

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 Non-welded Class A Pipe Penetration

Issued to
BLÜCHER Metal A/S
Vildbjerg, Midtjylland, Denmark

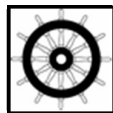
is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2020/1170**,
item No. MED/3.26b. SOLAS 74 as amended, Regulation II-2/9, IMO MSC.1/Circ.1276, IMO 2010 FTP Code and IMO MSC.1/1488

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

This Certificate is valid until **2026-02-10**.

Issued at **Høvik** on **2021-02-11**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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: **344.1-010880-1**
Certificate No: **MEDB00006YG**

Product description

"BLÜCHER Non-welded Class A Pipe Penetration"

Penetration system for BLÜCHER pipes type 868.910 composed of steel flanges fixed using bolts squeezing steel plates around the steel deck and BLÜCHER pipes welded to the flange. The penetration pipes are fitted with a safety clamps.

For further details, see drawings listed under Type Examination documentation below.

Application/Limitation

Approved for use as pipe penetration system in class A-0, A-30 and to A-60 steel decks. Other applications are subject to case-by-case approval.

When insulation is required, the penetrations are to be insulated with PAROC Marine Wired Mat 100 (or equally with density of min. 100 kg/m³) with length and thickness according to drawings S-0496-300 and S-0496-301. Alternatively, class A-0, A-15 and A-30 may be insulated as Class A-60 with using an approved A-60 insulation similar to the approved deck (thickness) - length and number of layers should be according drawings S-0496-300 and S-0496-301 with sufficient density and in addition the division is to be insulated at least 200 mm around the penetration.

Table 1: Approved pipe penetration in A-class steel deck

Type	Penetration size (OD) [mm]	Pipe material	Pipe diameter (OD) [mm]	Sealing type	Penetration position	Insulation
868.910	164 - 273	Steel	40 - 160	EPDM	Exposed	S-0496-300 S-0496-301

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. PGB10010A Rev. 1 dated 2 February 2021 from DBI, Hvidovre, Denmark (date of initial report 27 February 2020).

Test report No. PGB10011A Rev. 1 dated 2 February 2021 from DBI, Hvidovre, Denmark (date of initial report 27 February 2020).

Insulation drawings:

Drawing No. S-0496-300 from maker.

Drawing No. S-0496-301 from maker.

Part drawings:

Drawing No. S-0496-302 from maker.

Drawing No. S-0496-303 from maker.

Drawing No. S-0496-304 from maker.

Drawing No. S-0496-305 from maker.

Drawing No. S-0496-306 from maker.

Drawing No. S-0496-307 from maker.

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).