



DET NORSKE VERITAS

EC TYPE EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2011/75/EU, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. This Certificate is issued by Det Norske Veritas under the authority of the Government of the Kingdom of Norway.

CERTIFICATE NO. **MED-B-8629**

This is to certify that the
Penetrations through "A" class divisions: pipe, duct, trunk, etc penetrations

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

Manufacturer
IBMO B.V.
Bleiswijk, Netherlands

is found to comply with the requirements in the following Regulations/Standards:
Annex A.1, item No. A.1/3.26b and Annex B, Module B in the Directive. SOLAS 74 as amended, Regulation II-2/9, IMO MSC/Circ.1276 and IMO FTP Code

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

Høvik, 2013-11-18
for **Det Norske Veritas AS**

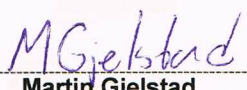


This Certificate is valid until
2018-11-18

Notified Body No.: **0575**


Marianne Strand Valderhaug
Head of Department

DNV local office:
Rotterdam


Martin Gjelstad
Surveyor



The Certificate is subject to terms and conditions overleaf. Any significant changes in design or construction of the product, or amendments to the Directive or Standards referenced above may render this Certificate invalid. The product liability rests with the manufacturer or his representative in accordance with Council Directive 96/98/EC, as amended. The Mark of Conformity may only be affixed to the product and a Declaration of Conformity may only be issued when the production/product assessment module referred to in the council directive, is fully complied with.



Certificate No.: MED-B-8629
 Item No.: A1/3.26b
 Job Id.: 344.1-004120-1

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 of manufacturer, type designation, fire-technical rating, MED Mark of Conformity and USCG approval number if applicable (see below and page 3).

Mark of Conformity

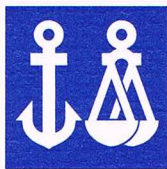
The manufacturer is allowed to affix the Mark of Conformity according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and shall issue a Declaration of Conformity, only when the module D or E or F of Annex B in the same directive is fully complied with.

Module D: The quality system for production and testing shall be approved by the Notified Body.

Module E: The quality system for inspection and testing shall be approved by the Notified Body.

Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a Certificate of Conformity.



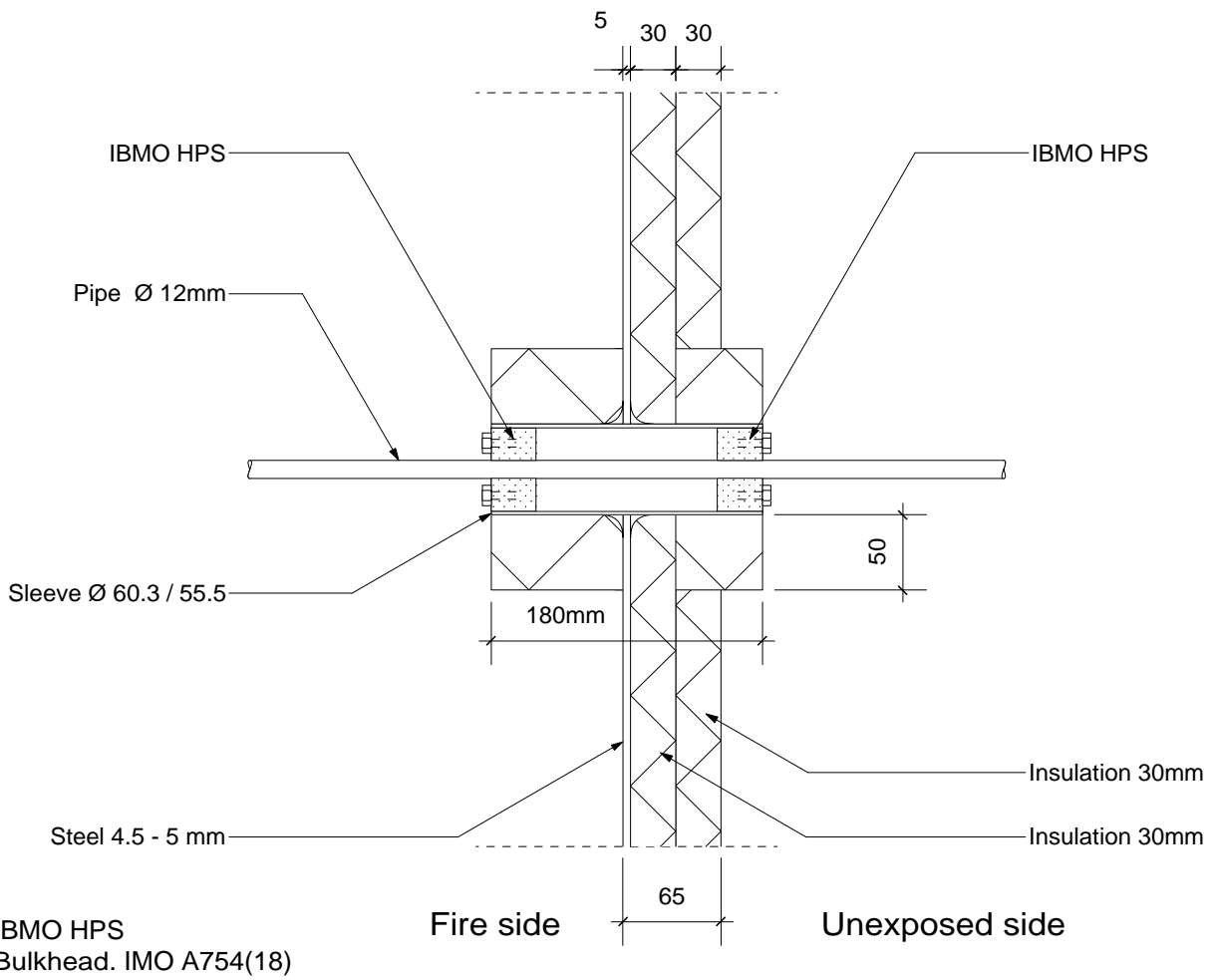






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USCG Approval

An 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.

