DNV·GL

Certificate No:
TAA00001XT

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Level Switches

with type designation(s)
FG, FF, EF, FD

Issued to
FineTek Co.,Ltd.
New Taipei City, Taiwan

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.

Temperature	**C**
Humidity	**B**
Vibration	**A**
EMC	**A**
Enclosure	**B**

Issued at **Hamburg** on **2018-07-12**
This Certificate is valid until **2023-06-30**.
DNV GL local station: **Kaohsiung**

Approval Engineer: **Jens Dietrich**

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.

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Product description
This Type Approval covers following units:

FG… Magnetic float level indicator
FF… Magnetic float level switch
EF… By-pass level indicator
FD… Magnetic float level switch
Model EF includes sub-model MEF…
Model FD includes sub-model FH…, FM…, F7H… and F7M…

Place of manufacture
FineTek Co., Ltd.
No.16, Tzuchiang St., Tucheng Industrial Park, New Taipei City 236, Taiwan;
No.26, Ding'an Rd., Su'ao Township, Yilan County 270, Taiwan.

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.

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-certificate issued by a notified/recognized Certification Body.

When a side-mounted gauge/switch is used on tanks containing flammable liquids, quick-closing valve(-s) operable from outside area or self-closing valve(-s) shall be fitted on the tank penetration.

Tests carried out
Applicable tests according to class guideline DNV GL CG-0339, Nov.2016.

Marking of product
Manufacturer, model, serial number and power rating.

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 this certificate.

END OF CERTIFICATE