

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Class A and B Penetration**with type designation(s)
RGP cable penetration - Non-loadbearing A-class

Issued to

MCT Brattberg AB
Karlskrona, Swedenis found to comply with
DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations
DNV GL rules for classification – Ships
DNV GL offshore standards**Application :****Approved for use as cable penetration system in non-loadbearing A-class bulkheads for approved ship cables.****This certificate is recognized by Transport Canada.****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**Issued at **Høvik** on **2021-02-23**for **DNV GL**This Certificate is valid until **2026-02-22**.DNV GL local station: **Sweden CMC**Approval Engineer: **Helge Bjørnarå****Mårten Schei-Nilsson**
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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.



Product description

RGP cable penetration - Non-loadbearing A-class, is a circular multi-cable penetration system composed of a RGP frame inserted into a flanged sleeve on one side and a 60 mm deep Insulation Holder on opposite side. The frame is filled with MCT Insert Blocks (Standard Block, Handiblock, AddBlock, U-Block and Spareblock).

Sleeve type(s): SFRB

SFRB and Insulation holder are to be bolted to the bulkhead.

For further details, see drawing listed under Type Approval documentation.

Application/Limitation

Approved for use as cable penetration system in non-loadbearing A-class bulkheads for approved ship cables. Other applications are subject to case-by-case approval.

Class A-0, A-15 and A-30 shall be insulated as for A-60.

Non-loadbearing A-60 bulkhead:

Bulkhead consisting of CIS 100 panels (supplied by BD Systems). The panels, 100 mm thick x 600 mm wide, each comprised 0.7 mm thick galvanized steel facings each side of the 100 mm thick mineral wool core with density of 144 kg/m².

The penetrations are only approved for use in constructions similar to the one used for testing. On a case by case basis, other equivalent constructions may be used when confirmed acceptable and documented by maker and found to be acceptable by the flag administration.

Table 1: Approved for non-loadbearing A-60 bulkhead:

Type	Size	Max cable diameter [mm]	Sleeve length [mm]	Sleeve thickness [mm]	Sleeve position	Sleeve insulation	Dwg. No.
RGP	50 - 200	40	73 - 86	6	Inside bulkhead, flange on either side.	Insulation holder is filled with A-60 insulation.	1190518

Any insulation used during the fire test, must be kept there also when used in divisions with lower rating than fire tested.

Any surface materials used have to be approved for smoke and toxicity and low flame spread characteristics (IMO 2010 FTP Code Annex 1 Parts 2 and 5) when required according to relevant rules.

Each product is to be supplied with its manual for installation and use.

Type Approval documentation

Certification in accordance with Class Program DNVGL-CP-0338, September 2018.

Test Report No. P101462-1006 dated 2 February 2018 from BRE Global, Watford, UK.

Drawing No. 1190518 Rev. A dated 9 September 2019 from maker.



Job Id: **262.1-034723-1**
Certificate No: **TAF00001H1**

Tests carried out

Tested according to IMO FTPC Part 11 (IMO Res. MSC.45(65)) and in compliance with IMO 2010 FTP Code Ch. 8.

Marking of product

The product or packing is to be marked with name of manufacturer, type designation and fire-technical rating.

Periodical assessment

DNV GL's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Class Programme DNVGL-CP-0338, Section 4.