EXPERT SOLUTIONS FOR THE MOST DEMANDING APPLICATIONS

Hilti cable transit system

FOR A SAFER SEAL.

The versatile Hilti cable transit system. Fire-resistant, watertight and gastight.

HILTI

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 secure your competitive edge by offering many decisive advantages and thus tremendous added value.

Fire Test Approvals

- Rubber Modules are Fire-resistant and halogen-free elastomeric material

Onshore Firetest approvals:

- **European Technical Assessment**
  Hilti Firestop cable transit CFS-T were 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 180mins
- **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 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 register
- **J-60 Approval**
  Tested on Jet fire for 60mins approval from ABS.

Applications – Sealing and fire stop solutions e.g. in

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
• Low inventory only 7 different modules are needed to cover all cable diameters from 3 to 99 mm	• 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	• 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

4
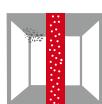
SEALING SOLUTION THAT GOES BEYOND FIRE.

The safety standards including various attributes demanded by energy and industry projects make them some of the most uncompromising, exacting engineering works of all. 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.
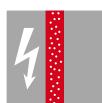
Gas
Hilti Cable transit systems are tested up to 3 bar for Gas and Air tightness supporting compliance with customer application requirements.

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 air blast loading.

TRANSIT SYSTEM APPROVAL

ON shore and Industry applications

Product/approval	UL	FM	EN
CFS-T SB	(UL)	FM APPROVED	ETA CE
CFS-T SBO	(UL)	FM APPROVED	ETA CE
CFS-T RR	(UL)	FM APPROVED	ETA CE
CFS-T RRS	(UL)	FM APPROVED	ETA CE

Offshore and Shipbuilding applications

| Product/approval	ABS	DNV-GL	LR	CCS	RMRS	
CFS-T SS	ABS	DNV·GL	Lloyd's Register Marine	(CCS)	(RMRS)	ATEX
CFS-T SSF	ABS	DNV·GL	Lloyd's Register Marine		(RMRS)	ATEX
CFS-T SSR/R30	ABS	DNV·GL				ATEX
CFS-T RR	ABS	DNV·GL	Lloyd's Register Marine	(CCS)	(RMRS)	ATEX
CFS-T RRS	ABS	DNV·GL				ATEX

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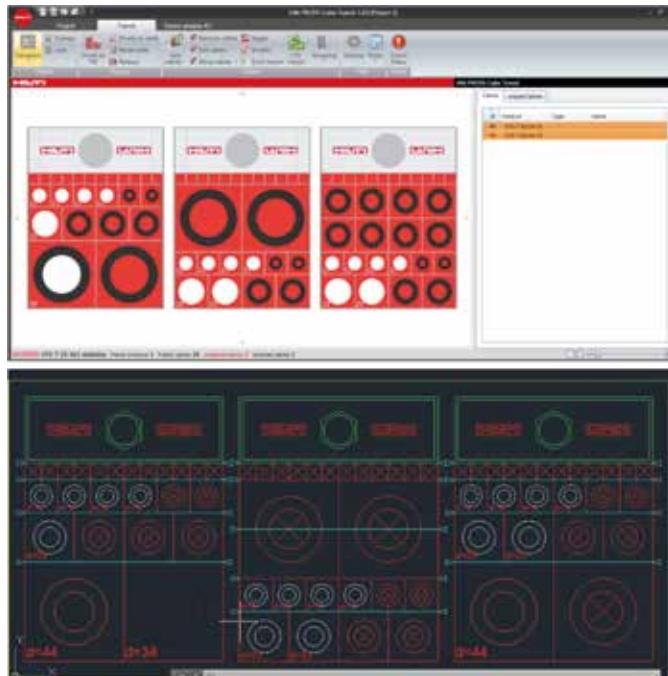
PUTS FIRESTOP SOLUTIONS AT YOUR FINGERTIPS.

Hilti PROFIS cable transit planning software and AVEVA PDMS libary.

The Hilti PROFIS cable transit planning software helps you achieve high safety standards right from the very earliest stages of your project. It helps you calculate and select frames and modules of the right dimensions for your projects, 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.
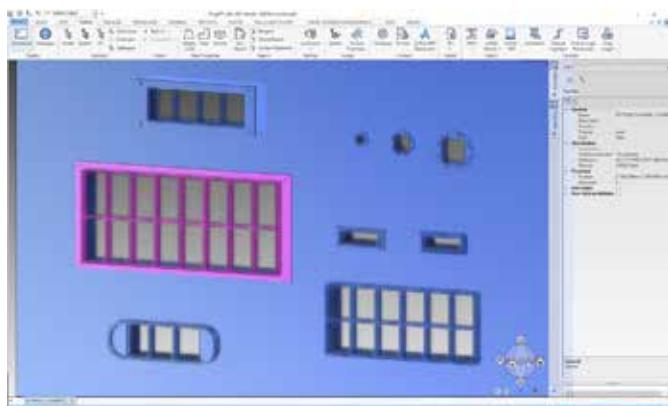
- Designing and calculating the frames and modules required according to the size of the opening and applicable materials (CFS-T SB, CFS-T SBO, CFS-T SS, CFS-T SSF, CFS-T RR).
  Precise planning of all cable transits according to the number, size and type of cables.
- Adding of cables by xls import is 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.
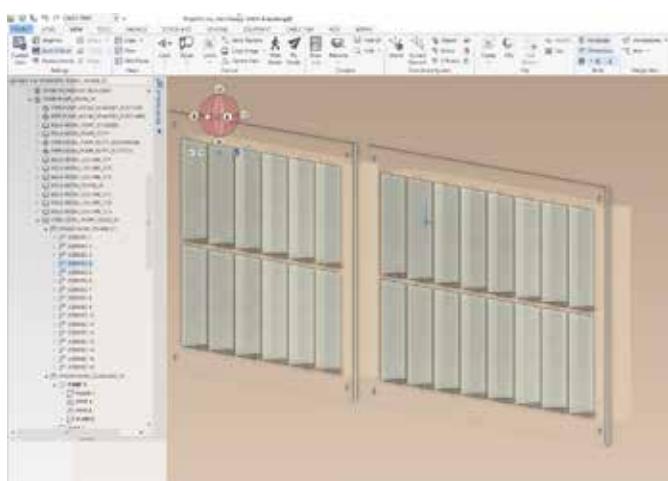
Features of Hilti PDMS libary:

