



TYPE APPROVAL CERTIFICATE

No. LAB484722CS/002

This is to certify that the product identified below satisfies the requirements of the standard quoted under "Reference standard"

<i>Description</i>	Devices for the passage of electric cables through A or B Class divisions
<i>Type</i>	ROXTEC R-Series - SLA type
<i>Applicant</i>	ROXTEC INTERNATIONAL AB ROMBVAGEN 2, BOX 540 SE-37123 Karlskrona SWEDEN
<i>Manufacturer</i>	ROXTEC INTERNATIONAL AB
<i>Place of manufacture</i>	ROMBVAGEN 2, 37165 LYCKEBY SWEDEN
<i>Reference standards</i>	IMO Res. MSC.307(88)-(2010 FTP Code) - Part. 3

Issued in Genoa on June 13, 2023. This Certificate is valid until June 12, 2028

RINA Services S.p.A.

Enrico Cabella

This certificate consists of this page and 1 enclosure

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ROXTEC R-Series - SLA type**Product description**

Devices for the passage of electric cables having maximum diameter of 50 mm through A Class bulkheads and decks. The devices are composed of rubber designated Roxylon inserted in a circular steel frame (SLA) and fitted inside with RM Modules. The transits are insulated as follows:

Decks - one layer of mineral wool (certified non-combustible according to the IMO FTP Code) having minimum thickness of 50 mm and minimum density of 120 kg/m³ and one layer of mineral wool (certified non-combustible according to the IMO FTP Code) having minimum thickness of 30 mm and minimum density of 125 kg/m³ fitted on the lower side.

Bulkheads - two layers of mineral wool (certified non-combustible according to the IMO FTP Code) having, each, minimum thickness of 45 mm and minimum density of 90 kg/m³ fitted on the non-fire hazard side.

On decks and bulkheads the mineral wool covers the transits and is applied all around the transits for a minimum width of 250 mm.

The transits may be fitted with additional insulation as described in the following table:

BULKHEAD

Transit type	Fill %	Cables - Maximum diameter (mm)	TRANSIT FIXING AND NOTES
R50	16	10	The penetration may be fixed on the exposed and unexposed side; when fixed on the unexposed side, additional insulation composed of two layers of the same mineral wool, having length of 110 mm, is to be fitted around the cables
R100	22.10	47	The penetration may be fixed on the exposed and unexposed side; when fixed on the unexposed side, additional insulation composed of two layers of the same mineral wool, having length of 110 mm, is to be fitted around the cables

DECK

Transit type	Fill %	Cables - Maximum diameter (mm)	TRANSIT FIXING AND NOTES
R50	12	10	The penetration is fixed on the unexposed side; no additional insulation
R50	16	10	The penetration may be fixed on the exposed and unexposed side; when fixed on the exposed side, additional insulation composed of the deck insulation, having width of 100 mm, is to be fitted around the cables
R100	25	50	The penetration may be fixed on the exposed and unexposed side; when fixed on the exposed side, additional insulation composed of the deck insulation, having width of 100 mm, is to be fitted around the cables

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Field of application

Fire resistant A-60 Class cable transits through A Class bulkheads; fire risk on the uninsulated side.

Fire resistant A-60 Class cable transits through A Class decks.

Reference documents

Roxtec drawings enclosed in CTO Test Reports No. RS-21/B/-518/E dated 15 December 2021, No. RS-22/B-152/E dated 4 May 2022 and DBI Test Reports No. PGA10871Arev2 dated 16 January 2018 and No. PGA10800A dated 26 May 2016.

Tests carried out

Tests as per CTO Test Reports No. RS-21/B/-518/E dated 15 December 2021, No. RS-22/B-152/E dated 4 May 2022 and DBI Test Reports No. PGA10871Arev2 dated 16 January 2018 and No. PGA10800A dated 26 May 2016 issued according to 2010 FTP Code.

Note: Transits SLA 25 – 75 – 100 were subjected to hydrostatic test (water – 4 bar) for 60 minutes and gas-tightness test (helium – 1.5 bar) for 30 minutes without any leakage – test as per DNV-GL Survey report No. 141EX8Z Rev. 2 dated 10 August 2017

General conditions for the approval

- a) The initial conditions verified by RINA at the time of the approval are to be maintained
- b) Any changes to the initial conditions are to be promptly communicated to RINA, which reserves the right to repeat the relevant assessment
- c) This certificate will no be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with RINA
- d) RINA personnel are to allowed to witness during the performances of activities, upon their request
- e) The activities are to be carried out in compliance with the RINA Rules and/or other applicable Rules
- f) Should the specified regulations or standards be amended during the validity of this certificate, the product is to be reapproved prior to it being placed on board vessels to which the amended regulations or standards apply.

Genoa June 13, 2023

File Allegato/Attached file