

EC CERTIFICATE TYPE EXAMINATION (MODULE B)

This is to certify that:

DNV GL SE, a Notified Body under the terms of the Marine Equipment Directive 96/98/EC of 20 December 1996, notified by the German Federal Ministry of Transport, Building and Urban Development, did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the requirements of Marine Equipment Directive (MED) 96/98/EC as amended, subject to any conditions in the schedule attached hereto.

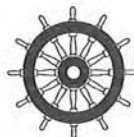
Certificate No.	37 957 - 12 HH
Applicant	Northrop Grumman Sperry Marine B.V. German Branch Woltmanstr. 19 20097 Hamburg, GERMANY
Product Description	Gyro Compass for High Speed Craft (HSC)
Product Name	Type 5021
Trade Name	NAVIGAT 3000
Specified Standards	IMO Resolutions MSC.97 (73), A.821 (19), A.694 (17), MSC.36 (63), MSC.191(79) ISO 16328 (2014), IEC 62288 (2014), IEC 61162-1 (2010), IEC 61162-2 (1998), IEC 60945 (2002) incl. corr. 1(2008).
Related Directive	(EU) 2015/559
Equipment Section	Navigation equipment
Annex A.1 Item No.	A.1/4.31
Date of Re-issue	2016-06-13
Expiry Date	2021-06-12

DNV GL SE

Notified Body No.: 0098

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Schedule of Approval

Approval Documentation

Test report : Treo 047-12, Treo 057-12, Treo 082-12, BSH 762 NAVIGAT 3000, 120605-1-d_NG_Skorsby, 120606-1-d_NG 3000_SerialIn.

Technical Data

The Northrop Grumman Sperry Marine Fiber-Optic Gyrocompass NAVIGAT 3000 comprise of the following equipment necessary for functioning:

Mastercompass:	NAVIGAT 3000	Type: 5021
Interface and power supply unit:		Type: 4902
Control and Display Unit:		Type: 4995

Heading Management System	NAVITWIN IV	Type: 4994
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The following repeater may be used:

Steering repeater (console mounted)	Type: 5016 AA
Steering repeater (console mounted)	Type: 4881
Steering repeater (console mounted)	Type: 4881 AA

Steering repeater (console mounted)	Type: 5016 AB
Steering repeater (console mounted)	Type: 4881 AD
(Magnetic, only in connection with NAVITWIN)	

Repeater (bulkhead mounted)	Type: 5016 AC
Repeater (bulkhead mounted)	Type: 4881 AC
Repeater (bulkhead mounted)	Type: 4881 AK

Bearing repeater	Type: 5016
Bearing repeater	Type: 4881 AB
Bearing repeater	Type: 4881 AM
with	
Bearing repeater stand	Type: 4622 AB or 4622 AC or 4622 AD
Bearing repeater stand (Sperry)	Type: 1812783
Bearing repeater bracket	Type: 4890
Bearing repeater bracket (height adjustable)	Type: 4905
Prismatic azimuth device PV 23	Type: 2535
Terminal box	Type: 4884
Terminal box	Type: 4894

Options:

Compass Monitor	NAVITWIN III	Type: 4923
Voyage Data Printer		Type: 4805
(only in connection with NAVITWIN)		
Fluxgate Coil for Magnetic Compass		Type: 4863

Digital Tape Repeater		Type DTR 600
Universal Digital Repeater (UDR)		Type: 4891
Multifunction Display	NAVIDATA	Type: 4806 AC
Multifunction Display	NAVIDATA	Type: 4806 AD
Multifunction Display	NAVIDATA	Type: 4806 AE

Switch over box		Type: 4932
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Documentation:

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Operation, Installation and Service Manual	NAVIGAT 3000	056362
Operation, Installation and Service Manual	Repeater Compass System	056359
Operation, Installation and Service Manual	Switch-Over Unit	056318
Operation, Installation and Service Manual	NAVITWIN IV	056350
Operation, Installation and Service Manual	Universal Digital Repeater	056351

Remarks

None

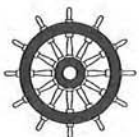
Limitations on the acceptance or use of the product

none

Notes:

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE, as the Notified Body, of any modifications or changes to the approved equipment. 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.

An 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), 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.



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.