- 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 SB and SBO transit frames

CFS-T SB

CFS-T SBO

Hilti CFS-T SB and CFS-T SBO transit frames for wall and floor penetrations in concrete, masonry and lightweight walls.

Technical information
- Made from 5 mm thick angle steel. Partitioning bars between frame windows made from 8 mm flat steel.
- CFS-T SBO transit frames (with removable top and bolts) for existing cable installations.

Material availability options
- CFS-T SB: hot-dip galvanised
- CFS-T SBO: electrolytically galvanised

| Dimensions of CFS-T SB and CFS-T SBO transit frames (single-row)										
CFS-T SB/ CFS-T SBO	**2 x 1**									
H1 x B1 (in mm)	101x120									
H2 x B2 (in mm)	181x240									
	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)	160x120	160x248	160x376	160x504	160x632	160x760	160x888	160x1016	160x1144	160x1272
H2 x B2 (in mm)	240x240	240x368	240x496	240x624	240x752	240x880	240x1008	240x1136	240x1264	240x1392
	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)	218x120	218x248	218x376	218x504	218x632	218x760	218x888	218x1016	218x1144	218x1272
H2 x B2 (in mm)	298x240	298x368	298x496	298x624	298x752	298x880	298x1008	298x1136	298x1264	298x1392
	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)	277x120	277x248	277x376	277x504	277x632	277x760	277x888	277x1016	277x1144	277x1272
H2 x B2 (in mm)	357x240	357x368	357x496	357x624	357x752	357x880	357x1008	357x1136	357x1264	357x1392

CFS-T SB and SBO transit frames

CFS-T SB

CFS-T SBO

Technical information

- Made from 5 mm thick angle steel. Partitioning bars between frame windows made from 8 mm flat steel.
- CFS-T SBO transit frames (with removable top and bolts) for existing cable installations.

Material availability options
- CFS-T SB: hot-dip galvanised
- CFS-T SBO: electrolytically galvanised
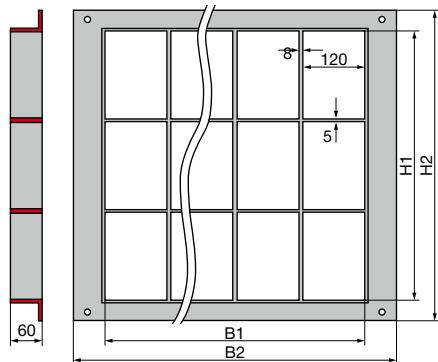
Dimensions of CFS-T SB and CFS-T SBO transit frames (double-row)

CFS-T SB/ CFS-T SBO	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)	328x120	328x248	328x376	328x504	328x632	328x760	328x888	328x1016	328x1144	328x1272
H2 x B2 (in mm)	408x240	408x368	408x496	408x624	408x752	408x880	408x1008	408x1136	408x1264	408x1392
	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)	444x120	444x248	444x376	444x504	444x632	444x760	444x888	444x1016	444x1144	444x1272
H2 x B2 (in mm)	524x240	524x368	524x496	524x624	524x752	524x880	524x1008	524x1136	524x1264	524x1392
	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)	562x120	562x248	562x376	562x504	562x632	562x760	562x888	562x1016	562x1144	562x1272
H2 x B2 (in mm)	642x240	642x368	642x496	642x624	642x752	642x880	642x1008	642x1136	642x1264	642x1392

CFS-T SB transit frames

CFS-T SB

Technical information
- Made from 5 mm thick angle steel. Partitioning bars between frame windows made from 8 mm flat steel.

Material availability options
- CFS-T SB: hot-dip galvanised
- CFS-T SBO: electrolytically galvanised
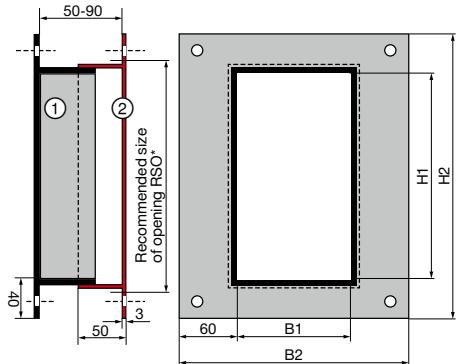
## Dimensions of CFS-T SB transit frames (triple-row)

