



Confirmation of Product Type Approval

Please refer to the "Service Restrictions" shown below to determine if Unit Certification is required for this product. This certificate reflects the information on the product in the ABS Records as of the date and time the certificate is printed.

Pursuant to the Rules of the American Bureau of Shipping (ABS), the manufacturer of the below listed product held a valid Manufacturing Assessment (MA) with expiration date of 27-MAY-2024. The continued validity of the Manufacturing Assessment is dependent on completion of satisfactory audits as required by the ABS Rules.

And; a Product Design Assessment (PDA) valid until subject to continued compliance with the Rules or standards used in the evaluation of the product.

The above entitle the product to be called Product Type Approved.

The Product Design Assessment is valid for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Product Name: Fire Stop System

Model Name(s): Hilti Cable Transit System: "CFS-T SS", "CFS-T SSF", "CFS-T RR", "CFS-T RRS", "CFS-T SSR", "CFS-T SSR/R30", "CFS-T SSRF/R30", "CFS-T EMC", "CFS-T RR EMC".

Presented to:

HILTI AKTIENGESELLSCHAFT
FELDKIRCHERSTR. 100
Liechtenstein

Intended Service:	Multi cable transit systems for A-0 steel bulkhead and deck penetrations.
Description:	Modular cable transit system consisting of steel frames or plugs in combination with insert blocks, made from halogen-free synthetic rubber, as well as compression units and anchor plates. For technical details and data, please find attached "Product Drawings".
Tier:	3
Ratings:	Class "A-0" steel bulkhead and deck penetrations. Model SSF 8x1 tested water tight at a pressure of 4.5 bar, and gas tight at a pressure of 3 bar. Model SS-2x1 tested water tight at a pressure of 11 bar and gas tight at a pressure of 7 bar. Filler module tested by means of compressed air before and after storage in a climatic testing cabinet for air tightness (0.5 bar, 10 min.) after storage at -60°C for four days. Degree of Protection: IP66, IP67, IP69 (TUV SÜD, TR-46085-19369-02).
Service Restrictions:	1. Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined. 2. The scope of Type Approval is to comply with MSC.1/Circ.1221 dated 11 December 2006. 3. Insulation is to be carried out in accordance with the Warringtonfiregent Reports Nos. 19288A dated 20 November 2018, 19289A dated

20 November 2018, 19290A dated 20 November 2018, 19444A dated 16 January 2019 and 19540A dated 14 March 2019. 4. When requested to be used in watertight bulkheads on passenger ships or special purpose ships, the penetration system has to comply with the requirements given in SOLAS Consolidated Edition 2014 Ch. II-1 Reg. 13.2.3. This approval of penetrations passing through watertight bulkheads are subject for separate examination and approval by flag Administration. 5. The maximum and minimum tested size of transit frames are CFS-T SSF 8x1 (Inner dimension: 277mm x 120mm; Outer dimension: 417mm x 260mm) and CFS-T SSF 2x1 (Inner dimension: 120mm x 101mm; Outer dimension: 260mm x 241mm). 6. The maximum and minimum tested size of transit sleeves are CFS-T SLF 200 (Hole diameter: 203.1mm, Outer diameter: 319mm) and CFS-T SLF 50 (Hole diameter: 50.6mm, Outer diameter: 157mm). 7. Only to be used in the tested configurations as under "Description" above. 8. Not to be used for penetrations of tank boundaries.

Comments:

1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product. 2. The installation is to be in accordance with the manufacturer's instructions and Warringtonfiregent reports. 3. Unless specially directed by Administration, this approval is not to be construed as a substitute for Flag Administration's approval for the purpose of SOLAS (Consolidated Edition 2014), as amended. 4. This certificate may not be used for EU and US flagged vessels (MED and/or USCG have their own specific/requirements).

Notes / Documentation:

Drawing No. BST No. 305027, OFI-Leakage test modular system, Revision: -, Pages: - Drawing No. BST No. 47299-3-e, OFI-Leakage test SB/SS-2X1, Revision: -, Pages: - Drawing No. Bulkhead 1, A-0 Bulkhead test no. 1, Revision: 1, Pages: 1 Drawing No. Bulkhead 2, A-0 Bulkhead test no. 2, Revision: 1, Pages: 2 Drawing No. Bulkhead 3, A-0 Bulkhead test no. 3, Revision: 1, Pages: 3 Drawing No. Bulkhead 4, A-0 Bulkhead test no. 4, Revision: 1, Pages: 4 Drawing No. CFS-T_A-0_B, Bulkhead_A-0 Drawings, Revision: 0, Pages: 1 Drawing No. CFS-T_A-0_D, Deck_A-0 Drawings, Revision: 0, Pages: 2 Drawing No. Deck 1, A-0 Deck test no. 1, Revision: 1, Pages: 1 Drawing No. PDA Request, ABS Request for product design assessment, Revision: -, Pages: - Drawing No. Presentation, A-0 Overview test data, Revision: 1, Pages: 1 Drawing No. SEC13-1705WP-E-E, EMC Test report for CFS-T EMS 4X1, Revision: -, Pages: - Drawing No. TUV No. TR-46085-19369-02, TUV IP Test Report, Revision: -, Pages: - Drawing No. Tighness test blank, Water-/Gas tighness test CFS-T 8x1, Revision: 1, Pages: 2 Drawing No. Tighness test cable, Water-/Gas tighness test CFS-T 8x1, Revision: 1, Pages: 1 Test Lab: Warringtonfiregent Report Nos. and dates: 19288A dated 20 November 2018, 19289A dated 20 November 2018, 19290A dated 20 November 2018, 19444A dated 16 January 2019 and 19540A dated 14 March 2019

Term of Validity:

This Product Design Assessment (PDA) Certificate 19-DL1862647-PDA, dated 28/May/2019 remains valid until 27/May/2024 or until the Rules or specifications used in the assessment are revised (whichever occurs first). This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product. Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA. Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

ABS Rules:

2019 Marine Vessel Rules, 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-8-4/21.13

National Standards:**International Standards:**

IMO Resolution MSC.307(88) (FTP Code, Edition 2012), Annex 1 Part 3.

Government Authority:**EUMED:****Others:****Model Certificate****Model Certificate No****Issue Date****Expiry Date**

PDA

19-DL1862647-PDA

29-MAY-2019

27-MAY-2024



ABS Programs

ABS has used due diligence in the preparation of this certificate and it represents the information on the product in the ABS Records as of the date and time the certificate was printed. Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. Limited circumstances may allow only Prototype Testing to satisfy Type Approval. The approvals of Drawings and Products remain valid as long as the ABS Rule, to which they were assessed, remains valid. ABS cautions manufacturers to review and maintain compliance with all other specifications to which the product may have been assessed. Further, unless it is specifically indicated in the description of the product; Type Approval does not necessarily waive witnessed inspection or survey procedures (where otherwise required) for products to be used in a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS. Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.