



UK TYPE-EXAMINATION (MODULE B) CERTIFICATE

This is to certify that:

Lloyd's Register Marine Limited (LRM Ltd) did undertake the relevant type approval procedures for the type of equipment identified below which was found to be in compliance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended, subject to any conditions in the schedule attached hereto.

Manufacturer	MCT Brattberg AB
Address	SE-37 192 Karlskrona, Sweden
Reference	MSN1874 Amendment 6
Regulation Item (No. & Item Designation)	UK/3.26a Penetrations through 'A' Class divisions: electric cable transits
Product Type	Fire penetration seal
Product 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 MSC.1/Circular 1488

The attached Design Appraisal Document (schedule) forms part of this certificate. This certificate remains valid unless suspended, expired or withdrawn, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service.

This certificate is issued under the authority of the MCA. This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with the approved body named on this certificate.

During the period of validity of this certificate the applicable regulations (international conventions and the relevant resolutions and circulars of the IMO) and testing standards may change, therefore the product conformity may need to be re-assessed by the Approved Body.

The "UK Mark of Conformity" may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an Approved Body.

Lloyd's Register Marine Limited (Reg. no. 13281335) is a limited company registered in England and Wales. Registered office: 71 Fenchurch Street, London, EC3M 4BS, UK.
A member of Lloyd's Register group.

Matt Tillman

UKI Marine & Offshore TSO Manager
For and on behalf of Lloyd's Register Marine Ltd. (8512)

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



ATTACHMENT TO UK TYPE EXAMINATION (MODULE B) CERTIFICATE No. LR2351297UKMB

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions and the Merchant Shipping (Marine Equipment) Regulations 2016, as amended for the UK Type Examination of marine equipment for use on UK ships

This Design Appraisal Document forms part of the Certificate.

APPROVAL/EXAMINED DOCUMENTATION

TEST REPORTS

Building Research Establishment (BRE), Garston, United Kingdom, 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 Issue 1 dated 7 December 2020, P101462-1025 Issue 1 dated 9 August 2022, P101462-1026 Issue 1 dated 8 November 2022 and P101462-1027 Issue 1 dated 4 January 2023.

Lloyds Register pressure test witness report reference QR14-11211G/W and QR14-11212G/W both dated 15 June 2011.

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.
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
MSR	4-12mm	Steel Bulkhead	Unrestricted	A-60	1220244
MSR	13-32mm	Steel Bulkhead	Unrestricted	A-60	1220244
MSR	4-32mm	Steel Deck	Unrestricted	A-60	1220244
MSR	4-32mm	Steel Bulkhead	Restricted to the fire unexposed side	A-0	1220251
MSR	4-12mm	Steel Bulkhead	Unrestricted	A-0	1220251
MSR	13-32mm	Steel Bulkhead	Unrestricted	A-0	1220251
MSR	4-32mm	Steel Deck	Unrestricted	A-0	1220251

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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
SR	51-110mm	Steel Bulkhead	Restricted to the fire unexposed side	A-60	1220247
SR	4-12mm	Steel Bulkhead	Unrestricted	A-60	1220247
SR	4-110mm	Steel Deck	Unrestricted	A-60	1220247
SR	4-50mm	Steel Bulkhead	Restricted to the fire unexposed side	A-0	1220245
SR	51-110mm	Steel Bulkhead	Restricted to the fire unexposed side	A-0	1220245
SR	4-12mm	Steel Bulkhead	Unrestricted	A-0	1220245
SR	4-110mm	Steel Deck	Unrestricted	A-0	1220245

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
DB	17-60mm	Steel Bulkhead	Unrestricted	A-60	1220246
DB	4-60mm	Steel Deck	Unrestricted	A-60	1220246
DB	4-16mm	Steel Bulkhead	Unrestricted	A-0	1220253
DB	17-60mm	Steel Bulkhead	Unrestricted	A-0	1220253
DB	4-60mm	Steel Deck	Unrestricted	A-0	1220253

4. Frame types MSR 20-63, SR 25-200 & DB 16-60.
5. EMP (Electro Magnetic Pulse) variant also accepted.
6. 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.
7. Production items of the subject equipment are to be manufactured in accordance with either an approved Production Quality Assurance System (Module D), a Product-Quality Assurance System (Module E) or a Product Verification Process (Module F), as applicable. The UK Conformity Mark cannot be affixed to the product until a conformity assessment module is in place.
8. Each item, batch or lot of the subject equipment is to be issued with a "UK Declaration of Conformity" and have the "UK Conformity Mark" affixed after a conformity assessment module is in place.

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9. 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 as applicable and are designed, manufactured and installed to the same quality and specifications as the prototype tested, including components that are designed and manufactured by third parties.
10. Should a change of Place of Production from that stated below be required i.e., where the stages of manufacture/assembly/testing of this product take place, the new Place of Production is to be advised to us prior to the change taking place. This Certificate will require to be updated for Approval to be maintained.
11. The manufacturer must keep a copy of the UK type-examination certificate, its annexes, and additions together with the technical documentation at the disposal of the national authorities for a period of at least 10 years after the UK Conformity Mark has been affixed on the last product manufactured and, in no case for a period shorter than the expected life of the marine equipment concerned.

PRESSURE TESTING

1. MSR, SR and DB penetrations were tested for a hydrostatic and pneumatic pressure of 5 Bar

PLACE OF PRODUCTION

MCT Brattberg AB
SE-37192 Karlskrona
Sweden



Matthew Tillman
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Marine & Offshore
**For and on behalf of Lloyd's Register Marine Ltd.
(LRM Ltd) - UK Approved Body 8512**