CFS-T SB	4+4+4x1	4+4+4x2	4+4+4x3	4+4+4x4	4+4+4x5	4+4+4x6	4+4+4x7	4+4+4x8	4+4+4x9	4+4+4x10
H1 x B1 (in mm)	496x120	496x248	496x376	496x504	496x632	496x760	496x888	496x1016	496x1144	496x1272
H2 x B2 (in mm)	576x240	576x368	576x496	576x624	576x752	576x880	576x1008	576x1136	576x1264	576x1392
	6+6+6x1	6+6+6x2	6+6+6x3	6+6+6x4	6+6+6x5	6+6+6x6	6+6+6x7	6+6+6x8	6+6+6x9	6+6+6x10
H1 x B1 (in mm)	670x120	670x248	670x376	670x504	670x632	670x760	670x888	670x1016	670x1144	670x1272
H2 x B2 (in mm)	750x240	750x368	750x496	750x624	750x752	750x880	750x1008	750x1136	750x1264	750x1392
	8+8+8x1	8+8+8x2	8+8+8x3	8+8+8x4	8+8+8x5	8+8+8x6	8+8+8x7	8+8+8x8	8+8+8x9	8+8+8x10
H1 x B1 (in mm)	847x120	847x248	847x376	847x504	847x632	847x760	847x888	847x1016	847x1144	847x1272
H2 x B2 (in mm)	927x240	927x368	927x496	927x624	927x752	927x880	927x1008	927x1136	927x1264	927x1392

CFS-T SB/container transit frames for steel panels

Technical information

- Made from 8 mm thick angle steel. Partitioning bars in multiple frames made from 5 mm flat steel.
- The design consists of a basic CFS-T SB frame with flattened welded seams for an even seat and the counter frame for covering the wall aperture.
- Corresponding holes allow mounting with through bolts.

- Optional: CFS-T SST 40x10x5000 self-adhesive sealing strip gasket (black foam rubber) on basic frame.
- CFS-T SB/cont. transit frames can be installed in panels (container walls) with a wall thickness of 50 to 90 mm.

Material availability
- hot-dip galvanized

Dimensions of CFS-T SB/cont. transit frame*

| CFS-T SB/cont.	4 x 1	Recommended opening size
H1 x B1 (in mm) / H2 x B2 (in mm)	160x120 / 240x240	195x160
	6 x 1	**RSO***
H1 x B1 (in mm) / H2 x B2 (in mm)	218x120 / 298x240	253x160
	8 x 1	**RSO***
H1 x B1 (in mm) / H2 x B2 (in mm)	277x120 / 375x240	312x160
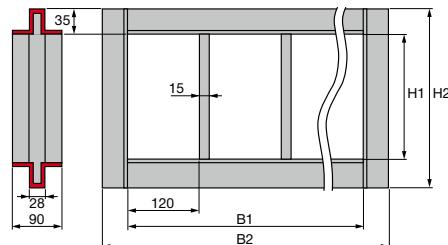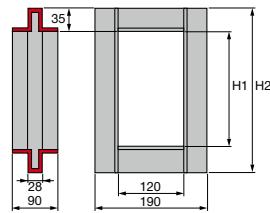
CFS-T SBS transit frames

CFS-T SBS

CFS-T SBSO

Hilti CFS-T SBS and CFS-T SBSO transit frames are casted in frames for wall and floor penetrations in concrete, masonry and lightweight walls.

Technical information

- Made from cold-drawn steel profiles, material thickness 4 mm, bars between frame fields on multiple frames made from flat oval precision tubes.
- For the subsequent sealing of existing cable installations frame type SBSO with removable top is used.
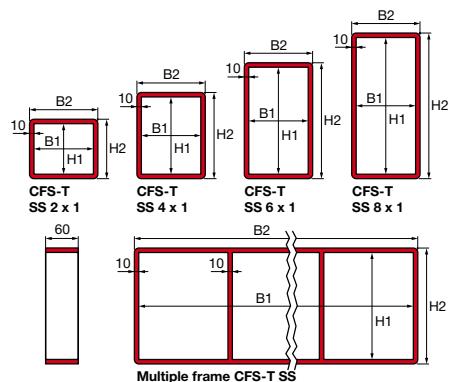
Material availability options
- CFS-T SBS: hot-dip galvanised
- CFS-T SBSO: electrolytically galvanised

	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)	160x120	160x248	160x376	160x504	160x632	160x760	160x888	160x1016	160x1144	160x1272
H2 x B2 (in mm)	240x240	240x368	240x496	240x624	240x752	240x880	240x1008	240x1136	240x1264	240x1392
	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)	218x120	218x248	218x376	218x504	218x632	218x760	218x888	218x1016	218x1144	218x1272
H2 x B2 (in mm)	298x240	298x368	298x496	298x624	298x752	298x880	298x1008	298x1136	298x1264	298x1392
	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)	277x120	277x248	277x376	277x504	277x632	277x760	277x888	277x1016	277x1144	277x1272
H2 x B2 (in mm)	357x240	357x368	357x496	357x624	357x752	357x880	357x1008	357x1136	357x1264	357x1392

CFS-T SS transit frames

CFS-T SS

CFS-T SS 2 x 1 **CFS-T SS 4 x 1** **CFS-T SS 6 x 1** **CFS-T SS 8 x 1**

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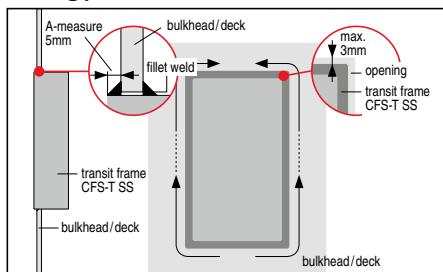
Hilti CFS-T SS transit frames have been optimized for use in steel structures.

