

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Level Transmitter**with type designation(s)
Rosemont 5408 level transmitter

Issued to

Rosemount Tank Radar AB
Mölnlycke, Västra Götalands Län, Swedenis 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:****Temperature D****Humidity B****Vibration A****EMC B****Enclosure C****** - for stainless steel housing****Enclosure Class B for Rosemont 5408 aluminium housing**Issued at **Høvik** on **2018-11-23**This Certificate is valid until **2023-11-22**.for **DNV GL**DNV GL local station: **Gothenburg**Approval Engineer: **Sergey Gilmiyarov**

Jan Tore Grimsrud
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

The Rosemount 5408 is a two-wire non-contacting radar transmitter for continuous level measurement of liquids, slurries, and solids.

The Rosemount 5408 will be used for monitoring, process-control, and safety functions such as overfill prevention, level deviation monitoring or dry-run prevention.

Place of manufacture

Rosemount Tank Radar AB,
Mölnlycke, Sweden

Application/Limitation

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 paragraphs, which are for information only, is based on information received from the manufacturer, but not verified by DNVGL.

FM15ATEX0055X	Equipment Group II, Category 1G, Ex ia IIC T4...T2 Ga Equipment Group II, Category 1/2G, Ex ib IIC T4...T2 Ga/Gb Equipment Group II, Category 1D, Ex ia IIIC T85°C...T250°C Da Equipment Group II, Category 1/2G, Ex db IIC T6...T2 Ga/Gb Equipment Group II, Category 2D, Ex tb IIIC T85°C...T250°C Db
---------------	---

FM15ATEX0056X	Equipment Group II, Category 3G, Ex nA IIC T4...T2 Gc
---------------	---

IECEx FMG 15.0033X	See certificate for approved protection types
--------------------	---

Type Approval documentation

Tests carried out

ProdApp-0215	Performance Test Specification	Issue 1
Eagle-Prod_Doc_TH0252	5408 Marine TA - Test Specification	Issue1.1

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

Marking of product

Typical model number: **5408 A 1 S H A 1 E5 1 R 3 AB CAB 3 M5 DA1**

All options listed in the *5408 Product Data Sheet, rev BA*, document number 00813-0100-4408 issued Oct 2017 **except:**

- Process connection type: Tri Clamp (C)
- Process connection type: Bracket Mounting (B)

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:

Job Id: **262.1-027639-1**
Certificate No: **TAA0000230**

- 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 after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE