

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of the Kingdom of Norway.

This is to certify:

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

with type designation(s)

Roxtec sealing system with multidiameter technology: R-series (steel)

Issued to

**Roxtec International AB
KARLSKRONA, Sweden**

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

Regulation **(EU) 2015/559,**

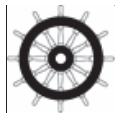
Annex A.1, item No. A.1/3.26a and Annex B, Module B in the Directive; SOLAS 74 as amended, Regulation II-2/9, IMO MSC/Circ.1276 and IMO 2010 FTP Code

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

This Certificate is valid until **2021-12-07.**

Issued at **Høvik** on **2017-03-09**

DNV GL local station:
Malmö



Notified Body
No.: **0575**



for **DNV GL AS**

Digitally Signed By: Hoff, Øyvind
Location: DNV GL Høvik, Norway
Signing Date: 31.03.2017, on behalf of

Approval Engineer:
Piotr Orzechowski

Vidar Dolonen
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005.

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-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

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.



Job Id: **344.1-000153-65**
Certificate No: **MEDB00001MS**

- 103070.29A (A-60 bulkhead) dated 28 October 2003 from SINTEF, Norway.

Drawings Nos.

- S1026428 Rev.B (A-0),
- S1026429 Rev.A (A-15, A-30 and A-60 bulkhead/deck),
- S1006145 Rev.0 (A-15, A-30 and A-60 (R X))
- S1512885 Rev. C (SL A) dated 23 March 2017,
- S1513350 Rev. B (SL A) dated 7 September 2016
all from Roxtec International AB.

Installation instructions Roxtec SL A sleeve from Roxtec.

Tests carried out

Tested according to IMO FTP Code Part 3 and in compliance with IMO 2010 FTP Code Ch. 8 and in accordance to 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, fire-technical rating, MED Mark of Conformity and USCG approval number if applicable (see first page).

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

Product description

“Roxtec sealing system with multidiameter technology: R-series (steel)”
consisting of a steel sleeve, bolted welded or attached through expansion (R X) to a steel section. Sleeve is fitted with a Roxtec R frame (standard or EMC) in sizes 50-200. The R-frame is filled with Roxtec (standard or EMC) halogen free RM modules.

Application/Limitation

Approved for penetration in steel bulkheads or decks limited to a pressure of 4 bar watertightness and 2.67 bar gastightness.

For bolted versions with gasket and self tapping screws, the pressure is limited to 3.33 bar watertightness and 1.67 bar gastightness.

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

Type Approval documentation

Test reports DNV No. MLM 010238 dated 30 August 2001, DNV No. MLM 020408 dated 3 June 2001, DNV No. MLM 030473-1 (R X) dated 27 January 2003 and DNV 40007647-1 dated 13 December 2011 (R50) from DNV Malmö.

Tests carried out

Tested according to Class programme DNVGL-CP-0165 Chapter 4, February 2016.