



# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:  
**MEDB000016X**  
Revision No:  
**1**

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 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 Cabin Drain**

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

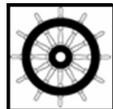
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2026-05-31**.

Issued at **Høvik** on **2021-06-01**

DNV local station:  
**Denmark CMC**

Approval Engineer:  
**Marcin Tobiasz**



Notified Body  
No.: **0575**

for **DNV AS**

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**Sverre Olav Bergli**  
**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 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 AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") 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.



## Product description

“BLÜCHER Cabin Drain”

is a penetration system type 491 composed of a lower part, an upper part, a removable water trap (w/ EPDM or CR seal) and a Ø50 mm pipe. The lower part is welded to a deck.

## Application/Limitation

Approved for use as a marine drain system in class A-0 to A-60 deck. Other applications are subject to case-by-case approval.

Where insulation is required, the penetrations are to be insulated with PAROC Marine Wired Mat 100 (or equally) with length and thickness according to drawings S-0430-300. Alternatively, class A-0, A-15 and A-30 may be insulated as Class A-60 by using an approved A-60 Insulation similar to the approved deck (thickness and density) - length should be according drawings S-0430-300 and in addition the division is to be insulated at least 200 mm around the penetration.

Table 1: Approved drain penetration in A-60 steel deck

Type	Size [mm]	Pipe material	Pipe diameter (OD) [mm]	Drain depth [mm]	Drain thickness [mm]	Drain position	Drain insulation
491 w/ water trap	Ø110	Steel	Ø50	65	2	Exposed	Fully insulated + 450 mm along pipe*

\*) 450 mm from centre of drain and along pipe.

Table 2: Approved drain penetration in A-0 steel deck

Type	Size [mm]	Pipe material	Pipe diameter (OD) [mm]	Drain depth [mm]	Drain thickness [mm]	Drain position	Drain insulation
491 w/ water trap	Ø110	Steel	Ø50	65	2	Exposed	Fully insulated + 450 mm along pipe*

\*) 450 mm from centre of drain.

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. PG12302 dated 27 January 2011 from DBI, Hvidovre, Denmark.

Test report No. PG12303 dated 27 January 2011 from DBI, Hvidovre, Denmark.

Drawing No. S-0430-300 from manufacturer.

## 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).