

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:  
**MEDB00003AS**  
Revision No:  
**1**

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 Pitch indicator

with type designation(s)  
**DEIF Pitch Indicator**

Issued to  
**DEIF A/S**  
**Skive, Midtjylland, Denmark**

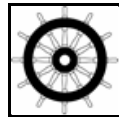
is found to comply with the requirements in the following Regulations/Standards:  
Regulation **(EU) 2019/1397**,  
**item No. MED/4.22. SOLAS 74 as amended, Regulations V/18, V/19 & X/3, IMO Res. A.694(17), IMO Res. MSC.36(63), IMO Res. MSC.97(73), IMO Res. MSC.191(79), IMO Res. MSC.302(87)**

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

This Certificate is valid until **2025-03-22**.

Issued at **Hamburg** on **2020-03-23**

DNV GL local station:  
**Denmark CMC**



for **DNV GL SE**

Approval Engineer:  
**Jan Reinecke**

Notified Body  
No.: **0098**

**Gerhard Aulbert**  
**Head of Notified Body**

A 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, and amended by Decision No 1/2018 dated February 18th, 2019.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.



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## Product description

The Pitch Indicators may consist of the following equipment:

XL72, XL96, XL144, XL192, BRW-2, BW144, BW192, XDi96, XDi144, XDi192

optional: XDi extension modules AX1 analogue, DX1 digital, NX1/NX2 serial

Software versions: XDi D & M platform 1: 1.0x.x and XDi D, M & N platform 2: 2.0x.x,  
AX1 Modul: 1.0x.x,  
DX1 Modul: 1.0x.x,  
NX1/NX2 Modul: 1.0x.x

## Application/Limitation

none

## Type Examination documentation

DNV GL No	Document Id.	Rev.	Description
18	4910211100D	2016-12-16	Report: EPC 679 XDi Test Data IEC60945
17		2014-06-12	Report: CAN Bus performance test
15		2015-03-27	Report: Test Report Flicker evaluation XDi
8		1.1	Report: Test of a Maritime navigation and radiocommunication equipment and systems IEC 61162-1/-2
3	4921250067D	D	XDi data sheet 4921250067 UK
2	4189350046D	D	XDi quick guide 4189350046 UK
1	4189350049B	B	Manual: Designer's Handbook
-	Miscs		E502501-2 dated 05-11-2004; GL Test Report 2011-12-14, Deif IPA no. 0326, Delta Test Report DANAK-1911248 dated 2011-01-25.

## Tests carried out

- Environmental and EMC testing: IEC 60945 (2002) incl. Corrigendum 1 (2008)
- Interface testing: IEC 61162-1 (2016), IEC 61162-2 Ed. 1.0 (1998)
- Presentation testing: IEC 62288 Ed. 2.0 (2014)
- Performance testing: ISO 22555 (2007)

Note: The DEIF Pitch Indicator does not issue alerts, hence, testing according to IEC 62923-1/-2 is deemed as not being applicable.

## Marking of product

According to IEC 60945, Sect.4.9:


The product to be marked with following information, where practicable:

- Identification of the manufacturer,
- Equipment type number or model identification under which it was type tested,
- Serial number of the unit,
- Compass safe distance.

Alternatively, the marking may be presented on a display at equipment start-up, and in case of fixed equipment compass safe distance may be given in the equipment manual.

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

- Wheel mark to 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.



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- Wheel mark to be affixed at the end of the production phase.  
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