

Certificate No: TAA00002BV

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Level Switches

with type designation(s) NK06

Issued to

FISCHER Mess- und Regeltechnik GmbH Bad Salzuflen, 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 Humidity В Vibration **EMC**

Required protection according to DNVGL Rules shall be provided upon **Enclosure**

installation on board

Issued at Hamburg on 2019-06-03

This Certificate is valid until 2024-06-02.

DNV GL local station: Magdeburg

Approval Engineer: Holger Jansen

Digitally Signed By: Rinkel, Marco

for **DNV GL**

Location: Hamburg, on behalf of

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.



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Product description

Electronic Level Switch Electrodes

Type: NK06

Number electrodes: 1 ... 3
Working pressure: max. 10 bar
Media temperature: max.60°C
Ambient temperature: -20°C ... 50°C

Material electrode head: brass

Material electrode: stainless steel 1.4305

Length of electrode: max. 1000 mm

Screwed plug: G1"A

Conductivity min.: 5 @S/cm (min.)
Appliance plug: GDME 3011

To be used with level circuit electronic type ER76 = GT76.

In case of several electrodes rods with a length of > 500 mm spacers have to be used.

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 Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

Type Approval documentation

Data sheet: NK06, 2008-08-13

Part list no: NK06 Dwg.-no.07.006.02.06554.V, Rev.AA, 2018-04-13 Drawing no: NK06 Dwg.-no.07.006.00.26514.2, Rev. f; 2016-07-18

Type Approval Assessment Report 2019-05-21

Tests carried out

Applicable tests according to DNV GL Class Guideline CG0339, November 2016.

Marking of product

The products to be marked with:

- Model name
- Manufacturer name
- Serial number

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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.

FND OF CERTIFICATE

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