



EXPERT SOLUTIONS FOR THE MOST DEMANDING APPLICATIONS

Transit System for
cables and pipes



FOR A SAFER SEAL

Transit system for cables and
pipes. Fire-resistant, watertight
and gastight.





YOU CAN DEPEND ON US



Hilti has been a leading manufacturer and supplier of high-quality, easy-to-use firestop systems for over 20 years. We support you at the preparatory and execution stages of your firestop projects by offering quick planning assistance, comprehensive technical literature and application-specific training. With Hilti you can depend on high-grade products and services that help secure your competitive edge by offering many decisive advantages and significant added value.

Fire Test Approvals

- Rubber modules are made from fire-resistant and halogen-free elastomeric material

Onshore Firetest approvals:

- **European Technical Assessment**
Hilti Firestop cable transit CFS-T was assessed according to EAD 350454-00-1104 EN 1366-3 and EN 1366-3:2009 for cables, metal pipes and mixed penetrations: fire ratings up to 180 mins.
- **UL approval**
Resistance to fire according ANSI / UL 1479 (ASTM E814) with fire ratings up to 4 hours available. UL listings and FM approved.

Offshore approvals:

- **A-60 approvals**
According IMO 754(18) class A and B for marine or offshore applications in steel bulkheads and decks available from MED, ABS, DNV-GL, Lloyd's register, US Coast Guard, Transport Canada, RMRS and CCS.
- **A-0 approvals**
According IMO 754(18) class A for marine or offshore applications in steel bulkheads and decks available from ABS, DNV-GL.
- **H-120 approvals**
According IMO 754(18) class A for marine or offshore applications in steel bulkheads and decks available from ABS and Lloyd's register.
- **J-60 Approval**
Tested on jet fire for 60 mins approval from ABS.

Applications – Sealing and firestop solutions

Oil and Gas	Power	Industry
Offshore platforms	Thermal Power plants	Petrochemical
Shipbuilding	Nuclear Power plants	Gas processing
Onshore facilities (refineries)	Wind power	Telecommunication and data centers

Features and Benefits

Simplicity	Reliability & Inspection	Productivity
<ul style="list-style-type: none"> • Low inventory: only 7 different modules are needed to cover all cable diameters from 3 to 99 mm 	<ul style="list-style-type: none"> • Versatile adapter modules for quick, easy accommodation of each cable diameter • Easy inspection - visual inspection of correct installation within seconds due to color-coded adapter system • The special design of the flexible sealing lips ensures a high-contact pressure for a higher water and air tightness with lower pre-compression forces 	<ul style="list-style-type: none"> • Big savings thanks to module interlinking, especially where cables run vertically through deck penetrations. • Easy to install using fixing anchor plate and the CFS-T SQU module squeezer • Wedge seals with only one bolt for quick installation

SEALING SOLUTION THAT GOES BEYOND FIRE

Safety standards, combined with attributes required by energy and industry projects, demand highly exacting engineering works. For these critical specifications, Hilti multi-cable transit systems (MCT) deliver you a high-performance but practical solution for creating fire-, water- and gas-resistant protective seals around cables and pipes.



Water Tightness

Hilti cable transit systems are tested up to 4.5 bar for water tightness in accordance with the applicable standards, minimizing damage in case of accident.



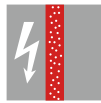
Gas

Hilti cable transit systems are tested up to 3 bar for gas and air tightness, supporting compliance with customer application requirements.



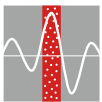
Resistance against Mold & Mildew

Hilti cable transit systems' rubber components were tested according to ASTM G-21, determining the effect of fungi, receiving a rating of 0. Therefore they can be considered mold and mildew resistant.



Electromagnetic Shielding

The EMC product lines of the Hilti Cable transit systems, were designed and tested to act as an Electro Magnetic shield at specific frequencies.



Seismic Performance

Hilti cable transit systems are tested for their performance during and after seismic actions, showing excellent smoke tightness and excellent fire performance.



Blast Resistance

Hilti cable transit systems were tested and remained in good condition after being subjected to airblast loading.

TRANSIT SYSTEM APPROVAL

Onshore and Industry applications

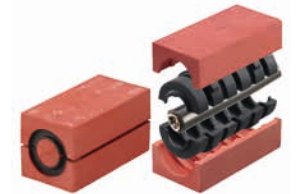
Product/approval	UL	FM	EN
CFS-T SB			
CFS-T SBO			
CFS-T RR			
CFS-T RRS			

Offshore and Shipbuilding applications

Product/approval	ABS	DNV-GL	LR	CCS	RMRS	
CFS-T SS						ATEX
CFS-T SSF						ATEX
CFS-T SSR/R30						ATEX
CFS-T RR						ATEX
CFS-T RRS						ATEX

TABLE OF CONTENTS

Hilti planning software	08
Selecting a transit frame	10
The Hilti cable transit system	18
Clever accessories	20
Installing the transit frame	21
Installing the cable transit system	24
Exchanging modules	26
The CFS-T RR plug seal system	28
Installing a CFS-T plug seal	30
The CFS-T RRS plug seal system	32
CFS-T EMC solutions	34
CFS-T EX solutions	38
The CFS-T STRF sealing solution	40
Overview of the product range	42



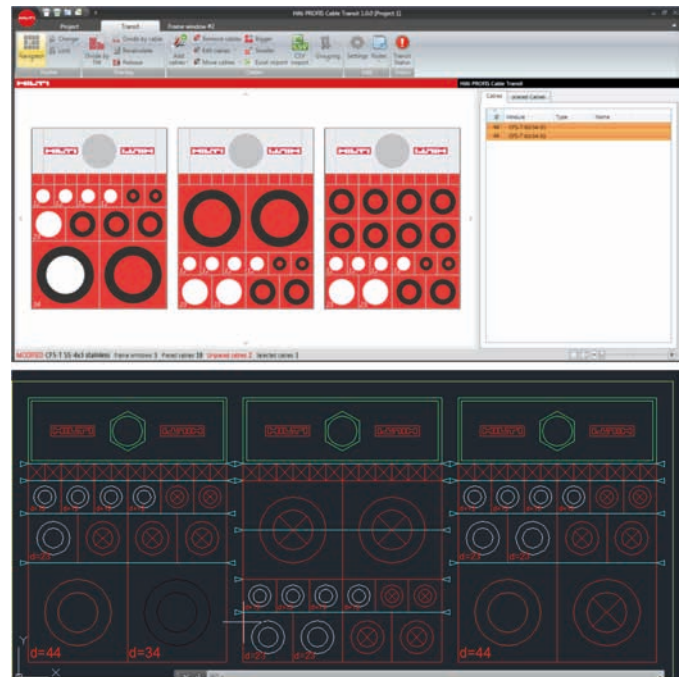
PUT FIRESTOP SOLUTIONS AT YOUR FINGERTIPS

PROFIS cable-transit planning software and AVEVA PDMS library

The Hilti PROFIS cable-transit planning software helps you achieve high safety standards from the very earliest stages of your project. It helps you calculate and select frames and modules of the right dimensions, prepares accurate bills of materials and lets you define each individual cable according to the needs of the installation. This easy-to-use program helps you save time and costs right from the word go.



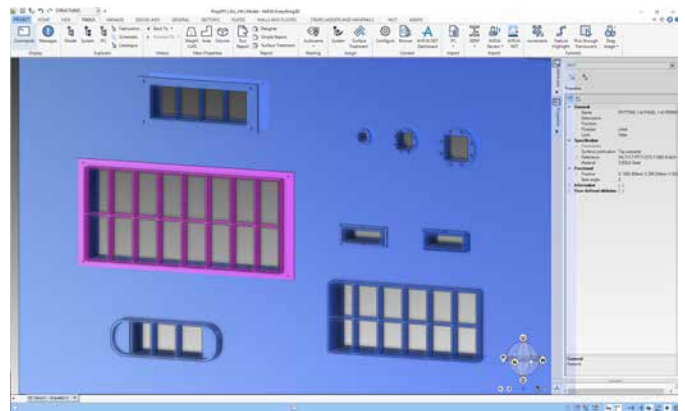
- Designing and calculating the frames and modules required according to the size of the opening and applicable materials (CFS-T SB, CFS-T SBO, CFS-T SS, CFS-T SSF, CFS-T RR).
Precise planning of all cable transits according to the number, size and type of cables.
- Adding cables by xls import is possible.
- Preparation of parts lists and drawings to be used as a basis for ordering the items required for a project.
- Presentation of the frame packing and cable layout plans for each cable transit, plus documentation containing all project-relevant information.
- Export into AutoCad files is possible.
- The Project Manager incorporated in the Hilti planning software takes the user step-by-step through the project, designing each cable transit on the basis of the specific cable configuration.





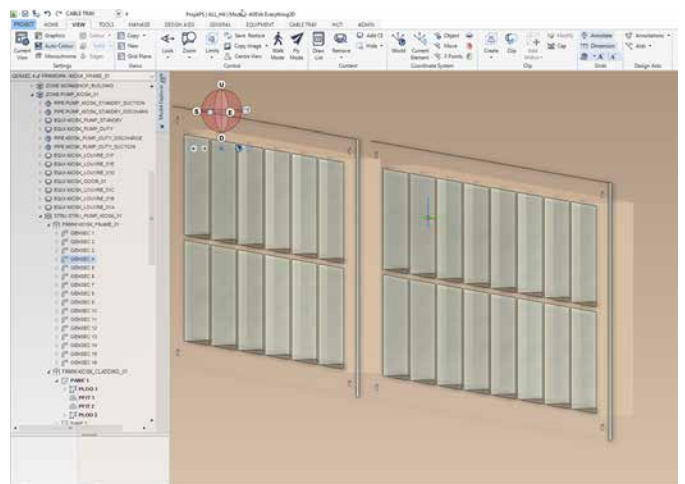
Features of Hilti PDMS library:

- 2-level categorization for easy selection
- Structural opening created automatically
- Combo frames placed in one step
- Quick BOM from Hilti part-list button



By documenting CFS-T objects in plant's entire 3D model, customers can benefit from:

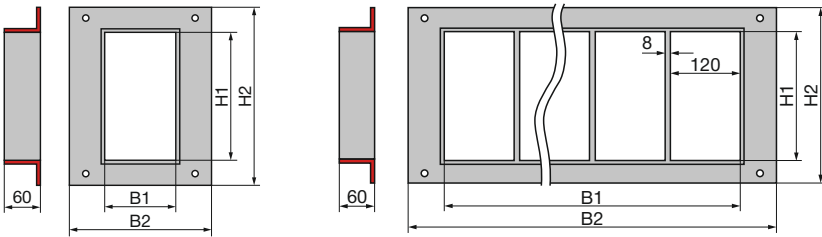
- Improved coordination between teams to properly plan cable sealing related tasks
- Clash detection and positioning
- Quick and accurate BOM from single source of truth



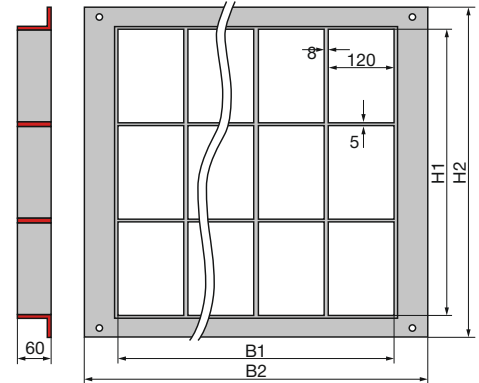
SAFETY ON ALL SIDES

CFS-T SBF frame sizes single/double/triple

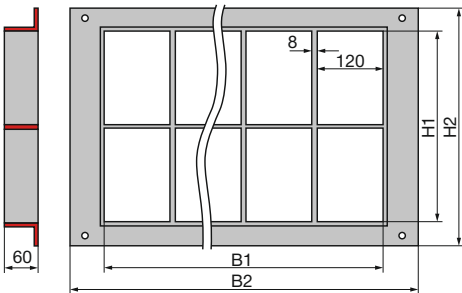
Single Row



Triple Row



Double Row



Frame sizes (single-row)*

	2 x 1		2 x 2		2 x 3		2 x 4		2 x 5		2 x 6		2 x 7		2 x 8		2 x 9		2 x 10	
H1 x B1 (in mm)	101	120	101	248	101	376	101	504	101	632	101	760	101	888	101	1016	101	1144	101	1272
H2 x B2 (in mm)	232	251	232	379	232	507	232	635	232	763	232	891	232	1019	232	1147	232	1275	232	1403
	4 x 1		4 x 2		4 x 3		4 x 4		4 x 5		4 x 6		4 x 7		4 x 8		4 x 9		4 x 10	
H1 x B1 (in mm)	160	120	160	248	160	376	160	504	160	632	160	760	160	888	160	1016	160	1144	160	1272
H2 x B2 (in mm)	291	251	291	379	291	507	291	635	291	763	291	891	291	1019	291	1147	291	1275	291	1403
	6 x 1		6 x 2		6 x 3		6 x 4		6 x 5		6 x 6		6 x 7		6 x 8		6 x 9		6 x 10	
H1 x B1 (in mm)	218	120	218	248	218	376	218	504	218	632	218	760	218	888	218	1016	218	1144	218	1272
H2 x B2 (in mm)	349	251	349	379	349	507	349	635	349	763	349	891	349	1019	349	1147	349	1275	349	1403
	8 x 1		8 x 2		8 x 3		8 x 4		8 x 5		8 x 6		8 x 7		8 x 8		8 x 9		8 x 10	
H1 x B1 (in mm)	277	120	277	248	277	376	277	504	277	632	277	760	277	888	277	1016	277	1144	277	1272
H2 x B2 (in mm)	408	251	408	379	408	507	408	635	408	763	408	891	408	1019	408	1147	408	1275	408	1403

* All sizes are covered by ETA approval

Frame sizes (double-row)**

	4+4 x 1		4+4 x 2		4+4 x 3		4+4 x 4		4+4 x 5		4+4 x 6		4+4 x 7		4+4 x 8		4+4 x 9		4+4 x 10	
H1 x B1 (in mm)	328	120	328	248	328	376	328	504	328	632	328	760	328	888	328	1016	328	1144	328	1272
H2 x B2 (in mm)	459	251	459	379	459	507	459	635	459	763	459	891	459	1019	459	1147	459	1275	459	1403
	6+6 x 1		6+6 x 2		6+6 x 3		6+6 x 4		6+6 x 5		6+6 x 6		6+6 x 7		6+6 x 8		6+6 x 9		6+6 x 10	
H1 x B1 (in mm)	444	120	444	248	444	376	444	504	444	632	444	760	444	888	444	1016	444	1144	444	1272
H2 x B2 (in mm)	575	251	575	379	575	507	575	635	575	763	575	891	575	1019	575	1147	575	1275	575	1403
	8+8 x 1		8+8 x 2		8+8 x 3		8+8 x 4		8+8 x 5		8+8 x 6		8+8 x 7		8+8 x 8		8+8 x 9		8+8 x 10	
H1 x B1 (in mm)	562	120	562	248	562	376	562	504	562	632	562	760	562	888	562	1016	562	1144	562	1272
H2 x B2 (in mm)	693	251	693	379	693	507	693	635	693	763	693	891	693	1019	693	1147	693	1275	693	1403

