



TYPE APPROVAL CERTIFICATE
No. LAB180318CS/001

This is to certify that the product identified below is in compliance with the regulations herewith specified.

<i>Description</i>	Devices for the passage of electric cables through A or B Class divisions
<i>Type</i>	Roxtec S Series - Steel Bulkhead
<i>Applicant</i>	ROXTEC INTERNATIONAL AB ROMBVAGEN 2, P.O. BOX 540 SE-37123 KARLSKRONA SWEDEN
<i>Manufacturer</i>	ROXTEC INTERNATIONAL AB
<i>Place of manufacture</i>	ROMBVAGEN 2, P.O. BOX 540 SE-37123 KARLSKRONA SWEDEN
<i>Reference standards</i>	IMO Res. MSC.307(88)-(2010 FTP Code)

Issued in Genoa on December 19, 2018. This Certificate is valid until December 18, 2023

RINA Services S.p.A.

Enrico Cabella

This certificate consists of this page and 1 enclosure

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Roxtec S Series - Steel Bulkhead**Product description**

Devices for the passage of electric cables having diameter ranging from 10 up to 86 mm through A Class bulkheads. The transits are composed of a steel frame having thickness of 10 mm fillet welded to the bulkhead plate and filled with EPDM halogen free material packing system; on the upper part it is installed one module fitted with a screw expander.

Field of application

Fire resistant A-60 Class cable transits through A Class bulkheads as per following tables:

Bulkhead insulated by means of two layers of mineral wool (certified non combustible in compliance to 2010 FTP Code) 50+40 mm thick and having density of 125 kg/m³

TYPE OF TRANSITS	Fill %	Cable diameter	ADDITIONAL INSULATION	TRANSIT FIXING AND NOTES
S 8+8x10	4	from 10 up to 86 mm	Mineral wool, two layers, 50+40 mm thick, having density of 125 kg/m ³ and width of 200 mm all around	The penetration is fixed to the bulkhead plate in the middle; the additional insul. is fitted on the bulkhead insulated side.
S 1x1 EX	2	10 mm	Mineral wool, two layers, 50+40 mm thick, having density of 125 kg/m ³ and width of 200 mm all around	The penetration is fixed to the bulkhead plate in the middle; the additional insul. is fitted on the bulkhead insulated side.
SF 8x2 EX	14	from 10 up to 86 mm	Mineral wool, two layers, 50+40 mm thick, having density of 125 kg/m ³ and width of 200 mm all around	The penetration is fixed to the bulkhead plate in the middle; the additional insul. is fitted on the bulkhead insulated side.

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Bulkhead insulated by means of two layers of mineral wool (certified non combustible in compliance to 2010 FTP Code) 30+30 mm thick and having density of 125 kg/m³

TYPE OF TRANSITS	Fill %	Cable diameter	ADDITIONAL INSULATION	TRANSIT FIXING AND NOTES
S 1x1	26	45 mm	Mineral wool, two layers 30 mm thick each having density of 125 kg/m ³ and width of 200 mm all around	The penetration is fixed to the bulkhead plate in the middle; the additional insul. is fitted on the bulkhead insulated side.
S 8x1	31	from 21 up to 53 mm	Mineral wool, two layers 30 mm thick each having density of 125 kg/m ³ and width of 200 mm all around	The penetration is fixed to the bulkhead plate in the middle; the additional insul. is fitted on the bulkhead insulated side.
S 8+8x3	28	from 21 up to 53 mm	Mineral wool, two layers 30 mm thick each having density of 125 kg/m ³ and width of 200 mm all around and, three layers, on the modules fitted with a screw expander	The penetration is fixed to the bulkhead plate in the middle; the additional insul. is fitted on the bulkhead insulated side.
SRC r40 8x1	31	from 31 up to 53 mm	Mineral wool, two layers 30 mm thick each having density of 125 kg/m ³ and width of 200 mm all around	The penetration is fixed to the bulkhead plate in the middle; the additional insul. is fitted on the bulkhead insulated side.
SR 8x1	31	from 21 up to 53 mm	Mineral wool, two layers 30 mm thick each having density of 125 kg/m ³ and width of 200 mm all around	The penetration is fixed to the bulkhead plate on the exposed side; the additional insul. is fitted on the bulkhead insulated side.

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Reference documents

Roxtec drawings enclosed in SP Test Report No. 6P02516 dated 29 August 2016 and Research Institute of Marine Engineering Test Report No. 09-344 dated 11 December 2009.

Tests carried out

Tests as per SP Test Report No. 6P02516 dated 29 August 2016 and Research Institute of Marine Engineering Test Report No. 09-344 dated 11 December 2009 issued according to IMO 2010 FTP Code and IMO Res. A.754 (18).

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 December 19, 2018

File Allegato/Attached file