**Welding procedure for transit frames CFS-T SS**
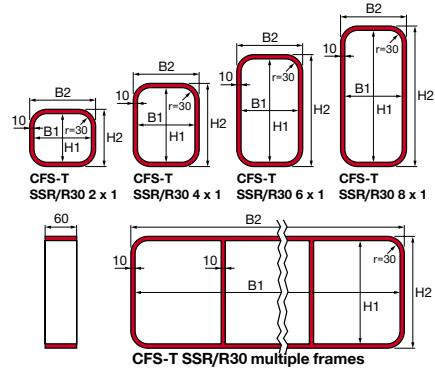
Dimensions of CFS-T SS transit frames (single-row)

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.
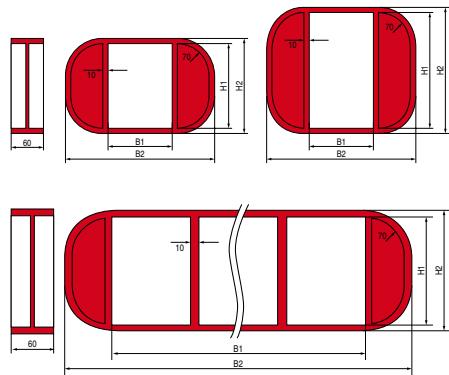
Dimensions of CFS-T SSR/R30 transit frames

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

![HILTI]

CFS-T SSR transit frames

CFS-T SSR

![ABS] ![DNV·GL] ![Lloyd's Register Marine]

Material Availability options
• Standard Steel (primer coated)
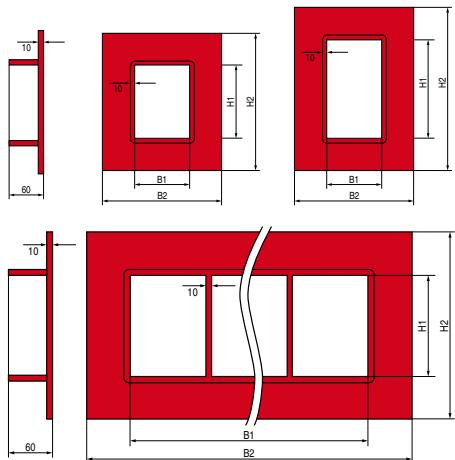
Dimensions of CFS-T SSR transit frames (single-row)

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
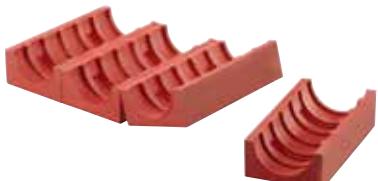
QUICK, EASY AND VERSATILE.
The Hilti cable transit system.

One system – a host of advantages
Designed as a modular system, the Hilti Cable Transit System solves 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 quickly and reliably, they're also re-usable. That saves time, cuts costs and helps 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 120mm).
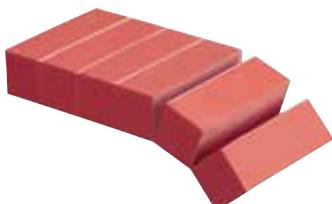
Adapter module
Adapter modules in black or gray for sealing around cables to a tolerance of 3-5 mm.

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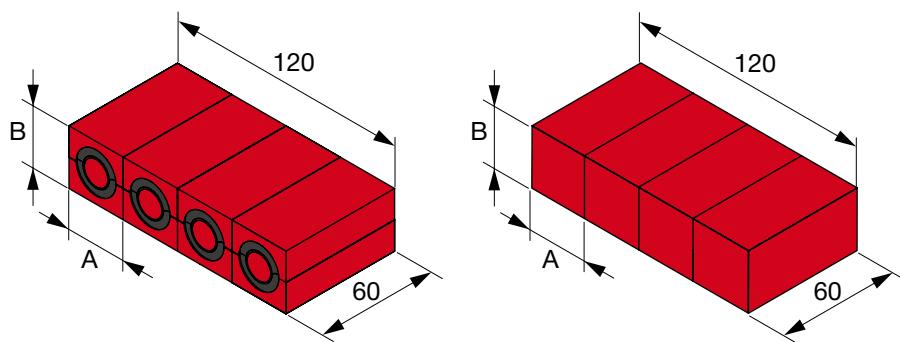
Filler modules
Space reserved for future cable installations can be filled with the filler modules in the sizes 5, 10, 15, 20, 30, 40 and 60. The filler modules are supplied in a joined-together state (filler module blocks) but can be easily separated for individual use.

Hilti fixed inner diameter modules are fire resistant, gas and watertight, designed for precise and fast installation in case of having Multiple cables with same diameter.
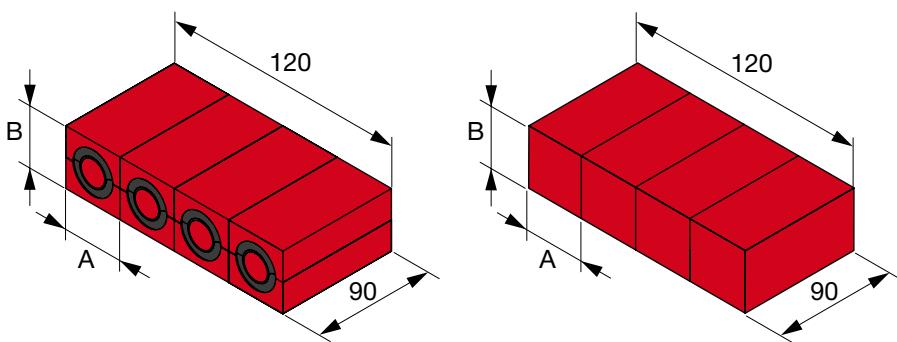
The modules are supplied in a joined-together state but can be easily separated for individual use. Available in 4 different module sizes (15, 20, 30, 40).

DIMENSIONS OF THE BASIC MODULES.

Module	Rohrhersteller		Diameter range	Diameter range per module / adapter
	Cable modules			
	Dimension A (in mm)	**Dimension B (in mm)**		
CFS-T 15/0+3-9	15	15	3 - 9 mm	Black adapter = 3 - 5 mm Grey adapter = 6 - 8 mm Basic module = 9 mm
CFS-T 20/0+5-12	20	20	5 - 12 mm	Black adapter = 5 - 7 mm Grey 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 Grey 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 Grey 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 Grey 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 Grey 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 Grey 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 Grey 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	-

DIMENSIONS OF THE SBS MODULES.

