

QS - CERTIFICATE OF ASSESSMENT - EC (MODULE D)

Certificate No:
MEDD000002J
Revision No:
4

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 Hamburg, Germany**

is found to comply with the applicable requirements.

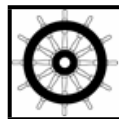
The quality system has been assessed with respect to the procedure of conformity assessment described in Annex II, Module D in the directive 2014/90/EU and regulation (EU) 2017/306.

This Certificate is valid until **2021-05-01**.

Issued at **Hamburg** on **2017-10-13**

DNV GL local station:
Hamburg

Approval Engineer:
Jan Reinecke

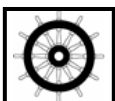


Notified Body
No.: **0098**

for **DNV GL SE**

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Sven Dudzus
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.



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.



Job Id: **344.1-006493-21**
 Certificate No: **MEDD00000ZJ**
 Revision No: **4**

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 ³	MEDB00002MG Rev.1	2022-05-31	0098	165.101/EC0098 /MEDB00002MG Rev.1

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	2022-10-12	0098	N/A

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

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.	USCG approval number
Spherical compass MARS, MERKUR, VENUS ³	MEDB00002MH Rev.1	2022-05-31	0098	N/A

Item no. MED/4.3 Gyro compass

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.	USCG approval number
NAVIGAT 3000 ²	3775712 HH	2021-06-12	0098	165.103/EC0098 /3775712
NAVIGAT X MK1 ²	MEDB00002AN	2021-06-12	0098	165.103/EC0098 /MEDB00002AN
NAVIGAT X MK2 ²	MEDB00002AR	2021-06-12	0098	165.103/EC0098 /MEDB00002AR
CompassNet (Type 5026) ²	MEDB000025J Rev.2	2021-05-01	0098	165.103/EC0098 /MEDB000025J Rev.2

Item no. MED/4.31 Gyro compass for high-speed craft

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.	USCG approval number
NAVIGAT 3000 ²	3795712 HH	2021-06-12	0098	165.203/EC0098 /3795712
NAVIGAT X MK1 HSC ²	MEDB00002AT	2021-06-12	0098	165.203/EC0098 /MEDB00002AT
CompassNet (Type 5026) ²	MEDB000025K Rev.2	2021-05-01	0098	165.203/EC0098 /MEDB000025K Rev.2

Job Id: **344.1-006493-21**
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Item no. MED/4.54 Bearing Device

Type designation	EC Type-Examination Certificate No.	Expiry date	Notified Body No.	USCG approval number
Azumith Device PV23, PV24 ³	4535516 HH	2021-05-22	0098	N/A

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 ¹	6096313 HH	2020-08-20	0098	165.105/EC0098 /6096313

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 3000 ²	3795912 HH	2021-06-12	0098	165.106/EC0098 /3795912
NAVIGAT X MK1 or NAVIGAT X MK1 HSC ²	MEDB00002AS	2021-06-12	0098	165.106/EC0098 /MEDB00002AS
CompassNet (Type 5026) ²	MEDB000025M Rev.2	2021-05-01	0098	165.106/EC0098 /MEDB000025M Rev.2

Places of production

- 1.MIKROLAB-Entwicklungsgesellschaft für Elektroniksysteme mbH, Dieter-Streng-Str. 1, Fürth, Germany
- 2.Northrop Grumman LITEF GmbH, Lörracher Str. 18, Freiburg, Germany
- 3.Hein & Oetting Feinwerkmechanik GmbH, Merckurring 86, Hamburg, Germany