

TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MERB000089E
Revision No:
0

This Certificate is issued by DNV UK Limited based on authorisation of the Maritime & Coast Guard Agency (MCA) as an UK Approved Body to undertake conformity assessments on marine equipment in accordance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016 as amended.

This is to certify:

That the NAVTEX receiver

with type designation(s)
NX-700A, NX-700B

Issued to

Furuno Electric Co., Ltd.
Nishinomiya, Japan

is found to comply with the requirements in the following Regulations/Standards:

Regulation **MSN 1874 Amendment 6,**
item No. UK/5.3. SOLAS 74 as amended, Regulations IV/7, IV/14 & X/ 3, IMO Res A.694(17), IMO Res. MSC.36(63),
IMO Res. MSC.97(73), IMO Res. MSC.148(77), IMO Res. MSC.302(87), IMO COMSAR Circ.32, ITU-R M.540-2
(06/90), ITU-R M.625-4 (03/12)

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

This Certificate is valid until **2028-01-17**.

Issued at **London** on **2023-01-18**

DNV local unit:
Kobe



for **DNV UK Ltd.**

Approval Engineer:
Steinar Kristensen

Approved Body No.: **0097**

Christine Mydlak-Röder
MER Service Responsible



Maritime &
Coastguard
Agency

UK Approved Body Authorised
by the MCA

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-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an approved body. The product liability rests with the manufacturer or his representative in accordance with the Merchant Shipping (Marine Equipment) Regulations 2016.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV UK Ltd. of any 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. This certificate remains valid unless suspended, withdrawn, re-called, or cancelled.

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.



Product description

The NX-700A and NX-700B Navtex receivers consist of the following units:

Unit	Type/Part no.	Comment/ Description	Location
Display units	NX-700A or NX-700B	Navtex display unit with 5" monochrome display and integrated printer Navtex display unit with 5" monochrome without integrated printer	Protected
Receiver Unit	NX-7001	Interfaces: <ul style="list-style-type: none"> • 12-24V DC input power • Antenna unit • SAR Alert • Printer (for NX-700B only) • RS422 NMEA in/out 	Protected
Antenna Unit	NX-7H	Active ferrite loop antenna	Exposed
Power Supply	PR-240 or PR-241	AC/DC Power Supply Unit	Protected
Accessories			
Sensor Adapter	MC-3000S	For installations with simultaneous connection of IEC 61162-1 information to navigation equipment and CAM/INS	Protected

Location specifies the location for the units according to IEC 60945 (2002).

Software modules

- NX-700A/B

Version

Prog: 0850196-02, Boot: 0850192-01

Application/Limitation

The following applies for the NX-700A/B NAVTEX receivers:

- Shall be installed according to manufacturer's User & Installation Manual.
- Operating frequency range: 518 kHz, 490 kHz, 4209.5 kHz
- Modulation method: F1B.

Type Examination documentation

DNV No	Document ID	Rev.	Description
23	FLI 12-11-111	2011-12-26	Report: Labotech, EMC and environmental test report for FMD-3200/-3200BB/-3300 ECDIS incl. Sensor Adapter MC-3000S
21	LIC 12-15-059	2015-07-09	Report: Labotech, IEC 61162-450 (2011) test report for Sensor Adapter MC-3000S
20	LIC 12-19-028	2019-02-28	Report: Labotech, IEC 61162-1 (2016) test report for Sensor Adapter MC-3000S
19	LIC 12-21-055	2021-04-26	Report: Labotech, IEC 61162-450 (2018) test report for Sensor Adapter MC-3000S
17	N 02.20	2020-03-25	Report: RES Laboratory Ltd, Bridge Alert Management test report according to IEC 62923-1/-2 (2018) and IEC 61097-6 A2 (2019) for NAVTEX Receiver NX-700A/B
16	LIC 12-20-122	2020-10-22	Report: Labotech, IEC 60945 Excessive conditions, acoustic noise, dangerous voltage test report for PR-241 Power supply unit
15	LIC 12-20-121	2020-10-22	Report: Labotech, IEC 60945 temperature and vibration test report for PR-241 Power supply unit
14	LIC 12-20-120	2020-10-22	Report: Labotech, IEC 60945 EMC test report for PR-241 Power supply unit
13	LIC 12-20-119	2020-10-22	Report: Labotech, IEC 60945 Compass safe distance test report for PR-241 Power supply unit

DNV No	Document ID	Rev.	Description
12	LIC 12-19-088	2019-05-29	Report: Labotech, IEC 61162-1 (2016) test report for NAVTEX Receiver w/LCD, Type NX-700B
11	LIC 12-19-087	2019-05-29	Report: Labotech, IEC 61162-1 (2016) test report for NAVTEX Receiver w/printer, Type NX-700A
9	LIC 01-19-035	2019-05-29	Report: Labotech, Reference document for IEC 61162-1 tests (ref report LIC-12-19-087) for NX-700A
8	K08-17-161	2014-02-14	Report: Furuno, MSC.302(87) test report for NAVTEX Receiver NX-700A/B
7	FLI 12-11-103	2011-10-06	Report: Labotech, IEC 61162-1 (2010) test report for NAVTEX Receiver, Type NX-700A, NX-700B
6	FLI 12-10-018	2010-05-26	Report: Labotech, IEC 61162-1 (2007) test report for NAVTEX Receiver, Type NX-700A, NX-700B
5	FLI 12-05-020	2005-05-17	Report: Labotech, IEC 60945 test report for NAVTEX Receiver, Type NX-700A, NX-700B
4	99770230	2006-07-06	Report: Telefication, IEC 61097-6 Ed.2, IEC 61162-1 (2000) and IEC 61162-2 (1998) Test report
3	99624530	2005-05-25	Report: Telefication, IEC 61097-6 Ed.2 (CDV), IEC 61162-1 (2000) and IEC 61162-2 (1998) Test report
2	OME-56490-K1	2022-10-25	Manual: Furuno, Operator's Manual for NAVTEX Receiver NX-700A/B

Tests carried out

- Performance tests: IEC 61096-6 (2005) incl. A1 (2011) and A2 (2019)
- Environmental tests: IEC 60945 (2002) incl. Corr.1 (2008)
- Interface tests: IEC 61162-1 (2016) and IEC 61162-450 (2018)
- Bridge Alert Management: IEC 62923-1 (2018) and IEC 62923-2 (2018)

Marking of product

The type designation and name and contact address of the manufacturer shall be affixed visibly, legibly and indelibly to the product. In addition the product shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.