EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB0000AMX
Revision no.:
0

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as “Forskrift om Skipsutstyr” by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

This is to certify:

that the **Penetrations through ‘A’ class divisions: - electric cable transits**

with type designation(s)
KFN Cable penetration system (aluminium division)

issued to
Shaoxing Lianyi Machinery & Electricity Manufacture Co., Ltd.
Zhuji, **China**

is found to comply with the Implementing Regulation **(EU) 2024/1975** for
Item no. **MED/3.26a** (Row **1 of 1**)
according to the following requirements:
IMO Res. MSC.1/Circ.1655, SOLAS 74 Reg. II-2/9

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

Date of issue: **2025-06-23**

Expiry date: **2030-06-22**

DNV local unit:
Ningbo CMC

Approval Engineer:
Marcin Tobiasz

Notified Body
no.: **0575**

for **DNV AS**

Christine Mydlak-Röder
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 United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment signed 17 October 2005, and amended by Decision No 1/2023 dated August 21st, 2023.

NORWEGIAN ACCREDITATION PROD 019

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

Product description

"KFN Cable penetration system (aluminium division)"
consists of circular or rectangular 60 mm long aluminium coaming fitted symmetrically to the aluminium division. The coaming is filled with 40 mm deep “NT-1" type light fire resistant filling material and 10 mm thick “FM-1" type fireproof sealant on each side of the stuffing layer. The coaming is fully welded to the division.

For further details, see drawings listed under Type Examination documentation.

Application/Limitation

Approved for use as a single or multicable penetration system in class A-60 aluminium bulkheads and decks as specified in appendix. Other applications are subject to case-by-case approval.

Class A-0, A-15 and A-30 shall be insulated as class A-60 and in addition the division is to be insulated at least 200 mm around the penetration.

Restricted application for bulkhead: fire against insulated side.

The distance between cable and cable frame and distance between cables shall be ≥2 mm.

Each product is to be supplied with installation manual, use and maintenance.

Please see Appendix: Application/Limitation

Type Examination documentation

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

Marking of product

The product or packing is to be marked with name and address of manufacturer, type designation, fire-technical rating, MED Mark of Conformity and USCG approval number if applicable (see first page).

APPENDIX

Application/Limitation

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Table 1: Approved cable penetration in A-60 aluminium bulkhead.

Type	Size [mm]	Max. cable diameter (OD) [mm]	Filling ratio [%]	Coaming length [mm]	Coaming thickness [mm]	Coaming position	Coaming insulation
KFN circular	Ø30 – Ø250	59	0 – 50.4	60	3	Symmetrical	Partly insulated on one side
KFN rectangular	30 x 30 – 826 x 326	120	0 – 50.4	60	3	Symmetrical	Partly insulated on one side

Table 2: Approved cable penetration in A-60 aluminium deck.

Type	Size [mm]	Max. cable diameter (OD) [mm]	Filling ratio [%]	Coaming length [mm]	Coaming thickness [mm]	Coaming position	Coaming insulation
KFN circular	Ø30 – Ø250	59	0 – 50.4	60	3	Symmetrical	Partly insulated on underside
KFN rectangular	30 x 30 – 826 x 326	120	0 – 50.4	60	3	Symmetrical	Partly insulated on underside

OTHER

Additional application/information for Watertightness/gastightness (Not part of the Marine Equipment Directive requirement)

Product description
"KFN Cable penetration system (aluminium division)" consists of circular or rectangular 60 mm long aluminium coaming fitted symmetrically to the aluminium division. The coaming is filled with 40 mm deep “NT-1" type light fire resistant filling material and 10 mm thick “FM-1" type fireproof sealant on each side of the stuffing layer. The coaming is fully welded to the division.

Application/Limitation
Approved for penetration in steel bulkheads or decks limited to a pressure of 2.67 bar (test pressure 3 bar) watertightness and 1.35 bar gastightness (test pressure 2 bar).

Penetration systems are not to be used for penetrating boundaries of tanks.

Each product or packing is to be supplied with its manual for installation, use and maintenance.

Type Approval documentation
Tightness test report No. SXLY20250111701 dated 17January 2025 from manufacturer

Tests carried out
Pressure tests with water and helium according to DNV-CP-0165.