

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Level Transmitter**with type designation(s)
GT 310 / GT 310T

Issued to

Göpfert AG
Weddingstedt, Schleswig-Holstein, Germany

is found to comply with

DNV GL rules for classification – Ships, offshore units, and high speed and light craft**Application :****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.****Temperature B****Humidity B****Vibration A****EMC B****Enclosure Required protection according to the Rules shall be provided upon installation on board.**Issued at **Hamburg** on **2019-03-22**for **DNV GL**This Certificate is valid until **2024-03-21**.DNV GL local station: **Magdeburg**Approval Engineer: **Marco Rinkel****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.



Product description

Level transmitter with metal sensor and fully welded stainless steel design.

- Ranges from 10 mbar to 25 bar gauge and absolute
- Digital 4 ... 20 mA output with HART protocol
- Accuracy $\leq \pm 0,25\%$ FS @ 25° C and $\leq \pm 0,5\%$ FS ($\leq \dots 250\text{mbar}$)
- Optional integrated Pt 100 / Pt 1000 sensor
- Supply voltage 12 ... 30 VDC
- Explosion proof marking: Ex ia IIC T4 / T6 Ga
- Used cable in accordance to the flame test report Nexans SQ086/13

Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case.

Reference is made to DNV GL Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

Ex-certification is not covered by this certificate. Application in hazardous area to be approved in each case according to the Rules and Ex-Certification/ Special Condition for Safe Use listed in valid Excertificate issued by a notified/recognized Certification Body.

Type Approval documentation

Test reports : EMC Hermes 13-L-00126-01 (2013-01-17); Environmental Paconsult 13-5261 rev 1 (2013-08-28); flame test report SQ086/13

Technical documentation: Data sheet GT310/GT310T version 09.13-01

Explosion proof certificate TPS 13 ATEX 85150 002

Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, November 2016.

Marking of product

The products to be marked with:

- Model name
- Manufacturer 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

END OF CERTIFICATE