

TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No: MERB00002MG Revision No:

This Certificate is issued by DNV UK Limited based on authorisation of the Maritime & Coast Guard Agency (MCA) as an UK Approved Body to undertake conformity assessments on marine equipment in accordance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016 as amended.

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 MSN 1874 Amendment 6,

item No. UK/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 London on 2022-11-15

DNV local unit: Hamburg - CMC North/East

Approval Engineer: Jörg Rebel

Approved Body No.: 0097

for DNV UK Ltd.

Christine Mydlak-Röder **MER Service Responsible**



by the MCA

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-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment)
Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an approved body. The product liability rests with the manufacturer or his representative in accordance with the Merchant Shipping (Marine Equipment) Regulations 2016.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV LIK Ltd. of any changes to the approved equipment. Should the specified regulations or standards be amended during the validity of this certificate, UK Approved Body Authorised the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply. This certificate remains valid unless suspended, withdrawn, re-called, or cancelled,

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



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Job Id: AA001ZM7
Certificate No: MERB00002MG

Revision No: 0

Product description

1. Standard Compass:

- Magnetic compass Class A (N under N) to use with the binnacle:

- Binnacle with optical transmission (Reflection tube) max. length 3500 mm

Type: 2060, Trade name: JUPITER

Type: 5041, Trade name: NAVIPOL CP

2. Steering Compass:

 Magnetic compass Class A (N under N) to use with the binnacle:

 Binnacle with optical transmission (Reflection tube) max. length 3500 mm Type: 2060, Trade name: JUPITER

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	А	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.

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