

QS - CERTIFICATE OF ASSESSMENT - EC (MODULE D)

Certificate No:
MEDD00000ZJ
Revision No:
13

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 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.

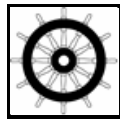
The quality system has been assessed with respect to the procedure of conformity assessment described in Annex II, Module D in the directive 2014/90/EU and regulation (EU) 2022/1157.

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

Issued at **Hamburg** on **2022-09-07**

DNV local station:
Hamburg – CMC North/East

Approval Engineer:
Jörg Rebel

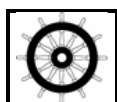


Notified Body
No.: **0098**

for **DNV SE**

Christine Mydlak-Roeder
Head of Notified Body

The manufacturer is allowed to affix the U.S. Coast Guard approval number(s) as stated in the appendix attached hereto and as allowed by the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment", signed February 27th, 2004, and amended by Decision No 1/2018 dated February 18th, 2019.



0098/yyyy

0098: Notified Body number undertaking quality surveillance
yyyy: The year in which the mark is affixed

The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate authorizes the manufacturer in conjunction with the valid EC Type Examination (Module B) Certificate(s) of the equipment listed before to affix the Mark of Conformity (wheelmark) to the product described herein.

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. MED/4.1 Magnetic compass – Class A for ships

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.	USCG approval number
JUPITER ^{2,3}	MEDB00002MG Rev.4	2027-05-31	0098	165.101/EC0098 /MEDB00002MG Rev.4

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

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.	USCG approval number
NAVIPILOT 4500N ¹	MEDB00006Y5	2027-09-06	0098	165.110/EC0098 /MEDB00006Y5

Item no. MED/4.20 Rudder angle indicator

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.	USCG approval number
Rudder Angle Indicator System ¹	MEDB00002UG Rev.1	2022-10-12	0098	165.167/EC0098 /MEDB00002UG Rev.1

Item no. MED/4.23 Magnetic Compass Class B for lifeboats and rescue boats

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.	USCG approval number
Spherical compass MERKUR, VENUS ³	MEDB00002MH Rev.2	2023-08-12	0098	N/A

Item no. MED/4.54 Compass Bearing Device

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.	USCG approval number
PV 23 (Type 2535, 2535-AA), PV 24 (Type 2695) ³	MEDB00007F5	2026-04-29	0098	N/A

Item no. MED/4.65 Gyro compass

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.	USCG approval number
CompassNet (Type 5026) ^{4,5}	MEDB000025J Rev.6	2026-04-29	0098	165.103/EC0098 /MEDB000025J Rev.6
NAVIGAT 100 ⁴	MEDB00007M0 Rev.1	2026-04-29	0098	165.103/EC0098 /MEDB00007M0 Rev.1

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

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.	USCG approval number
NAVIKNOT Types: 350E, 350EE, 450D, 450DD, 550DD, 600S, 600SD, 600SDD, 600SDT, 600SE and SRD500A ¹	MEDB000038V Rev.2	2025-08-20	0098	165.105/EC0098 /MEDB000038V Rev.2

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

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.	USCG approval number
NAVIGAT 100 ⁴	MEDB00007ZB	2027-03-06	0098	165.106/EC0098 /MEDB00007ZB
CompassNet (Type 5026) ^{4, 5}	MEDB000025M Rev.8	2026-04-29	0098	165.106/EC0098 /MEDB000025M Rev.8

Places of production

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