

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Misc. detector

with type designation(s)
A646622, A646622 - LF

Issued to

Senaco Co., Ltd.
Haman-gun Gyeongsangnam-do, Republic of Korea

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.

Type	Temperature	Humidity	Vibration	EMC	Enclosure
A646622	A	B	B	A	B (IP67)
A646622 - LF	A	B	B	A	B (IP67)

Issued at **Busan** on **2017-05-31**

This Certificate is valid until **2021-12-31**.

for **DNV GL**

DNV GL local station: **Busan**

Approval Engineer: **Baeg Soon Choi**

Michael Jost Auf der Stroth
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

A646622 and A646622-LF is inductive sensor to measure distance.

- Measurement range : 0.5mm ~ 7.5mm
- Output range: 4-20mA
- Operating power (input): DC24V

Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, 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 Rules for 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.

Periodical assessment

The scope of the retention/renewal survey is to verify that conditions stipulated for the type are complied with, and that no alternations are made to the product design or choice of system component 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 applicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensure that components and/or materials used comply with type approved documents
- Review of possible change in design of components, materials and/or performance, and make sure that such changes do not affect the type approval given.
- Ensure traceability between manufacturer's product type marking and type approval certificate

Retention survey is to be performed at least every second year and at renewal.

END OF CERTIFICATE