DNV·GL

Certificate No:
TAA00000YY

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Electrical Indicators

with type designation(s)
Field indicator RIA14

Issued to
Endress+Hauser Wetzer GmbH & Co. KG
Nesselwang, 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	**D (Cold test -40°C / 16h)**
Humidity	**B**
Vibration	**A**
EMC	**B**
Enclosure	**B (IP67 tested according to IEC60529, field housing type F2)**

This Certificate is valid until **2021-07-18**.

Issued at **Hamburg** on **2016-12-20**

for **DNV GL**

DNV GL local station: **Augsburg**

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

Microcontroller controlled indicator in single chamber field housing with illuminated LC display. The measuring range, decimal point and offset of the indicator can be configured by means of three keys in the device with the housing open or by means of a PC with the FieldCare PC software. The indicator is looped into the 4 to 20 mA circuit and obtains the required energy from there.

Input	Measured variable Measuring range	Current 4 to 20mA
Output	Output signal	Digital limit switch Passive, open collector
Power supply	Supply voltage Cable entry	Supply by means of the 4 to 20 mA current loop Thread NPT1/2, M20, G1/2
Installation	Mounting location	Wall
Mechanical construction	Material housing	Die cast aluminum housing Option: Stainless steel housing (316L)
Display	LC-display with 5-digit	display range -19999 to +99999

Firmware release: 01.00.xx

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.

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-Certificates issued by a notified/recognized Certification Body:
The relevant Certificates are: KEMA 04ATEX2306 U, KEMA 04ATEX2307, KEMA 08ATEX0023.

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:
· device 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
Periodical assessment is to be performed at least every second year and at renewal of this certificate.
END OF CERTIFICATE