DNV·GL

Certificate No:
TAA00000CB

TYPE EXAMINATION CERTIFICATE

This is to certify:

That the Bridge instrumentation

with type designation(s)
Alpha Rudder Feedback Unit MD, Alpha Rudder Feedback Unit HD

Issued to
Alphatron Marine B.V.
Rotterdam, Netherlands

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

Application :

See page 2

Type	Temperature	Humidity	Vibration	EMC	Enclosure
Alpha Rudder Feedback Unit MD	**D**	**B**	**A**	**A**	**C**
Alpha Rudder Feedback Unit HD	**D**	**B**	**A**	**A**	**C**

Issued at **Høvik** on **2016-04-27**

This Certificate is valid until **2021-04-26**.

for **DNV GL**

DNV GL local station: **Rotterdam, Product Certification /Verification**

Approval Engineer: **Frederik Tore Elter**

Jan Tore Grimsrud
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 Examination Certificate and not to the approval of equipment/systems installed.

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Product description

Alpha Rudder Feed Back MD and HD for mechanical rudder feedback.

Type Designation	Part number	Location
Alpha Rudder Feedback Unit MD	3109.0196	Exposed
Alpha Rudder Feedback Unit HD	3109.0194	Exposed

Application/Limitation

- Alpha Rudder Feed Back MD and HD are to be installed in accordance with makers documentation.

Type Examination documentation

Tests carried out

- Environmental testing: IEC60945(2002)
- Environmental testing: DNV 2.4 - Environmental test specification for instrumentation and automation equipment

Marking of product

The Manufacturer and Type Designation to be applied to the equipment in a clearly visible location. In addition the equipment shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.

Certificate Retention Survey

A retention survey is to be performed at least once every second year, and again upon renewal of this certificate.
The scope of the retention/renewal survey is to verify that the production quality conditions stipulated for the type approval are complied with and that no alterations are made to the product design or its components and/or materials without appraisal by the Society.