DNV·GL

Certificate No:
TAA00000X8

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Pressure Transmitter

with type designation(s)
DE28

Issued to
FISCHER Meß- und Regeltechnik GmbH
Bad Salzuflen, Germany

is 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 (Cold test with 0°C/16h)**
Humidity	**B**
Vibration	**A**
EMC	**B**
Enclosure	**B (IP 54 tested)**

This Certificate is valid until **2021-12-06**.

Issued at **Hamburg** on **2016-12-07**

for **DNV GL**

DNV GL local station: **Magdeburg**

Approval Engineer: **Klaus-Peter Schröder**

Duy Nam Le
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.

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Job Id:
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Product description

Differential pressure transmitter

Measuring ranges	0 … 400mbar 0 … 0.6bar 0 … 1bar 0 … 1.6bar 0 … 2.5bar 0 … 4bar 0 … 6bar
Output signal	Current output : 0 … 20mA 4 … 20mA Voltage output : 0 … 10V
Auxiliary energy	Rated voltage current output: 24V AC/DC Rated voltage voltage output: 24V AC/DC
Cable screw connection	M16 x 1.5mm
Cable	SABIX BL 400 FRNC 4x0.75mm² 1 m numbered cable, permanently wired 2.5 m numbered cable, permanently wired 5 m numbered cable, permanently wired
Material housing	PA6 GB30
Material Cable screw connection	PA6
Material Cable outer jacket	Special SABIX SHF 1 mix acc. to IEC 60092-359

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 RU SHIP Pt.4 Ch.9 Sec. 1.

Type Approval documentation

Tests carried out

Applicable tests according to Class Guideline DNVGL-CG-0339, Edition November 2015.

Marking of product

The products to be marked with:
- manufacturer name
- Article number
- Measuring range, output signal, voltage
- Production 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