DNV·GL

Certificate No:
TAA00000W9

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Level Alarm System

with type designation(s)
Rosemount TankRadar Overfill Alarm System OCA51;Transmitter OTG51

Issued to
Rosemount Tank Radar AB
Mölnlycke, Sweden

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.

Location classes:

Type	Temperature	Humidity	Vibration	EMC	Enclosure
Rosemount TankRadar Overfill Alarm System OCA51	**A**	**B**	**A**	**B**	**Required protection according to the Rules to be provided upon installation on board**
Transmitter OTG51	**D**	**B**	**A**	**B**	**C**

This Certificate is valid until **2018-12-31**.

Issued at **Høvik** on **2016-11-14**

for **DNV GL**

DNV GL local station: **Gothenburg**

Approval Engineer: **Jens Erling Bråten**

Odd Magne Nesvåg
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:
Certificate No: **TAA00000W9**

Product description

Tank Gauge Mechanics, OTG51
Tank Gauge Electronics, TGE51

System cabinet, OCA51 including:
- Communication and signal board, OCX51
- Supply and safety barrier, SCT51
- Common alarm unit, CU2
- Alarm unit, AU1 / AU1.1
- Power supply, PULS ML70.100 / 10.100
- Power supply, NVD-SC
- Alarm panel, OPA51

Application/Limitation

The system provides separate and independent channels for the High Level and Overfill (High High Level) alarms. A single level sensor assembly with the OTG51 is considered acceptable for covering both the overfill alarm and the high level alarm. This applies also where separation is unconditionally required by DNV GL rules, provided that the functions are implemented as 2 independent channel cards, each with independent power supply and output to independent channels.

Ex installations to be approved in each case according to the Rules and Ex-Certification**/** Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body.

Ex-certification is not covered by this certificate and the following paragraph, which is for information only, is based on information received from the manufacturer, but not verified by DNV GL.

Information on Ex-Certification received from manufacturer – Not verified by DNV GL		
Equipment	Certified	Certificate No.
Tank Gauging System	Ⓔx II (1) G [Ex ia Ga] IIC 0ºC ≤Ta≤70ºC Ⓔx II 1 G Ex ia IIC T4 Ga -40ºC≤Ta≤70ºC	Nemko 01ATEX338X Issue 12

Approval conditions

The following documentation of the actual application is to be submitted for approval in each case:
- Reference to this Type Approval Certificate
- System block diagram
- Power supply arrangement (may be part of the System block diagram)
- Single line diagram for IS-circuits
- Drawing showing location of equipment

The Type Approval covers hardware and software listed under Product description.

As long as the units are covered by the Type Approval, a product certificate according to Pt.4 Ch.9 Sec.1 [1.2.3] will not be required. Correct configuration and set up for each delivery to be tested during commissioning after installation.

Type Approval documentation

Tests carried out

Applicable tests according to Standard for Certification No. 2.4, April 2006.
Functional test (initial survey), Gothenburg 11.02.10

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