



Marine & Offshore
Division

Certificate number: 04558/F3 BV

File number: ACI 4000/032/004

Product code: 5302H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

ROXTEC International AB
KARLSKRONA - SWEDEN

for the type of product

CABLE PENETRATIONS IN FIRE DIVISIONS
Cable sealing system with multidiameter technology, S- Series

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships Part C Chapter 4

SOLAS 74, as amended, SOLAS 2000 Regulations II-2/9.3.1

IMO Resolution A.754(18)

IMO Resolution MSC.307(88) (FTP Code 2010) § 8

IMO MSC/Circ.1120.

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 06 Mar 2020

For BUREAU VERITAS,

At BV GOTHENBURG, on 22 Sep 2016,

Magne MOLLER



This certificate is recognized by Transport Canada

This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine & Offshore Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

A-Class Divisions "Cable sealing system with multidiameter technology, S-series"

Consisting of Roxtec S-series frames (S, SO, SF, SFO, SR, SK, SRC r20&r40 and BTB) in sizes 1-8 and combinations thereof, welded or bolted on to the steel divisions; filled with Roxtec (standard or Ex, EMC, PE, ES, BG, BGB) halogen free insert modules. Assembled with Roxtec Wedge kit or Roxtec EMC, Ex Wedge kit.

Penetration designation	S-series frames 1x1 to 8+8x3
	Welded and bolted
Type of division tested	Deck and Bulkhead
Depth of the penetration (mm)	60
External dimensions (mm)	121x80to 596x402
Classification attained	A0 to A-60

Maximum cable diameter: 98 mm

Tested fill based on transit opening area and the Roxtec Cable Sealing System. Maximum fill of a Roxtec transit is to install cable in every module installed in transit opening and minimum is to not install cable in any module in transit opening.

Additional insulation is to be provided as shown in the referred Manufacturer's drawings. Same insulation material and thickness to be used as used for the insulation of division penetrated. The insulation thickness is to be at least the length of protruding frame.

2. DOCUMENTS AND DRAWINGS:

As per Manufacturer's drawings n° S1040752 rev A, S1040753 rev A, S1040754 rev A, S1506241 rev A, S1005518 RevA and S1004649, Rev E.

3. TEST REPORTS :

- Test report N° 103070.13B, dated 23.4.2002 as per IMO A.754 (18) Resolution from SINTEF, Norway
- Test report N° 103070.14B, dated 4.7.2002 as per IMO A.754 (18) Resolution from SINTEF, Norway
- Test report N° 09-344E, dated 11.12.2009 as per IMO A.754 (18) Resolution from RIME, Japan
- Test report N° 09-346E, dated 11.12.2009, as per IMO A.754 (18) Resolution from RIME, Japan
- Test report N° PGA10024, dated 21.12.2011, as per IMO A.754 (18) Resolution from DBI, Denmark
- Test report N° PGA10025, dated 22.12.2011, as per IMO A.754 (18) Resolution from DBI, Denmark
- Test report N° PGA10652 dated 03.07.2015, as per IMO 2010 FTP Code Annex 1 Part 3 from DBI, Denmark
- Test report N° PGA10651 dated 03.07.2015, as per IMO 2010 FTP Code Annex 1 Part 3 from DBI, Denmark

4. APPLICATION / LIMITATION:

4.1 - The fitting aboard to be the same as used for the test.

4.2 - Approved for use as cable transits in A-0, A-15, A-30 and A-60 class steel divisions, with limitations contained in §1.

4.3 - Where intended to be fitted into hull structural parts, welding procedures, welder's certification and material certification are to be submitted to Bureau Veritas.

4.4 - The insulating material (s) shall have to comply with the requirements of BV Rules and be type approved .

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 -The "Cable sealing system with multidiameter technology, S-series' " are to be supplied by " **ROXTEC International AB** " in compliance with the type described in this certificate.

5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.

5.3 - "**ROXTEC International AB** " has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

"**ROXTEC International AB** " has declared to Bureau Veritas the following production site(s):

ROXTEC International AB
BOX 540
371 23 KARLSKRONA
SWEDEN

6. MARKING OF PRODUCT:

The product or packing is to be marked with manufacturer name, type, designation and fire-technical rating.

7. OTHERS:

7.1 - This approval is given with the understanding that the Society reserves the right to require check tests to be carried out on the above mentioned equipment in Clause I at any time, and that the Manufacturer with accept the responsibility for informing shipbuilders, shipowners or their sub-contractors of the proper methods of use and general maintenance of the Equipment and the conditions of this approval.

7.2 - This certificate supersedes the Type Approval Certificate N° 04558/F2 BV issued on 28/09/2015 by the Society.

7.3 - Tested for watertightness (before fire exposure): 6 bar during 60 min. Tested gastightness (before fire exposure): 4 bar during 30 min.

- Third Party Inspection report N° 020400 dated 25.03.2002, from DNV, Norway
- Third Party Inspection report N° SKM-04-4088 dated 16.06.2004 from DNV, Norway:

*** END OF CERTIFICATE ***