DNV·GL

Certificate No:
MEDB000023E

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: pipe, duct, trunk, etc penetrations

with type designation(s)
Pipe penetration through "A" class bulkheads and decks

Issued to
Jingjiang Haihong Plastics & Rubbers Science-Technology Co., Ltd.
Jingjiang 100, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2017/306,**
item No. MED/3.26b. SOLAS 74 as amended, Regulation II-2/9, IMO MSC.1/Circ.1276 and IMO 2010 FTP Code
Manufacturers authorised representative
Jingjiang Haihong Plastics & Rubbers Science-Technology Co., Ltd.
Jingjiang 100, China

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

This Certificate is valid until **2022-07-09**.

Issued at **Hamburg** on **2017-07-10**

DNV GL local station:
Jiangyin FiS&CMC

Approval Engineer:
Hagen Markus

Notified Body
No.: **0098**

for **DNV GL SE**

Sven Dudszus
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.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

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Product description

The single pipe penetration system EXPERT consists of:

- Steel sleeves of length 220 mm welded to steel bulkhead or deck;
- EXPERT strip (width 40 mm), wrapped around the centre of the plastic pipe in the steel sleeve;
- Isolation (thickness 20 mm, density 170 kg/m³ around the steel sleeve – exposed side deck;
- Isolation (thickness 20 mm, density 170 kg/m³ around the steel sleeve – unexposed side bulkhead.

Application/Limitation

The pipe penetration EXPERT, single type is type approved for plastic pipes penetrating bulkhead and deck of class A-0, A-15, A-30 and A-60, general application.

Application A-60 Deck and Bulkhead

Pipe material	Pipe O.D.	Fitting of fire collar	Drawing
PE-RT	20 mm up to 63 mm	Sealing plug: Rubber Strip: Rubber	EP001 EP002 EP004 – A Class Deck EP005 EP006 – A Class Bulkhead
PE 100	20 mm up to 160 mm	Sealing plug: Rubber Strip: Rubber	

For A- 0, A-15 and A-30 applications, the penetration shall be insulated as for A60 and the division is to be fitted with A-60 insulation for a minimum distance of 200 mm around the penetration.

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

Water and or gas tightness

For applications where water and or gas tightness is requested the pipe penetration EXPERT according to installation drawings EP004,EP005 and EP006 is to be used exclusively.

This type is approved for application in steel bulkheads or decks limited to a pressure of 3 bar water tightness and 2 bar gas tightness.

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

For application on passenger ships and special purpose ships (SPS), the penetration system shall comply with the requirements given in SOLAS Ch. II-1 Reg. 13.2.3 (2014 issue).

Penetrations passing through watertight bulkheads are subject for separate examination and approval (water tightness after a standard fire test).

Type Examination documentation

Installation instructions
According to drawing No. EP018

Tests carried out
Fire test, water and gastightness tests

Marking of product
According to Article 10 of the Council Directive (MED) the following is to be observed:

The wheel mark of conformity shall be affixed visibly, legibly and indelibly to the product or to its data plate. Where that is not possible or not warranted on account of the nature of the product, it shall be affixed to the packaging and to the accompanying documents.

The wheel mark shall:
- be affixed at the end of the production phase by the manufacturer or the manufacturer's authorized representative.
- be followed by the identification number of the notified body followed by the year in which the mark is affixed.

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

Example
EXPERT strip: EXPERT d1-d
EXPERT plug: EXPERT 1000x40x5