

CERTIFICATE NUMBER EFFECTIVE DATE EXPIRY DATE ABS TECHNICAL OFFICE 24-0032960-PDA 26-Sep-2024 25-Sep-2029 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

SE-371 92 KARLSKRONA, , 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

Endorsements:

Tier: 3 - Type Approved, unit certification not required

This Product Design Assessment (PDA) Certificate remains valid until 25/Sep/2029 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

Mohammed Abbas

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)

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Product: Pressure Sealing Cable/Pipes Transit

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

Endorsements:

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 welding.

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 (2024 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 (2024 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:

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:

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Tier: 3 - Type Approved, unit certification not required

Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

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STANDARDS

ABS Rules:

2024 ABS Marine Vessels Rules, 1A-1-4/7.7, 1A-1-A3, 1A-1-A4, 4-6-2/9.7.1, 4-8-4/21.13.1, 4-8-4/29.15 2024 ABS Mobile Offshore Units Rules, 1B-1-4/9.7, 1B-1-A2,1B-1-A3, 4-2-1/11.15.1, 4-3-3/5.13.1

National:

NA

International:

SOLAS Consolidated Edition 2024

Government:

NA

EUMED:

NA

OTHERS:

NA