DNV·GL

Certificate No:
TAA000018T

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Level Switches

with type designation(s)
HIF, HIF-Ex

Issued to
Shanghai KSR-Kuebler Automation Insturment Co., Ltd.
Shanghai, China

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	**B**
Humidity	**B**
Vibration	**A**
EMC	**B**
Enclosure	**B / IP 65**

This Certificate is valid until **2022-06-13**.

Issued at **Hamburg** on **2017-06-14**
DNV GL local station: **Augsburg**

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.

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Job Id:
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Product description

Magnetic Float Switch
Rated pressure: 160 bar
Max. admissible temperature: 400 °C
Material housing: stainless steel, aluminium
Material wetted parts: stainless steel, titanium
Insert length: max. 300 mm
Switch: reed contact
Contact rating (n/o or n/c):
250 V AC / 100 VA / 2 A
250 V DC / 50 W / 1 A
Contact rating (c/o):
250 V AC / 40 VA / 1 A
250 V DC / 20 W / 0.5 A
Degree of protection: IP 65
Ex protection: according to the certificate IBExU03ATEX 1038 X
Horizontal installation

Type Approval documentation

Tests carried out

Applicable tests according to Class Guidance DNVGL-CG-0339, November 2016

Marking of product

The products to be marked with:
- model 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 once in the period of validity and at renewal of this certificate.

END OF CERTIFICATE