DNV·GL

Certificate No:
MEDB00004J9

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: pipe, duct, trunk, etc penetrations

with type designation(s)
HPS (High Pressure Seal)

Issued to
IBMO B.V.
Bleiswijk, Netherlands

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773,**
item No. MED/3.26b. SOLAS 74 as amended, Regulation II-2/9, IMO MSC.1/Circ.1276 and IMO 2010 FTP Code

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

This Certificate is valid until **2023-10-11**.

Issued at **Høvik** on **2018-10-12**

DNV GL local station:
Rotterdam, Product Certification /Verification

Approval Engineer:
Grzegorz Wolski

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

NORWEGIAN ACCREDITATION PROD 019

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Product description

"HPS (High Pressure Seal)"
consists of a steel sleeve welded to the bulkhead/deck. The sleeve is fitted with IBMO HPS sealing system at both ends of the sleeve. Insulation and installation as specified in table below.

Use	Size of sleeve	Length of sleeve	Thickness of sleeve	Insulation specifications	Pipe
Bulkhead	Ø 273 mm	200 mm	9.5 mm	The sleeve is partially insulated with an approved A-60 insulation. In addition the sleeve is insulated on the exposed side. The pipe is insulated 490 mm on each side of the division.	Ø 168 mm
Deck	Ø 60 mm	180 mm	2,25 mm	The sleeve is partially insulated with an approved A-60 insulation. The pipe is insulated 150 mm on each side of the division.	Ø 12 mm
Deck	Ø 273 mm	200 mm	10 mm	The sleeve is partially insulated with an approved A-60 insulation. The pipe is insulated 450 mm on each side of the division.	Ø 168 mm

Application/Limitation

Approved for use as penetration system in Class A-0 to A-60 in steel bulkheads/decks. For A-0, 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. Other applications are subject to case-by-case approval.

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

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

Type Examination documentation

Test report no. 2012-Efectis-R9421a/NKS/BKJX and no. 2012-Efectis-R9421b/NKS/BKJX both dated 14 May 2013 from Efectis Nederland BV, Rijswijk, The Netherlands.

Tests carried out

Tested according to IMO FTPC Part 3 and in compliance 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, MED Mark of Conformity and USCG approval number if applicable (see first page).