

TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MERB0000130
Revision No:
0

This Certificate is issued by DNV UK Limited based on authorisation of the Maritime & Coast Guard Agency (MCA) as an UK Approved Body to undertake conformity assessments on marine equipment in accordance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016 as amended.

This is to certify:

That the Penetrations through "A" class divisions: electric cable transits

with type designation(s)
Roxtec sealing system with multidiameter technology: S-series (AI)

Issued to

Roxtec International AB
Karlskrona, Sweden

is found to comply with the requirements in the following Regulations/Standards:

Regulation **MSN 1874 Amendment 7,**
item No. UK/3.26a. SOLAS 74 as amended, Regulation II-2/9, IMO 2010 FTP Code and IMO MSC.1/1488

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2027-03-10.**

Issued at **London** on **2023-03-30**

DNV local unit:
Sweden CMC



for **DNV UK Ltd.**

Approval Engineer:
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Approved Body No.: **0097**

Christine Mydlak-Röder
MER Service Responsible



Maritime &
Coastguard
Agency

UK Approved Body Authorised
by the MCA

The Mark of Conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an approved body. The product liability rests with the manufacturer or his representative in accordance with the Merchant Shipping (Marine Equipment) Regulations 2016.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV UK Ltd. of any changes to the approved equipment. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply. This certificate remains valid unless suspended, withdrawn, re-called, or cancelled.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

“Roxtec sealing system with multidiameter technology: S-series (Al)”
 consisting of Roxtec S-series aluminium frames (S, SO, SF, SFO, SR, SK, SRC r20, SRC r40 and SBTB) in sizes 2 - 8 and combinations thereof, welded to an aluminium section. The S frame is filled with Roxtec (standard or EMC) halogen free RM modules. Assembled with Roxtec wedge kit (standard or EMC).

For further details, see drawings listed under Type Examination documentation below.

Application/Limitation

Approved for use as a single or multiple cable penetration system in class A-60 aluminium decks and bulkheads. Other applications are subject to case-by-case approval.

Class A-0, A-15 and A-30 shall be insulated as A-60 and in addition the division is to be insulated at least 200 mm around the penetration.

Table 1: Approved cable penetration in A-60 aluminium bulkhead

Type	Size	Max. cable diameter [mm]	Sleeve length [mm]	Sleeve thickness [mm]	Sleeve position	Sleeve insulation
S	2 - 8	88	60	10	Symmetric	S1571925, No. 1

Table 2: Approved cable penetration in A-60 aluminium deck

Type	Size	Max. cable diameter [mm]	Sleeve length [mm]	Sleeve thickness [mm]	Sleeve position	Sleeve insulation
S	2 - 8	83	60	10	Symmetric	S1571925, No. 2

The insulation material used has to be approved according to the UK Marine Equipment Regulation and bear the UK Mark of Conformity.

Each product is to be supplied with its manual for installation and maintenance.

Type Examination documentation

Test report No. P603001 dated 23 January 2007 from SP, Borås, Sweden.
 Test report No. RS-18/B-179/E dated 25 June 2018 from CTO, Gdansk, Poland.
 Test report No. RS-18/B-180/E dated 25 June 2018 from CTO, Gdansk, Poland.
 Test report No. RS-19/B-224/E dated 1 August 2019 from CTO, Gdansk, Poland.

Drawing No. S1571925 Rev. B dated 21 February 2022 from manufacturer.

Tests carried out

Tested in accordance with IMO FTPC Part 3 and in compliance with IMO 2010 FTP Code Ch. 8, and in accordance with IMO 2010 FTP Code part 3.

Marking of product

The product or packing is to be marked with name and address of manufacturer, type designation, UK Mark of Conformity (see first page).

Additional application/information for Watertightness/gastightness (Not part of the UK Marine Equipment Regulation requirement)

Product description

"Roxtec sealing system with multidiameter technology: S-series (Al)"
consisting of Roxtec S-series aluminium frames (S, SO, SF, SFO, SR, SK, SRC r20, SRC r40 and SBTB) in sizes 2 - 8 and combinations thereof, welded to an aluminium section. The S frame is filled with Roxtec (standard or EMC) halogen free RM modules. Assembled with Roxtec wedge kit (standard or EMC).

Application/Limitation

Approved for penetration in aluminium bulkheads or decks limited to a pressure of 4.00 bar watertightness and 2.67 bar gastightness.

The penetration system is not to be used for penetrating boundaries of tanks.

Type Approval documentation

Test report No. MLM 020106 dated 19 December 2001 from DNV Malmö.

Test report No. MLM 020133 dated 26 February 2002 from DNV Malmö.

Test report No. MLM 020408 dated 3 June 2002 from DNV Malmö.

Tests carried out

Pressure tests with water and Helium according to DNV Type Approval Programme 8.471.19-1.