

# **TYPE APPROVAL CERTIFICATE**

Certificate No: **TAA00000YY Revision No:** 1

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 В Vibration Α EMC в B (IP67 tested according to IEC60529, field housing type F2) Enclosure

Issued at Hamburg on 2021-09-23 This Certificate is valid until 2026-07-18. DNV local station: Augsburg

Approval Engineer: Holger Jansen

for DNV

Joannis Papanuskas **Head of Section** 

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD



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**

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	Current
	Measuring range	4 to 20mA
Output	Output signal	Digital limit switch
		Passive, open collector
Power supply	Supply voltage	Supply by means of the 4 to 20 mA current loop
	Cable entry	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, 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 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 DNV-CG-0339, August 2021.

## Marking of product

- The products to be marked with:
- device name
- manufacturer name
- serial number



 Job Id:
 262.1-024129-2

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 TAA00000YY

 Revision No:
 1

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

END OF CERTIFICATE