



Confirmation of Product Type Approval

Company Name: ROXTEC INTERNATIONAL AB

Address: ROMBVAGEN 2 LYCKEBY SE 371 65 Sweden

Product: Cable, Deck and Bulkhead Penetration Sealings

Model(s): Roxtec RS and RS OMD Series Seals in steel divisions.

Endorsements:

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	20-2032853-PDA	29-SEP-2020	28-SEP-2025
Manufacturing Assessment (MA)	24-6227546	25-JAN-2024	08-JAN-2029
Product Quality Assurance (PQA)	NA	NA	NA

Tier

3 - Type Approved, unit certification not required

Intended Service

Single cable penetrations in Class A0, A15, A30 and A60 bulkheads and decks for Marine and offshore applications. Penetrations of watertight and gastight bulkheads and decks up to the specified pressure..

Description

Roxtec sealing system with multidiameter technology: RS-series (steel) consisting of a steel sleeve welded, bolted (incl. SLA sleeve) or attached through expansion (RS X kit consist of SLX sleeve and RS seal) to a steel deck or bulkhead. The sleeve is filled with a Roxtec RS or RS OMD type (standard, Ex/ATEX or EMC version) halogen free rubber seal in sizes 23-150 (23-75 for RS with SLA Sleeve).

Ratings

Fire Rating: A0, A15, A30 and A60 for Bulkheads and Decks.

Watertight test pressure 6 bar (except bolted versions test pressure at 5 bar).

Gastight test pressure 4 bar (except bolted versions test pressure at 2.5 bar).

Watertight test pressure with SLA sleeve- 4 bar

Gastight test pressure with SLA sleeve-1.5 bar

Service Restrictions

a) Maximum cable diameter 86 mm (without SLA Sleeve) and 32 mm (with SLA Sleeve).

b) Minimum and Maximum frame sizes tested are 23-125 for RS/ RS OMD and 23-75 for RS with SLA Sleeve.

- c) Not for use in tank boundaries.
- d) Tested with Marine Power/ Instrumentation/Control Cables.
- e) Insulation material is to be A-60 approved type and installed in accordance with the manufacturer's ABS approved installation drawings to the satisfaction of the Surveyor.
- f) Unit Certification is not required for this product. If the manufacturer or purchaser's 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

- a) All seal type should be installed in accordance with the manufacturers instructions in accordance with ABS approved installation drawings.
- b) Watertight or fire rated 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.
- c) 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 (Consolidated Edition 2020). 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.
- d) The product or packing is to be marked with name of manufacturer, type designation and fire rating.
- e) The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes, Drawings and Documentation

- a) SP Technical Research Institute of Sweden Test reports:

6P10024- 31-01-2017- Steel Bulkhead Divisions, RS with SLA

8P07092rev 1 – 16-01-2020- IMO test of pipe penetration seals in A60 steel deck, RS with SLA

- b) Danish Institute of Fire and Security Technology test reports

PGA 10800A Dated 26-05-2016-Steel Deck Divisions, RS Seals

PGA10871A dated 31-10-2016-Steel Deck Divisions, RS Seals

PGA10870A dated 22-12-2011-01-11-2016- Steel Bulkhead Divisions, RS with SLA

PGA10652 dated 15-06-2015-Steel Bulkhead divisions, RS Seals

PGA10723A dated 15-12-2015- Stell Deck Divisions, RS Seals

- c) Centrum Techniki Okretowej SA Test reports

RS-17/B-396/E, dated 31-10-2017, Steel Bulkhead Divisions, RS Seals

RS-18/B-022/E dated 29-01-2018, Steel Bulkhead Divisions, RS Seals

RS-18/B-484/E dated 10-12-2018, Steel Deck Divisions, RS Seals

RS-18/B-023/E dated 29-01-2018, Steel Deck Divisions, RS Seals

RS-20/B-017/E dated 23-01-2020, Steel Bulkhead Divisions, RS Seals

RS-20/B-191/E dated 05-06-2020, Steel Bulkhead Divisions, RS Seals

d) Pressure test reports

DNV40007647-1, DNV Third Party Inspection Report, Dated 13 December 2011.

MLM010238, DNV Third Party Inspection Report, Dated 30 August 2001.

MLM020401, DNV Third Party Inspection Report, Dated 25 March 2002.

MLM030473-1 (RS X), DNV Third Party Inspection Report, Dated 27 January 2003.

N141EX8Z Rev 2, DNV Third Party Inspection Report, Dated 10 August 2017.

e) Drawings

1) S1558181 rev A for RS/RS OMD with Cable A-60 Class Steel BLKHD/DECK

2) S1558184 rev A for RS/RS OMD with Cable A-0 Class Steel BLKHD/DECK

3) S1558203 rev A for RS-Seal with SLA Sleeve and Cable A-60 Class Steel DECK/BLKHD

4) S1558204 rev A for RS-Seal with SLA Sleeve and Cable A-0 Class Steel DECK/BLKHD

Term of Validity

This Product Design Assessment (PDA) Certificate remains valid until 28/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.

ABS Rules

2020 ABS Rules for Building and Classing Marine Vessels: 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-8-4/21.13, 4-8-4/29.15.

2020 ABS Rules for Conditions of Classification - Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3.

2020 ABS Rules for Building and Classing Mobile Offshore Units 2020: 4-3-3/5.13.

International Standards

SOLAS Consolidated Edition 2020, Regulation 9.3.1

2010 FTP Code, Annex1, part 3 (2012 Edition)

EU-MED Standards

NA

National Standards

NA

Government Standards

This PDA conforms to Transport of Canada requirements as per Transport Canada Policy Letter

A8706-1 RDIMS#1961446

Other Standards

NA



A handwritten signature in blue ink, appearing to read "James W. White".

Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 13-Feb-2024 12:46

ABS has used due diligence in the preparation of this certificate, and it represents the information on the product in the ABS Records as of the date and time the certificate is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

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 prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.