TYPE APPROVAL CERTIFICATE

Certificate no.:
TAF00001H0
Revision No:
2

This is to certify:

that the Class A and B Penetration

with type designation(s)
RGP cable penetration - A-class

issued to
MCT Brattberg AB
Karlskrona, **Sweden**

is found to comply with
DNV's Interpretation of SOLAS 1974 Convention as Amended
DNV rules for classification – Ships
DNV offshore standards

Application:

Approved for use as cable penetration system in A-class steel and aluminium bulkheads and decks 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.

Issued at **Høvik** on **2026-07-03**

This Certificate is valid until **2031-06-16**.
DNV local unit: **Sweden CMC**

Approval Engineer: **Katarzyna Baczewska**

for **DNV**

Digitally Signed By:
Marcin Tobiasz
Location: DNV Gdynia, Poland

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.

Product description

"RGP cable penetration – A-class",
is a circular multi-cable penetration system composed of a RGP frame inserted into a sleeve. The frame is filled with MCT Insert Blocks (Standard Block, Handiblock, AddBlock, U-Block and Spareblock).

Sleeve type(s): S, L, SFR, SFRB and SFRBO

Sleeve is to be welded to division. SFRB and SFRBO may be bolted to the division.

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

Application/Limitation

Approved for use as cable penetration system in A-class steel and aluminium bulkheads and decks 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 and the division is to be fitted with A-60 insulation for a minimum distance of 200 mm around the penetration.

Table 1: Approved cable penetration in A-60 steel bulkhead:

Type	Size	Sleeve type	Max cable diameter [mm]	Sleeve length [mm]	Sleeve thickness [mm]	Sleeve position	Sleeve Insulation
RGP 1)	50 – 200	S, L	40	35 – 82	6	Symmetrically	Partially insulated on exposed side. (1190523)
RGP 1)	50 – 200	SFR, SFRB, SFRBO	50	35 – 82	6	Unexposed side	Partially insulated on exposed side. (1190524)
RGP 1)	50 – 300	S, L	50	35 – 85	6 – 7	Symmetrically	Fully insulated on exposed side. (1190526)
RGP 1)	300	S, L	110	85	7	Symmetrically	Fully insulated + 50 mm on exposed side. (1190525)
RGP	100 – 200	S, L	50	70 – 82	6	Symmetrically	Fully insulated on one side.

1) Restricted application, fire against insulated side.

Table 2: Approved cable penetration in A-60 steel deck:

Type	Size	Sleeve type	Max cable diameter [mm]	Sleeve length [mm]	Sleeve thickness [mm]	Sleeve position	Sleeve insulation
RGP	50 – 300	S, L	110	70	6	Symmetrically	Partially insulated on underside. (1190521)
RGP	50 – 300	SFR, SFRB, SFRBO	65	85 – 86	6	Top side	Partially insulated on underside.

Table 3: Approved cable penetration in A-60 aluminium bulkhead:

Type	Size	Sleeve type	Max cable diameter [mm]	Sleeve length [mm]	Sleeve thickness [mm]	Sleeve position	Sleeve insulation
RGP	100 – 200	S, L	32	60	10	Symmetrically	Fully insulated on both sides.
RGP 1)	100 – 200	S, L	32	60	10	Symmetrically	Fully insulated on exposed side and partially insulated on unexposed side. (1190522)

1) Restricted application, fire against fully insulated side.

Table 4: Approved cable penetration in A-60 aluminium deck:

Type	Size	Sleeve type	Max cable diameter [mm]	Sleeve length [mm]	Sleeve thickness [mm]	Sleeve position	Sleeve insulation
RGP	100 - 200	S, L	32	60	10	Symmetrically	Fully insulated on underside. (1190520)

Each product is to be supplied with its manual for installation/application and maintenance.

Type Approval documentation

Certification in accordance with Class Programme DNV-CP-0338, September 2021.

Test report No. 301124C dated 2 March 2016 from BRE Global, Watford, UK.
Test report No. P101462-1002 dated 18 August 2018 from BRE Global, Watford, UK.
Test report No. P101462-1001 dated 14 September 2018 from BRE Global, Watford, UK.
Test report No. P101462-1014 dated 22 November 2019 from BRE Global, Watford, UK.
Test report No. P101462-1010 dated 27 November 2019 from BRE Global, Watford, UK.
Test report No. P101462-1015 dated 27 November 2019 from BRE Global, Watford, UK.
Test report No. P101462-1015 dated 27 November 2019 from BRE Global, Watford, UK.
Test report No. P128270-1001 dated 6 August 2025 from BRE Global, Watford, UK.

Drawing No. 1190520 Rev. A dated 9 September 1992 from manufacturer.
Drawing No. 1190521 Rev. A dated 15 October 2007 from manufacturer.
Drawing No. 1190522 Rev. A dated 15 October 2007 from manufacturer.
Drawing No. 1190523 Rev. A dated 15 October 2007 from manufacturer.
Drawing No. 1190524 Rev. A dated 15 October 2007 from manufacturer.
Drawing No. 1190525 Rev. A dated 15 October 2007 from manufacturer.
Drawing No. 1190526 Rev. A dated 15 October 2007 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 of manufacturer, type designation and fire technical rating.

Periodical assessment
DNV'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 DNV-CP-0338, Section 4.

Transport Canada Approval
Based on the procedures laid down in the Transport Canada Publication entitled "Procedures for Approval of Life-Saving Appliances, Fire Safety Systems, Equipment and Products (TP14612)", DNV confirms that the product/s listed in this certificate is/are in accordance with Transport Canada's requirements.

Manufactured by:
MCT Brattberg AB, Lyckeåborgsvägen 61, 371 92 Karlskrona, Sweden.
Kyung Nam Precision Co., 41**,** Mieumsandan 2-ro 24beon-gil, Gangseo-gu, Busan, Republic of Korea.