

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00002MG
Revision No:
4

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

This is to certify:

That the Magnetic compass – Class A for ships

with type designation(s)
JUPITER

Issued to

**Northrop Grumman Sperry Marine B.V. - German Branch
Hamburg, Germany**

is found to comply with the requirements in the following Regulations/Standards:

Regulation (EU) 2021/1158,

item No. MED/4.1. SOLAS 74 as amended, Regulations V/18, V/19 & X/3, IMO Res. A.382(X), IMO Res. A.694(17), IMO Res. MSC.36(63), IMO Res. MSC.97(73), IMO Res. MSC.302(87)

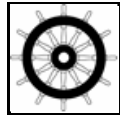
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2027-05-31**.

Issued at **Hamburg** on **2022-06-01**

DNV local station:
Hamburg – CMC North/East

Approval Engineer:
Jan Reinecke



Notified Body
No.: **0098**

for DNV SE

Christine Mydlak-Roeder
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

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 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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

1. Standard Compass:

- Magnetic compass Class A (N under N) to use with the binnacle: Type: 2060, Trade name: JUPITER
- Binnacle with optical transmission (Reflection tube) max. length 3500 mm Type: 5041, Trade name: NAVIPOL CP

2. Steering Compass:

- Magnetic compass Class A (N under N) to use with the binnacle: Type: 2060, Trade name: JUPITER
- Binnacle with optical transmission (Reflection tube) max. length 3500 mm Type: 5041, Trade name: NAVIPOL CP

Application/Limitation

None

Type Examination documentation

DNV No	Document ID	Rev.	Description
18	56016	F	Manual: JUPITER
16	56406	A	Manual: NAVIPOL CP
15	2022/01	1.1	Report: Type test acc. to ISO 25862:2019 Annex D
14	100040.018	09.03.2022	Report: Swirl error illumination Annex D.2.6.2
11	21DE-00285	0	Report: Binnacles IEC 60945
8	313-21	1	Report: Rain and spray
7	256-21	1	Report: Damp Heat Test
5	454.MC/NGC Jupiter/4	2020-10-09	Report: Test Report_ISO 25862:2019

Tests carried out

- Environmental and EMC testing: IEC 60945 (2002) incl. Corrigendum 1:2008
- Performance testing: ISO 25862:2019, ISO 1069:1973

Marking of product

According to IEC 60945, Sect.4.9:

The product to be marked with following information, where practicable:

- Identification of the manufacturer,
- Equipment type number or model identification under which it was type tested,
- Serial number of the unit,
- Compass safe distance.

Alternatively, the marking may be presented on a display at equipment start-up, and in case of fixed equipment compass safe distance may be given in the equipment manual.