** Sizes up to 8+8x4 are covered by ETA approval, an Engineering Judgement is required for all other sizes

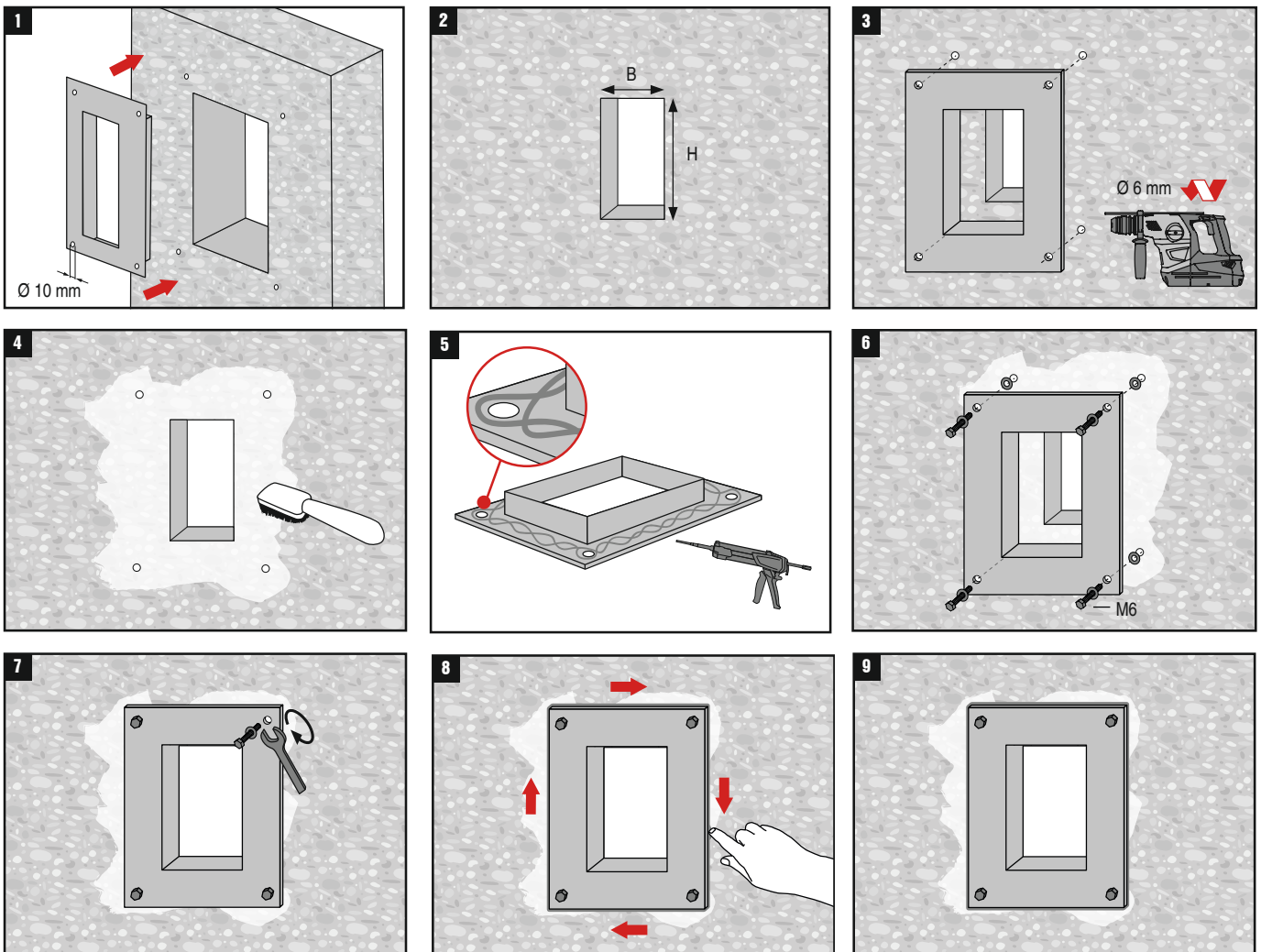
Frame sizes (triple-row)***

	4+4+4 x 1		4+4+4 x 2		4+4+4 x 3		4+4+4 x 4		4+4+4 x 5		4+4+4 x 6		4+4+4 x 7		4+4+4 x 8		4+4+4 x 9		4+4+4 x 10	
H1 x B1 (in mm)	496	120	496	248	496	376	496	504	496	632	496	760	496	888	496	1016	496	1144	496	1272
H2 x B2 (in mm)	627	251	627	379	627	507	627	635	627	763	627	891	627	1019	627	1147	627	1275	627	1403
	6+6+6 x 1		6+6+6 x 2		6+6+6 x 3		6+6+6 x 4		6+6+6 x 5		6+6+6 x 6		6+6+6 x 7		6+6+6 x 8		6+6+6 x 9		6+6+6 x 10	
H1 x B1 (in mm)	670	120	670	248	670	376	670	504	670	632	670	760	670	888	670	1016	670	1144	670	1272
H2 x B2 (in mm)	801	251	801	379	801	507	801	635	801	763	801	891	801	1019	801	1147	801	1275	801	1403
	8+8+8 x 1		8+8+8 x 2		8+8+8 x 3		8+8+8 x 4		8+8+8 x 5		8+8+8 x 6		8+8+8 x 7		8+8+8 x 8		8+8+8 x 9		8+8+8 x 10	
H1 x B1 (in mm)	847	120	847	248	847	376	847	504	847	632	847	760	847	888	847	1016	847	1144	847	1272
H2 x B2 (in mm)	987	251	987	379	987	507	987	635	987	763	987	891	987	1019	987	1147	987	1275	987	1403

*** The sizes are not covered by ETA approval: an Engineering Judgement will be required

INSTALLATION OF BOLTED FRAME CFS-T SBF

Instructions for use



- Insert the frame into aperture. Center the frame in the aperture and use it as template for the flange hole pattern. Remove the frame and drill the holes for the bolts.
- Clean the surface with a brush. Apply silicone sealant (CP 601S) onto the frame flange with a minimum thickness 6 mm. A second string of sealant isolates the holes. Attach 2 mm washers or similar behind the flange to ensure a 2 mm gap between the frame flange and the structure.
- Attach the frame to the structure. Attach the frame using bolts, nuts and washers.
- To complete the installation, tighten the nuts crosswise according to your selected fasteners.
- Smooth out the sealant so that it closes any gap completely. Consider the curing time of the sealant.

! You do not need to drill more holes. The necessary holes have been drilled at production offsite. The size of the holes are standard ones and have a dimension of 10 mm. For large frames, simplify the installation by attaching two bolts first. Then drill the remaining holes with the frame in place. Max. size of opening must not exceed +7 mm of B1 and H1 on all sides.

CFS-T SBF TRANSIT FRAMES: SINGLE-ROW



Transit frames (single-row)*		
Ordering designation	Package contents	Item no.
Transit frame CFS-T SBF-2x1 HDG	1	2280325
Transit frame CFS-T SBF-4x1 HDG	1	2280326
Transit frame CFS-T SBF-4x2 HDG	1	2280327
Transit frame CFS-T SBF-4x3 HDG	1	2280328
Transit frame CFS-T SBF-4x4 HDG	1	2280329
Transit frame CFS-T SBF-4x5 HDG	1	2280820
Transit frame CFS-T SBF-4x6 HDG	1	2280821
Transit frame CFS-T SBF-4x7 HDG	1	2280822
Transit frame CFS-T SBF-4x8 HDG	1	2280823
Transit frame CFS-T SBF-4x9 HDG	1	2280824
Transit frame CFS-T SBF-4x10 HDG	1	2280825
Transit frame CFS-T SBF-6x1 HDG	1	2280836
Transit frame CFS-T SBF-6x2 HDG	1	2280837
Transit frame CFS-T SBF-6x3 HDG	1	2280838
Transit frame CFS-T SBF-6x4 HDG	1	2280323
Transit frame CFS-T SBF-6x5 HDG	1	2280324
Transit frame CFS-T SBF-6x6 HDG	1	2280839
Transit frame CFS-T SBF-6x7 HDG	1	2280840
Transit frame CFS-T SBF-6x8 HDG	1	2280841
Transit frame CFS-T SBF-6x9 HDG	1	2280842
Transit frame CFS-T SBF-6x10 HDG	1	2280843
Transit frame CFS-T SBF-8x1 HDG	1	2280854
Transit frame CFS-T SBF-8x2 HDG	1	2280855
Transit frame CFS-T SBF-8x3 HDG	1	2280856
Transit frame CFS-T SBF-8x4 HDG	1	2280857
Transit frame CFS-T SBF-8x5 HDG	1	2280858
Transit frame CFS-T SBF-8x6 HDG	1	2280859
Transit frame CFS-T SBF-8x7 HDG	1	2280860
Transit frame CFS-T SBF-8x8 HDG	1	2280861
Transit frame CFS-T SBF-8x9 HDG	1	2280862
Transit frame CFS-T SBF-8x10 HDG	1	2280863

*Standard items

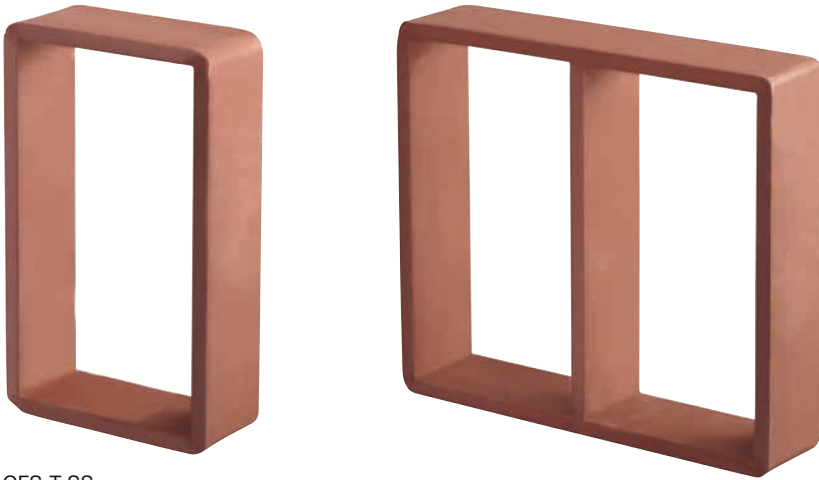
CFS-T SBF TRANSIT FRAMES DOUBLE-ROW

Transit frames (double-row)*		
Ordering designation	Package contents	Item no.
Transit frame CFS-T SBF-4+4x1 HDG	1	2280826
Transit frame CFS-T SBF-4+4x2 HDG	1	2280827
Transit frame CFS-T SBF-4+4x3 HDG	1	2280828
Transit frame CFS-T SBF-4+4x4 HDG	1	2280829
Transit frame CFS-T SBF-4+4x5 HDG	1	2280830
Transit frame CFS-T SBF-4+4x6 HDG	1	2280831
Transit frame CFS-T SBF-4+4x7 HDG	1	2280832
Transit frame CFS-T SBF-4+4x8 HDG	1	2280833
Transit frame CFS-T SBF-4+4x9 HDG	1	2280834
Transit frame CFS-T SBF-4+4x10 HDG	1	2280835
Transit frame CFS-T SBF-6+6x1 HDG	1	2280844
Transit frame CFS-T SBF-6+6x2 HDG	1	2280845
Transit frame CFS-T SBF-6+6x3 HDG	1	2280846
Transit frame CFS-T SBF-6+6x4 HDG	1	2280847
Transit frame CFS-T SBF-6+6x5 HDG	1	2280848
Transit frame CFS-T SBF-6+6x6 HDG	1	2280849
Transit frame CFS-T SBF-6+6x7 HDG	1	2280850
Transit frame CFS-T SBF-6+6x8 HDG	1	2280851
Transit frame CFS-T SBF-6+6x9 HDG	1	2280852
Transit frame CFS-T SBF-6+6x10 HDG	1	2280853
Transit frame CFS-T SBF-8+8x1 HDG	1	2280864
Transit frame CFS-T SBF-8+8x2 HDG	1	2280865
Transit frame CFS-T SBF-8+8x3 HDG	1	2280866
Transit frame CFS-T SBF-8+8x4 HDG	1	2280867
Transit frame CFS-T SBF-8+8x5 HDG	1	2280868
Transit frame CFS-T SBF-8+8x6 HDG	1	2280869
Transit frame CFS-T SBF-8+8x7 HDG	1	2280870
Transit frame CFS-T SBF-8+8x8 HDG	1	2280871
Transit frame CFS-T SBF-8+8x9 HDG	1	2280321
Transit frame CFS-T SBF-8+8x10 HDG	1	2280322

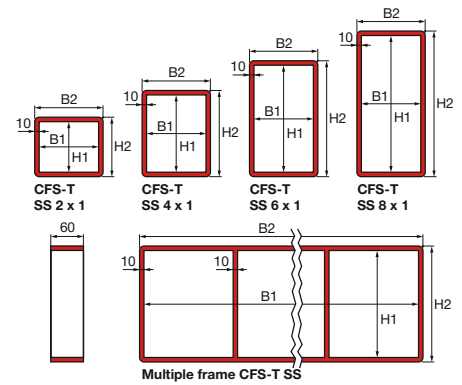
*Standard items



CFS-T SS transit frames



CFS-T SS



Technical information

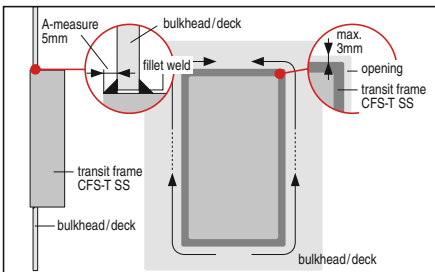
- Made from 10 mm flat bar
- CFS-T SS transit frames with higher number of frame windows or double-row CFS-T SS transit frames available on request.

Material availability options

- Standard steel (primer coated)
- Stainless steel
- Aluminum

Hilti CFS-T SS transit frames have been optimized for use in steel structures.

Welding procedure for transit frames CFS-T SS



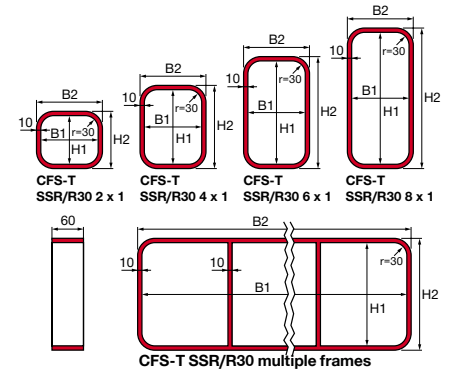
Dimensions of CFS-T SS transit frames (single-row)

CFS-T SS	2 x 1	2 x 2	2 x 3	2 x 4	2 x 5
H1 x B1 (in mm)	101x120	101x250	101x380	101x510	101x640
H2 x B2 (in mm)	121x140	121x270	121x400	121x530	121x660
	4 x 1	4 x 2	4 x 3	4 x 4	4 x 5
H1 x B1 (in mm)	160x120	160x250	160x380	160x510	160x640
H2 x B2 (in mm)	180x140	180x270	180x400	180x530	180x660
	6 x 1	6 x 2	6 x 3	6 x 4	6 x 5
H1 x B1 (in mm)	218x120	218x250	218x380	218x510	218x640
H2 x B2 (in mm)	238x140	238x270	238x400	238x530	238x660
	8 x 1	8 x 2	8 x 3	8 x 4	8 x 5
H1 x B1 (in mm)	277x120	277x250	277x380	277x510	277x640
H2 x B2 (in mm)	297x140	297x270	297x400	297x530	297x660

CFS-T SSR/R30 transit frames



CFS-T SSR/R30



Approvals

Approvals issued by international certification organizations for use of the product in SOLAS A60 decks and bulkheads in accordance with IMO 754(18) are available on request.

Material availability options

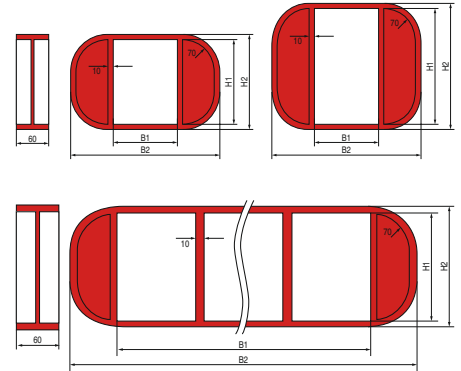
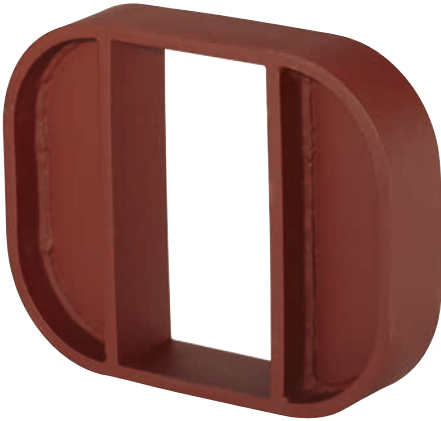
- Standard steel (primer coated)

Hilti CFS-T SSR/R30 transit frames are the high-strength alternative for steel structures in shipbuilding and offshore applications where the frame is subjected to extra-high loads.

