



CERTIFICATE NUMBER	20-2028539-PDA
EFFECTIVE DATE	17-Sep-2020
EXPIRY DATE	16-Sep-2025
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

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 RGPM

This Product Design Assessment (PDA) Certificate remains valid until 16/Sep/2025 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: bengt.johansson@mctbrattberg.seWeb: www.mctbrattberg.se**Tier: 3 - Type Approved, unit certification not required**

Product: Pressure Sealing Cable/Pipes Transit**Model:** RGPM**Intended Service:**

Cable and pipe penetration System approved for water tightness and gas tightness in bulkheads and decks for ships and offshore applications

Description:

Round modular frame up to 200 mm for cable penetration and pipe seals, installed in bulkheads and decks, and utilizing nitrile rubber seals.

Rating:

Watertight pressure rating for use in bulkheads and decks - Up to 15 bar g.

Gas Tightness rating- 20 mb

Service Restriction:

1. Maximum cable size used in the hydrostatic test is 35 mm dia and maximum pipe size used is 21 mm dia.
2. Maximum frame size tested is RGPM 200 and minimum size tested is RGPM 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 MVR 3-7-1/Table 1 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) Pressure Type Test, Test Report Number QR-239, Lycab AB, dated 20 October 1998
- 2) Inspection/ Test Certificate Number QR15-8069, ABS Type Approval Testing , Lycab AB, dated 20 October 1998
- 3) DNV Witnessed Pressure and Gas Tightness Test Report Number 308597 Rev A dated 17 October 2008.
- 3) Drawing Number - 620326 Rev A, RGPM-200 for 3 cables 21 dia and 2 cables 35 dia.
- 4) Drawing Number 620365 Rev. A, RFPM-200 for 3 cables of 21mm and for 2 cables of 35mm
- 5) Drawing Number 6140075, Rev. B - RGPM-100 for 8 cables 7.1 – 8.1 dia with 3 plugs

Terms of Validity:

This Product Design Assessment (PDA) Certificate remains valid until 16/Sep/2025 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.

MCT BRATTBERG AB

SE-371 92 KARLSKRONA

KARLSKRONA

Sweden

Telephone: +46 455 37 52 00

Fax: +46 455 37 52 90

Email: bengt.johansson@mctbrattberg.se

Web: www.mctbrattberg.se

Tier: 3 - Type Approved, unit certification not required

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.

STANDARDS

ABS Rules:

2020 ABS Marine Vessel Rules – 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-6-2/9.7, 4-8-4/21.13, 4-8-4/29.15

2020 ABS Mobile Offshore Units Rules 1-1-A2, 1-1-A3, 1-1-4/9.7, 4-2-1/11.15.1, 4-3-3/5.13

National:

NA

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

NA