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Certificate No: LR21222544SF-03

Issue Date: 12/01/2024 Expiry Date: 27/06/2026

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
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Address Lyckeåborgsvagen 63, 371 92 Karlskrona, Sweden

Type Fire Resisting Penetration Seals

Description MCT Brattberg Single/Multi Cable and Pipe Circular Penetration seals Types:

"RGP" and "RGPO" installed in MCT Brattberg Mild, Stainless Steel or

Aluminium Circular frames Types: "S, SFR, SFRB and SFRBO"

Trade Name "RGP" "RGPO" Penetration Seals

Specified Standard IMO Res. MSC.307(88)-(2010 FTP Code), as amended, 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.

Marta Walk

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

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



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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR21222544SF-03

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 an Amendment of Certificate Number: LR21222544SF-02.

APPROVAL DOCUMENTATION

MCT Brattberg drawings reference 1190517 rev A, 1190518 rev B, 1190520 rev A, 1190521 rev A, 1190522 rev A, 1190523 rev A, 1190524 rev A, 1190525 rev A, 1190526 rev A, 1190527 rev A, DNV witness reports N141GRC3 dated 22 November 2017 and N141GRU3 dated 28th February 2018.

TEST REPORTS

Building Research Establishment test reports 301124C dated 2nd March 2016, P101462-1001 dated 14th September 2018, P101462-1002 dated 15th August 2018, P101462-1006 dated 2nd February 2018, P101462-1010 dated 27th November 2019, P101462-1014 dated 22nd November 2019 and P101462-1015 dated 27th November 2019.

CONDITIONS OF CERTIFICATION

- 1. When used in conjunction with A-60 Class steel or A-60 Class aluminium bulkheads and decks with approved insulation arrangements, refer to MCT Brattberg installation drawings.
- 2. For applications in A-0, A-15, A-30 Class steel bulkheads and decks, a 200mm diameter ring of A-60 insulation is to be provided around one side of the bulkhead penetration or underside of deck penetrations. The insulation shall be as per the A-60 tested specimens.
- 3. "RGP" and "RGPO" cable penetrations consisting of: MCT Brattberg mild, stainless Steel or Aluminium Frames filled with MCT Brattberg 60mm thick Lycron self-lubricating transit blocks of type standard, add block, U block and Handi block.
- 4. Tables 1-5 below detail penetration types and sizes.

Table 1. Aluminium A-60 Bulkheads.

Aluminium Bulkheads A-60					
Frame Type	Sleeve Type	Penetration Size	Cable/Pipe	Collar Position	Drawing Reference
S, SFR, SFRB, SFRBO	RGP/RGPO	RGP 50-200	Cable/Pipe	Centre Line, Exposed or unexposed	1190522



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Table 2. Aluminium A-60 Deck.

Aluminium Decks A-60					
Frame Type	Sleeve Type	Penetration Size	Cable/Pipe	Collar Position	Drawing Reference
S, SFR, SFRB, SFRBO	RGP/RGPO	RGP 50-200	Cable/Pipe	Centre Line, Exposed or unexposed	1190520

Table 3. Steel A-60 Bulkheads.

	Steel Bulkheads A-60					
Frame Type	Sleeve Type	Penetration Size	Cable/Pipe	Collar Position	Drawing Reference	
S, SFR, SFRB, SFRBO	RGP S	RGP 50	Cable/Pipe	Centre-Line		
S, SFR, SFRB, SFRBO	RGP/ RGPO	RGP 50-200	Cable/Pipe	Centre Line, Exposed or unexposed	1190523, 1190524, 1190527	
S, SFR, SFRB, SFRBO	RGP/ RGPO	RGP 300	Cable/Pipe	Centre Line, Exposed or unexposed	1190525, 1190526	
S, SFR, SFRB, SFRBO	RGP BTB LIGHT	RGP 50-200	Cable/Pipe	Centre Line, Exposed or unexposed	1090517	

Table 4. Steel A-60 Decks.

Steel Decks A-60					
Frame Type	Sleeve Type	Penetration Size	Cable/Pipe	Collar Position	Drawing Reference
S, SFR, SFRB, SFRBO	RGP/RGPO	RGP 50-300	Cable/Pipe	Centre Line, Exposed or unexposed	1190521



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Table 5. CIS 100 Sandwich Panelled A-60 Bulkhead.

CIS 100 Sandwich Panelled A-60 Bulkhead.					
Frame Type	Sleeve Type	Penetration Size	Cable/Pipe	Collar Position	Drawing Reference
SFRB	RGP	RGP 50-200	Cables	Centre Line, Exposed or unexposed	1190518-B

- 5. 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.
- 6. 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 Lloyd's Register Class Rules as applicable 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.

Notes

The following penetrations underwent a hydrostatic and pneumatic pressure test.

Penetration Type	Hydrostatic Pressure	Pnematic Pressure
RGP/RGPO 50-200 All Block Types	5 bar	3 bar
RGP/ RGPO 300 All Block Types	3 bar	2 bar

PLACE OF PRODUCTION

MCT Brattberg AB

SE-37192 Karlskrona Sweden



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H. Halk

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)