Dimensions of CFS-T SSR/R30 transit frames

CFS-T SSR/R30	4 x 1	4 x 2	4 x 3	4 x 4	4 x 5
H1 x B1 (in mm)	160x120	160x250	160x380	160x510	160x640
H2 x B2 (in mm)	180x140	180x270	180x400	180x530	180x660
	6 x 1	6 x 2	6 x 3	6 x 4	6 x 5
H1 x B1 (in mm)	218x120	218x250	218x380	218x510	218x640
H2 x B2 (in mm)	238x140	238x270	238x400	238x530	238x660
	8 x 1	8 x 2	8 x 3	8 x 4	8 x 5
H1 x B1 (in mm)	277x120	277x250	277x380	277x510	277x640
H2 x B2 (in mm)	297x140	297x270	297x400	297x530	297x660

CFS-T SSR transit frames



CFS-T SSR



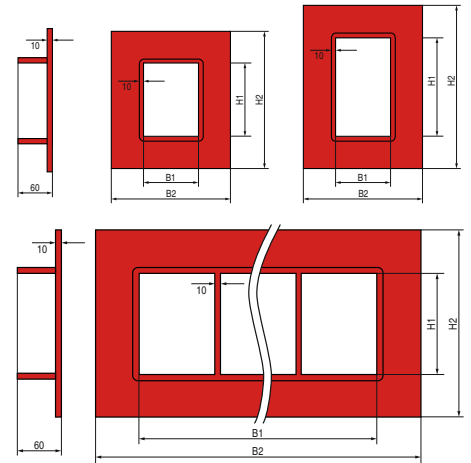
Material Availability options

- Standard steel (primer coated)

Dimensions of CFS-T SSR transit frames (single-row)

CFS-T SSR	4 x 1	4 x 2	4 x 3	4 x 4	4 x 5
H1 x B1 (in mm)	160x120	160x250	160x380	160x510	160x640
H2 x B2 (in mm)	180x300	180x430	180x560	180x690	180x820
	6 x 1	6 x 2	6 x 3	6 x 4	6 x 5
H1 x B1 (in mm)	218x120	218x250	218x380	218x510	218x640
H2 x B2 (in mm)	238x300	238x430	238x560	238x690	238x810
	8 x 1	8 x 2	8 x 3	8 x 4	8 x 5
H1 x B1 (in mm)	277x120	277x250	277x380	277x510	277x640
H2 x B2 (in mm)	297x300	297x430	297x560	297x690	297x810

CFS-T SSF transit frames



CFS-T SSF



Technical information

- Made from 10 mm flat bar

Material availability options

- Standard steel (primer coated)
- Stainless steel

Hilti CFS-T SSF transit frames have been optimized for use in steel structures

Dimensions of CFS-T SSF transit frames

CFS-T SSF	4 x 1	4 x 2	4 x 3	4 x 4	4 x 5
H1 x B1 (in mm)	160x120	160x250	160x380	160x510	160x640
H2 x B2 (in mm)	300x260	300x390	300x520	300x650	300x780
	6 x 1	6 x 2	6 x 3	6 x 4	6 x 5
H1 x B1 (in mm)	218x120	218x250	218x380	218x510	218x640
H2 x B2 (in mm)	358x260	358x390	358x520	358x650	358x780
	8 x 1	8 x 2	8 x 3	8 x 4	8 x 5
H1 x B1 (in mm)	277x120	277x250	277x380	277x510	277x640
H2 x B2 (in mm)	417x260	417x390	417x520	417x650	417x780

QUICK, EASY AND VERSATILE

The Hilti Cable Transit System.

One system – a host of advantages

Designed as a modular system, the Hilti Cable Transit System helps solve three problems simultaneously. These versatile sets consisting of the fire-resistant, gas- and watertight basic module, module adapter and core module not only seal around cables more quickly and reliably, they're also re-usable. This saves time, cuts costs and keep your inventory to a minimum.

Basic module

The basic module for sealing around cables to a tolerance of 2-3 mm (without use of an adapter). The modules are supplied in a joined-together state but can be easily separated for individual use. Available in 7 different module sizes (15, 20, 30, 40, 60, 90 and 120 mm).

Adapter module

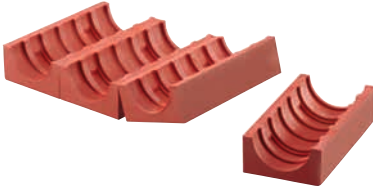
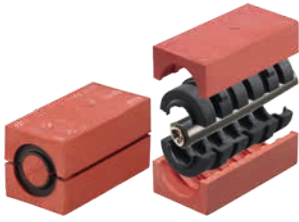
Adapter modules in black or gray for sealing around cables to a tolerance of 3-5 mm.

Core module

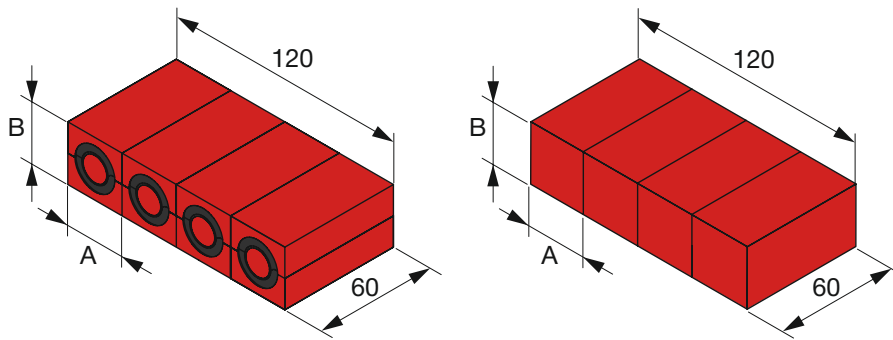
The core module is used as a filler where space is reserved for future cable installations.

Filler modules

Space reserved for future cable installations can be filled with the filler modules in the sizes 5, 10, 15, 20, 30, 40 and 60. The filler modules are supplied in a joined-together state (filler module blocks) but can be easily separated for individual use.



DIMENSIONS OF THE BASIC MODULES.



Module	Cable / pipe modules		Diameter range	Diameter range per module / adapter
	Dimension A (in mm)	Dimension B (in mm)		
CFS-T 15/0+3-9	15	15	3 - 9 mm	Black adapter = 3 - 5 mm Gray adapter = 6 - 8 mm Basic module = 9 mm
CFS-T 20/0+5-12	20	20	5 - 12 mm	Black adapter = 5 - 7 mm Gray adapter = 8 - 10 mm Basic module = 11 - 12 mm
CFS-T 20/0+5-16 (with extended diameter range)	20	20	5 - 16 mm	Black adapter = 5 - 8 mm Gray adapter = 9 - 11 mm Red adapter = 12 - 14 mm Basic module = 15 - 16 mm
CFS-T 30/0+13-23	30	30	13 - 23 mm	Black Adapter = 13 - 16 mm Gray Adapter = 17 - 21 mm Basic Module = 22 - 23 mm
CFS-T 40/0+23-33	40	40	23 - 33 mm	Black Adapter = 23 - 26 mm Gray Adapter = 27 - 31 mm Basic Module = 32 - 33 mm
CFS-T 60/0+34-51	60	60	34 - 51 mm	Black Adapter = 34 - 38 mm Gray Adapter = 39 - 43 mm Red insert = 44 - 48 mm Basic Module = 49 - 51 mm
CFS-T 90/0+52-78	90	90	52 - 78 mm	Black Adapter (thick) = 52 - 57 mm Gray Adapter = 58 - 63 mm Red Adapter = 64 - 69 mm Black Adapter (thin) = 70 - 75 mm Basic Module = 76 - 78 mm
CFS-T 120/0+79-99	120	120	79 - 99 mm	Black Adapter = 79 - 84 mm Gray Adapter = 85 - 90 mm Red Adapter = 91 - 96 mm Basic Module = 97 - 99 mm
Filler modules				
CFS-T FB 24x5/0	5	5	0	-
CFS-T FB 12x10/0	10	10	0	-
CFS-T FB 15/0	15	15	0	-
CFS-T FB 20/0	20	20	0	-
CFS-T FB 30/0	30	30	0	-
CFS-T FB 40/0	40	40	0	-
CFS-T FB 60/0	60	60	0	-

CLEVER ACCESSORIES

Wedge compression kit

The CFS-T WD 120 wedge compression kit is used to allow quick and easy compression of modules and filler blocks for an effective seal. The sealing wedge can be placed anywhere within the frame and there is only one central bolt to be tightened.

Available with bolt and counter-plate made from galvanized steel or A4 stainless steel material.

The CFS-T WD 120 wedge compression kit is supplied complete with 4 anchor plates, one fixing anchor plate, Hilti ruler and lubricant (30 g).



Anchor plate

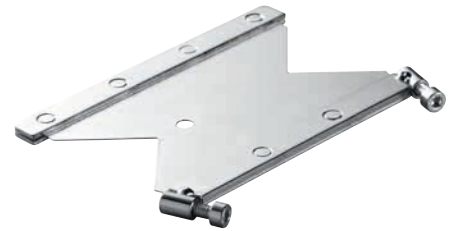
The anchor plate facilitates assembly of the cable modules and filler modules, secures these within the frame and increases tightness of the seal against static and dynamic pressure. The anchor plate is available in galvanized steel, stainless steel or in aluminum.

Use one anchor plate between each row of modules and also to secure the CFS-T WD 120 wedge.



Fixing anchor plate

The fixing anchor plate is used in conjunction with the module squeezer. After precompression of the modules, the fixing anchor plate can be secured by tightening the screws against the frame. It thus holds the rows of modules in their precompressed position. This facilitates insertion of the last module and the wedge seal. Use of the fixing anchor plate is recommended in situations where a large number of cables pass through the transit frame.



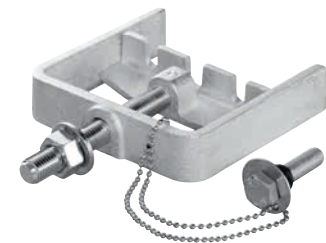
Module squeezer

The module squeezer uses the screw jack principle to achieve easy precompression of the modules before insertion of the row, or last two rows, and thus facilitates further assembly of the cable modules and insertion of the wedge seal.



Wedge puller

The wedge puller is used as a disassembly tool to aid removal of the CFS-T WD 120 wedge seal without damage, allowing subsequent retrofitting of additional cables.



Lubricant

The Hilti CFS-T LUB is lubricant which is used to grease all rubber module parts during assembly to facilitate installation, helping to ensure sealing to achieve required water and gas tightness of the system, as well as preventing modules from sticking together if they are disassembled. Lubricant is available in two sizes: 30gm and 500gm.



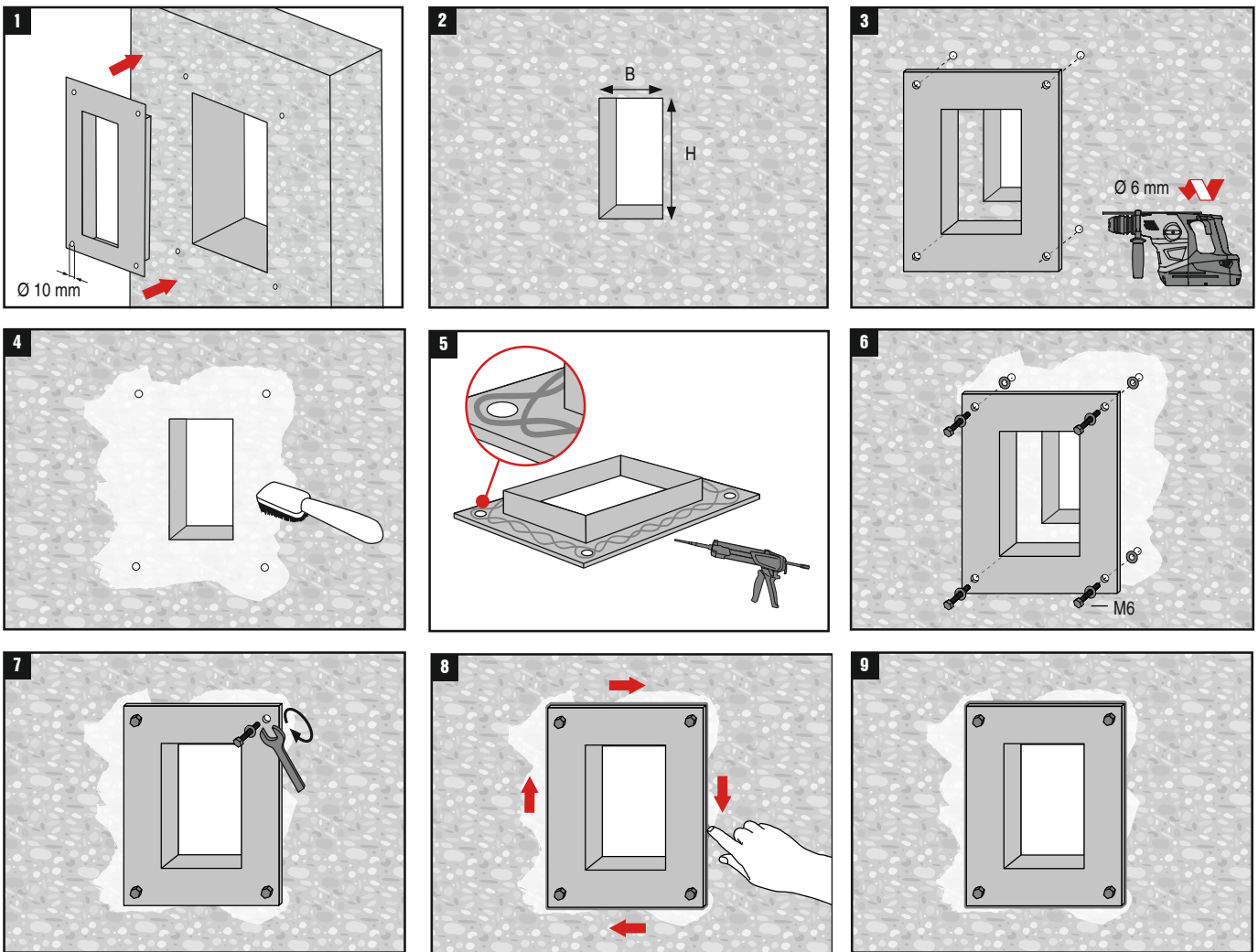
INSTRUCTIONS FOR USE



www.hilti.com
www.hilti.ca
www.hilti.group

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- cn** 操作之前以及有关特殊应用细节, 请参阅Hilti产品资料、第三方发布编目和国家认证。仅用于工业用途
- ar** قبل الاستعمال وللحصول على تفاصيل محددة عن الاستخدام، يرجى الرجوع لكتيب منتجات هيلتي، وقوائم أسعار الطرف الثالث المنشورة، والموافقات الدولية. للاستخدام الصناعي فقط.

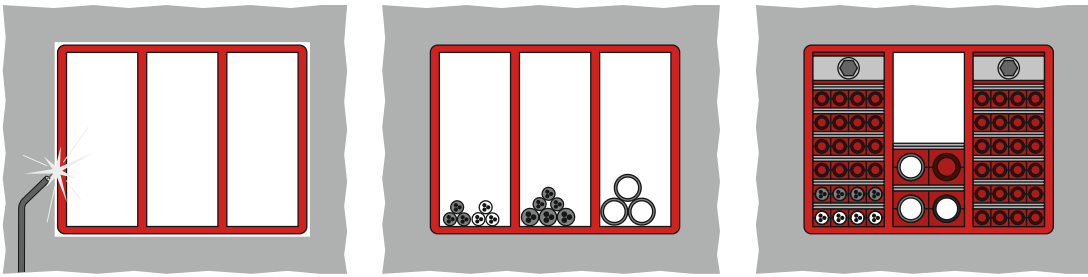
Instructions for use



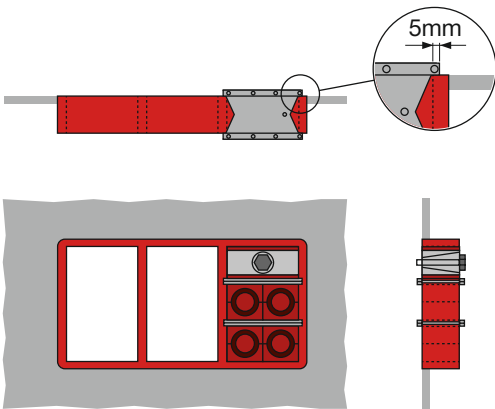
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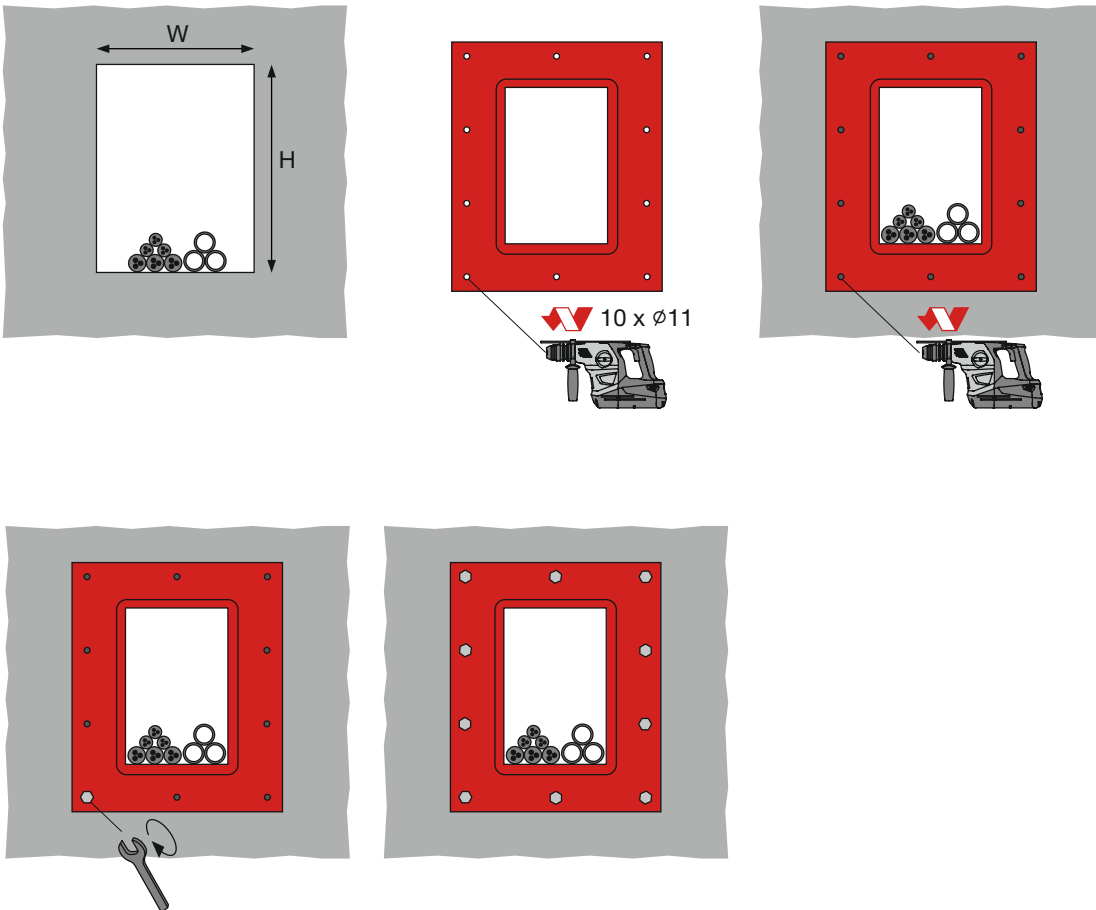
INSTALLING THE RECTANGULAR FRAMES TO THE STEEL DIVISIONS



Frames should be welded to bulkhead or deck according to Hilti Welding Guideline (issue date 2020).

