

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)

Pouring Cable Transist: YB-JGM/A-60K & YB-JGM/A-60T

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

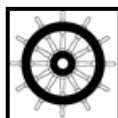
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2023-01-08.**

Issued at **Høvik** on **2018-01-09**

DNV GL local station:
Shanghai

Approval Engineer:
Tessa Biever



Notified Body
No.: **0575**

for **DNV GL AS**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"Pouring Cable Transist: YB-JGM/A-60K & YB-JGM/A-60T"

Consisting of a symmetrically fitted cable sleeve made of 5 mm thick steel and welded to the bulkhead/deck, filled with YB-MWT cable sealing inorganic filler with a nominal density of 1500 ± 50 kg/m³ around the cables and dammed at both ends with 25 mm deep YB-PD cable sealing expansion plugging.

The A-15 to A-60 transits are to be insulated with at least 2 x 20 mm thick A-60 ceramic wool insulation type LZ2, material produced by Yixing City Kun Hao Fire Resistant Materials, with density of at least 170 kg/m³ around the penetrations.

For further details see approved test report listed under Type Examination documentation.

Application/Limitation

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

Class 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.

Type of transits	Maximum size (WxHxD)	Max/ min filling rate	Minimum size (WxHxD)	Max/ min filling rate	Fire rating Bulkhead/ Deck	Insulated
YB-JGM/A60K/T	980x390x200mm	39.5% / 0.05%	160x110x200mm	35% / 0.15%	A-15 to A-60	Yes
YB-JGM/A0K/T	760x210x150mm		760x210x150mm	38.4% / 0.06 %	A-0	No
YB-JGM/A60K/T	φ 140x200mm (Depth)	37% / 0.9%	φ 42x200 mm (Depth)	15% / 1.5%	A-15 to A-60	Yes
YB-JGM/A0K/T	φ 114X150mm (Depth)		φ 114X150 mm (Depth)	36% / 1.2%	A-0	No

Insulation deck penetrations

The steel sleeve is insulated in accordance with the drawings below.

Insulation bulkhead penetrations

The steel sleeve is partly insulated with division insulation according to the approved drawings below.

The insulation materials used have to be approved according to the Marine Equipment Directive and bear the Mark of Conformity.

The penetration system is not to be used for penetrating boundaries of tanks.

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

Type Examination documentation

Test reports No. FT11242 (deck) and FT11243 (bulkhead) both dated 12 October 2011 from Far East Fire Testing Centre (FEFTC), Shanghai, China.

Bulkhead drawings Nos:

- 681YB-111-00 (YB-JGM/A0K/T 760x210x150),
- 681YB-112-00 (YB-JGM/A0K/T 114x150),
- 681YB-113-01 (YB-JGM/A60K/T 980x390x200),
- 681YB-114-01 (YB-JGM/A60K/T 160x110x200),
- 681YB-115-01 (YB-JGM/A60K/T 42x200),
- 681YB-116-01 (YB-JGM/A60K/T 140x200)

all from manufacturer.

Deck drawings Nos:

- 681YB-101-00 ((YB-JGM/A0K/T 760x210x150),
- 681YB-102-00 (YB-JGM/A0K/T 114x150),
- 681YB-103-00 (YB-JGM/A60K/T 980x390x200),
- 681YB-104-00 (YB-JGM/A60K/T 160x110x200),
- 681YB-105-00 (YB-JGM/A60K/T 42x200),
- 681YB-106-00 (YB-JGM/A60K/T 140x200)

all from manufacturer

Tests carried out

Tested in accordance with IMO FTPC Part 3 and in accordance with IMO 2010 FTP Code Ch. 8.

Marking of product

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

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

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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 2).

Approved for water tightness up to a design pressure of 0.233 MPa (2.33 bar), test pressure - 0.35 MPa (3.5 bar).

Approved for air tightness up to a design pressure of 0.0267 MPa (0.267 bar), test pressure - 0.04 MPa (0.4 bar).

The penetration system is not to be used for penetrating boundaries of tanks.



Job Id: **344.1-001077-16**
Certificate No: **MEDB0000397**

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

Type Approval documentation

Tests carried out

Pressure tests with water and air according to DNVGL-CP-0165, Edition October 2017.