



Marine & Offshore

Certificate number: 53012/B0 BV

File number: ACI 4010/030/005

Product code: 5301H

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

PIPE PENETRATIONS IN FIRE DIVISIONS

A-60 Class penetration seals for thermoplastic pipes, in aluminium divisions, type Sleeve-it FC and Sleeve-it WT.

Requirements:

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

SOLAS 74 convention as amended, Regulations II-2/9

IMO Res. MSC.307(88) (2010 FTP Code)

IMO MSC.1/Circ.1276

IMO MSC.1/Circ.1488

This certificate is issued to attest that Bureau Veritas Marine & Offshore 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: 11 Aug 2028

For Bureau Veritas Marine & Offshore,

At BV COPENHAGEN, on 11 Aug 2023,

Hans-erik ERICSSON

This certificate was created electronically and is valid without signature



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 Marine & Offshore. 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 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 Marine & Offshore 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.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

A-60 Class penetration seals for thermoplastic pipes, in aluminium divisions, type Sleeve-it FC and Sleeve-it WT.

Penetration seals consisting of:

- a stainless steel casing containing intumescent material,
- an aluminium flange,
- for Sleeve-it WT only, a EPDM rubber grommet.

Additional insulation on penetrations:

- should be approved as having the same level of performance as the penetrated division and expected classification of penetration,
- is to be fitted as shown in the referred Manufacturer's drawings (see §2) and also according to Manufacturer's insulation guidelines.

Penetration type	Pipe material	Pipe Outer diameter	Installation	Insulation drawings
Sleeve-it FC	Thermoplastic Pipes*	16 to 225 mm	Bulkhead/ Deck Tack-welded or bolted mounting	N°S1590612, rev A, dated 03/04/2023
Sleeve-it WT	Thermoplastic Pipes*	16 to 225 mm	Deck Welded mounting only	N°S1590621, rev A, dated 03/04/2023

* PP, PB, PVC, PB, ABS, PE, PVDF

2. DOCUMENTS AND DRAWINGS :

Refer to table in §1.

3. TEST REPORTS :

- Test report N° PGA10801A (bulkhead - Sleeve-it FC 16-225), dated August 29, 2016, as per IMO 2010 FTP Code, Annex 1, Part 3, from DBI, Denmark
- Test report N° RS-17/B-555/E (bulkhead - Sleeve-it FC 16-225), dated January 15, 2018, as per IMO 2010 FTP Code, Annex 1, Part 3, from CTO, Poland
- Test report N° PGA10802A (deck - Sleeve-it FC 16-225, Sleeve-it WT 16-225) dated August 29, 2016, as per IMO 2010 FTP Code, Annex 1, Part 3, from DBI, Denmark
- Test report N° RS-17/B-210/E (deck - Sleeve-it FC 16-225, Sleeve-it WT 16-225), dated June 2, 2017, as per IMO 2010 FTP Code, Annex 1, Part 3, from CTO, Poland

4. APPLICATION / LIMITATION :

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

4.2 - Not for use in tank boundaries.

4.3 - Approved for use as pipe penetrations:

- for Sleeve-It FC:
 - in A-15, A-30, A-60 class aluminium bulkheads and decks, with fire insulation as described in §1,
 - in A-0 class aluminium divisions, with local fire insulation arrangement (on the penetration itself as described in §1 and 200 mm around).
- for Sleeve-It WT:
 - in A-15, A-30, A-60 class aluminium decks only, with fire insulation as described in §1,
 - in A-0 class aluminium decks only, with local fire insulation arrangement (on the penetration itself as described in §1 and 200 mm around).

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 -The "A-60 Class penetration seals for thermoplastic pipes, in aluminium divisions, type Sleev-it FC and Sleev-it WT " 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 office and production site(s) recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

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- It is **Roxtec International AB** responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2- Watertightness and Gastightness (before fire exposure) for Sleev-it WT penetration seal: Inspection report N° N141EX90, dated June 30, 2017, from DNV-GL:

- Tested watertightness : 1,5 bar during 60 min.
- Tested gastightness : 1 bar during 30 min.

7.3 - This Certificate supersedes the Type Approval Certificate N°53012/A0 BV issued on 01/08/2018 by the Society.

*** END OF CERTIFICATE ***