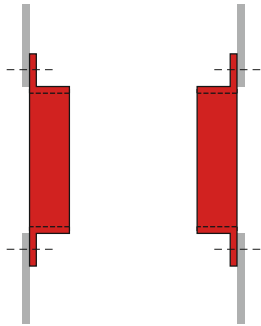


INSTALLING THE CFS-T SSF FRAME (BOLTED VERSION) TO THE STEEL DIVISIONS

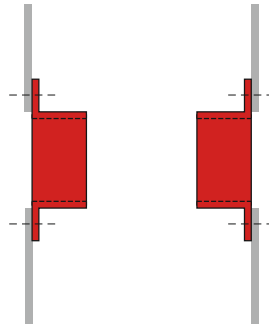


FRAME/PLUG POSITIONS ON BULKHEAD AND DECK

Bolted version to bulkhead

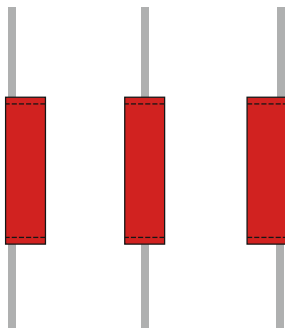


Rectangular frames

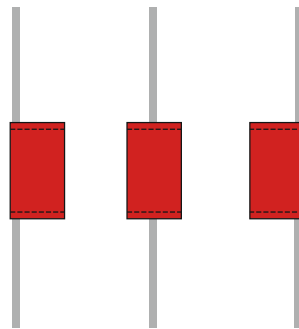


Round plugs with sleeve

Welded version to bulkhead

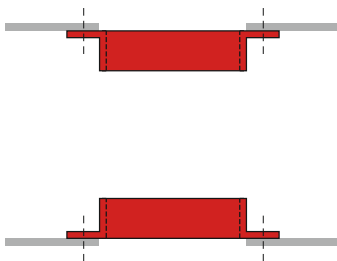


Rectangular frames

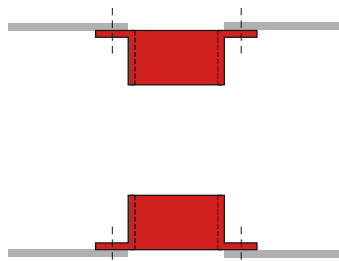


Round plugs with sleeve

Bolted version to deck

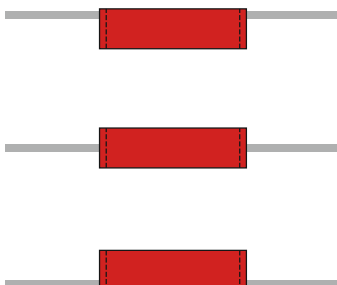


Rectangular frames

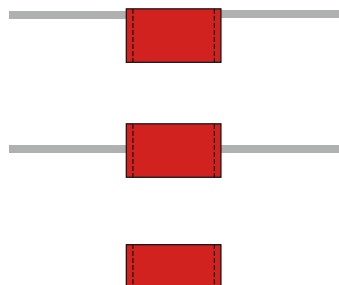


Round plugs with sleeve

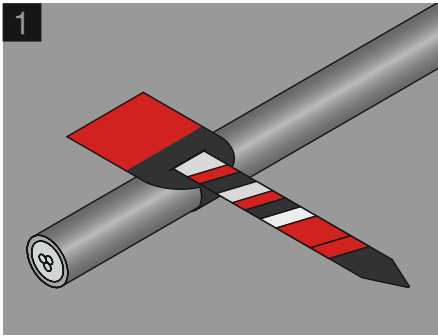
Welded version to deck



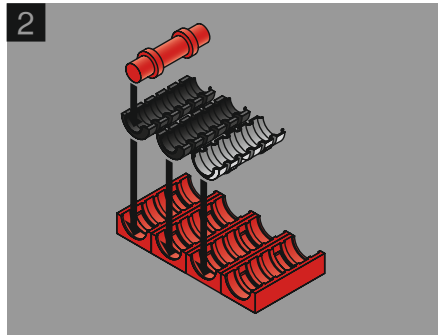
Rectangular frames



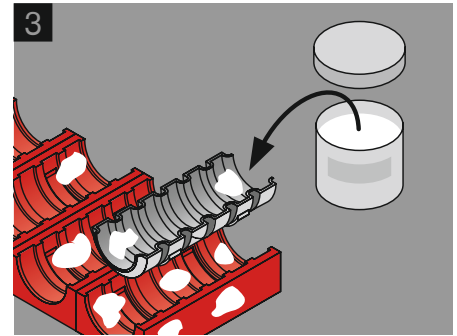
Round plugs with sleeve

INSTALLING THE SYSTEM IN A FEW EASY STEPS

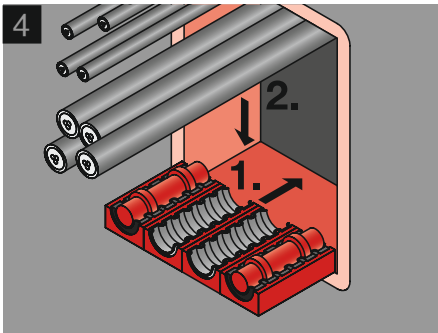
1
Wrap the Hilti size-gauge around the cable/pipe in order to determine the module and adapter size required.



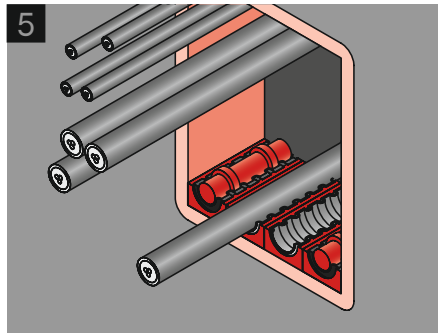
2
If necessary, remove the black adapter and replace it with one of the correct size or, depending on the size required, use the basic module without the adapter.



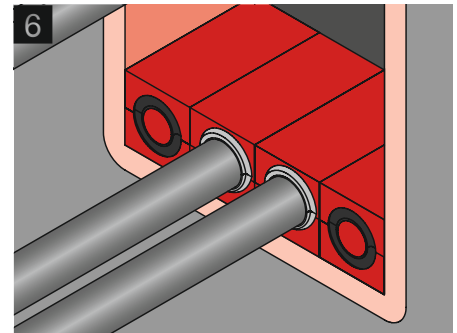
3
Carefully apply Hilti CFS-T LUB lubricant to all system parts.



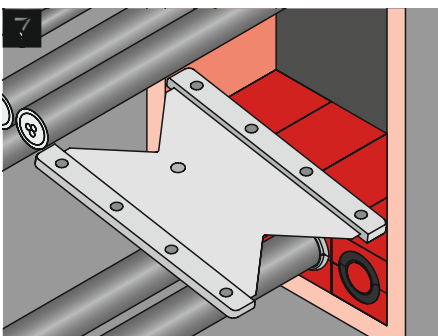
4
Place the open module in the frame beneath the cables/pipes.



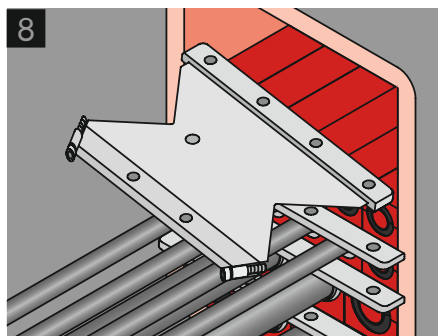
5
Position the cables/pipes in the module.



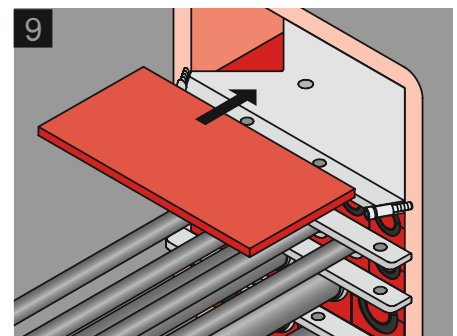
6
Close the module by fitting the appropriate top half.



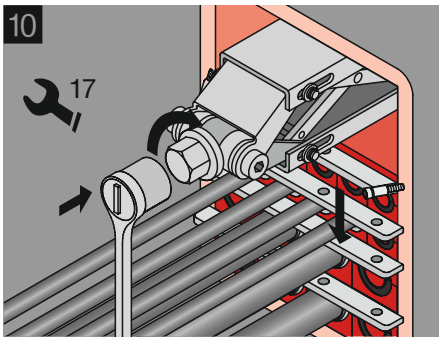
7
Place the anchor plate on top of the module row and then continue with the next row as described above, using modules of the appropriate sizes.



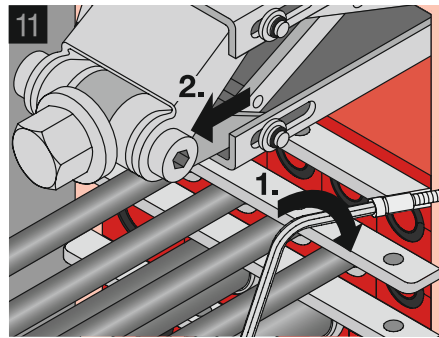
8
Place the fixing anchor plate on top of the second-last module row.



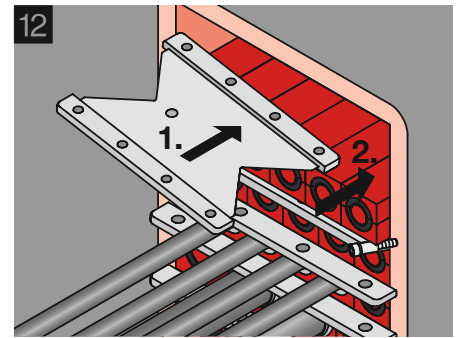
9
Place the pressure plate on top of the last anchor plate in the frame.



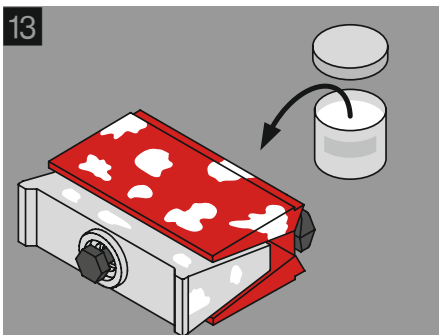
Position the module squeezer centrally in the space above the last module and apply pressure by turning the spindle with a suitable wrench.



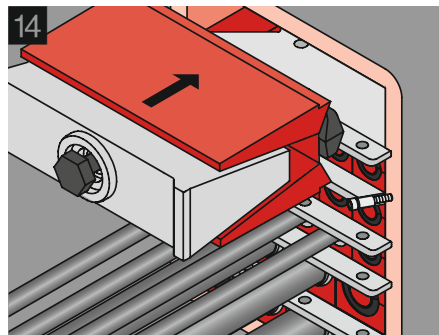
Tighten the screws on the fixing anchor plate. Remove the module squeezer. The modules remain compressed, making it easier to insert the wedge seal.



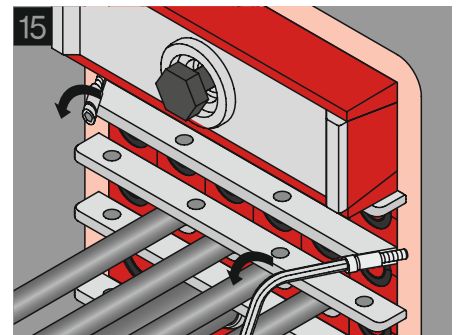
The last anchor plate and module row can then be inserted.



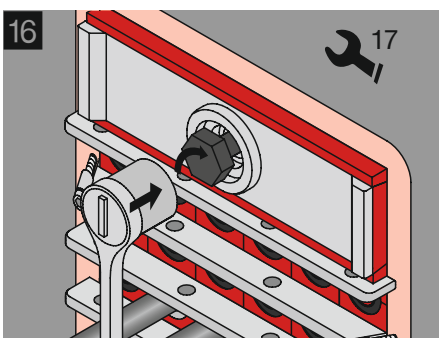
Apply lubricant to all surfaces of the CFS-T WD 120 wedge seal.



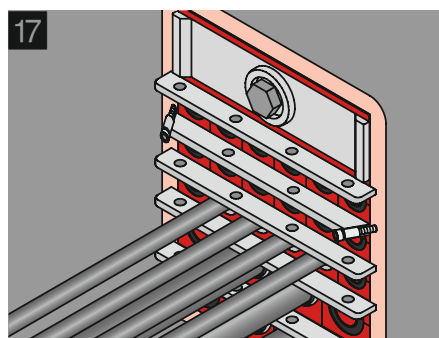
Push the wedge seal into the remaining space in the frame.



Release the screws on the fixing anchor plate before tightening the bolt in the wedge seal.



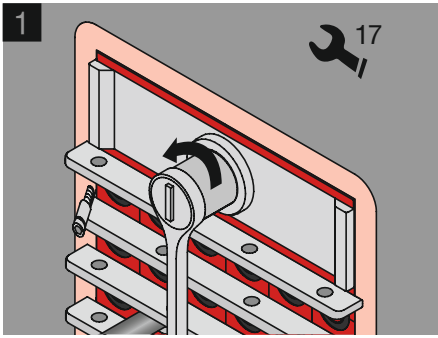
Secure the whole assembly by tightening the bolt in the wedge seal with a suitable wrench.



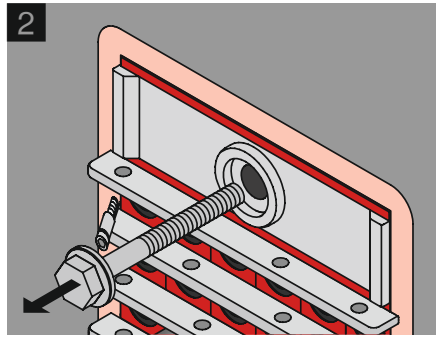
Make sure that all modules have been correctly installed in accordance with the points in the checklist.

Technical checklist

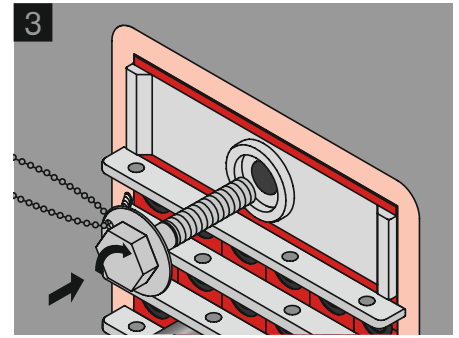
- Is the wedge seal within the frame?
- Are all modules securely seated behind the raised edge of the anchor plate where they cannot fall out?
- Has the right number of modules been installed? Check the original installation plan.
- Have modules of the correct size been installed? Check the original installation plan.
- Have module adapters and core modules of the correct color been installed (gray, red, black or none)?
- Were all modules, adapters and core modules well lubricated?

EXCHANGING THE MODULES QUICKLY AND EASILY

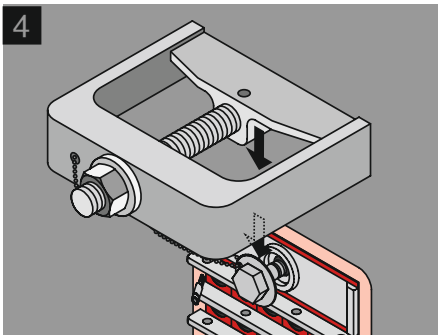
1 Use a wrench to unscrew the bolt in the wedge seal.



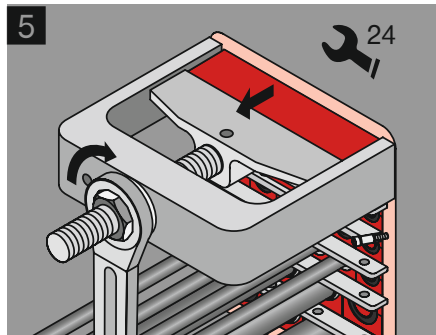
2 Remove the bolt from the wedge seal.



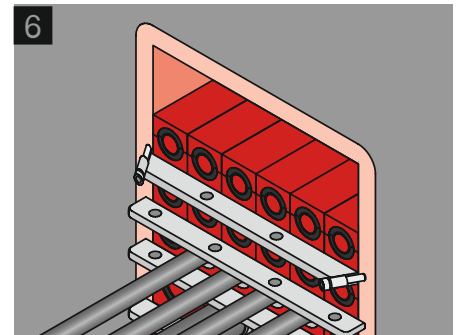
3 Insert the pulling bolt (attached to the wedge puller).



4 Bring the CFS-T WD 120 wedge puller into position so that it grips the head of the pulling bolt.



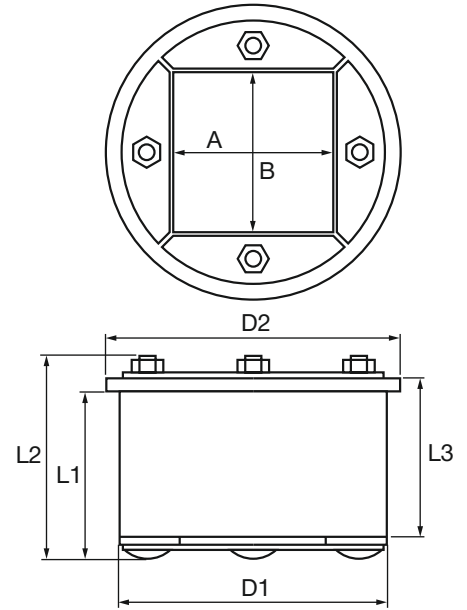
5 Pull the wedge seal out of the frame by turning the nut on the puller with an M24 ring wrench.



6 Remove the applicable modules from the frame and then follow the installation instructions when refitting the required items.

CFS-T RR - THE SOLUTION FOR ROUND CABLE TRANSITS

CFS-T RR plug seal



The CFS-T RR plug seal is an important component of the Hilti cable transit system for sealing around cables in circular openings. It forms a fire-resistant, watertight and gastight seal.

Technical information

The CFS-T RR plug seal consists of an elastic, halogen-free and highly flame-resistant synthetic rubber (HFE) insert with tensioning bolts and plates made from galvanized steel or A4 stainless steel.

Dimensions of the CFS-T RR plug seal

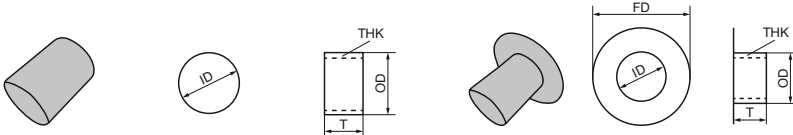
Type	Space avail.		Hole dia. ø mm	Dimensions in mm				Module length L 3	Tensioning bolts DIN603(DIN84)
	AxB	cm ²		D 1	D 2	L 1	L 2		
CFS-T RR 50	30x30	9	50 - 51	50	56	71	85	60	4 pcs. M4x70
CFS-T RR 70	40x40	16	70 - 72	70	76	71	85	60	4 pcs. M5x70
CFS-T RR 100	60x60	36	100 - 103	100	110	71	85	60	4 pcs. M6x80
CFS-T RR 125	80x80	64	125 - 128	125	135	76	95	60	8 pcs. M6x90
CFS-T RR 150	90x90	81	150 - 154	150	160	76	95	60	8 pcs. M8x90
CFS-T RR 200	120x120	144	200 - 205	200	210	76	95	60	8 pcs. M8x90

Type	Filler	Maximum cable capacity (example)
CFS-T RR 50	1 pcs. 30/0 or 4 pcs. 15/0	4 cables 3-9 mm dia. or 1 cable up to 23 mm dia.
CFS-T RR 70	4 pcs. 20/0	4 cables 3-12 mm dia. or 1 cable up to 33 mm dia.
CFS-T RR 100	4 pcs. 30/0	9 cables 5-12 mm dia. or 1 cable 34-51 mm dia.
CFS-T RR 125	16 pcs. 20/0	16 cables 5-12 mm dia. or 4 cables 13-33 mm dia. or 1 cable up to 51 mm dia
CFS-T RR 150	9 pcs. 30/0	16 cables 5-12 mm dia. or 9 cables 13-23 mm dia. or 1 cable up to 78 mm dia.
CFS-T RR 200	16 pcs. 30/0	36 cables 5-12 mm dia. or 16 cables 13-23 mm dia. or 9 cables 23-33 mm dia. or 4 cables 34-51 mm dia. or 1 cable up to 99 mm dia.



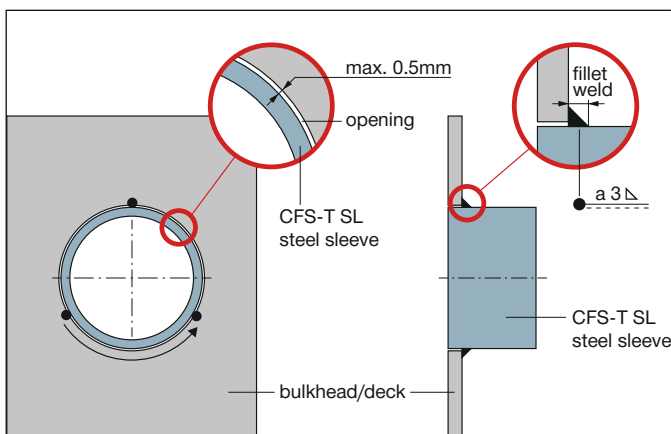
CFS-T SL sleeves

CFS-T SLF sleeves



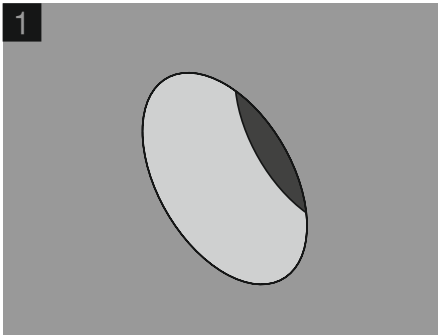
Sleeve type	To be used for	ID	OD	FD	T	THK
CFS-T SL 50 CFS-T SLF 50	CFS-T RR 50	51.2 mm	57.0 mm	157 mm	70 mm	mind. 3 mm
CFS-T SL 70 CFS-T SLF 70	CFS-T RR 70	70.3 mm	76.1 mm	176 mm	70 mm	mind. 3 mm
CFS-T SL 100 CFS-T SLF 100	CFS-T RR 100	102.2 mm	108.0 mm	210 mm	70 mm	mind. 3 mm
CFS-T SL 125 CFS-T SLF 125	CFS-T RR 125	127.0 mm	140.0 mm	240 mm	80 mm	mind. 6.5 mm
CFS-T SL 150 CFS-T SLF 150	CFS-T RR 150	150.0 mm	159.0 mm	260 mm	80 mm	mind. 4.5 mm
CFS-T SL 200 CFS-T SLF 200	CFS-T RR 200	203.1 mm	219.1 mm	320 mm	80 mm	mind. 8 mm

Welding procedure for transit sleeves CFS-T SL

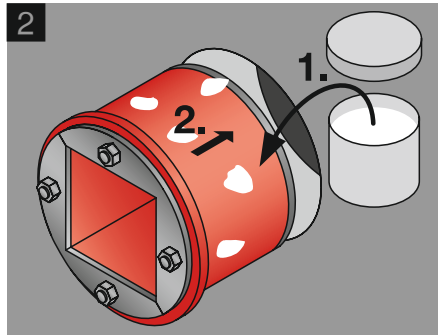


NOTE:

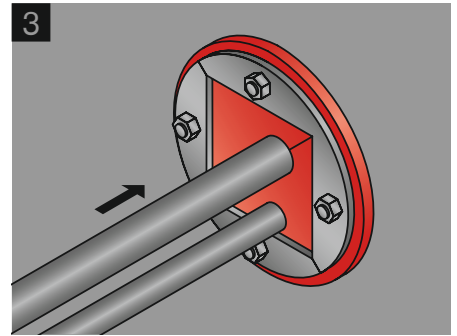
Welding of frames and sleeves in A-Class divisions with one or two side welding, depending on shipyard standards or stress condition of the penetrated division.

INSTALLING THE SYSTEM IN A FEW EASY STEPS

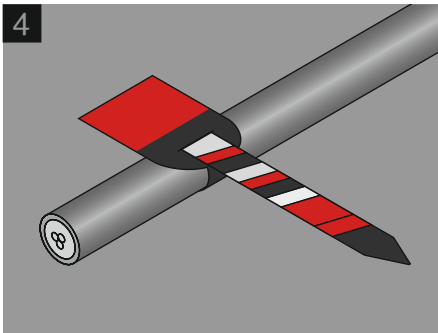
1
Check the size of the opening to ensure that the plug seal will fit snugly.



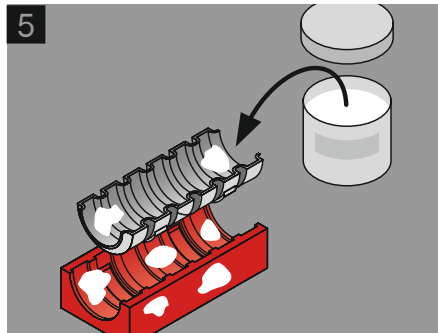
2
Lubricate and push the plug seal into the opening.



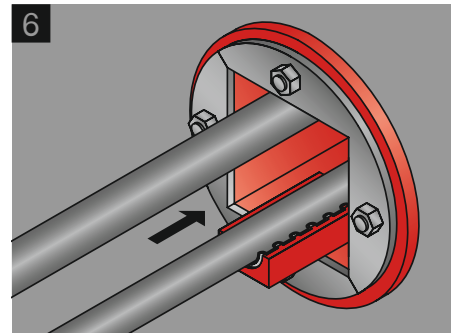
3
Install the cables/pipes in accordance with the frame packing plan.



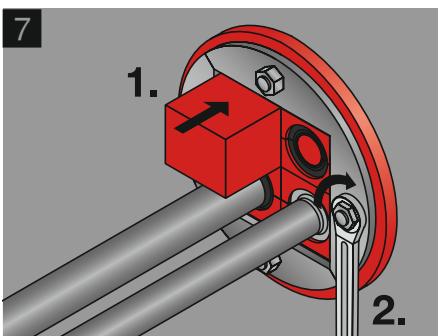
4
Use the Hilti size gauge to determine the modules required.



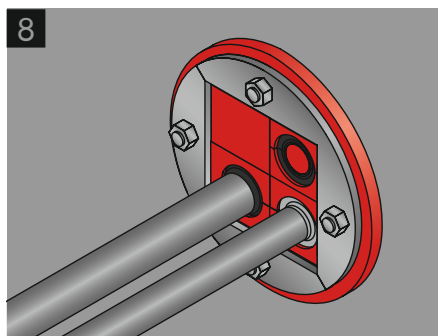
5
Lubricate all system parts carefully with Hilti lubricant.



6
Insert the modules, row by row, and lay the cable/pipe on top. Rotate the modules through 90° if necessary.

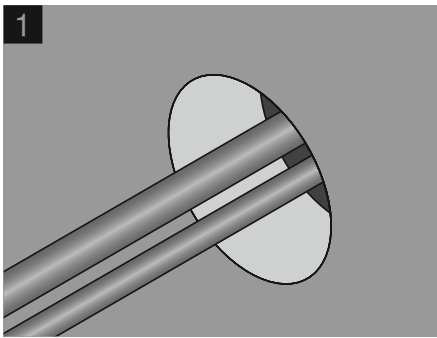


7
After inserting the last module (can be a blank module), use a ring wrench to tighten the bolts on the frame.

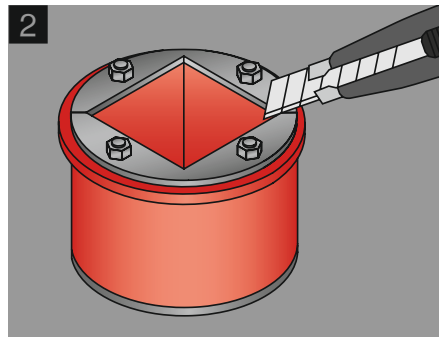


8
Check that the modules are seated and installed correctly.

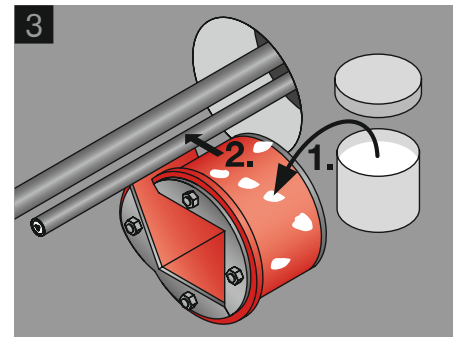
INSTALLING THE SYSTEM WHERE CABLES/PIPES ARE ALREADY IN PLACE



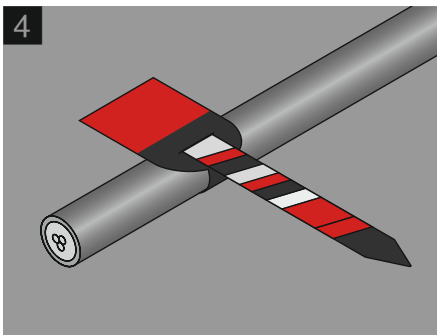
1
Check the size of the opening to ensure that the plug seal will fit snugly.



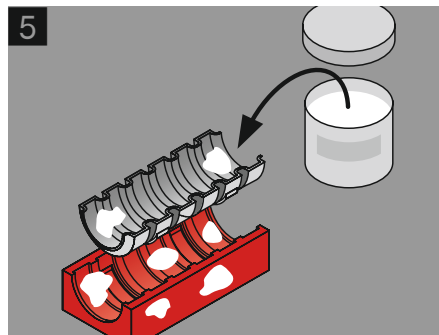
2
In situations where cables/pipes are already in place, use a sharp knife to cut through the plug seal at a corner of the frame.



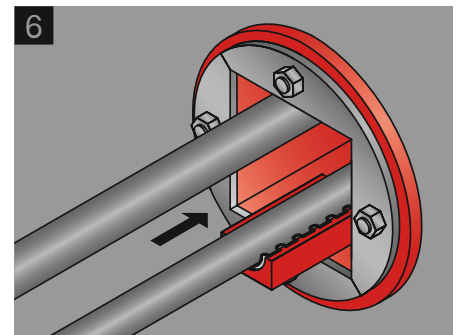
3
Lubricate and slip the opened frame over the cables/pipes and then push the plug seal into the opening (tap in with a hammer if necessary).



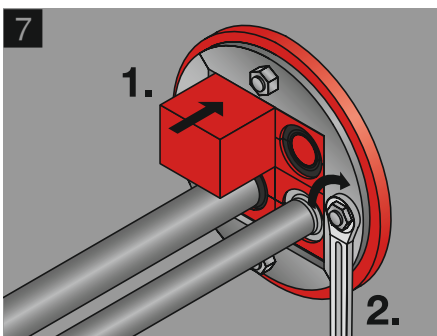
4
Use the Hilti size-gauge to determine the modules required.



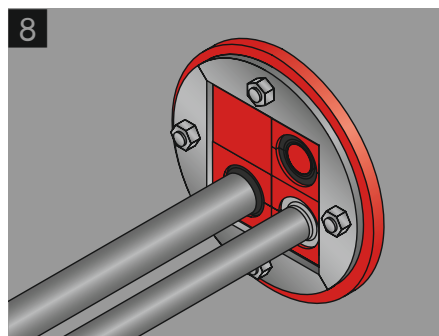
5
Lubricate all system parts carefully with Hilti lubricant.



6
Insert the modules, row by row, and lay the cable/pipe on top. Rotate the modules through 90° if necessary.



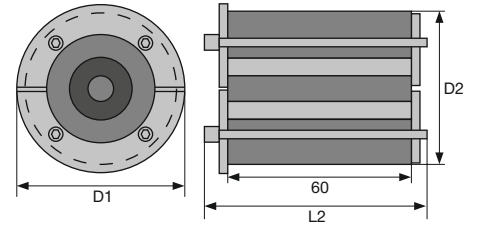
7
After inserting the last module (can be a blank module), use a ring wrench to tighten the bolts on the frame.



8
Check that the modules are seated and installed correctly.

CFS-T RRS - THE SOLUTION FOR SINGLE CABLES AND PIPES

CFS-T RRS – plug seal



Sealing individual cables and pipes against fire and gas and to better ensure watertightness in cored holes or sleeved pipes.

Technical information

The CFS-T RRS plug seal consists of an elastic, halogen-free and highly flame-resistant synthetic rubber (HFE) insert with tensioning bolts and plates made from galvanized steel or A4 stainless steel.

