DNV·GL

Certificate No:
**TAA00002ER**

# TYPE APPROVAL CERTIFICATE

## This is to certify:

**That the Level Transmitter**

with type designation(s)
**PS3xxA**

Issued to
## IFM Electronic GmbH
**Essen, Nordrhein-Westfalen, Germany**

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:**

| | |
|---|---|
| **Temperature** | **D** |
| **Humidity** | **B** |
| **Vibration** | **A** |
| **EMC** | **B** |
| **Enclosure** | **D** |

Issued at **Hamburg** on **2019-07-30**
This Certificate is valid until **2024-07-08**.
DNV GL local station: **Augsburg**

Approval Engineer: **Dariusz Lesniewski**

for **DNV GL**

**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.


© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

## Product description

Power supply: 10…30V DC
Output signal: 4...20mA, 2-wire
Pressure ranges: 0...0.1bar up to 0…10 bar
Accuracy: typical better then 0.5% of FS
Electrical connection: vented FEP-cable
Wetted parts: CrNi-Steel
Degree of protection: IP 68 (max. depth 100m)
Ex-proof protection: see Ex-proof certificates
Media: liquids which will not obstruct the pressure system or attack stainless steel parts or attack cable material

## Approval conditions

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 rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

## Type Approval documentation

## Tests carried out

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

## Marking of product

The products to be marked with:
- manufacturer name
- model name
- serial number
- power supply ratings

## 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

A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE