

CERTIFICATE NUMBER 19-LD1894168-PDA

EFFECTIVE DATE

27 August 2019

EXPIRATION DATE

26 August 2024

ABS TECHNICAL OFFICE London Engineering Department

CERTIFICATE OF

Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

MCT BRATTBERG AB

located at

KARLSKRONA, Sweden

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product Pressure Sealing Cable/Pipes Transit

Model RGPH-50, RGPH -70, RGPH-100, RGPH-125, RGPH-150 and RGPH-200

This Product Design Assessment (PDA) Certificate remains valid until 26 August 2024 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau of Shipping

Mohammed K.M. Abbas Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

MCT BRATTBERG AB

SE-371 92 KARLSKRONA

KARLSKRONA

Sweden

Telephone: +46 455 37 52 00 Fax: +46 455 37 52 90 Email: info@mctbrattberg.se

Web: www.mctbrattberg.se

Tier: 3 - Type Approved, unit certification not required

Product:

Pressure Sealing Cable/Pipes Transit

Model:

RGPH-50, RGPH-70, RGPH-100, RGPH-125, RGPH-150 and RGPH-200

Intended Service:

Cables / pipes water tight penetrations in bulkheads or decks for Marine and Offshore Applications.

Description:

Round modular frame up to 200mm for single or multiple cable / pipe water tight penetrations in bulkheads or decks using nitrile rubber blocks or seals. RGPH high pressure seal is available with flange for bolting or without flange for

Model: RGPH-50 for single cable or pipe penetration. Models: RGPH-70, RGPH-100, RGPH-125, RGPH-150 and RGPH-200 for multiple cable or pipe penetration.

Rating:

Watertight pressure rating for use in bulkheads and decks - Up to 40 bar g.

Service Restriction:

- 1. Maximum cable size used in the hydrostatic test is 28 mm dia and maximum pipe size used is 26 mm dia.
- 2. Maximum frame size tested is RGPH 200 and minimum size tested is RGPH 50.
- 3. This product is intended for pressure boundary purposes only.
- 4. Not for use in tank boundaries.
- 5. In all cases, cable sizes and combinations thereof are to be typical of marine installations.
- 6. Unit Certification is not required for this product. If the manufacturer or purchasers request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments:

- 1. Installation is to be in accordance with manufacturer's instructions.
- 2. Spare solid insert modules are to be used where cables or pipes are not located.
- 3. Watertight bulkheads or decks for cable penetrations are to be examined and tested as per ABS Marine Vessels Rules 3-7-1/Table1 and 4-8-4/29.15.
- 4. When requested to be used in watertight bulkheads on passenger ships or special purpose ships, the penetration system has to comply with the requirements given in SOLAS Ch. II -1 Reg. 13.2.3 (2014 Consolidated Edition). This approval of penetrations passing through watertight bulkhead is not to be construed as a substitute for flag Administration's approval for the purpose of SOLAS (2014 Consolidated Edition).
- 5. The product or packing is to be marked with name of manufacturer, type designation and rating.
- 6. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:

- 1) DNV Hydrostatic pressure test report no. QR-314 dated 08 March 2006.
- 2) Model; Drawings no.; Revision number

RGPH- 50; 6060011; Rev.A

RGPH-70; 6140136; Rev.A RGPH-100; 6140138; Rev.A

RGPH-125; 6140170; Rev.A

RGPH-150; 6140140; Rev.A

RGPH-200; 610096; Rev.C

RGPH-200 with ANSI Flange; 610093; Rev.B

Terms of Validity:

This Product Design Assessment (PDA) Certificate 19-LD1894168-PDA, dated 27/Aug/2019 remains valid until

MCT BRATTBERG AB

SE-371 92 KARLSKRONA

Sweden

KARLSKRONA

Telephone: +46 455 37 52 00 Fax: +46 455 37 52 90 Email: info@mctbrattberg.se

Web: www.mctbrattberg.se

Tier: 3 - Type Approved, unit certification not required

26/Aug/2024 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

STANDARDS

ABS Rules:

2019 ABS Marine Vessels Rules, 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-6-2/9.7.1, 4-8-4/21.13.1, 4-8-4/29.15 2019 ABS Mobile Offshore Units Rules, 1-1-4/9.7, 1-1-A2,1-1-A3, 4-2-1/11.15.1, 4-3-3/5.13.1

National:

NA

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

NA