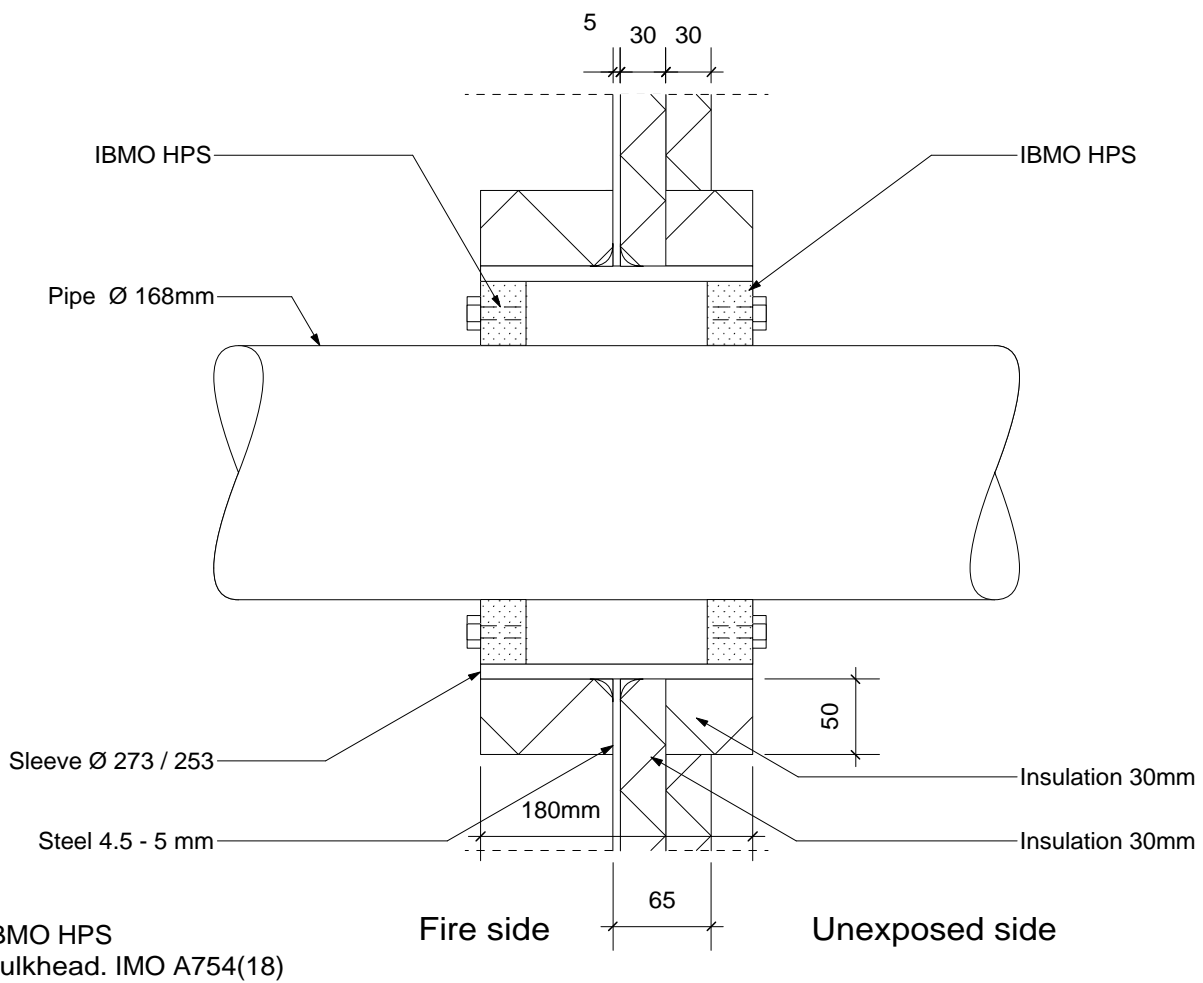








legend	
	putty pad
	EIS
	MPS
	HPS

remarks
<ul style="list-style-type: none"> - All measurements in millimeters - Sleeves placed symmetrical

IBMO Group B.V.	Project:	Fire test 2013 IMO A754(18)		
	Drawing No.:	A.FTBH.15.01.13	page 1 of 1	paper size A4
	Subject:	Bulkhead, 4.5-5mm.		
	Scale:	1:5		
	Date:	03-03-2013		
	Initials.:	RV		
Lorentzstraat 13 2665 JG Bleiswijk The Netherlands		Tel.: +31(0)10 - 522 75 05 Fax: +31(0)10 - 476 31 45 Web: www.ibmo.eu		



legend	remarks	Project: Fire test 2013 IMO A754(18)			
 putty pad	- All measurements in millimeters - Sleeves placed symmetrical	Drawing No.:	H.FTBH.15.01.13	page 1 of 1	paper size A4
 EIS		Subject: Bulkhead, 4.5-5mm.			
 MPS		Scale: 1:5			
 HPS		Date: 03-03-2013			
		Initials.: RV Lorentzstraat 13 2665 JG Bleiswijk The Netherlands Tel.: +31(0)10 - 522 75 05 Fax: +31(0)10 - 476 31 45 Web: www.ibmo.eu 			