

# TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:  
**MERB000065Z**  
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: GH-, RS- and R-series (sandwich panel)**

Issued to

**Roxtec International AB**  
**Karlskrona, Sweden**

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

Regulation **MSN 1874 Amendment 6,**

**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 **2024-12-02.**

Issued at **London** on **2022-11-30**

DNV local unit:  
**Sweden CMC**



for **DNV UK Ltd.**

Approval Engineer:  
**Roland Priebe**

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 This certificate remains valid unless suspended, withdrawn, re-called, or cancelled.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: GH-, RS- and R-series (sandwich panel)”  
 Cable transits consisting of the following:

Frame type	Sealing type	Size
GH	Roxtec modules	2x1 to 8+8x3
SLFRS	RS	31 to 125
SLFR	R	50 to 200

All cable transits are fully insulated with A-60 mineral wool.

The frame flanges are sealed with fire rated sealant and bolted to the sandwich panel bulkhead.

For further details see approved drawings listed below.

## Application/Limitation

The penetrations are approved for use as a cable penetration system for approved ship cables in class A-60/A-30 bulkheads made of sandwich panel type C.I.S-100 (A-60) manufactured by Norac AS with a thickness of 100 mm and a density of 30.62 kg/m<sup>3</sup>, or equivalent sandwich panels. Other applications are subject to case-by-case approval.

Frame type	Sealing type	Size	Frame installation side	Penetration class	Max cable diameter (mm)
GH	Roxtec modules	2x1 to 8+8x3	Unexposed	A-60	82
GH	Roxtec modules	2x1 to 8+8x3	Exposed	A-30	82
SLFRS	RS	31 to 125	Either side	A-60	82
SLFR	R	50	Either side	A-60	25
SLFR	R	70 to 200	Unexposed	A-60	60
SLFR	R	70 to 200	Exposed	A-30	60

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

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

## Type Examination documentation

Test report No. 3P07871 rev. 1 dated 2014-10-11 from SP Technical Research Institute of Sweden.

Drawing No. S1040644, rev. B: Insulation of GH frames dated 2014-05-05 from Roxtec

Drawing No. S1040645, rev. B: Insulation of RS / RS-OMD seals dated 2014-05-05 from Roxtec

Drawing No. S1040646, rev. B: Insulation of R frames dated 2014-05-05 from Roxtec

## Tests carried out

Tested according 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 and the Mark of Conformity (see first page).