Module	Rohrhersteller		Diameter range	Diameter range per module / adapter
	Cable modules			
	Dimension A (in mm)	Dimension B (in mm)		
CFS-T 20/0+5-12	20	20	5 - 12 mm	Black adapter = 5 - 7 mm Grey 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 Grey 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 Grey 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 Grey Adapter = 27 - 31 mm Basic Module = 32 - 33 mm
CFS-T SBS SM 40/23-33	40	40	23 - 33 mm	Black Adapter = 23 - 26 mm Grey Adapter = 27 - 31 mm Basic Module = 32 - 33 mm
CFS-T SBS SM 60/33-51	60	60	34 - 51 mm	Black Adapter = 34 - 38 mm Grey Adapter = 39 - 43 mm Red insert = 44 - 48 mm Basic Module = 49 - 51 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	-

![HILTI]

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 material or in aluminium.
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 to allow subsequent retrofitting of additional cables.
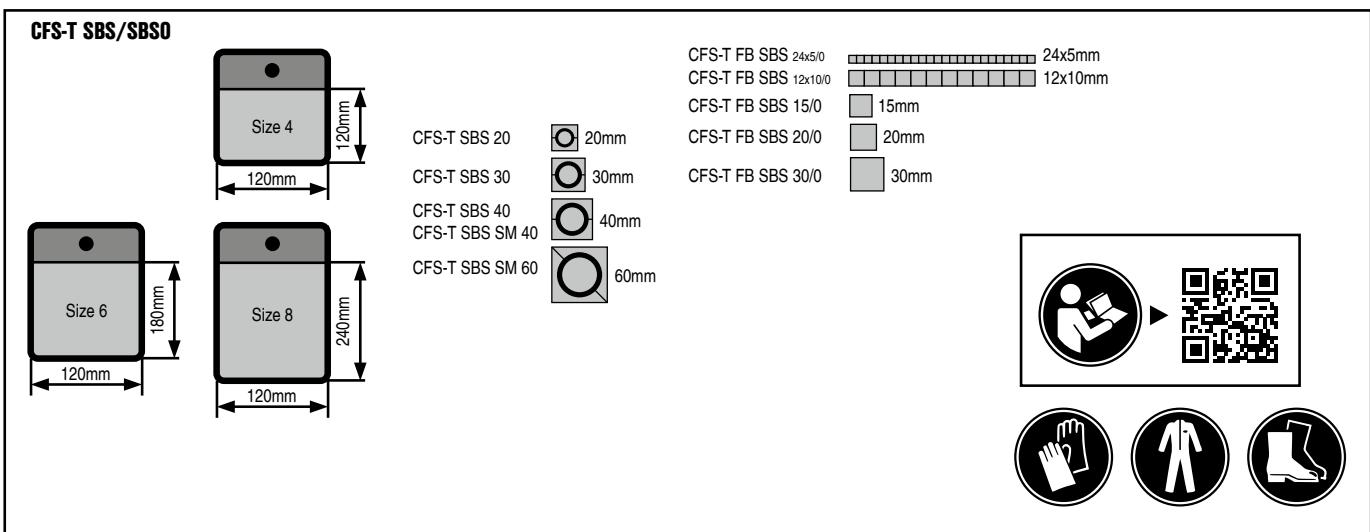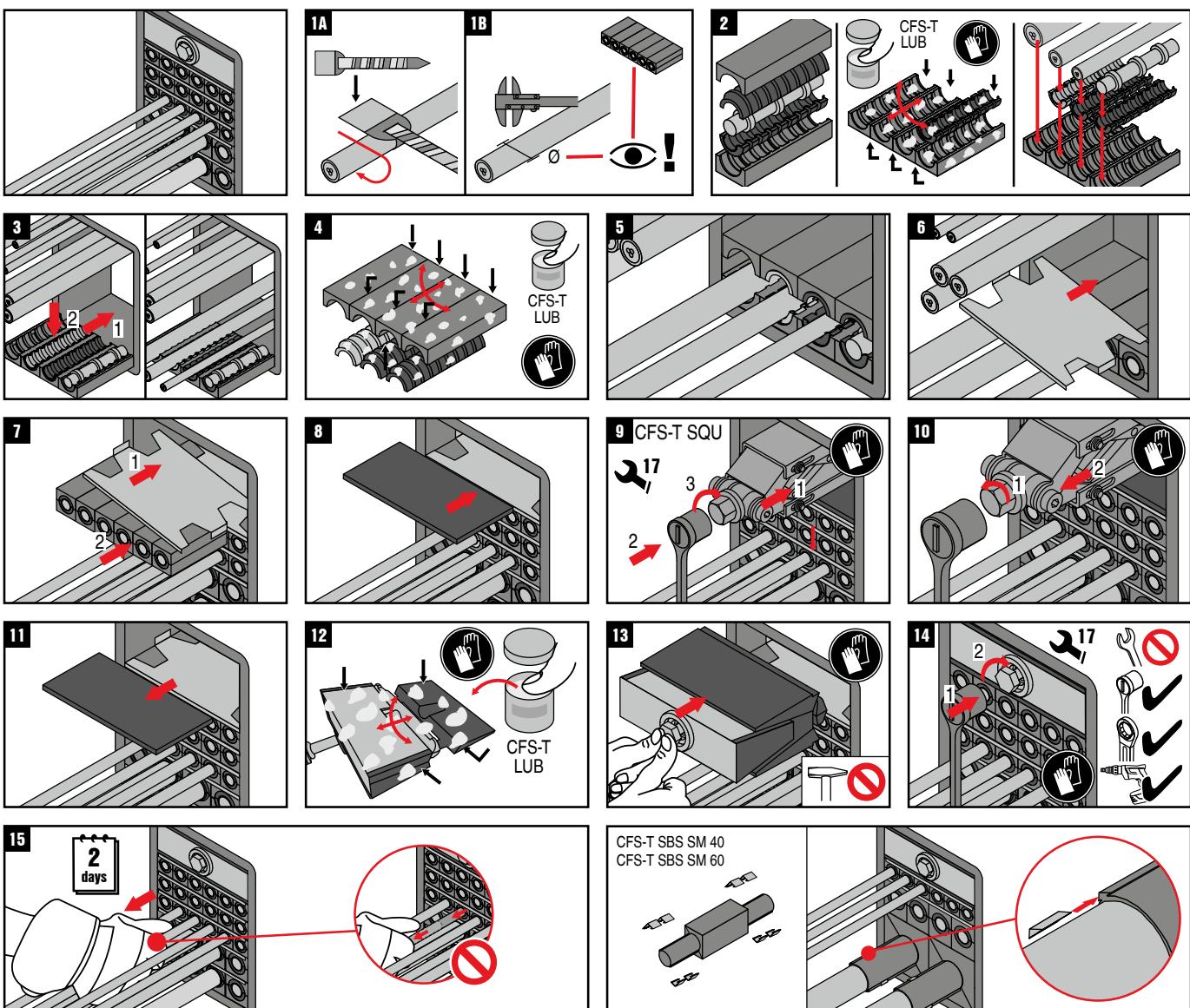
Lubricant
The Hilti CFS-T LUB is lubricant which must be used to grease all rubber module parts during assembly to facilitate installation, ensure sealing effect to achieve required water and gas tightness of the system, as well as it prevents modules from sticking together in case they are disassembled, Lubricant is available in two sizes 30 gm and 500 grams.

