

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

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 GL 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)
Modular Cable transits YB-MGM

Issued to
Shanghai Yibo Shipping Co., Ltd
Shanghai, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2017/306**,
item No. MED/3.26a. SOLAS 74 as amended, Regulation II-2/9 and IMO 2010 FTP Code

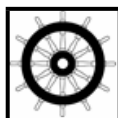
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2022-12-06**.

Issued at **Høvik** on **2017-12-07**

DNV GL local station:
Shanghai

Approval Engineer:
Tessa Biever



Notified Body
No.: **0575**

for **DNV GL AS**

Vidar Dolonen
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.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"Modular Cable Transits YB-MGM"

Transit YB-MGM/F consisting of a symmetrically fitted 10 mm thick rectangular steel sleeve welded to a steel section. The sleeve is filled with flame retardant rubber YB-MK modules , YB-GCB stay plate between each modules and YB-YJK keep block fastened to the modular.

Transit YB-MGM/Y consisting of a symmetrically fitted 6 mm to 9 mm thick circular steel sleeve welded to a steel section. The sleeve is filled with flame retardant rubber YB-MK modules and YB-YJK keep block.

For further details, see approved drawings and test reports listed under Type Approval documentation below.

Application/Limitation

Approved for use as a cable penetration system in class A-60 steel bulkheads and decks. 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 shall be insulated at least 200 mm around the penetration.

Type	Size range (mm)	Sleeve thickness (mm)	Max / Min. filling (%)
YB-MGM/F	1050 x 600 x 60 to 80 x 120 x 60	10	54.5 / 0.04
YB-MGM/Y	Ø 219 x 84	9	29 / 0.08
YB-MGM/Y	Ø 63,5 x 74	6	8.4 / 1.2

Insulation deck penetrations:

The steel sleeves of the penetrations are partially insulated on exposed side with the A-60 insulation used according to the approved drawings listed below.

Insulation bulkhead penetrations:

The steel sleeve is partially insulated with 20 mm division insulation on unexposed side with the A-60 insulation used according to the approved drawings listed below.

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

Each product shall be supplied with its manual for installation and maintenance.

Type Approval documentation

Basis for approval:

Test reports Nos.: FT15012 dated February 2nd 2015 and FT15013 dated February 5th 2015 from Far East Fire Testing Centre (FEFTC), Shanghai, China.

Assesment report for "Technical specification for thermocouple arrangement of YB-MGM modular cable transits" dated 15 May 2017 from Far East Fire Testing Centre (FEFTC), Shanghai, China.

Drawing Nos. 681YB-271-01, 681YB-272-01, 681YB-273-01, 681YB-274-01, 681YB-275-01, 681YB-276-01, 681YB-277-01, 681YB-278-01 dated 20 July 2017 all from the manufacturer.

Tests carried out

Tested in accordance with 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

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

Product description

"Modular Cable Transits YB-MGM"

Transit YB-MGM/F consisting of a symmetrically fitted 10 mm thick rectangular steel sleeve welded to a steel section. The sleeve is filled with flame retardant rubber YB-MK modules , YB-GCB stay plate between each modules and YB-YJK keep block fastened to the modular.

Transit YB-MGM/Y consisting of a symmetrically fitted 6 mm to 9 mm thick circular steel sleeve welded to a steel section. The sleeve is filled with flame retardant rubber YB-MK modules and YB-YJK keep block. For further details, see approved drawings and test reports listed under Type Approval documentation below.

Application/Limitation

This certificate covers only watertightness/gastightness for the same penetration types and sizes as the one being fire tested (see table on page 1).

Approved for penetration in steel bulkheads or steel decks limited to a pressure of 4.0 bar watertightness (6.0 bar – tested pressure).

Approved for penetration in steel bulkheads or steel decks limited to a pressure of 2.8 bar gastightness (4.2 bar – tested pressure).

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

Watertight/Airtight test report No. YB-WGP-2015-01 dated 8th of January 2015 from the manufacturer.

Tests carried out

Pressure tested according to Class Programme DNVGL-CP-0165, Edition October 2017.