

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)

BLÜCHER PIPE PENETRATION TYPE 866, 868 AND 870

Issued to

Blücher Metal A/S
Vildbjerg, Midtjylland, Denmark

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

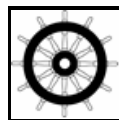
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2023-11-12.**

Issued at **Høvik** on **2018-11-13**

DNV GL local station:
Aalborg

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Job Id: **344.1-000332-37**
Certificate No: **MEDB00004NK**

Product description

"BLÜCHER PIPE PENETRATION TYPE 866, 868 AND 870"

Penetration system for Blücher stainless steel pipes as per table below:

Pipe penetration	Size	Using	Used on ⁽¹⁾⁽²⁾
Type 866	Ø 40 - 200 mm	Stainless steel sleeves of length 50-100 mm and thickness 5 mm	D/B
Type 868	Ø 40 - 110 mm	Stainless steel flange 5 mm thick	D/B
Type 870	Ø 40 - 110 mm	Stainless steel scuppers of length 100 mm and thickness 5 mm	D only

(1) Consult documentation for detailed distinction

(2) D – deck / B – bulkhead

The penetration pipes are fitted with EPDM sealing material and safety clamps (see drawings in test reports for details).

Sleeve is welded to the bulkhead/deck (as applicable) and the Blücher pipes.

The pipes are to be insulated with approved insulation according to classification as shown in drawings S-0309-01 Rev. A, 02 Rev. B, 03 Rev. A, 04 Rev. A, 20 and 21.

Applications/Limitations

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

Restricted application: Pipe penetration 870 is approved for use in decks only.

Watertightness and gastightness is not covered in this certificate.

The pipe penetrations insulated to A-60 and A-30 may also be used in A-15 class divisions if the pipe penetrations are insulated as required for A-60 and A-30 class divisions respectively 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 penetration system is generally not to be used for penetrating boundaries of tanks.

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 use.

Type Examination documentation

Test reports No. PG11279 Serial No. 9365 dated 12 December 2003, No. PG11270 Serial No. 9351 and No. PG11278 Serial No. 9381 dated 22 December 2003 and No. PG11277 Serial No. 9388 dated 7 January 2004 from DIFT, Denmark.

Test Report No. PG 11600, Serial No. 10557 dated 17 May 2006 from DIFT, Denmark.

Test reports No. PG12302, Serial No. 12829, No. 12303, Serial No. 12841 both dated 27 January 2011 from DIFT, Denmark.

Assessment report No. PG11278b dated 22 December 2003 from DIFT, Denmark.

Assessment report No. PH13466 dated 2 March 2011 from DIFT, Denmark.



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Drawings Nos. S-0309-01, Rev. A, 02 Rev. B, 03 Rev. A, 04 Rev. A. 20 and 21 from Blücher Metal A/S (Insulation).

Drawings Nos. S-0309-10 Rev. B, 11 Rev. B, 12 Rev. B, 13 Rev. B, 14 Rev. B, 15 Rev. B, 16 Rev. B, 17 Rev. C, 18 Rev. B, 19 Rev. B and 22 Rev. A from Blücher Metal A/S (types).

Tests carried out

Tested according to IMO FTPC Part 3, IMO Res. A.754(18) 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, the Mark of Conformity and USCG approval (see page one).