INSTRUCTIONS FOR USE

CFS-T SBS/SBSO

Size 4 — 120mm × 120mm
Size 6 — 120mm × 180mm
Size 8 — 120mm × 240mm

CFS-T SBS 20 — 20mm
CFS-T SBS 30 — 30mm
CFS-T SBS 40
CFS-T SBS SM 40 — 40mm
CFS-T SBS SM 60 — 60mm

CFS-T FB SBS 24x5/0 — 24x5mm
CFS-T FB SBS 12x10/0 — 12x10mm
CFS-T FB SBS 15/0 — 15mm
CFS-T FB SBS 20/0 — 20mm
CFS-T FB SBS 30/0 — 30mm
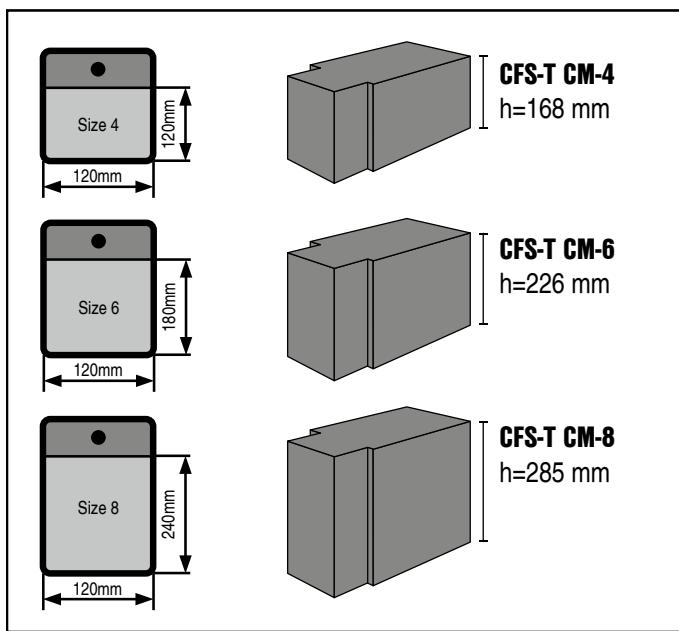
TRANSIT SYSTEM CFS-T SBS

INSTALLATION OF TRANSIT FRAME CFS-T SBS/SBSO

1a

CFS-T CM–4/-6/-8

t=wall thickness
300 mm
128 mm
h
120 mm
90 mm

1b

4mm

2

3
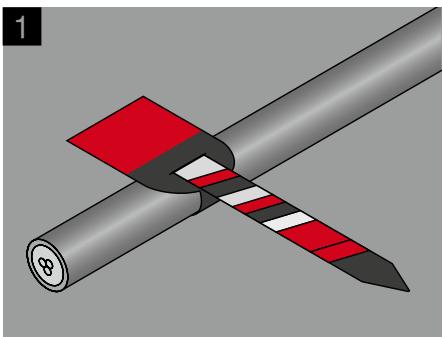
INSTALLING THE CFS-T SB TRANSIT FRAME IN CONCRETE

1a

CFS-T CM-2/-4/-9/-8

h=	
CFS-T CM-2	109 mm
CFS-T CM-4	168 mm
CFS-T CM-6	226 mm
CFS-T CM-8	285 mm

t

120 mm · 60 mm · t/2 · 300 mm · 128 mm · h

1b

5 mm

2

3
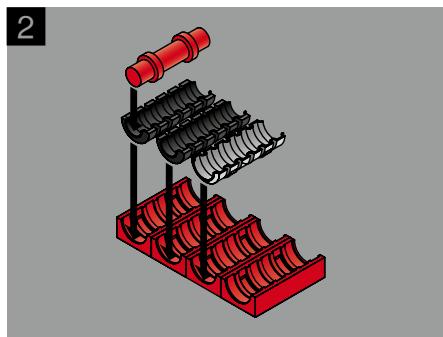
INSTALLING THE CFS-T SBO TRANSIT FRAME IN CONCRETE

1

2

4 × ø10

3

4

1

2

5a

5b

6

1

3

2

7

4 × MB

8

INSTALLING THE SYSTEM – THIS IS HOW IT'S DONE IN A FEW EASY STEPS.

