



Certificate Of Fire Approval

This is to certify that the product detailed below will be accepted for compliance with the applicable Lloyd's Register Rules and Regulations and with the International Convention for the Safety of Life at Sea, (SOLAS), 1974, as amended, for use on ships and offshore installations classed with Lloyd's Register, and for use on ships and offshore installations when authorised by contracting governments to issue the relevant certificates, licences, permits etc.

Manufacturer	MCT Brattberg AB
Address	Lyckeåborg, Karlskrona, 371 92, Sweden
Type	Pipe Penetration (Standard Fire Test)
Description	Fire Resisting Single or Multiple Pipe Rectangular Penetration Seals -Type: "MCT Brattberg RGS Series" for A Class Steel Bulkheads and Decks
Trade Name	RGS single and multiple pipe rectangular transits
Specified Standard	IMO Res. MSC.307 (88)-(2010 FTP Code) Annex 1 Part 3 IMO MSC.1/Circ.1488

This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Lloyd's Register Marine Polska sp. z o. o. of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document and its supplementary Type Approval Terms and Conditions form part of this Certificate.

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached Design Appraisal Document are complied with and the equipment remains satisfactory in service.

Al Zwycięstwa 13a, Gdańsk, 80-219, Poland

Marta Walk

Fire & Safety - Senior Specialist to Lloyd's Register Marine Polska sp. z o. o.
A member of the Lloyd's Register group

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**DESIGN APPRAISAL DOCUMENT****ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR26270050SFTC**

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions, and this Design Appraisal Document forms part of the Certificate.

This Certificate is a Renewal and an Amendment of Certificate Number LR21282447SF-02.

APPROVAL DOCUMENTATION

BRE Global Ltd, Garston, United Kingdom, Fire Test Report No.: P125338-1001, Issue 2 dated 4 April 2024

DBI Danish Institute of Fire and Security Technology, Hvidovre, Denmark; Fire Test Report No.: PGB10367A Revision 1, dated 24 March 2025

Manufacturer's Drawings: 1240350 Revision D, 1240358 Revision D & 1080760, Revision 1

CONDITIONS OF CERTIFICATION

1. RGS single and multiple pipe rectangular transits may be accepted for use in A Class steel bulkheads and decks, insulation arrangement for the penetrations are given in the tables below.
2. MCT Brattberg RGS series pipe penetrations consisting of frame, Lycron self-lubricating transit Insert Blocks (type "Standard Blocks", "Handiblock", "Addblocks", "U-Blocks", "Spareblocks" and "EMC variants") and Stayplates and STG Endpacking with compression plate or PTG Presswedge.
3. For use with single steel pipes up to 114.5mm outside diameter and multiple steel pipes up to 30mm outside diameter and copper pipes up to 22mm outside diameter, insulated for minimum lengths as described in Manufacturer's drawings listed above.
4. Frame sizes: 1, 2, 4, 6, 8 and combinations thereof to a maximum size equivalent to RGS 8x2 transit.
5. RGS series consisting Mild Steel, Stainless Steel, and aluminium Rectangular Frame types: RGS, RGSF, RGSFB, RGSC, RGSK, RGSbtb, RGSR, RGSFBO.
6. EMP (Electro Magnetic Pulse) Frame types may also be accepted
7. The frame is welded or bolted to an approved A Class steel division and packed with insert blocks suited for each pipe dimension. The compression unit is inserted to compress the insert blocks against pipes to establish a tight seal.

Table 1. RGS Pipe Transits in A-60 divisions


Seal	Maximum Pipe Diameter (mm)	Application	Penetration position	Rating	Drawing
RGS	4-50mm	Steel Bulkhead	Unrestricted	A-60	1240350, rev. D, Fig.1
RGS	4-114.5mm	Steel Bulkhead	Unrestricted	A-60	1240350, rev. D, Fig.2
RGS	4-30mm	Steel Bulkhead	Unrestricted	A-60	1240350, rev. D, Fig.3
RGS	4mm	Steel Deck	Unrestricted	A-60	1240350, rev. D, Fig.4
RGS	4-50mm	Steel Deck	Unrestricted	A-60	1240350, rev. D, Fig.5
RGS	4-114.5mm	Steel Deck	Unrestricted	A-60	1240350, rev. D, Fig.6
RGS	4-30mm	Steel Deck	Unrestricted	A-60	1240350, rev. D, Fig.7

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**DESIGN APPRAISAL DOCUMENT****ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR26270050SFTC****Table 2. RGS Pipe Transits in A-0 divisions**

Seal	Maximum Pipe Diameter (mm)	Application	Penetration position	Rating	Drawing
RGS	4-50mm	Steel Bulkhead	Unrestricted	A-0	1240358, rev. D, Fig.1
RGS	4-114.5mm	Steel Bulkhead	Unrestricted	A-0	1240358, rev. D, Fig.2
RGS	4-30mm	Steel Bulkhead	Unrestricted	A-0	1240358, rev. D, Fig.3
RGS	4mm	Steel Deck	Unrestricted	A-0	1240358, rev. D, Fig.4
RGS	4-50mm	Steel Deck	Unrestricted	A-0	1240358, rev. D, Fig.5
RGS	4-114.5mm	Steel Deck	Unrestricted	A-0	1240358, rev. D, Fig.6
RGS	4-30mm	Steel Deck	Unrestricted	A-0	1240358, rev. D, Fig.7

8. For applications in A-15, A-30 Class steel bulkheads and decks, penetrations are to be fitted with the same or equivalent A-60 Class insulation arrangements as those used in the fire tests (including any insulation fitted on the penetration itself in the tests) for a minimum distance of 200mm around the penetration.
9. Composition, application and installation of subcomponents, including adhesives, seals and any fire retardants, to be maintained in production and used in accordance with originally tested composition formula and method of application and installation, and manufacturer's instructions.
10. Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure that items are of the same standard as the approved prototype.
11. The certificate holder is solely responsible for the products supplied under this Certificate and to ensure that their products are fully compliant with the relevant statutory regulations and designed, manufactured and installed to the same quality and specifications as the prototype tested, including components that are designed and manufactured by third parties.

 This product has been verified to be fully in accordance with Transport Canada Procedure TP14612E "Procedures for approval of life-saving appliances and fire safety systems, equipment and products" and is suitable to be placed on Canadian Flagged vessel

NOTE (FOR INFORMATION ONLY)

RGS pipe penetrations were subjected to 6 bar hydrostatic pressure testing and 4 bar pneumatic pressure testing, with satisfactory results, as detailed in the referenced documents: Lloyd's Register Witness Test Report No. 11201/A dated 30.01.2012 and Det Norske Veritas Watertightness and Gastightness Test Report No. N141GRC2 dated 22.11.2017

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Certificate No:

LR26270050SFTC

Reference:

GTSO/FIRE/TA/MW/ TSO/25-038812/PRJ111005044434

DESIGN APPRAISAL DOCUMENT

ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR26270050SFTC

PLACE OF PRODUCTION

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M. Walk.

Marta Walk
Senior Specialist, Fire & Safety
Statutory Discipline Team, Marine & Offshore
Lloyd's Register EMEA

Supplementary Type Approval Terms and Conditions

This Certificate and Design Appraisal Document relates to type approval, it certifies that the prototype(s) of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein, it does not mean or imply approval for any other use, nor approval of any products designed or manufactured otherwise than in strict conformity with the said prototype(s)

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