

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	Cable Transit(Standard Fire Test)
Description	MCT Brattberg "SR, MSR & DB Series Cable" Glands in A class Steel bulkheads and decks for cables
Trade Name	"SR, MSR & DB"
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.

**DESIGN APPRAISAL DOCUMENT****ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR26333052SFTC**

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: LR22490614SF.

APPROVAL DOCUMENTATION**Test Reports**

Building Research Establishment (BRE), Garston, United Kingdom, Fire Test Reports No: 301124D Issue 1 dated 21 April 2016, P101462-1021 Issue 1 dated 17 April 2020, P101462-1022 Issue 1 dated 7 July 2020. P101462-1023 dated 9 October 2020, P101462-1025 dated 9 August 2022, P101462-1026 dated 8 November 2022 and P101462-1027 Issue 1 dated 4 January 2023

RISE Research Institutes of Sweden AB, Boras, Sweden; Fire Test Reports, Fire Test Report No.: O100409-1156471-1

Manufacturer's drawings: 1220244 Rev.B, 1220245 Rev.B, 1220246, Rev.B, 1220244, Rev.B, 1220251, Rev.B. & 1220253, Rev.B.

CONDITIONS OF CERTIFICATION

1. Consisting of MCT Brattberg round cable glands with cylindrical silicone rubber bung tightened with two semicircular compression plates either bolted (MSR) or welded (SR) to the deck or bulkhead.
2. DB single cable variant also accepted bolted to the deck or bulkhead. DB Gland available as EMC conversion.
3. The SR, MSR and DB Series Cable Transits may be accepted for applications in A Class steel divisions , insulation arrangement for the penetrations are given in the tables below.

Table 1. MSR cable glands in A-0 and A-60 divisions

Seal	Maximum Cable Diameter (mm)	Application	Penetration position	Rating	Drawing
MSR	4-32mm	Steel Bulkhead	Restricted to the fire unexposed side	A-60	1220244 Rev. B, Fig. 1
MSR	4-12mm	Steel Bulkhead	Unrestricted	A-60	1220244 Rev. B, Fig. 2
MSR	13-32mm	Steel Bulkhead	Unrestricted	A-60	1220244 Rev. B, Fig. 3
MSR	4-32mm	Steel Deck	Unrestricted	A-60	1220244 Rev. B, Fig. 4
MSR	4-32mm	Steel Bulkhead	Restricted to the fire unexposed side	A-0	1220251 Rev. B, Fig. 1
MSR	4-12mm	Steel Bulkhead	Unrestricted	A-0	1220251 Rev. B, Fig. 2
MSR	13-32mm	Steel Bulkhead	Unrestricted	A-0	1220251 Rev. B, Fig. 3
MSR	4-32mm	Steel Deck	Unrestricted	A-0	1220251 Rev. B, Fig. 4

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Table 2. SR cable glands in A-0 and A-60 divisions

Seal	Maximum Cable Diameter (mm)	Application	Penetration position	Rating	Drawing
SR	4-50mm	Steel Bulkhead	Restricted to the fire unexposed side	A-60	1220247 Rev. B, Fig. 2
SR	51-110mm	Steel Bulkhead	Restricted to the fire unexposed side	A-60	1220247 Rev. B, Fig. 3
SR	4-12mm	Steel Bulkhead	Unrestricted	A-60	1220247 Rev. B, Fig. 1
SR	4-110mm	Steel Deck	Unrestricted	A-60	1220247 Rev. B, Fig. 4
SR	4-50mm	Steel Bulkhead	Restricted to the fire unexposed side	A-0	1220245 Rev. B, Fig. 2
SR	51-110mm	Steel Bulkhead	Restricted to the fire unexposed side	A-0	1220245 Rev. B, Fig. 3
SR	4-12mm	Steel Bulkhead	Unrestricted	A-0	1220245 Rev. B, Fig. 1
SR	4-110mm	Steel Deck	Unrestricted	A-0	1220245 Rev. B, Fig. 4

Table 3. DB cable glands in A-0 and A-60 divisions

Seal	Maximum Cable Diameter (mm)	Application	Penetration position	Rating	Drawing
DB	4-16mm	Steel Bulkhead	Unrestricted	A-60	1220246 Rev. B, Fig. 1
DB	17-60mm	Steel Bulkhead	Unrestricted	A-60	1220246 Rev. B, Fig. 2
DB	4-60mm	Steel Deck	Unrestricted	A-60	1220246 Rev. B, Fig. 3
DB	4-16mm	Steel Bulkhead	Unrestricted	A-0	1220253 Rev. B, Fig. 1
DB	17-60mm	Steel Bulkhead	Unrestricted	A-0	1220253 Rev. B, Fig. 2
DB ¹⁾	4-60mm	Steel Deck	Unrestricted	A-0	1220253 Rev. B, Fig. 3

¹⁾ Models M16-150-30 up to M60-150-30 included.

- Frame types MSR 20-63, SR 25-200 & DB 16-60.
- EMP (Electro Magnetic Pulse) variant also accepted.
- Cable transits are to be fitted with the as-tested insulation materials in all cases. Any modifications are subject to acceptance by the final project authority and the attending surveyor.
- 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.
- 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.
- 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.

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This product has been verified to be fully in accordance with Transport Canada Procedure TP14621E "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; outside the scope of this Fire Type Approval Certificate)

MSR, SR and DB penetrations were tested for a hydrostatic and pneumatic pressure of 5 Bar, as detailed in the referenced document: Lloyd's Register Witness Test Report No. QR14-11211G/W and QR14-11212G/W, both dated 15 June 2011

PLACE OF PRODUCTION**MCT Brattberg AB**

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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)