

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Submersible Pressure Transmitter**with type designation(s)
8859 ...

Issued to

Trafag AG
Bubikon ZH, Switzerlandis found to comply with
DNV GL rules for classification – Ships**Application :****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.****Location classes:**

Temperature	B
Humidity	B
Vibration	A
EMC	B
Enclosure	D

Issued at **Hamburg** on **2017-03-29**This Certificate is valid until **2019-11-09**.DNV GL local station: **Augsburg**for **DNV GL**Approval Engineer: **Dariusz Lesniewski**

Joannis Papanuskas
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Job Id: **262.1-024416-1**
Certificate No: **TAA000014B**

Product description

Pressure type: gauge or absolute (vacuum)
Pressure range: 0...0.1 bar up to 0...25 bar
Power supply: 24V DC (9V DC min. ... 28V DC max.)
Output signal: 4...20mA, 2-wire connection, loop-powered
Accuracy: better than $\pm 0.25\%$ FS (at 25°C)
Total error range: better than $\pm 1.0\%$ FS
Electrical connection: fixed cable
Fixing: freely suspended cable
Material: housing, diaphragm, process connection - stainless steel or titanium
 seals - Viton
 cable PUR or FEP (Installation inside tank only)
Degree of protection: IP68

Place of manufacture

STS Sensor Technik Sirnach AG
Rütihofstrasse 8
8370 Sirnach, Switzerland

Application/Limitation

Models with cable material PUR or FEP for installation inside tank only

Type Approval documentation

Tests carried out

GL Guidelines for the Performance of Type Approvals, Chapter 2,
Test Requirements for Electrical / Electronic Equipment and Systems (VI-7-2), Edition 2012

Marking of product

The products to be marked with:
- manufacturer name
- model name
- serial number

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed at least every second year and at renewal of this certificate.

END OF CERTIFICATE