



Evaluation Certificate



Number **TC7272** revision 2 Project number 2347005 Page 1 of 1

Issued by

NMi Certin B.V.

In accordance with

- WELMEC 8.8 "General and Administrative Aspects of the Voluntary System of Modular Evaluation of Measuring instruments under the MID".

OIML R117-1 Edition 2007 (E) "Dynamic measuring systems for liquids

other than water".

Producer Wennstrom Flow Control AB

Kungsgatan 16 SE 73636 Kungsör

Sweden

Part A **gas separator**, intended to be used as a part of a measuring system for

road tanker with volumetric measuring devices.

Producer's mark or name : Wennstrom

Type designation : FC80B and FC100B

Destined for the measurement of : Petroleum(gasoline) or domestics

fuel oil (diesel)

Further properties and test results are described in the annexes:

- Description TC7272 revision 2;

Documentation folder TC7272-2.

Remarks – This revision replaces the previous revisions;

- The documentation folder replaces the previous documentation folder.

Issuing Authority

NMi Certin B.V.

3 May 2019

C. Øosterman

Head Certification Board

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

Reproduction of the complete document only is permitted.





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



Description

Number **TC7272** revision 2 Project number 2347005 Page 1 of 1

1 General information on the gas separator

Properties of the gas separator, whether mentioned or not, shall not conflict with the legislation.

This Evaluation Certificate is the positive result of the applied voluntary, modular approach, for a component of a measuring instrument, as described in WELMEC 8.8.

The complete measuring system must be covered by an EC-type examination certificate or an EU-type examination certificate.

1.1 Essential parts

The gas separator is composed of the following parts:

| Description | Documentation | Remarks |
|----------------------------------|---------------|------------|
| FCS11 or FCS13 FCAU2 or FCAU3 | 7272/3-01 | schematics |
| FCS documentation | 7272/3-03 | |
| Installation requirements | 7272/3-03 | example |

The gas separator is based on the continues flow monitoring and composed of three main component. The flow sensor controls the flow, the stop valve stops the flow if air of gas is detected and the degassing unit extract air or gas out of the main line.

1.2 Essential characteristics

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

| Qmax [L/min] | Pressure range [bar(g)] | Minimum Measured Quantity | Remarks |
|-----------------|----------------------------|---------------------------------|--------------|
| 1300 | 0,2 –10 | 500 L | Pumped flow |
| 1000 | 0 – 10 | 500 L | Gravity flow |

Mechanical environment classes : M3 / E3
Temperature range ambient : -25 °C / +55 °C
Temperature range liquid : -10 °C / +50 °C



Description

Number **TC7272** revision 2 Project number 2347005 Page 2 of 2

1.3 Essential shapes

1.3.1 Installation of the flow sensor

The flow sensor must be positioned is the Main pipe. Depending on the type of system the installation varies:

1.3.1.1 Gravity delivery systems

The minimum distance between the flow sensor and the meter is 385 mm for the gravity delivery. The main pipe must be continuously sloping down.

1.3.1.2 Pumped flow delivery systems

The minimum distance between the flow sensor and the meter is 500 mm for the pumped delivery. The main pipe must be continuously sloping upwards between the pump and the airing pipe. It must then be continuously sloping downwards from the airing pipe to the meter.

1.3.2 Switch position

To keep the pipe work between meter and the transfer point full of liquid during measurement switch SW 2 in the FlowCheck sensor should be in position "D" as show in drawing 7272/3-04.

1.3.3 Inscriptions

On the gas separator, clearly visible, at least the following is inscribed:

- Evaluation Certificate number TC7272;
- Name or trade mark of the producer;
- Type designation;
- Serial number.

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

See documentation no. 7272/3-06 for an example of the markings.

1.4 Conditional parts

- Stop valve

The stop valve is a is pneumatically operated ball valve and is mounted directly behind the meter. See for dimensions drawing 7272/3-01

1.5 Non essential parts

- Filter;
- Pump.



Description

Number **TC7272** revision 2 Project number 2347005 Page 3 of 3

2 Seals

The following seals are applied:

- The inscriptions are fixed to the gas separator and secured against removal by seal or it will be destroyed when removed.
- Sealing of the gas separator against unauthorised opening of the housing.

See documentation no. 7272/3-05 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.

4 Reports

An overview of performed tests is given in the report:

- E6/M6/25255 dated 13 March 2000 that includes 2 pages.

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