

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Class A and B Penetration**with type designation(s)
MCT BRATTBERG, TYPE RGS

Issued to

MCT Brattberg AB
KARLSKRONA, Sweden

is found to comply with

DNV GL offshore standards**DNV GL rules for classification – Ships****DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations****DNV GL class programme DNVGL-CP-0165 – Type approval – Cable and pipe penetrations****Application :****Approved for use as penetration system for approved ship cables in class A steel or aluminium bulkheads and decks.****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 **2017-10-25**This Certificate is valid until **2022-10-24**.for **DNV GL**DNV GL local station: **Malmö**Approval Engineer: **Tessa Biever**

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.



Product description

MCT Brattberg, Type RGS"

cable penetration piece constructed of a steel or aluminium frame filled with 60 mm thick MCT Brattberg Lycron insert blocks.

The penetration is approved:

- with frame types RGS, RGSC, RGSF, RGSFB, RGSK, RGSbtb and RGSR
- with frame size ranges 2, 4, 6, 8, and multiples thereof to a maximum size equivalent to size 8+8x7.

Application/Limitation

Approved for use in A-0, A-15, A-30 and A-60 steel or aluminium bulkheads or decks with insulation arrangements shown on the following drawings:

1100887 Rev. A	1100888 Rev. A	1100889 Rev. A	1100890 Rev. A
1100897 Rev. A	1100898 Rev. A	1100899 Rev. A	1110971 Rev. A
1120502 Rev. A	1120503 Rev. A	1120504 Rev. A	1100891 Rev. A
1100892 Rev. A	1100894 Rev. A	1100895 Rev. A	1100896 Rev. A

Class A-0, A-15 and A-30 shall be insulated as class A-60 and in addition the division is to be insulated at least 200 mm around the penetration.

Penetration systems are not to be used for penetrating boundaries of tanks.

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

Type Approval documentation

Certification in accordance with Class Programme DNVGL-CP-0338, October 2017 and DNVGL-CP-0165, October 2017.

Test reports No. 212563A dated 9 December 2003,

- No. 212564 dated 27 January 2004,
- No. 212565A dated 9 December 2003,
- No. 259264A dated 3 June 2010,
- No. 262822 dated 1 October 2010,
- No. 266413 dated 10 March 2011,
- No. 267923 dated 1 June 2011,
- No. 271351 dated 7 August 2012,
- No. 271353A dated 30 July 2012
- No. 271353B dated 5 September 2012 and
- No. 282342 dated 15 February 2013, all from BRE Global, Watford, UK.

Assessment Report No. CC 269831 dated 21 April 2011 from BRE Global, Watford, UK.

Tests carried out

Tested in accordance with IMO FTPC Part 3 and in compliance with IMO 2010 FTP Code Ch. 8 and DNVGL-CP-0165.

Marking of product

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

Transport Canada Approval

Based on the procedures laid down in the Transport Canada Publication entitled "Approval Procedures for, Life Saving Equipment and Structural Fire Protection Products (TP 14612)", DNV GL confirms that the products listed in this certificate are in accordance with Transport Canada's requirements.



Job Id: **262.1-007247-4**
Certificate No: **TAF00000TJ**

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 DNVGL-CP-0338 Section 4.