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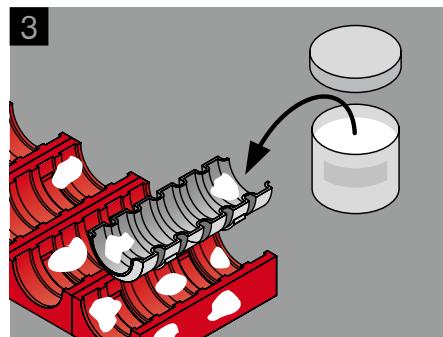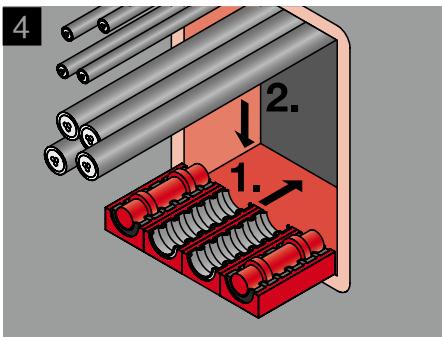
Wrap the Hilti size gauge around the cable in order to determine the module and adapter size required.

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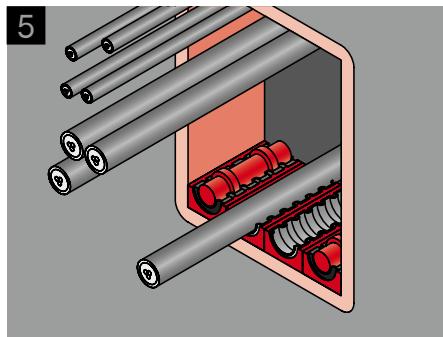
If necessary, remove the black adapter and replace it with one of the correct size or, depending on the size required, use the basic module without the adapter.

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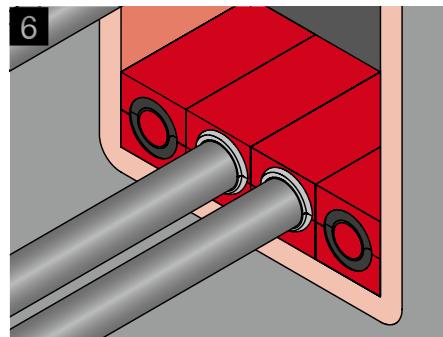
Carefully apply Hilti CFS-T LUB lubricant to all system parts.

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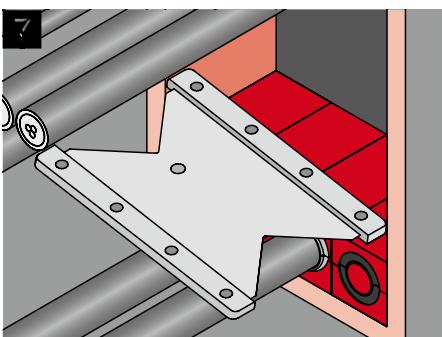
Place the open module in the frame beneath the cables.

5
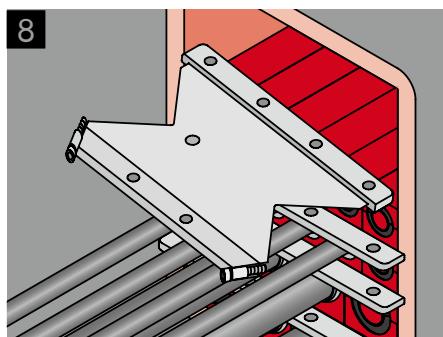
Position the cables in the module.

6
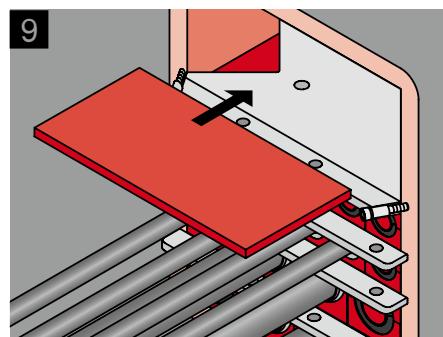
Close the module by fitting the appropriate top half.

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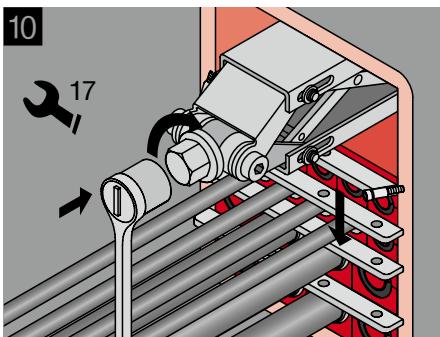
Place the anchor plate on top of the module row and then continue with the next row as described above, using modules of the appropriate sizes.

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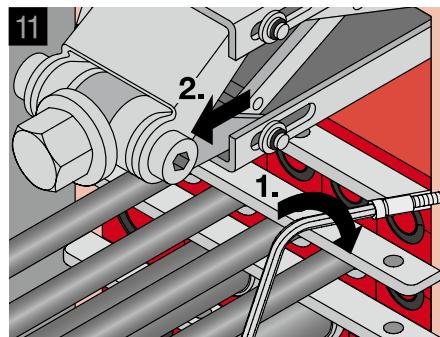
Place the fixing anchor plate on top of the second-last module row.

