

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Level Switches**

with type designation(s)
FLS-FMS, FLS-DMS, FLS-TMR

Issued to

Hanla IMS Co., Ltd.
Busan, Republic of Korea

is found to comply with
DNV GL rules for classification – Ships and offshore units

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Temperature	D
Humidity	B
Vibration	A
EMC	-
Enclosure	C (IP56)

This Certificate is valid until **2021-06-30**.

Issued at **Busan** on **2016-07-18**

DNV GL local station: **Pusan**

Approval Engineer: **Byoung So Lee**

for **DNV GL**

Baeg Soon Choi
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.

Product description

FLS-FMS Series	Magnetic type float level switch
FLS-DMS Series	Displacer type float level switch
FLS-TMR Series	Reed switch type float level switch

Application/Limitation

Maximum working pressure: 10 kg/cm².
Contact rating 5A/220VAC, for TMR 0,5A/220VAC
For application in hazardous areas, safety barriers to be used.

Application/Limitation

The Type Approval covers hardware listed under Product description.
DNV GL product certificate is not required unless it is required by applicable DNV GL rules.

Type Approval documentation

Tests carried out

Vibration-, heat-, cold- humidity-, inclination tests.

Periodical assessment

The scope of the retention/renewal survey 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 survey 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
- Retention survey is to be performed at least every second year and at renewal of this certificate.



Job Id: **262.1-005684-4**
Certificate No: **TAA00000KB**

END OF CERTIFICATE