

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

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 Compass Bearing Device

with type designation(s)
180, 160, Thomson, Sea, Coast, 175

Issued to

Cassens & Plath GmbH
Bremerhaven, Germany

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2017/306**,
item No. MED/4.54. SOLAS 74 as amended, Regulations V/18 & V/19

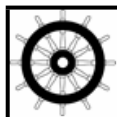
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2022-12-21**.

Issued at **Hamburg** on **2017-12-22**

DNV GL local station:
Bremerhaven

Approval Engineer:
Jörg Rebel



Notified Body
No.: **0098**

for **DNV GL SE**

Sven Dudzus
Head of Notified Body

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. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled. 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.



Job Id: **344.1-007725-1**
Certificate No: **MEDB00003KT**

Product description

The compass bearing device consists of following components necessary for operation:

- | | |
|--|---------|
| 1. Vane type azimuth device for bearing compass Type/11 and Type/12 with black mirror for relative & compass bearings | 180 |
| 2. Vane type azimuth device for bearing compass Type/21 with black mirror for relative & compass bearings | 160 |
| 3. Thomson (prism) type azimuth device for bearing compass Type/11 and Type/12 with 2 shades glasses for relative & compass bearings | THOMSON |
| 4. Pelorus with gimbal suspension | SEA |
| 5. Pelorus without gimbal suspension | COAST |
| 6. Vane type azimuth device for compass SR4 with black mirror for compass bearings | 175 |

Application/Limitation

None

Type Examination documentation

DNV GL No	Document ID	Rev.	Description
1	326/Wo/12	2014-02-18	Manual: Standard Azimuth Device for Type/11, Type/12 and Type/21 Compasses (Type 180/160)
2	11/Wo/154A	2014-02-18	Manual: Bearing Device Thomson
3	12/Wo/097A	2013-11-14	Manual: Peloruses (Type Sea)
4	GL_CP1_2012	2012-11-01	Report: Performance Test
5	500/Wo/17	2017-12-18	Manual: Bearing Device Type 175 for Lilley & Gillie Compass Type SR4

Tests carried out

- | | |
|--------------------------|---|
| • Performance testing: | ISO 25862 (2009) |
| • Environmental testing: | IEC 60945 (2002) incl. Corrigendum 1 (2008) |

Marking of product

According to Article 10 of the Council Directive (MED):

- The wheel mark shall be affixed visibly, legibly and indelibly to the product or to its data plate and, where relevant, embedded in its software. Where that is not possible or not warranted on account of the nature of the product, it shall be affixed to the packaging and to the accompanying documents.
- The wheel mark shall be affixed at the end of the production phase.
- The wheel mark shall be followed by the identification number of the notified body, where that body is involved in the production control phase, and by the year in which the mark is affixed.
- The identification number of the notified body shall be affixed by the body itself or, under its instructions, by the manufacturer or the manufacturer's authorised representative.

For specific products, manufacturers may use an appropriate and reliable form of electronic tag instead of, or in addition to, the wheel mark.

END OF CERTIFICATE