

Issued by NMI Certin B.V.

In accordance with The "Metrologiewet" (Stb. 2006, 137) and the "Regeling nationaal autonoom geregelde meetinstrumenten"

Producer Endress+Hauser Flowtec AG
Kägenstrasse 7
CH-4153 Reinach
Switzerland

A **measuring device** (Coriolis), for the measurement of Compressed Natural Gas, (CNG)

Type : CNGmass

Producer's mark or name : Endress+Hauser Flowtec AG

Flow rate range(Qmin-Qmax) : See § 0 of the description
Minimum measured quantity : See § 0 of the description
Accuracy class : 1,5
Environment classes : M2 / E2
Temperature range liquid : -40 °C / +55 °C
Temperature range ambient : -40 °C / +55 °C
Destined for the measurement of : Compressed Natural Gas (CNG)

Further properties and test results are described in the annexes:
- Description TC10997 revision 0;
- Documentation folder TC10997-1.

Issuing Authority **The Designated Body, NMI Certin B.V.**
18 September 2017


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1 General information about the measuring device

All properties of this measuring system, whether mentioned or not, shall not be in conflict with the legislation.

1.1 Essential parts

1.1.1 The measurement sensor is composed of the following parts:

Description	Documentation	Remarks
CNGmass	10997/0-01	Picture
CNGmass flow diagram	10997/0-02	
Electronics Assembly Amplifier V13	10997/0-03	
Electronics Parts Amplifier V13	10997/0-04	
Electronics Assembly power supply IO N06	10997/0-05	
Electronics Parts power supply IO N06	10997/0-06	
CNGmass Name Plate	10997/0-07	Example
CNGmass Sealing	10997/0-08	Example

1.2 Essential characteristics

In addition to the characteristics stated on page 1 of this Test Certificate, the following characteristics apply:

- DN08 measurement sensor
 - Minimum – Maximum flow rate: 0,3 – 30 kg/min
 - Maximum pressure: 350 bar(g)
 - Minimum measured quantity: 1 kg
- DN15 measurement sensor
 - Minimum – Maximum flow rate: 0,8 – 80 kg/min
 - Maximum pressure: 350 bar(g)
 - Minimum measured quantity: 1 kg
- DN25 measurement sensor
 - Minimum – Maximum flow rate: 1,5 – 150 kg/min
 - Maximum pressure: 350 bar(g)
 - Minimum measured quantity: 2 kg

1.3 Essential shapes

- Inscriptions

The main nameplate is bearing at least, good legible, the following information:

- the Test Certificate number TC10997;
- name or trade mark of the manufacturer;
- the measurement sensors designation (type);
- serial number and year of manufacture;
- Minimum – maximum flow rate;
- Maximum pressure;
- Characteristics of the product, for example product name; viscosity.

Parts of the inscriptions (except for the Test Certificate number and serial number) may be stated on the nameplate or on a separate Data Sheet belonging to the complete measuring system.

See documentation number 10997/0-07 for an example of the nameplate.

- Sealing: see chapter 2.

1.4 Conditional parts

Not applicable

1.5 Conditional characteristics

Not applicable

2 Seals

The following seals are applied:

- The measuring device against opening;
- The main circuit board read only switch;

See documentation number 10997/0-08 for an example of the sealing positions.

3 Conditions for Conformity Assessment

- Other parties may use this Evaluation Certificate only with the written permission of the producer.
- The flow measuring device shall be calibrated with water at least on two points. Precise calibration points depend on line size.



Description

Number **TC10997** revision 0
Project number 16200831
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4 Reports

An overview of performed tests is given in the reports:

- No. CPC-607296-1a dated 7 February 2007 that includes 72 pages;
- No. CPC-10200012 dated 8 February 2010 that includes 23 pages;
- No. NMI-16200831-01 dated 7 July 2017 that includes 41 pages;
- No. NMI-16200831-02 dated 19 July 2017 that includes 17 pages.

A report can be a test report, an evaluation report, a type evaluation report and/or a pattern evaluation report.