

# 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: S-series (AI)**

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**

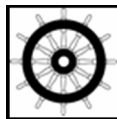
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2022-01-30**.

Issued at **Høvik** on **2017-01-31**

DNV GL local station:  
**Gothenburg**

Approval Engineer:  
**Ivar Bull**



Notified Body  
No.: **0575**

for **DNV GL AS**

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**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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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: **344.1-005051-1**  
Certificate No: **MEDB0000130**

## 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, SBTB) in size "S 8+8x3" with six frame openings (external size 402 x 596 mm (WxH)) welded to an aluminium division.

The S-frame is filled with Roxtec (standard or EMC) halogen free RM modules.

Assembled with Roxtec wedge kit or Roxtec EMC wedge kit.

## Application/Limitation

Approved for use as a single or multiple cable penetration system in class A-0, A-15, A-30 and A-60 aluminium bulkheads and decks. Other applications are subject to case-by-case approval.

Deck or bulkhead to be insulated with approved insulation according to classification covering the edge of the aluminium sleeve. See insulation drawing specified in the Type Approval Documentation. For fire class A-0, A-15 and A-30, the sleeve is to be insulated as for class A-60, and in addition the division shall be insulated at least 200 mm around the penetration.

Maximum approved cable diameter: Ø81 mm

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

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

## Type Examination documentation

Test Reports:

No. 103070.33 B (A-60 deck) dated 17 November 2004 from SINTEF NBL, Norway

No. 103070.33 Assessment (A-60 deck) dated 23 November 2004 from SINTEF NBL, Norway

No. P603001 (A-60 bulkhead) dated 23 January 2007 from SP, Sweden

Drawing No. S1011090 Rev. 0 dated 16 March 2007 from Roxtec International AB

## Tests carried out

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

## 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/or USCG approval number if applicable (see page 1).

## Appendix

### **Additional application/information for Watertightness/gastightness (Not part of the Marine Equipment Directive 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, SBTB) in size "S 8+8x3" with six frame openings (external size 402 x 596 mm (WxH)) welded to an aluminium division.

The S-frame is filled with Roxtec (standard or EMC) halogen free RM modules.

Assembled with Roxtec wedge kit or Roxtec EMC wedge kit.

#### **Application/Limitation**

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

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

#### **Type Approval documentation**

Test reports:

No. MLM 020106 dated 19 December 2001 from DNV Malmö, Sweden

No. MLM 020133 dated 26 February 2002 from DNV Malmö, Sweden

No. MLM 020408 dated 3 June 2002 from DNV DNV Malmö, Sweden

#### **Tests carried out**

Pressure tests with water and Helium tested according to Class Programme DNVGL-CP-0165 Chapter 4, February 2016.