100 & MG40 / 65 / 100	:	Closed

G-value	Q_{max} [m^3/h]	Q_{min} [m^3/h]	Q_t [m^3/h]	V [dm^3]
100	160	1	16	120
65	100	0,65	10	60
40	65	0,4	6,5	35
25	40	0,25	4	20
16	25	0,16	2,5	10
10	16	0,1	1,6	10
4	6	0,04	0,6	1,2
2,5	4	0,025	0,4	1,2
1,6	2,5	0,016	0,25	1,2

1.3 Essential shapes

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;
- EC type-examination Certificate no. T10258;
- identification mark or name of the manufacturer;
- serial number of the meter and year of manufacture;
- Q_{max}, Q_t and Q_{min};
- maximum working pressure p_{max};
- ambient temperature range;
- gas temperature range;
- accuracy class

An example of the markings is shown in document no. 10258/5-01.

This measuring instrument was previously placed on the market under the name “Sacofgas 1927 S.p.A.”.

1.3.1 Sealing: see chapter 2.

1.4 Conditional parts

1.4.1 Construction
In addition to the essential parts as mentioned at 1.1, the meter contains at least the following conditional parts:
- housing;
- transmission;
- register.

The meter can also be provided with a low frequency impulse output.

Housing
The gas meter has a housing, which has sufficient tensile strength.
The lpn / S80 AL and MGxx AL covers are made of aluminium alloy, the lower and upper case are connected with each other by screws.
The lpn / S80 AT, MGxx AT, MG40, MG65, MG100 and PhN XX covers are made of steel sheet, the lower and upper case are connected with each other by a clamp for G-values up to and including G16. For larger G-values the lower and higher case are connected with each other by screws.
The counter case is also connected to the upper case by screws. Examples of the housing are stated on 10258/0-05, 10258/2-01, 10258/2-02 and 10258/3-02.

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 m^3, by a sufficient number of drums before the comma to ensure that the quantity passed during 8000 hours at Q_{max} does not return the drums to their initial values and a test element that enables tests to be carried out in a reasonable time. In drawing nr. 10258/0-08 an example of the counter is presented. The counter is adjustable via an adjusting wheel, see documentation nr. 10258/0-07.

1.4.4 Low frequency impulse output (optional)
In addition to the register a low frequency impulse output can be mounted to the meter. The pulse factor of the impulse output shall be indicated on the nameplate. In drawing nr. 10258/0-08 an example of the impulse output is presented. In drawing nr.10258/0-08 the position of the impulse output in the register is presented.

1.5 Conditional shapes

Connection
The meter is executed with a double pipe connection.

G-value	Minimum diameter of the connections [mm]	Maximum distance between connections [mm]
100	102	710
65	82	640
40	68	510
25	61	335
16	48	280
10	48	280
4	20	160
2,5	20	160
1,6	20	160

1.6 Non-essential parts

1.6.1 Reverse stop for preventing registration in reversed flow direction

1.6.2 Pressure measuring point with a maximum hole through the meter housing of 1 mm, mounted on the horizontal plane of the upper case or the front plane of the lower case.

1.6.3 Maximally three temperature sockets for measuring the gas temperature.

2 Seals

The following items of the meter are sealed:

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

See drawing no. 10258/0-05 and 10258/2-01 for an example of the sealing.