

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB0000226
Revision No:
2

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 Class A Marine Drains Type 470.900 and 475.900

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

is found to comply with the requirements in the following Regulations/Standards:
Regulation (EU) 2022/1157,
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

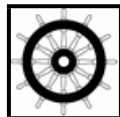
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2027-09-05**.

Issued at **Høvik** on **2022-09-06**

DNV local station:
Denmark CMC

Approval Engineer:
Marcin Tobiasz



Notified Body
No.: **0575**



for **DNV AS**

Digitally Signed By:
Øyvind Hoff
Location: DNV Høvik, Norway
on behalf of

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 Class A Marine Drains Type 470.900 and 475.900” are Ø140 drains (outlet pipe in sizes Ø50, 75, 110 mm) composed of a lower part and/or an upper part and a steel flange (flange thickness 6 mm), fastened to an aluminium/steel deck with 4 sets of bolted arrangement. A SI (Silicone) gasket is fitted in the penetration flange.

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

Application/Limitation

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

Table 1: Approved pipe penetration in A-60 and A-30 deck.

Type	Size [mm]	Pipe/drain material	Pipe diameter (OD) [mm]	Penetration length [mm]	Penetration thickness [mm]	Penetration position	Penetration insulation
470.900	Ø140	Stainless steel	Ø50 - Ø110	146 - 174	6 (plate/flange) 1 (pipe/drain)	Underside	S-0429-301 ¹⁾ S-0429-306 ¹⁾
475.900	Ø140	Stainless steel	Ø50 - Ø75	106	6 (plate/flange) 1 (pipe/drain)	Underside	S-0429-301 ¹⁾ S-0429-306 ¹⁾

1) Insulated with 50 mm thick PAROC Marine Wired Mat 100 (manufactured by PAROC with density 100 kg/m³) 450 mm along a pipe or insulated with 100 mm thick A-60 approved deck insulation 600 mm along.

Table 2: Approved pipe penetration in A-0 deck.

Type	Size [mm]	Pipe/drain material	Pipe diameter (OD) [mm]	Penetration length [mm]	Penetration thickness [mm]	Penetration position	Penetration insulation
470.900	Ø140	Stainless steel	Ø50 - Ø110	146 - 174	6 (plate/flange) 1 (pipe/drain)	Underside	S-0429-301 ¹⁾ S-0429-306 ¹⁾
475.900	Ø140	Stainless steel	Ø50 - Ø75	106	6 (plate/flange) 1 (pipe/drain)	Underside	S-0429-301 ¹⁾ S-0429-306 ¹⁾

1) Insulated with 50 mm thick PAROC Marine Wired Mat 100 (manufactured by PAROC with density 100 kg/m³) 450 mm along a pipe or insulated with 100 mm thick A-60 approved deck insulation 600 mm along. Additionally, to be insulated at least 200 mm around the penetration.

The insulation materials used have 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. PGA10022 dated 19 December 2011 from DBI, Hvidovre, Denmark.
 Test report No. PGA10030 dated 19 December 2011 from DBI, Hvidovre, Denmark.
 Test report No. PGA11807 dated 23 June 2008 from DBI, Hvidovre, Denmark.
 Test report No. PGA11555A dated 27 February 2020 from DBI, Hvidovre, Denmark.

Assessment reports No. PHD10075A dated 12 July 2022 from DBI, Hvidovre, Denmark.

Insulation drawings:

Drawing No. S-0429-301 dated 27 January 2012 from manufacturer.
 Drawing No. S-0429-306 dated 5 December 2013 from manufacturer.

Drain drawings:

Drawing No. S-0429-313, Rev. A from manufacturer.
 Drawing No. S-0429-314, Rev. A from manufacturer.
 Drawing No. S-0429-315, Rev. A from manufacturer.

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).