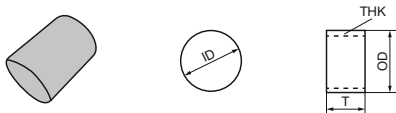


Type	Cable/pipe diameter	D2	D1	Tolerance / bore type	L2	No. of bolts	Bolts
CFS-T RRS-43/0+5-23	0+5-23 mm	43 mm	53 mm	43 - 45 mm	75 mm	4	M5x70
CFS-T RRS-50/0+13-33	0+13-33 mm	50 mm	60 mm	50 - 52 mm	75 mm	4	M5x70
CFS-T RRS-70/0+23-51	0+23-51 mm	70 mm	80 mm	70 - 72 mm	75 mm	4	M5x70
CFS-T RRS-100/0+34-78	0+34-78 mm	100 mm	110 mm	100 - 103 mm	76 mm	6	M6x70
CFS-T RRS-100/0+23-78	0+23-78 mm	100 mm	110 mm	100 - 103 mm	76 mm	6	M6x70

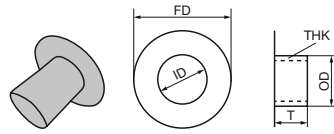
CFS-T RRS-43/0+5-23		CFS-T RRS-50/0+13-33		CFS-T RRS-70/0+23-51	
Cable diameter and corresponding system part					
22 - 23 mm	Basic	32 - 33 mm	Basic	49 - 51 mm	Basic
17 - 21 mm	Adapter gray L	27 - 31 mm	Adapter gray L	44 - 48 mm	Adapter red L
13 - 16 mm	Adapter black L	23 - 26 mm	Adapter black L	39 - 43 mm	Adapter gray L
11 - 12 mm	Adapter ring red	22 - 23 mm	Adapter ring red	34 - 38 mm	Adapter black L
8 - 10 mm	Adapter gray S	17 - 21 mm	Adapter gray S	32 - 33 mm	Adapter ring red
5 - 7 mm	Adapter black S	13 - 16 mm	Adapter black S	27 - 31 mm	Adapter gray S
-	Core	-	Core	23 - 26 mm	Adapter black S
				-	Core

CFS-T RRS-100/0+34-78		CFS-T RRS-100/0+23-78	
Cable diameter and corresponding system part			
76 - 78 mm	Basic	76 - 78 mm	Basic
70 - 75 mm	Adapter black XL	70 - 75 mm	Adapter black XL
64 - 69 mm	Adapter red XL	64 - 69 mm	Adapter red XL
58 - 63 mm	Adapter gray XL	58 - 63 mm	Adapter gray XL
52 - 57 mm	Adapter black L	52 - 57 mm	Adapter black L
49 - 51 mm	Adapter ring red L	49 - 51 mm	Adapter ring red L
44 - 48 mm	Adapter red L	44 - 48 mm	Adapter red L
39 - 43 mm	Adapter gray L	39 - 43 mm	Adapter gray L
34 - 38 mm	Adapter black M	34 - 38 mm	Adapter black M
		32 - 33 mm	Adapter ring red S
		27 - 31 mm	Adapter gray S
		23 - 26 mm	Adapter black S

CFS-T SL sleeves

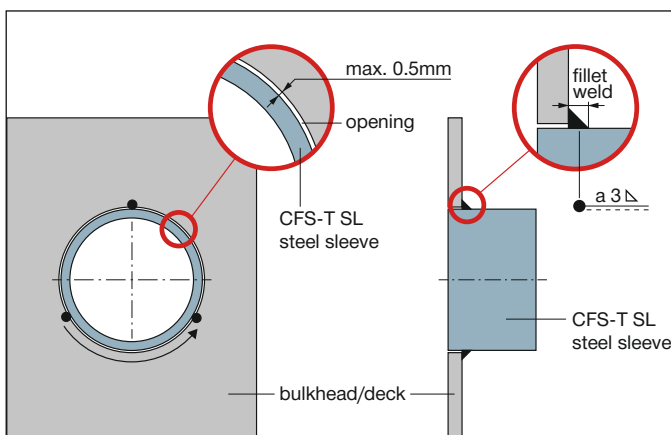


CFS-T SLF sleeves



Sleeve type	To be used for	ID	OD	FD	T	THK
CFS-T SL 50 CFS-T SLF 50	CFS-T RRS 50	51.2 mm	57.0 mm	157 mm	70 mm	mind. 3 mm
CFS-T SL 70 CFS-T SLF 70	CFS-T RRS 70	70.3 mm	76.1 mm	176 mm	70 mm	mind. 3 mm
CFS-T SL 100 CFS-T SLF 100	CFS-T RRS 100	102.2 mm	108.0 mm	210 mm	70 mm	mind. 3 mm

Welding procedure for transit sleeves CFS-T SL



NOTE:

Welding of frames and sleeves in A-Class divisions with one or two side welding, depending on shipyard standards or stress condition of the penetrated division.

CFS-T EMC SOLUTIONS

CFS-T cable modules and filler modules



EMC modules with contact tips and tapes (made from electrolytic copper) form a conductive connection between cable shield and frame.

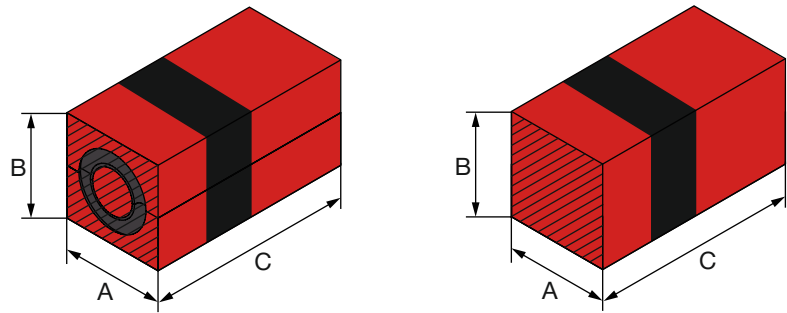


Applications

- EMC sealing solution (electromagnetic compatibility) for protection against electromagnetic influences.
- Highly sensitive electronic equipment, like signal and control systems, communication techniques and instruments.
- Instruments to be tightly shielded from electromagnetic fields caused by sudden electromagnetic pulses (EMP), lightning (LEMP), nuclear explosions (NEMP), control operations in overhead lines and transformer stations, or electromagnetic fields from electronic instruments or other equipment not sufficiently shielded.
- Special areas of navy ships, offshore platforms (upstream), offshore transformer stations (wind energy).

EMC wedge kits are available in

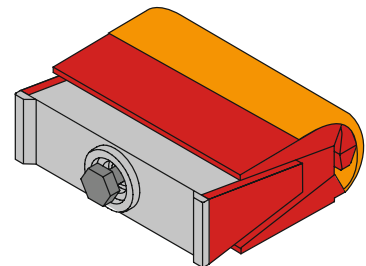
- Galvanised steel
- Stainless steel



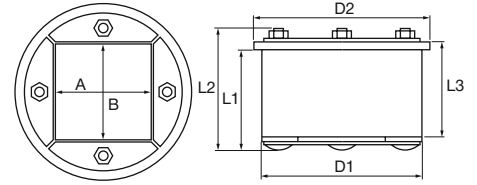
Module	Dimension A	Dimension B	Dimension C	Diameter range	Diameter range per module/adapter
Cable modules					
CFS-T EMC 20/0+5-12	20 mm	20 mm	60 mm	5 - 12 mm	Black adapter = 5 - 7 mm Gray adapter = 8 - 10 mm Basic module = 11 - 12 mm
CFS-T EMC 30/0+13-23	30 mm	30 mm	60 mm	13 - 23 mm	Black adapter = 13 - 16 mm Gray adapter = 17 - 21 mm Basic module = 22 - 23 mm
CFS-T EMC 40/0+23-33	40 mm	40 mm	60 mm	23 - 33 mm	Black adapter = 23 - 26 mm Gray adapter = 27 - 31 mm Basic module = 32 - 33 mm
CFS-T EMC 60/0+34-51	60 mm	60 mm	60 mm	34 - 51 mm	Black adapter = 34 - 38 mm Gray adapter = 39 - 43 mm Red insert = 44 - 48 mm Basic module = 49 - 51 mm
CFS-T EMC 90/0+52-78	90 mm	90 mm	60 mm	52 - 78 mm	Black adapter (thick) = 52 - 57 mm Gray adapter = 58 - 63 mm Red adapter = 64 - 69 mm Black adapter (thin) = 70 - 75 mm Basic module = 76 - 78 mm
CFS-T EMC 120/0+79-99	120 mm	120 mm	60 mm	79 - 99 mm	Black adapter = 79 - 84 mm Gray adapter = 85 - 90 mm Red adapter = 91 - 96 mm Basic module = 97 - 99 mm
Filler modules					
CFS-T FB EMC 24x5/0	5 mm	5 mm	60 mm	0	-
CFS-T FB EMC 12x10/0	10 mm	10 mm	60 mm	0	-
CFS-T FB EMC 15/0	15 mm	15 mm	60 mm	0	-
CFS-T FB EMC 20/0	20 mm	20 mm	60 mm	0	-
CFS-T FB EMC 30/0	30 mm	30 mm	60 mm	0	-

CFS-T EMC wedge kits

CFS-T EMC wedge seals are available in galvanized steel or stainless steel. Each wedge kit contains one CFS-T EMC wedge seal, 4 anchor plates and one CFS-T EMC contact paste (to protect copper contact strips on modules and compression wedge from corrosion). Anchor plates are available in galvanized steel, stainless steel or aluminum.



CFS-T RR EMC plug seals



Material availability options

- Galvanised steel
- Stainless steel

Dimensions of the CFS-T RR EMC plug seals

Type	Space avail.		Hole dia.	Dimensions in mm				Module length	Tensioning bolts
	AxB	cm ²	∅ mm	D 1	D 2	L 1	L 2	L 3	DIN603 (DIN84)
CFS-T RR 50 EMC	30x30	9	50 - 51	50	56	71	85	60	4 pcs. M4x40
CFS-T RR 70 EMC	40x40	16	70 - 72	70	76	71	85	60	4 pcs. M5x40
CFS-T RR 100 EMC	60x60	36	100 - 103	100	111	71	85	60	4 pcs. M6x80
CFS-T RR 125 EMC	80x80	64	125 - 128	125	135	76	95	60	8 pcs. M6x90
CFS-T RR 150 EMC	90x90	81	150 - 154	150	160	76	95	60	8 pcs. M8x90
CFS-T RR 200 EMC	120x120	144	200 - 205	200	210	76	95	60	8 pcs. M8x90

Type	Filler	Maximum cable capacity (example)
CFS-T RR 50 EMC	1 pcs. 30/0 or 4 pcs. 15/0	4 cables 3 - 9 mm dia. or 1 cable up to 23 mm dia.
CFS-T RR 70 EMC	4 pcs. 20/0	4 cables 3 - 12 mm dia. or 1 cable up to 33 mm dia.
CFS-T RR 100 EMC	4 pcs. 30/0	9 cables 5 - 12 mm dia. or 1 cable 34-51 mm dia.
CFS-T RR 125 EMC	16 pcs. 20/0	16 cables 5 - 12 mm dia. or 4 cables 13 - 33 mm dia. or 1 cable up to 51 mm dia.
CFS-T RR 150 EMC	9 pcs. 30/0	16 cables 5 - 12 mm dia. or 9 cables 13 - 23 mm dia. or 1 cable up to 78 mm dia.
CFS-T RR 200 EMC	16 pcs. 30/0	36 cables 5 - 12 mm dia. or 16 cables 13 - 23 mm dia. or 9 cables 23 - 33 mm dia. or 4 cables 34 - 51 mm dia. or 1 cable up to 99 mm dia.

**FOR A
SAFER SEAL**

**Transit System
for cables
and pipes**



CFS-T EX FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES

CFS-T EX



Applications

- Industries affected by the ATEX directive, such as the petrochemical and chemical industries.
- Oil and gas platforms which are not covered by the IMO resolution.

Sealing solution certified according to ATEX (“**A**tmosphères **E**xplosibles”) for use in areas with a potentially explosive atmosphere.


Hilti Cable Transit System

II 2 GD
EX e II IP 65
EX5 11 12 51975 001
Frame type:
CFS-T SS
CFS-T SSF
CFS-T RR
CFS-T STRF
Certification body: TÜV Süd
Hilti = registered trademark of Hilti Corporation, Schaan, LI
2025977-12.2011

CFS-T EX wedge kits



Technical information

- Each wedge kit contains one EX marked wedge seal, 4 EX marked anchor plates, one EX marked fixing anchor plate (available in galvanized steel and stainless steel) and one CFS-T lubricant.

Material availability options for wedge seals and anchorplate

- Galvanised steel
- Stainless steel

CFS-T EX cable module



CFS-T EX filler module

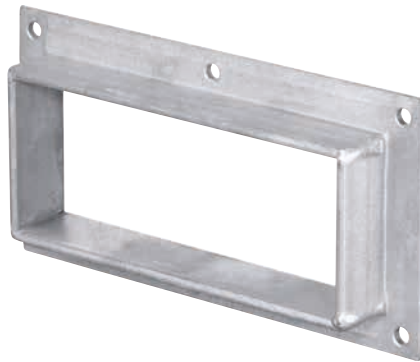


SEALING SOLUTIONS FOR SWITCH CABINETS

CFS-T STRF basic frame



CFS-T GF



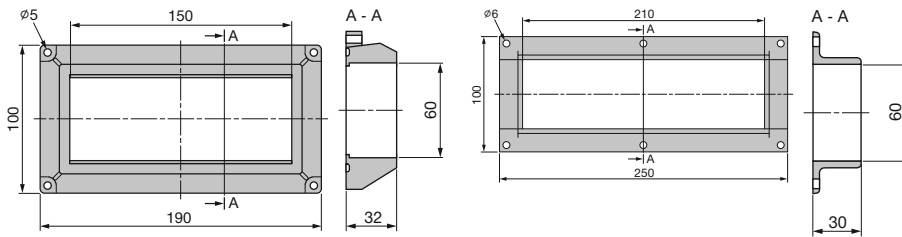
CFS-T GS

Technical information

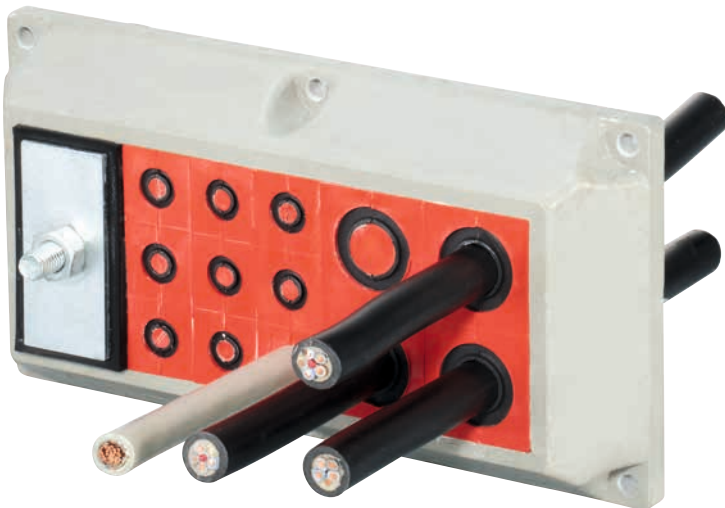
- Low inventory requirements: only four different modules are needed to cover all diameters from 3 to 33 mm.
- Sealing cables and pipes against dust and splashed water (up to safety class IP-65).
- Frames available in two standard sizes (inner width of 60 mm, inner length of 150 or 210 mm).

Material availability options

- Galvanised steel
- Fiberglass

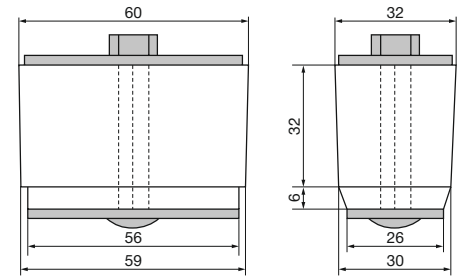


Sealing cables, pipes and other conduits leading into switch cabinets, appliances and casings.

