

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Temperature Transmitter

with type designation(s)
3144P

Issued to

Rosemount, Inc.
Cedar Grove NJ, USA

is found to comply with

Det Norske Veritas' Rules for Classification of Ships and High Speed and Light Craft
Det Norske Veritas' Offshore Standards

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	A
Enclosure	D

Issued at **Hamburg** on **2018-01-22**

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

DNV GL local station: **New York**

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: **262.1-027201-1**
Certificate No: **TAA00001JK**

Product description

Rosemount 3144P Temperature Transmitter

Place of manufacture

Rosemount Inc.
8200 Market Blvd
Chanhassen, MN 55317, USA

Rosemount Inc.
6021 Innovation Blvd
Shakopee, MN 55379, USA

Emerson Process Management Ltda.
Av. Hollingsworth, 325 – Iporanga
18087-105 – Sorocaba – SP, Brazil

Emerson Process Management Asia Pacific Pte. Ltd.
(Rosemount Measurement)
1 Pandan Crescent
Singapore 128461, Republic of Singapore

Beijing Rosemount Far East Instrument Co., Ltd.
Building No. 1, South of Shengfang Road, Qian Gao Mi Dian, Economic Development Zone
Beijing, China 102600

Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, 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 Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

Application/Limitation

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 Ex-certificate issued by a notified/recognized Certification Body.

Type Approval documentation

Tests carried out

Applicable tests according to Standard for Certification No. 2.4, April 2006.
Enclosure tested for IP68 down to 3 meter according to IEC 60529:2001.

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



Job Id: **262.1-027201-1**
Certificate No: **TAA00001JK**

- 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