DNV·GL

Certificate No:
MEDB00002TS

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Heading control system for high speed craft

with type designation(s)
PilotStar NX

Issued to
Raytheon Anschütz GmbH
Kiel Schleswig-Holstein, Germany

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2017/306,**
item No. MED/4.40. SOLAS 74 as amended, Regulation X/3, IMO Res. A.694(17), IMO Res. A.822(19), IMO Res. MSC.36(63), IMO Res. MSC.97(73), IMO Res. MSC.191(79), IMO Res. MSC.302(87), IMO MSC.1/Circ.1349

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2022-08-30**.

Issued at **Hamburg** on **2017-08-31**

DNV GL local station:
Hamburg

Approval Engineer:
Harald Bluhm

Notified Body
No.: **0098**

for **DNV GL SE**

Sven Dudszus
Head of Notified Body

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.
This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.
Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

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Product description

The Heading Control System for High Speed Crafts PilotStar NX comprises of:

Operator Unit PilotStar NX	Type: 102-820.NG001 or 102-820.SAxxx Software Version 102-820.P0001 E00.xx
Interface Unit PilotStar NX	Type: 102-821.NG001 Software Version 102-821.P0001 E00.xx
	(The Interface Unit PilotStar NX is not required in combination with the NautoSteer AS steering gear control system.)
Additional Equipment	
Interface Modul (Serial/Ethernet)	Type: MOXA NPort 5232-T
Tiller Follow Up AS	Type: 105-307 NG001 / NG003 / NG005 / NG006 Software Version 105-307.P0001 E00.xx
Tiller Non Follow Up AS	Type: 105-308 NG001 / NG003 Software Version 105-307.P0001 E00.xx
FU Handwheel AS	Type: 105-400 NG001 / NG003 / NG005 / NG006 Software Version 105-400.P0001 E00.xx
Override Signal Unit AS	Type: 105-313.NG001 / NG002 Software Version: 105-313.P0001 E00.XX
CAN Distribution Unit AS	Type: 138-128 NG001 / NG002 Software Version 138-128.P0001 E00.xx

The product complies with the requirements of IEC 61924-2 (2012) incl. Corrigendum 1 (2013) – Module C – Alert Management and may be linked to a Bridge Alert Management (BAM) System or an Integrated Navigation System (INS).

Documentation:

4314.DOC010102 Operator and Service Manual

Type Examination documentation

Tests carried out

ISO 16329:2003, IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008), IEC 61162-1 ed5.0, IEC 61162-2 Ed1.0 (1998-09), IEC 61162-450 Ed1.0 (2011) IEC 62288 Ed. 2.0 (2014-07).

Marking of product

According to Article 10 of the Council Directive (MED):

- The wheel mark shall be affixed visibly, legibly and indelibly to the product or to its data plate and, where relevant, embedded in its software. Where that is not possible or not warranted on account of the nature of the product, it shall be affixed to the packaging and to the accompanying documents.

- The wheel mark shall be affixed at the end of the production phase.
- The wheel mark shall be followed by the identification number of the notified body, where that body is involved in the production control phase, and by the year in which the mark is affixed.

- The identification number of the notified body shall be affixed by the body itself or, under its instructions, by the manufacturer or the manufacturer's authorised representative.

For specific products, manufacturers may use an appropriate and reliable form of electronic tag instead of, or in addition to, the wheel mark.