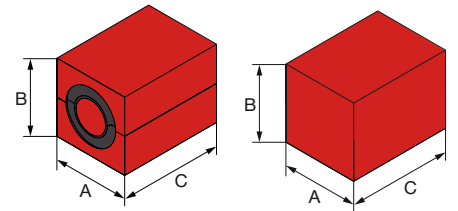


Type	Available space	Inner width LB (mm)	Inner length LL (mm)	Outer width AB (mm)	Outer length AL (mm)	Flange width FB (mm)	Flange length FL (mm)	Aperture (mm)
CFS-T STRF 150	60x120	60	150	88	178	100	190	81x171
CFS-T STRF 210	60x180	60	210	88	238	100	250	81x221

CFS-T WD 60 wedge seal



CFS-T S cable module



Module	Dimension A/B	Dimension C	Diameter range	Diameter range per module / adapter
Cable modules				
CFS-T S 15/0+3-9 cable module	15 mm	30 mm	3 - 9 mm	Black adapter = 3 - 5 mm Gray adapter = 6 - 8 mm Basic module = 9 mm
CFS-T S 20/0+5-12 cable module	20 mm	30 mm	5 - 12 mm	Black adapter = 5 - 7 mm Gray adapter = 8 - 10 mm Basic module = 11 - 12 mm
CFS-T S 30/0+13-23 cable module	30 mm	30 mm	13 - 23 mm	Black adapter = 13 - 16 mm Gray adapter = 17 - 21 mm Basic module = 22 - 23 mm
CFS-T S 40/0+23-33 cable module	40 mm	30 mm	23 - 33 mm	Black adapter = 23 - 26 mm Gray adapter = 27 - 31 mm Basic module = 32 - 33 mm
Filler modules				
CFS-T FB S 24x5/0 filler module	5 mm	30 mm	0	-
CFS-T FB S 12x10/0 filler module	10 mm	30 mm	0	-

CFS-T BASIC SYSTEM



Cable modules

Ordering designation	Package contents	Item no.
CFS-T 15/0+3-9 cable module incl. adapter and core modules	64	2014595
CFS-T 20/0+5-12 cable module incl. adapter and core modules	36	2014596
CFS-T 20/0+5-16 cable module incl. adapter and core modules	36	2097591
CFS-T 30/0+13-23 cable module incl. adapter and core modules	16	2014597
CFS-T 40/0+23-33 cable module incl. adapter and core modules	9	2014598
CFS-T 60/0+34-51 cable module incl. adapter and core modules	4	2014599
CFS-T 60/34-51 cable module incl. adapter (without core modules)	4	2060568
CFS-T 90/0+52-78 cable module incl. adapter and core modules	1	2014860
CFS-T 90/52-78 cable module incl. adapter (without core modules)	1	2060569
CFS-T 120/0+79-99 cable module incl. adapter and core modules	1	2014861
CFS-T 120/79-99 cable module incl. adapter (without core modules)	1	2060670



Filler modules

Ordering designation	Package contents	Item no.
CFS-T FB 24x5/0 filler module	36	2014862
CFS-T FB 12x10/0 filler module	18	2014863
CFS-T FB 15/0 filler module	96	2014864
CFS-T FB 20/0 filler module	54	2014865
CFS-T FB 30/0 filler module	24	2014866
CFS-T FB 30/0R30 filler module	16	2014867
CFS-T FB 40/0 filler module	9	2210445
CFS-T FB 60/0 filler module	4	2210446



Wedge seals

Ordering designation	Package contents	Item no.
CFS-T WD 120 GS wedge compression kit comprising 1 wedge seal (galvanized), 4 anchor plates (galvanized), 1 fixing anchor plate (galvanized), lubricant (30 g)	1	2014880
CFS-T WD 120 S/S wedge compression kit comprising 1 wedge seal (stainless steel material 1.4571 / V4A (AISI 316Ti)), 4 anchor plates (stainless steel material 1.4301(AISI 304)), 1 fixing anchor plate (stainless steel material 1.4301 (AISI 304)), lubricant (30 g)	1	2014881
CFS-T WD 120 AL wedge compression kit comprising 1 wedge seal (stainless steel material 1.4571 / V4A (AISI 316Ti)), 5 anchor plates (aluminum), lubricant (30 g)	1	2014922
CFS-T WD 120 GS wedge compression seal (galvanized)	1	2047206
CFS-T WD 120 S/S wedge compression seal (stainless steel)	1	2047207



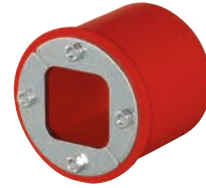
Anchor plates

Ordering designation	Package contents	Item no.
CFS-T AP 120 GS anchor plate set comprising 9 anchor plates (galvanized), 1 fixing anchor plate (galvanized)	1	2014882
CFS-T AP 120 S/S anchor plate set comprising 9 anchor plates (stainless steel material 1.4301 (AISI 304)), 1 fixing anchor plate (stainless steel material 1.4301 (AISI 304))	1	2014883
CFS-T AP 120 AL anchor plate set comprising 10 anchor plates (aluminum)	1	2016767
CFS-T FAP 120 S/S fixing anchor plate set comprising 10 fixing anchor plates (stainless steel material 1.4301 (AISI 304))	1	2014923
CFS-T FAP 120 GS fixing anchor plate (Galvanised)	5	2233910
CFS-T AP 120 GS anchor plate (Galvanized)	5	2233911
CFS-T AP 120 S/S anchor plate (stainless steel)	5	2233912

CFS-T RR PLUG SEALS

Plug seal with fittings and bolts in galvanized steel

Ordering designation	Package contents	Item no.
CFS-T RR-50 GS plug seal	1	2014886
CFS-T RR-70 GS plug seal	1	2014888
CFS-T RR-90 GS plug seal	1	2014890
CFS-T RR-100 GS plug seal	1	2014892
CFS-T RR-103 GS plug seal	1	2014894
CFS-T RR-125 GS plug seal	1	2014896
CFS-T RR-150 GS plug seal	1	2014898
CFS-T RR-154 GS plug seal	1	2014900
CFS-T RR-200 GS plug seal	1	2014902



Plug seal with fittings and bolts in stainless steel

Ordering designation	Package contents	Item no.
CFS-T RR-50 S/S plug seal	1	2014887
CFS-T RR-70 S/S plug seal	1	2014889
CFS-T RR-90 S/S plug seal	1	2014891
CFS-T RR-100 S/S plug seal	1	2014893
CFS-T RR-103 S/S plug seal	1	2014895
CFS-T RR-125 S/S plug seal	1	2014897
CFS-T RR-150 S/S plug seal	1	2014899
CFS-T RR-154 S/S plug seal	1	2014901
CFS-T RR-200 S/S plug seal	1	2014903



CFS-T RRS PLUG SEALS

Plug seal with fittings and bolts in galvanized steel

Ordering designation	Package contents	Item no.
CFS-T RRS-43/0+5-23 GS plug seal incl. adapter and core modules	1	2042729
CFS-T RRS-50/0+13-33 GS plug seal incl. adapter and core modules	1	2042731
CFS-T RRS-70/0+23-51 GS plug seal incl. adapter and core modules	1	2042733
CFS-T RRS-100/0+34-78 GS plug seal incl. adapter and core modules	1	2042735
CFS-T RRS-100/0+23-78 GS plug seal incl. adapter and core modules	1	2042737



Plug seal with fittings and bolts in stainless steel

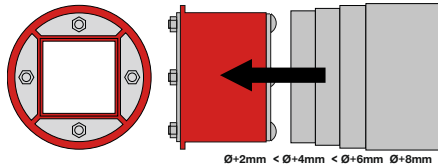
Ordering designation	Package contents	Item no.
CFS-T RRS-43/0+5-23 S/S plug seal incl. adapter and core modules	1	2042730
CFS-T RRS-50/0+13-33 S/S plug seal incl. adapter and core modules	1	2042732
CFS-T RRS-70/0+23-51 S/S plug seal incl. adapter and core modules	1	2042734
CFS-T RRS-100/0+34-78 S/S plug seal incl. adapter and core modules	1	2042736
CFS-T RRS-100/0+23-78 S/S plug seal incl. adapter and core modules	1	2042738

ADAPTERSET/SEALING STRIP FOR DIAMETER ADJUSTMENT



Adapterset

Ordering designation	Package contents	Item no.
CFS-T AS-100 adapter for round plugs	2	2210448
CFS-T AS-125 adapter for round plugs	2	2210449
CFS-T AS-150 adapter for round plugs	2	2210450
CFS-T AS-200 adapter for round plugs	2	2210451



Sealing strip

Ordering designation	Package contents	Item no.
CFS-T SST 60x1x720 HFE sealing strip (halogen-free elastomer)	5	2210452
CFS-T SST 60x4x720 HFE sealing strip (halogen-free elastomer)	5	2042740

CFS-T EMC SYSTEM



Cable modules

Ordering designation	Package contents	Item no.
CFS-T EMC 20/0+5-12 cable modules incl. adapter and core modules	36	2014868
CFS-T EMC 30/0+13-23 cable modules incl. adapter and core modules	16	2014869
CFS-T EMC 40/0+23-33 cable modules incl. adapter and core modules	9	2014870
CFS-T EMC 60/0+34-51 cable modules incl. adapter and core modules	4	2014871
CFS-T EMC 90/0+52-78 cable modules incl. adapter and core modules	1	2014872
CFS-T EMC 120/0+79-99 cable modules incl. adapter and core modules	1	2014873

Filler modules

Ordering designation	Package contents	Item no.
CFS-T FB EMC 24x5/0 filler module	36	2014874
CFS-T FB EMC 12x10/0 filler module	18	2014875
CFS-T FB EMC 15/0 filler module	96	2014876
CFS-T FB EMC 20/0 filler module	54	2014877
CFS-T FB EMC 30/0 filler module	24	2014878

Wedge seals

Ordering designation	Package contents	Item no.
CFS-T WD 120 EMC GS wedge compression kit comprising 1 wedge seal (galvanized), 4 anchor plates (galvanized), 1 fixing anchor plate (galvanized), EMC contact paste (30 g)	1	2020707
CFS-T WD 120 EMC S/S wedge compression kit comprising 1 wedge seal (stainless steel material 1.4571 / V4A (AISI 316Ti)), 4 anchor plates (stainless steel material 1.4301(AISI 304)), 1 fixing anchor plate (stainless steel material 1.4301 (AISI 304)), EMC contact paste (30 g)	1	2020708
CFS-T WD 120 EMC AL wedge compression kit comprising 1 wedge seal (stainless steel material 1.4571 / V4A (AISI 316Ti)), 5 anchor plates (aluminum), EMC contact paste (30 g)	1	2020709

Anchor plates

Ordering designation	Package contents	Item no.
CFS-T AP 120 GS anchor plate set comprising 9 anchor plates (galvanized), 1 fixing anchor plate (galvanized)	1	2014882
CFS-T AP 120 S/S anchor plate set comprising 9 anchor plates (stainless steel material 1.4301 (AISI 304)), 1 fixing anchor plate (stainless steel material 1.4301 (AISI 304))	1	2014883
CFS-T AP 120 AL anchor plate set comprising 10 anchor plates	1	2016767
CFS-T FAP 120 S/S fixing anchor plate set comprising 10 fixing anchor plates (stainless steel material 1.4301 (AISI 304))	1	2014923
CFS-T AP 120 EX S/S Anchor plate (Stainless steel)	5	2235218
CFS-T AP 120 EX GS Anchor plate (Galvanized)	5	2235280
CFS-T FAP 120 EX GS fixing anchor plate (Galvanized)	5	2235219



Plug seals		
Ordering designation	Package contents	Item no.
CFS-T RR-50 EMC GS (galvanized steel)	1	2014904
CFS-T RR-50 EMC S/S (stainless steel material 1.4571 / V4A (AISI 316Ti))	1	2014905
CFS-T RR-70 EMC GS (galvanized steel)	1	2014906
CFS-T RR-70 EMC S/S (stainless steel material 1.4571 / V4A (AISI 316Ti))	1	2014907
CFS-T RR-90 EMC GS (galvanized steel)	1	2014908
CFS-T RR-90 EMC S/S (stainless steel material 1.4571 / V4A (AISI 316Ti))	1	2014909
CFS-T RR-100 EMC GS (galvanized steel)	1	2014910
CFS-T RR-100 EMC S/S (stainless steel material 1.4571 / V4A (AISI 316Ti))	1	2014911
CFS-T RR-103 EMC GS (galvanized steel)	1	2014912
CFS-T RR-103 EMC S/S (stainless steel material 1.4571 / V4A (AISI 316Ti))	1	2014913
CFS-T RR-125 EMC GS (galvanized steel)	1	2014914
CFS-T RR-125 EMC S/S (stainless steel material 1.4571 / V4A (AISI 316Ti))	1	2014915
CFS-T RR-150 EMC GS (galvanized steel)	1	2014916
CFS-T RR-150 EMC S/S (stainless steel material 1.4571 / V4A (AISI 316Ti))	1	2014917
CFS-T RR-154 EMC GS (galvanized steel)	1	2014918
CFS-T RR-154 EMC S/S (stainless steel material 1.4571 / V4A (AISI 316Ti))	1	2014919
CFS-T RR-200 EMC GS (galvanized steel)	1	2014920
CFS-T RR-200 EMC S/S (stainless steel material 1.4571 / V4A (AISI 316Ti))	1	2014921

CFS-T EX SYSTEM

Cable modules

Ordering designation	Package contents	Item no.
CFS-T EX 15/0+3-9 cable modules incl. adapter and core modules	64	2042700
CFS-T EX 20/0+5-12 cable modules incl. adapter and core modules	36	2042701
CFS-T EX 30/0+13-23 cable modules incl. adapter and core modules	16	2042702
CFS-T EX 40/0+23-33 cable modules incl. adapter and core modules	9	2042703
CFS-T EX 60/0+34-51 cable modules incl. adapter and core modules	4	2042704
CFS-T EX 90/0+52-78 cable modules incl. adapter and core modules	1	2042705
CFS-T EX 120/0+79-99 cable modules incl. adapter and core modules	1	2042706



Filler modules

Ordering designation	Package contents	Item no.
CFS-T FB EX 24x5/0 filler module	36	2042707
CFS-T FB EX 12x10/0 filler module	18	2042708
CFS-T FB EX 15/0 filler module	96	2042709
CFS-T FB EX 20/0 filler module	54	2042710
CFS-T FB EX 30/0 filler module	24	2042711

Wedge seals and anchor plates

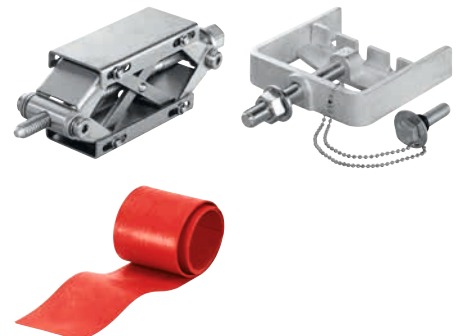
Ordering designation	Package contents	Item no.
CFS-T WD 120 EX GS wedge compression kit comprising 1 wedge seal (galvanized), 4 anchor plates (galvanized), 1 fixing anchor plate (galvanized), CFS-T lubricant (30 g)	1	2042713
CFS-T WD 120 EX S/S wedge compression kit comprising 1 wedge seal (stainless steel material 1.4571 / V4A (AISI 316Ti)), 4 anchor plates (stainless steel material 1.4301(AISI 304)), 1 fixing anchor plate (stainless steel material 1.4301 (AISI 304)), CFS-T lubricant (30 g)	1	2042714
CFS-T AP 120 EX GS anchor plate set comprising 9 anchor plates (galvanized), 1 fixing anchor plate (galvanized)	1	2042715
CFS-T AP 120 EX S/S anchor plate set comprising 9 anchor plates (stainless steel material 1.4301 (AISI 304)), 1 fixing anchor plate (stainless steel material 1.4301 (AISI 304))	1	2042716
CFS-T FAP 120 EX S/S fixing anchor plate set comprising 10 fixing anchor plates (stainless steel material 1.4301 (AISI 304))	1	2042717

Accessories

Ordering designation	Package contents	Item no.
CFS-T EX FS identification plate	1	2029923

Accessories

Ordering designation	Package contents	Item no.
CFS-T SQU module squeezer	1	2014885
CFS-T PUL wedge puller	1	2014884
CFS-T LUB 500 g lubricant	1	2042741
Lubricant CFS-T LUB 30g	12	2235217
CFS-T SST 60x1x720 HFE sealing strip (halogen-free elastomer)	5	2210452
CFS-T SST 60x4x720 HFE sealing strip (halogen-free elastomer)	5	2042740



CFS-T STRF SYSTEM



CFS-T S cable modules and CFS-T FB S filler modules

Ordering designation	Package contents	Item no.
CFS-T S 15/0+3-9 cable module incl. adapter and core modules	128	2042718
CFS-T S 20/0+5-12 cable module incl. adapter and core modules	72	2042719
CFS-T S 30/0+13-23 cable module incl. adapter and core modules	32	2042720
CFS-T S 40/0+23-33 cable module incl. adapter and core modules	18	2042721
CFS-T FB S 24x5/0 filler module	72	2042722
CFS-T FB S 12x10/0 filler module	36	2042723



Wedge seal

Ordering designation	Package contents	Item no.
CFS-T WD 60 wedge seal	1	2042724



Transit frames CFS-T STRF

Ordering designation	Package contents	Item no.
CFS-T STRF-150 GF transit frame (glass fiber)	1	2042725
CFS-T STRF-210 GF transit frame (glass fiber)	1	2042726
CFS-T STRF-150 GS transit frame (galvanized steel)	1	2042727
CFS-T STRF-210 GS transit frame (galvanized steel)	1	2042728

