

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB0000AT1
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)

HK-24/A60/C, HK-24/A0/C, HK-24/A60/J, HK-24/A0 Multi Cable Penetration

issued to

Shanghai Huoke New Material Co., Ltd.
Shanghai, 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:

SOLAS 74 Reg. II-2/9

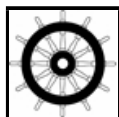
Further details of the equipment and conditions for certification are given overleaf.

Date of issue: **2025-02-03**

Expiry date: **2030-02-02**

DNV local unit:
Shanghai

Approval Engineer:
Marcin Tobiasz



for **DNV AS**

Notified Body
No.: **0575**

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.



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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

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 USD 300 000.

Product description

"HK-24/A60/C, HK-24/A0/C, HK-24/A60/J, HK-24/A0/J Multi Cable Penetration"

are multi rectangular or circular cable penetration composed of 80 mm long steel sleeve welded to the steel bulkhead/deck.

The sleeve is packed with HK-24 type ultralight fireproof putty (manufactured by Shanghai Huoke New Material) with maximum density 800 kg/m³.

For further details see drawings in test reports mentioned under Type Examination documentation.

Application/Limitation

Approved for use as a cable penetration system in class A-0 and A-60 steel bulkheads and decks (see appendix 1). Other applications are subject to case-by-case approval.

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

Minimum distance between cables and between cable and sleeve is 3 mm.

Each product is to be supplied with manual for installation 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 if applicable (see first page).

APPENDIX

Application/Limitation

Certificate no.:
MEDB0000AT1
Revision no.:
0

Table 1 Approved cable penetration in A-60 steel bulkhead.

Type	Sleeve size [mm]	Max. cable diameter (OD) [mm]	Filling ratio [%]	Sleeve length [mm]	Sleeve Thickness [mm]	Sleeve position	Penetration insulation
HK-24/A60/C	106 x 56 – 806 x 306 Ø 38 – Ø 300	94	0- 40	80	3 - 4	Symmetric	Partially insulated

Table 2 Approved cable penetration in A-60 steel deck.

Type	Sleeve size [mm]	Max. cable diameter (OD) [mm]	Filling ratio [%]	Sleeve length [mm]	Sleeve Thickness [mm]	Sleeve position	Penetration insulation
HK-24/A60/J	106 x 56 – 806 x 306 Ø 38 – Ø 300	94	0 - 40	80	3 - 4	Symmetric	Partially insulated

Table 3 Approved cable penetration in A-0 steel bulkhead.

Type	Sleeve size [mm]	Max. cable diameter (OD) [mm]	Filling ratio [%]	Sleeve length [mm]	Sleeve Thickness [mm]	Sleeve position	Penetration insulation
HK-24/A0/C	106 x 56 – 806 x 306 Ø 38 – Ø 300	65	0- 40	80	3 - 4	Symmetric	None

Table 4 Approved cable penetration in A-0 steel deck.

Type	Sleeve size [mm]	Max. cable diameter (OD) [mm]	Filling ratio [%]	Sleeve length [mm]	Sleeve Thickness [mm]	Sleeve position	Penetration insulation
HK-24/A0/J	106 x 56 – 806 x 306 Ø 38 – Ø 300	65	0- 40	80	3 - 4	Symmetric	None