



QS - CERTIFICATE OF ASSESSMENT (MODULE D)

Certificate No:
MERD00000ZJ
Revision No:
0

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 Quality System for the products

with type designation(s) as specified in the Appendix to this Certificate

Issued to

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

is found to comply with the applicable requirements.

The quality system has been assessed with respect to the procedure of Module D conformity assessment as referred to in the Merchant Shipping (Marine Equipment) Regulations 2016 and regulation MSN 1874 Amendment 6.

This Certificate is valid until **2026-04-29**.

Issued at **London** on **2022-11-15**

DNV local unit:
Hamburg – CMC North/East



for **DNV UK Ltd.**

Approval Engineer:
Jörg Rebel

Approved Body No.: **0097**

Christine Mydlak-Röder
MER Service Responsible



0097/(yy)yy

Example for the "Mark of Conformity":
0097: number of the Approved Body responsible for quality surveillance module
(yy)yy: year in which the mark is affixed.



**Maritime &
Coastguard
Agency**

UK Approved Body Authorised
by the MCA

The product liability tests with the manufacturer or his representative in accordance with the Merchant Shipping (Marine Equipment) Regulations 2016.

This certificate provides the basis for the manufacturer or (if applicable) their authorised representative established within the United Kingdom in conjunction with the UK TYPE EXAMINATION (MODULE B) CERTIFICATE of the equipment listed in the scope to affix the "Mark of Conformity" ("Red Ensign Mark").

This certificate loses its validity if the manufacturer makes any changes to the approved quality system, which have not been notified to, and agreed with the notified body named on this certificate. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

The Manufacturer has to apply for periodical audits to verify the maintenance and application of the quality system every 12 months.

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.



APPENDIX

Item no. UK/4.1 Magnetic compass – Class A for ships

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.
JUPITER ^{3,4}	MERB00002MG Rev. 0	2027-05-31	0097

Item no. UK/4.16 Heading control system (HCS)

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.
NAVIPILOT 4500N ¹	MERB00006Y5 Rev. 0	2027-09-06	0097

Item no. UK/4.20 Rudder angle indicator

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.
Rudder Angle Indicator System ¹	MERB00002UG Rev. 0	2027-10-06	0097

Item no. UK/4.54 Compass Bearing Device

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.
PV 23 (Type 2535, 2535-AA), PV 24 (Type 2695), PV 25 (Type 5042) ^{3,4}	MERB00007F5 Rev. 0	2026-04-29	0097

Item no. UK/4.65 Gyro compass

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.
NAVIGAT 100 ²	MERB00007M0 Rev. 0	2026-04-29	0097

Item no. UK/4.65 Gyro compass

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.
CompassNet (Type 5026) ^{2,5}	MERB000025J Rev. 0	2026-04-29	0097

Item no. UK/4.7 Speed and distance measuring equipment (SDME)

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.
NAVIKNOT Types: 350E, 350EE, 450D, 450DD, 550DD, 600S, 600SD, 600SDD, 600SDT, 600SE and SRD500A ¹	MERB000038V Rev. 0	2025-08-20	0097

Item no. UK/4.9 Rate-of-turn indicator (ROTI)

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.
CompassNet (Type 5026) ^{2,5}	MERB000025M Rev. 0	2026-04-29	0097

Places of production

1. MIKROLAB-Entwicklungsgesellschaft für Elektroniksysteme mbH, Dieter-Streng-Str. 1, 90766 Fürth, Germany
2. Northrop Grumman Italia S.p.A., Via Pontina km 27.800, 00040 Pomezia, Italy
3. Hein & Oetting Feinwerkmechanik GmbH, Merkurring 86, 22143 Hamburg, Germany
4. Cassens & Plath GmbH, Am Lunedeich 131, 27572 Bremerhaven, Germany
5. IXBLUE, rue Paul Sabatier, 22300 Lannion, France