CFS-T SBF TRANSIT FRAMES SINGLE-ROW

CFS-T SBF transit frames (single-row)*		
Ordering designation	Package contents	Item no.
Transit frame CFS-T SBF-2x1 HDG	1	2280325
Transit frame CFS-T SBF-4x1 HDG	1	2280326
Transit frame CFS-T SBF-4x2 HDG	1	2280327
Transit frame CFS-T SBF-4x3 HDG	1	2280328
Transit frame CFS-T SBF-4x4 HDG	1	2280329
Transit frame CFS-T SBF-4x5 HDG	1	2280820
Transit frame CFS-T SBF-4x6 HDG	1	2280821
Transit frame CFS-T SBF-4x7 HDG	1	2280822
Transit frame CFS-T SBF-4x8 HDG	1	2280823
Transit frame CFS-T SBF-4x9 HDG	1	2280824
Transit frame CFS-T SBF-4x10 HDG	1	2280825
Transit frame CFS-T SBF-6x1 HDG	1	2280836
Transit frame CFS-T SBF-6x2 HDG	1	2280837
Transit frame CFS-T SBF-6x3 HDG	1	2280838
Transit frame CFS-T SBF-6x4 HDG	1	2280323
Transit frame CFS-T SBF-6x5 HDG	1	2280324
Transit frame CFS-T SBF-6x6 HDG	1	2280839
Transit frame CFS-T SBF-6x7 HDG	1	2280840
Transit frame CFS-T SBF-6x8 HDG	1	2280841
Transit frame CFS-T SBF-6x9 HDG	1	2280842
Transit frame CFS-T SBF-6x10 HDG	1	2280843
Transit frame CFS-T SBF-8x1 HDG	1	2280854
Transit frame CFS-T SBF-8x2 HDG	1	2280855
Transit frame CFS-T SBF-8x3 HDG	1	2280856
Transit frame CFS-T SBF-8x4 HDG	1	2280857
Transit frame CFS-T SBF-8x5 HDG	1	2280858
Transit frame CFS-T SBF-8x6 HDG	1	2280859
Transit frame CFS-T SBF-8x7 HDG	1	2280860
Transit frame CFS-T SBF-8x8 HDG	1	2280861
Transit frame CFS-T SBF-8x9 HDG	1	2280862
Transit frame CFS-T SBF-8x10 HDG	1	2280863



*Standard items

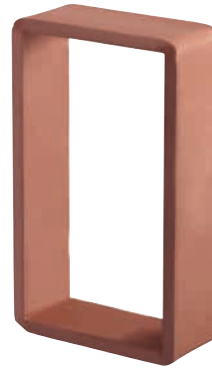
CFS-T SBF TRANSIT FRAMES DOUBLE-ROW



CFS-T SBF transit frames (double-row)*		
Ordering designation	Package contents	Item no.
Transit frame CFS-T SBF-4+4x1 HDG	1	2280826
Transit frame CFS-T SBF-4+4x2 HDG	1	2280827
Transit frame CFS-T SBF-4+4x3 HDG	1	2280828
Transit frame CFS-T SBF-4+4x4 HDG	1	2280829
Transit frame CFS-T SBF-4+4x5 HDG	1	2280830
Transit frame CFS-T SBF-4+4x6 HDG	1	2280831
Transit frame CFS-T SBF-4+4x7 HDG	1	2280832
Transit frame CFS-T SBF-4+4x8 HDG	1	2280833
Transit frame CFS-T SBF-4+4x9 HDG	1	2280834
Transit frame CFS-T SBF-4+4x10 HDG	1	2280835
Transit frame CFS-T SBF-6+6x1 HDG	1	2280844
Transit frame CFS-T SBF-6+6x2 HDG	1	2280845
Transit frame CFS-T SBF-6+6x3 HDG	1	2280846
Transit frame CFS-T SBF-6+6x4 HDG	1	2280847
Transit frame CFS-T SBF-6+6x5 HDG	1	2280848
Transit frame CFS-T SBF-6+6x6 HDG	1	2280849
Transit frame CFS-T SBF-6+6x7 HDG	1	2280850
Transit frame CFS-T SBF-6+6x8 HDG	1	2280851
Transit frame CFS-T SBF-6+6x9 HDG	1	2280852
Transit frame CFS-T SBF-6+6x10 HDG	1	2280853
Transit frame CFS-T SBF-8+8x1 HDG	1	2280864
Transit frame CFS-T SBF-8+8x2 HDG	1	2280865
Transit frame CFS-T SBF-8+8x3 HDG	1	2280866
Transit frame CFS-T SBF-8+8x4 HDG	1	2280867
Transit frame CFS-T SBF-8+8x5 HDG	1	2280868
Transit frame CFS-T SBF-8+8x6 HDG	1	2280869
Transit frame CFS-T SBF-8+8x7 HDG	1	2280870
Transit frame CFS-T SBF-8+8x8 HDG	1	2280871
Transit frame CFS-T SBF-8+8x9 HDG	1	2280321
Transit frame CFS-T SBF-8+8x10 HDG	1	2280322

*Standard items

CFS-T SS TRANSIT FRAMES

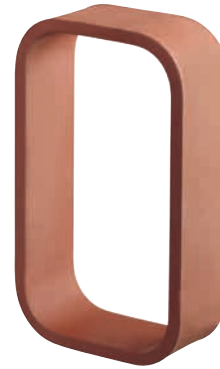


CFS-T SS transit frames		
Ordering designation	Package contents	Item no.
CFS-T SS-2x1 MSP transit frame (steel, rust preventive coated)	1	2146055
CFS-T SS-2x1 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2146056
CFS-T SS-2x2 MSP transit frame (steel, rust preventive coated)	1	2146057
CFS-T SS-2x2 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2146058
CFS-T SS-2x3 MSP transit frame (steel, rust preventive coated)	1	2146059
CFS-T SS-2x3 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2146060
CFS-T SS-2x4 MSP transit frame (steel, rust preventive coated)	1	2146061
CFS-T SS-2x4 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2146062
CFS-T SS-2x5 MSP transit frame (steel, rust preventive coated)	1	2146063
CFS-T SS-2x5 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2146064
CFS-T SS-4x1 MSP transit frame (steel, rust preventive coated)	1	2146065
CFS-T SS-4x1 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2146066
CFS-T SS-4x2 MSP transit frame (steel, rust preventive coated)	1	2146067
CFS-T SS-4x2 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2146068
CFS-T SS-4x3 MSP transit frame (steel, rust preventive coated)	1	2146069
CFS-T SS-4x3 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2146070
CFS-T SS-4x4 MSP transit frame (steel, rust preventive coated)	1	2146071
CFS-T SS-4x4 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2146072
CFS-T SS-4x5 MSP transit frame (steel, rust preventive coated)	1	2146073
CFS-T SS-4x5 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2146074
CFS-T SS-6x1 MSP transit frame (steel, rust preventive coated)	1	2146075
CFS-T SS-6x1 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2146076
CFS-T SS-6x2 MSP transit frame (steel, rust preventive coated)	1	2146077
CFS-T SS-6x2 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2146078
CFS-T SS-6x3 MSP transit frame (steel, rust preventive coated)	1	2146079
CFS-T SS-6x3 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2146080
CFS-T SS-6x4 MSP transit frame (steel, rust preventive coated)	1	2146081
CFS-T SS-6x4 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2146082
CFS-T SS-6x5 MSP transit frame (steel, rust preventive coated)	1	2146083
CFS-T SS-6x5 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2146084
CFS-T SS-8x1 MSP transit frame (steel, rust preventive coated)	1	2146085
CFS-T SS-8x1 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2146086
CFS-T SS-8x2 MSP transit frame (steel, rust preventive coated)	1	2146087
CFS-T SS-8x2 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2146088
CFS-T SS-8x3 MSP transit frame (steel, rust preventive coated)	1	2146089
CFS-T SS-8x3 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2146090
CFS-T SS-8x4 MSP transit frame (steel, rust preventive coated)	1	2146091
CFS-T SS-8x4 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2146092
CFS-T SS-8x5 MSP transit frame (steel, rust preventive coated)	1	2146093

CFS-T SS transit frames

Ordering designation	Package contents	Item no.
CFS-T SS-4+4x1 MSP transit frame (steel, rust preventive coated)	1	2262687
CFS-T SS-4+4x1 S/S transit frame (stainless steel material 1.4571/V4A (AISI 316 Ti))	1	2262688
CFS-T SS-4+4x2 MSP	1	2262689
CFS-T SS-4+4x2 S/S	1	2262900
CFS-T SS-4+4x3 MSP	1	2262901
CFS-T SS-4+4x3 S/S	1	2262902
CFS-T SS-4+4x4 MSP	1	2262903
CFS-T SS-4+4x4 S/S	1	2262904
CFS-T SS-4+4x5 MSP	1	2262905
CFS-T SS-4+4x5 S/S	1	2262906
CFS-T SS-6+6x1 MSP	1	2262907
CFS-T SS-6+6x1 S/S	1	2262908
CFS-T SS-6+6x2 MSP	1	2262909
CFS-T SS-6+6x2 S/S	1	2262910
CFS-T SS-6+6x3 MSP	1	2262911
CFS-T SS-6+6x3 S/S	1	2262912
CFS-T SS-6+6x4 MSP	1	2262913
CFS-T SS-6+6x4 S/S	1	2262914
CFS-T SS-6+6x5 MSP	1	2262915
CFS-T SS-6+6x5 S/S	1	2262685
CFS-T SS-8+8x1 MSP	1	2262916
CFS-T SS-8+8x1 S/S	1	2262917
CFS-T SS-8+8x2 MSP	1	2262918
CFS-T SS-8+8x2 S/S	1	2262919
CFS-T SS-8+8x3 MSP	1	2262920
CFS-T SS-8+8x3 S/S	1	2262921
CFS-T SS-8+8x4 MSP	1	2262922
CFS-T SS-8+8x4 S/S	1	2262923
CFS-T SS-8+8x5 MSP	1	2262684
CFS-T SS-8+8x5 S/S	1	2262686

CFS-T SSR/R30 TRANSIT FRAMES



CFS-T SSR/R30 transit frames

Ordering designation	Package contents	Item no.
CFS-T SSR/R30-4x1 MSP steel, rust preventive coated	1	2014985
CFS-T SSR/R30-4x2 MSP steel, rust preventive coated	1	2014986
CFS-T SSR/R30-4x3 MSP steel, rust preventive coated	1	2014987
CFS-T SSR/R30-4x4 MSP steel, rust preventive coated	1	2014988
CFS-T SSR/R30-4x5 MSP steel, rust preventive coated	1	2014989
CFS-T SSR/R30-6x1 MSP steel, rust preventive coated	1	2014990
CFS-T SSR/R30-6x2 MSP steel, rust preventive coated	1	2014991
CFS-T SSR/R30-6x3 MSP steel, rust preventive coated	1	2014992
CFS-T SSR/R30-6x4 MSP steel, rust preventive coated	1	2014993
CFS-T SSR/R30-6x5 MSP steel, rust preventive coated	1	2014994
CFS-T SSR/R30-8x1 MSP steel, rust preventive coated	1	2014995
CFS-T SSR/R30-8x2 MSP steel, rust preventive coated	1	2014996
CFS-T SSR/R30-8x3 MSP steel, rust preventive coated	1	2014997
CFS-T SSR/R30-8x4 MSP steel, rust preventive coated	1	2014998
CFS-T SSR/R30-8x5 MSP steel, rust preventive coated	1	2014999

CFS-T SSR transit frames (single-row)

Ordering designation	Package contents	Item no.
CFS-T SSR-4x1 MSP steel, rust preventive coated	1	2050950
CFS-T SSR-4x2 MSP steel, rust preventive coated	1	2050951
CFS-T SSR-4x3 MSP steel, rust preventive coated	1	2050952
CFS-T SSR-4x4 MSP steel, rust preventive coated	1	2050953
CFS-T SSR-4x5 MSP steel, rust preventive coated	1	2050954
CFS-T SSR-6x1 MSP steel, rust preventive coated	1	2050955
CFS-T SSR-6x2 MSP steel, rust preventive coated	1	2050956
CFS-T SSR-6x3 MSP steel, rust preventive coated	1	2050957
CFS-T SSR-6x4 MSP steel, rust preventive coated	1	2050958
CFS-T SSR-6x5 MSP steel, rust preventive coated	1	2050959
CFS-T SSR-8x1 MSP steel, rust preventive coated	1	2050960
CFS-T SSR-8x2 MSP steel, rust preventive coated	1	2050961
CFS-T SSR-8x3 MSP steel, rust preventive coated	1	2050962
CFS-T SSR-8x4 MSP steel, rust preventive coated	1	2050963
CFS-T SSR-8x5 MSP steel, rust preventive coated	1	2050964

CFS-T SSF TRANSIT FRAMES

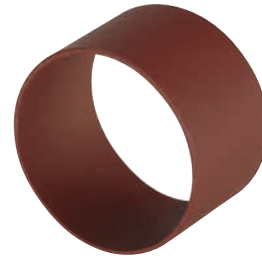


CFS-T SSF transit frames		
Ordering designation	Package contents	Item no.
CFS-T SSF-2x1 MSP transit frame (steel, rust preventive coated)	1	2263754
CFS-T SSF-2x1 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2050981
CFS-T SSF-4x1 MSP transit frame (steel, rust preventive coated)	1	2263755
CFS-T SSF-4x1 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2050982
CFS-T SSF-4x2 MSP transit frame (steel, rust preventive coated)	1	2263756
CFS-T SSF-4x2 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2050982
CFS-T SSF-4x3 MSP transit frame (steel, rust preventive coated)	1	2263757
CFS-T SSF-4x3 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2050984
CFS-T SSF-4x4 MSP transit frame (steel, rust preventive coated)	1	2263758
CFS-T SSF-4x4 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2050985
CFS-T SSF-4x5 MSP transit frame (steel, rust preventive coated)	1	2263759
CFS-T SSF-4x5 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2050986
CFS-T SSF-6x1 MSP transit frame (steel, rust preventive coated)	1	2263780
CFS-T SSF-6x1 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2050987
CFS-T SSF-6x2 MSP transit frame (steel, rust preventive coated)	1	2263781
CFS-T SSF-6x2 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2050988
CFS-T SSF-6x3 MSP transit frame (steel, rust preventive coated)	1	2263782
CFS-T SSF-6x3 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2050989
CFS-T SSF-6x4 MSP transit frame (steel, rust preventive coated)	1	2263783
CFS-T SSF-6x4 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2050990
CFS-T SSF-6x5 MSP transit frame (steel, rust preventive coated)	1	2263784
CFS-T SSF-6x5 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2050991
CFS-T SSF-8x1 MSP transit frame (steel, rust preventive coated)	1	2263785
CFS-T SSF-8x1 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2050992
CFS-T SSF-8x2 MSP transit frame (steel, rust preventive coated)	1	2263786
CFS-T SSF-8x2 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2050993
CFS-T SSF-8x3 MSP transit frame (steel, rust preventive coated)	1	2263787
CFS-T SSF-8x3 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2050994
CFS-T SSF-8x4 MSP transit frame (steel, rust preventive coated)	1	2263788
CFS-T SSF-8x4 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2050995
CFS-T SSF-8x5 MSP transit frame (steel, rust preventive coated)	1	2263753
CFS-T SSF-8x5 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2050996

CFS-T SL AND CFS-T SLF SLEEVES

Sleeves in mild steel, primed

Ordering designation	Package contents	Item no.
CFS-T SL 50 MSP sleeve (steel, rust preventive coated)	1	2044651
CFS-T SL 70 MSP sleeve (steel, rust preventive coated)	1	2044652
CFS-T SL 100 MSP sleeve (steel, rust preventive coated)	1	2044653
CFS-T SL 125 MSP sleeve (steel, rust preventive coated)	1	2044654
CFS-T SL 150 MSP sleeve (steel, rust preventive coated)	1	2044655
CFS-T SL 200 MSP sleeve (steel, rust preventive coated)	1	2044656



Sleeves in stainless steel

Ordering designation	Package contents	Item no.
CFS-T SL 50 S/S sleeve (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2044663
CFS-T SL 70 S/S sleeve (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2044664
CFS-T SL 100 S/S sleeve (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2044665
CFS-T SL 125 S/S sleeve (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2044666
CFS-T SL 150 S/S sleeve (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2044667
CFS-T SL 200 S/S sleeve (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2044668

Sleeves with flange in mild steel, primed

Ordering designation	Package contents	Item no.
CFS-T SLF 50 MSP sleeve (steel, rust preventive coated)	1	2044657
CFS-T SLF 70 MSP sleeve (steel, rust preventive coated)	1	2044658
CFS-T SLF 100 MSP sleeve (steel, rust preventive coated)	1	2044659
CFS-T SLF 125 MSP sleeve (steel, rust preventive coated)	1	2044660
CFS-T SLF 150 MSP sleeve (steel, rust preventive coated)	1	2044661
CFS-T SLF 200 MSP sleeve (steel, rust preventive coated)	1	2044662



Sleeves with flange in stainless steel

Ordering designation	Package contents	Item no.
CFS-T SLF 50 S/S sleeve (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2044669
CFS-T SLF 70 S/S sleeve (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2044670
CFS-T SLF 100 S/S sleeve (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2044671
CFS-T SLF 125 S/S sleeve (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2044672
CFS-T SLF 150 S/S sleeve (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2044673
CFS-T SLF 200 S/S sleeve (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2044674



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