

EU-TYPE EXAMINATION CERTIFICATE

- [2] Component Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- [3] EU-Type Examination Certificate Number: **DNV 21 ATEX 16551U** **Issue 0**
- [4] Component: **Cable Transit Device**
- [5] Manufacturer: **Hilti Aktiengesellschaft**
- [6] Address: **Feldkircherstr. 100
9494 Schaan
Liechtenstein**
- [7] This component and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] DNV Product Assurance AS, notified body number 2460, in accordance with Article 17 and Article 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive.
- The examination and test results are recorded in confidential reports listed in item 16.
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with: **60079-0:2018/AC:2020, EN 60079-7:2015+A1:2018 and EN 60079-31:2014**
- [10] Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule. The sign "U" placed behind the certificate number indicates that this certificate should not be confounded with certificates issued for equipment or protective systems. This partial certification may be used as a basis for certification of an equipment or protective systems.
- [11] This EU-TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified component in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.
- [12] The marking of the component shall include the following:



II 2G Ex eb IIC Gb
II 2D Ex tb IIIC Db



Date of issue:
2022-05-13



Asle Kaastad
For DNV Product Assurance AS
The Certificate has been digitally signed.
See www.dnv.com/digitalsignatures for info

[13] **Schedule**

[14] **EU-Type Examination Certificate No:** DNV 21 ATEX 16551U Issue 0

[15] **Description of Component**

The Cable Transit Devices 'CTDs'(see Type Designation below) are available as rectangular- or circular frames with or without a flange made of mild- or stainless steel and installed with elastomeric rubber (EPDM) sealing arrangement for use with circular cables both armoured and non-armoured of non-interrupted and non-metallic outer jacket type or conduits. The circular frames are available in four to six different diameters and the rectangular frames are available in four single or several multiple configurations.

The internal sealing arrangement of the CTDs are based on a modular system made of EPDM (cable- & filler module- or plug variants CFS-T, RR or RRS) that depend on each individual size, accepts a limited number of cable diameters in applicable variant of CTDs and shall be marked with the Ex symbol. Filler modules may be used as blanking elements when no cables are installed.

The modules and plugs for sealing are made of two half parts of EPDM basic profiles for use with or without adapter modules and ends up with a solid EPDM core module. The adapter modules are made with three different colours (black, grey & red) to make the adaption to a cable exactly same on both halves. To achieve appropriate sealing and mechanical properties to prevent the cables from slippage the Hilti size gauge (ruler) must be used to identify the correct adapter module for the cable or conduit.

Compression devices are used to achieve appropriate compression of the modules and other components of the system, for rectangular CTDs there is a wedge and for circular CTDs there are two variants of plug-profiles, one RR profile that may be partly divided or un-divided in one corner and one RRS profile that incorporates both compression device and adapter modules for use with single cables or conduits.

The Ex components does not have a defined and incorporated sealing against the final enclosure wall and there are needs for supplementary type examinations and certification. See schedule of limitations for additional consideration regarding type of protection when fully assembled.

The CTD installation procedures and correct sizes and adaption of assembling the cables or conduits to the modules are described in detail in the enclosed installation instructions and to achieve correct sealing.

Type designation

CFS-T SS, CFS-T SSF, CFS-T SBF, CFS-T SL and CFS-T SLF.

Refer to scheduled document 2344286 for full type identification of the different sizes of single or multiple frames configurations

Service Temperature

-20°C to +75°C

Degrees of protection (IP Code)

IP66

In addition to Ex requirements the product has been separately tested against the requirements of IEC 60259:2001 and meet IP68 (immersion of 0,5m for 60min) for CFS-T SL and CFS-T SLF.

[16] **Report No.:**
SC201815

[17] **Schedule of Limitations**

1. For cable transit devices certified as an Ex component and marked with the symbol U, compliance with applicable requirements shall be verified, this includes mechanical test (if applicable) and test of degree of protection, which shall be carried out on the frame of the cable transit device (excluding modules and compression devices) after it has been installed on the enclosure of the apparatus subjected to test and certification.
2. For optimum reliability wait 48 hours or longer after installation before exposing the cables/pipes to strain or pressure.
3. For maintaining the explosion protection, the installation instructions that accompany the products shall be considered.
4. The marking label that accompany the products shall be placed according to the installation instructions.
5. Only to be used with cables for fixed installation.

[18] **Essential Health and Safety Requirements**
Met by compliance with the requirements mentioned in item 9

[19] **Drawings and documents**

Number	Title	Rev.	Date
229902	HILTI CFS-T DESCRIPTIVE LIST	0	2022-03-21

[20] **Certificate History**

Issue	Description	Issue date	Report no.
0	Original issue	2022-05-13	SC201815

END OF CERTIFICATE

