

**EC-TYPE EXAMINATION  
CERTIFICATE (MODULE B)**

Certificate No:  
**MEDB000016W**  
Revision No:  
**5**

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 CLASS A PIPE PENETRATION**

Issued to  
**Blücher Metal A/S**  
**Vildbjerg, Midtjylland, Denmark**

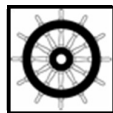
is found to comply with the requirements in the following Regulations/Standards:  
Regulation **(EU) 2019/1397**,  
**item No. MED/3.26b. SOLAS 74 as amended, Regulation II-2/9, IMO MSC.1/Circ.1276, IMO 2010 FTP Code and IMO MSC.1/1488**

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

This Certificate is valid until **2025-07-13**.

Issued at **Høvik** on **2020-07-14**

DNV GL local station:  
**Denmark CMC**



for **DNV GL AS**

Approval Engineer:  
**Marcin Tobiasz**

Notified Body  
No.: **0575**

**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, and amended by Decision No 1/2019 dated February 22nd, 2019.



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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Job Id: **344.1-000332-49**  
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## Product description

“Blücher Class A Pipe Penetration”

Penetration system for Blücher pipes type 866, 868 and 870 composed of steel sleeves/flanges welded to the bulkhead/deck and Blücher pipes welded to the sleeve.

Pipe penetration	Penetration size	Pipe size	Sealing type	Used on (1)(2)	Sleeve/scupper
Type 866.032	Ø 60 mm	Ø 32/50 – Ø 40/50 mm	EPDM	D/B	Stainless steel sleeves of length 50 mm and thickness 5 mm
Type 866.025	Ø 50- 210 mm	Ø 40 - 200 mm	SI Sealing	D/B	Stainless steel sleeves of length 100 mm and thickness 5 mm
Type 868	Ø 90- 260 mm	Ø 40 - 200 mm	SI Sealing	D/B	Stainless steel flange 5 mm thick
Type 870	Ø 90- 235 mm	Ø 40 - 200 mm	SI Sealing	D only	Stainless steel scuppers of length 100 mm and thickness 5 mm

(1) Consult documentation for detailed distinction

(2) D – deck / B – bulkhead

The pipes are to be insulated with approved insulation with sufficient density (e.g. Paroc Wired Mat 100 or Rockwool Marine Wired Mat 105) according to drawings S-0377-300 Rev. B, 308 Rev. C, 301 Rev. B, 330 Rev. A, 302 Rev. B, 331 Rev. A., 334.

## Application/Limitation

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.

The pipe penetrations insulated to A-60 and A-30 may also be used in A-15 and A-0 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 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. PGA11214A ver. 2 dated 14 September 2018 from DIFT, Hvidovre, Denmark.

Test report No. PGA11215A ver. 2 dated 8 July 2020 (date of initial report 20 June 2018) from DIFT, Hvidovre, Denmark.

Test report No. PGA11264A Rev. 0 dated 28 August 2018 from DIFT, Hvidovre, Denmark.

Test report No. PGA11265A Rev. 0 dated 29 August 2018 from DIFT, Hvidovre, Denmark.

Test report No. PGA11316A Rev. 1 dated 8 July 2020 (date of initial report 12 March 2018) from DIFT, Hvidovre, Denmark.

Test report No. PGA11317A Rev. 0 dated 12 March 2018 from DIFT, Hvidovre, Denmark.

Test report No. PGA11554A Rev. 0 dated 15 November 2019 from DIFT, Hvidovre, Denmark.

Test report No. PGA11555A Rev. 0 dated 19 November 2019 from DIFT, Hvidovre, Denmark.

Assessment report No. PHA11296A Rev. 1 dated 9 July 2020 (date of initial report 20 January 2020) from DIFT, Hvidovre, Denmark.

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Assessment report No. PHA11296B Rev. 0 dated 20 January 2020 from DIFT, Hvidovre, Denmark.

Drawing No. S-0377-300 Rev. B from Blücher Metal A/S.  
Drawing No. S-0377-308 Rev. C from Blücher Metal A/S.  
Drawing No. S-0377-301 Rev. B from Blücher Metal A/S.  
Drawing No. S-0377-330 Rev. A from Blücher Metal A/S.  
Drawing No. S-0377-302 Rev. B from Blücher Metal A/S.  
Drawing No. S-0377-331 Rev. A from Blücher Metal A/S.  
Drawing No. S-0377-337 from Blücher Metal A/S.  
Drawing No. S-0377-316 Rev. D from Blücher Metal A/S.  
Drawing No. S-0377-317 Rev. C from Blücher Metal A/S.  
Drawing No. S-0377-318 Rev. C from Blücher Metal A/S.  
Drawing No. S-0377-338 from Blücher Metal A/S.  
Drawing No. S-0377-319 Rev. C from Blücher Metal A/S.  
Drawing No. S-0377-333 Rev. B from Blücher Metal A/S.  
Drawing No. S-0377-309 from Blücher Metal A/S.  
Drawing No. S-0377-313 Rev. D from Blücher Metal A/S.  
Drawing No. S-0377-314 Rev. C from Blücher Metal A/S.  
Drawing No. S-0377-315 Rev. C from Blücher Metal A/S.  
Drawing No. S-0377-329 from Blücher Metal A/S.  
Drawing No. S-0377-335 Rev. A from Blücher Metal A/S.  
Drawing No. S-0377-336 from Blücher Metal A/S.  
Drawing No. S-0377-353 from Blücher Metal A/S.  
Drawing No. S-0377-310 Rev. C from Blücher Metal A/S.  
Drawing No. S-0377-311 Rev. B from Blücher Metal A/S.  
Drawing No. S-0377-312 Rev. C from Blücher Metal A/S.  
Drawing No. S-0377-346 from Blücher Metal A/S.  
Drawing No. S-0377-347 from Blücher Metal A/S.  
Drawing No. S-0377-348 from Blücher Metal A/S.  
Drawing No. S-0377-339 from Blücher Metal A/S.  
Drawing No. S-0377-345 from Blücher Metal A/S.  
Drawing No. S-0377-334 from Blücher Metal A/S.

### **Tests carried out**

Tested according to IMO 2010 FTP Code part 3.

### **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 if applicable (see first page).