

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 Penetrations through "A" class divisions: electric cable transits

with type designation(s)
JZ-DMT Cable Penetration

Issued to

Jingjiang Jinzhou Marine Equipment Co., Ltd.
JINGJIANG, 100, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2019/1397**,
item No. MED/3.26a. SOLAS 74 as amended, Regulation II-2/9, IMO 2010 FTP Code and IMO MSC.1/1488

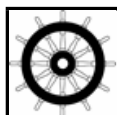
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2025-04-07**.

Issued at **Hamburg** on **2020-04-08**

DNV GL local station:
Jiangyin

Approval Engineer:
Carsten Hunsalz



Notified Body
No.: **0098**

for **DNV GL SE**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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

"JZ-DMT Cable Penetration",
composed of a 5 - 8 mm thick steel sleeve, welded to a 5 - 8 mm thick flange plate which is welded to bulkhead/deck. The 200 mm long sleeve is filled with "JZ-DMT filler" (density 1800 kg/m³) around cables. Cable expansion block, type JZ-PD06 (25 mm in depth), is used as end plugging material against exposed side for decks and against both sides for bulkheads.

For Class A-60 the steel sleeve is partially insulated with 2x20 mm thick "TG-type" ceramic wool from Pusen Fireproof Material Co., Ltd. (nominal density 170 kg/m³) fixed by Ø3 mm knock screws and Ø30 mm pressed rings on exposed side for decks and on insulated side for bulkheads.
The distance between the cables is minimum 5 mm and between cable/sleeve minimum 3 mm.

Minimum size: Class A-0/60: 200 x 100 x 200 mm (Length x Width x Depth).
Ø 40 x 200 mm (Diameter x Depth)

Maximum size: Class A-0: 600 x 300 x 200 mm (Length x Width x Depth).
Ø 120 x 200 mm (Diameter x Depth)

Class A-60: 800 x 300 x 200 mm (Length x Width x Depth).
Ø 120 x 200 mm (Diameter x Depth)

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

Application/Limitation

Approved for use as a cable penetration system in class A-0 and A-60 steel bulkheads and decks.

Approved for use in class A-15 and A-30 when the penetration system is insulated as A-60 at least 200mm around the penetration.

No more than 40% of the inside cross sectional area of each transit should be occupied by cables.

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

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

Type Examination documentation

Job Id: **344.1-010093-1**
Certificate No: **MEDB000066K**

Tests carried out

- IMO Res. MSC.307(88)-(2010 FTP Code), Annex 1: Part 3,
- MSC.1/Circ. 1488

Marking of product

For identification to this type examination certificate the product or packing is to be marked with:

- Manufacturer's name
- Type designation and fire-technical rating
- Mark of Conformity according to Article 10 of the Council Directive (MED)

Appendix

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

Application/Limitation

Approved for water tightness up to a design pressure of 2 bar, test pressure 3 bar.

Approved for air tightness up to a design pressure of 0.17 bar, test pressure 0.25 bar.

Type Approval documentation

Water and gas tightness test report dated 1 December 2014 from DNV Nanjing.

Tests carried out

Pressure tests according to DNVGL-CP-0165 Sec. 2 Ch. 4.

END OF CERTIFICATE