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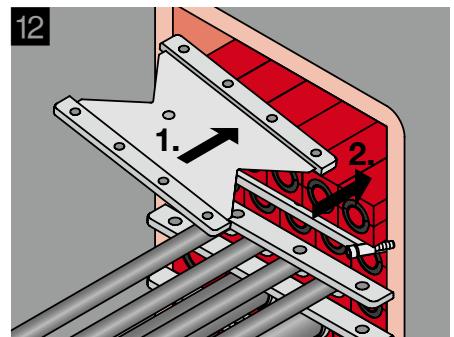
Place the pressure plate on top of the last anchor plate in the frame.

10
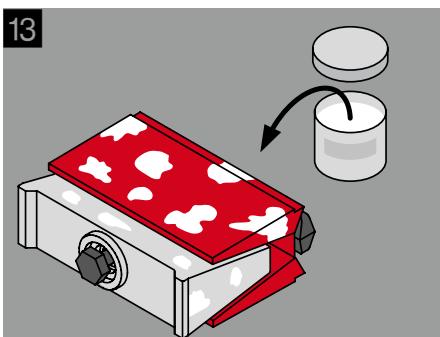
Position the module squeezer centrally in the space above the last module and apply pressure by turning the spindle with a suitable wrench.

11
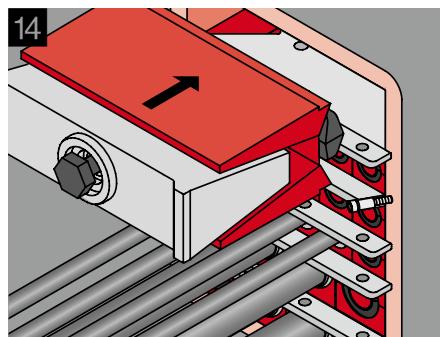
Tighten the screws on the fixing anchor plate. Remove the module squeezer. The modules remain compressed, making it easier to insert the wedge seal.

12
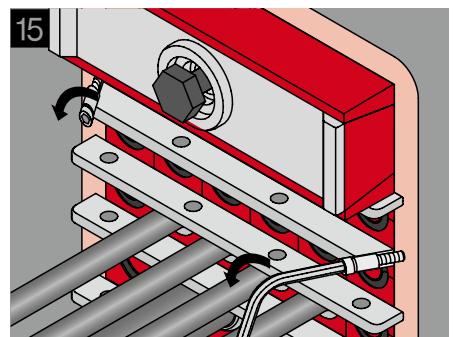
The last anchor plate and module row can then be inserted.

13
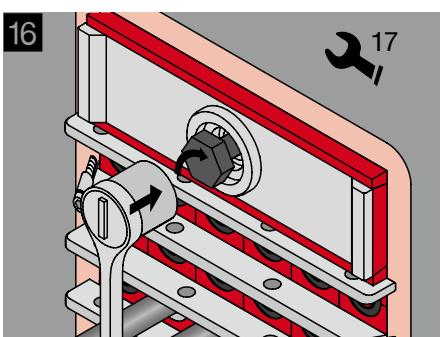
Apply lubricant to all surfaces of the CFS-T WD 120 wedge seal.

14
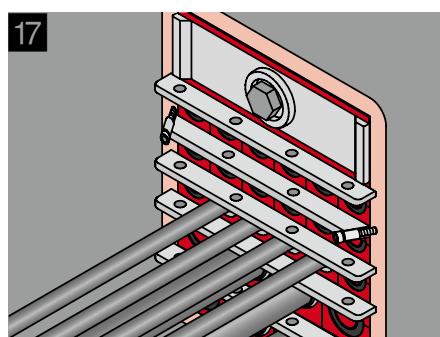
Push the wedge seal into the remaining space in the frame.

15

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

16

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

17
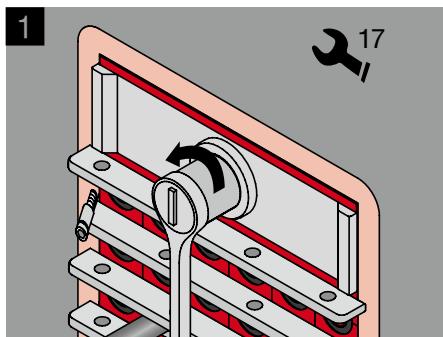
Make sure that all modules have been correctly installed in accordance with the points in the checklist.
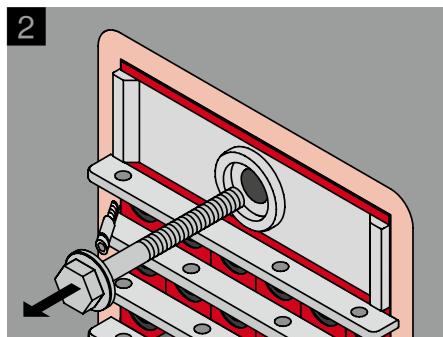
Technical information
- Is the wedge seal completely, or almost completely, within the frame?
- Are all modules securely seated behind the raised edge of the anchor plate where they cannot fall out?
- Has the right number of modules been installed? Check the original installation plan.
- Have modules 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?
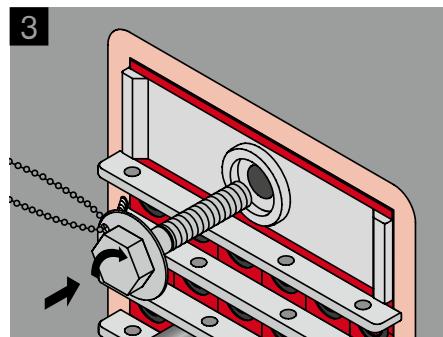
EXCHANGING THE MODULES QUICKLY AND EASILY.

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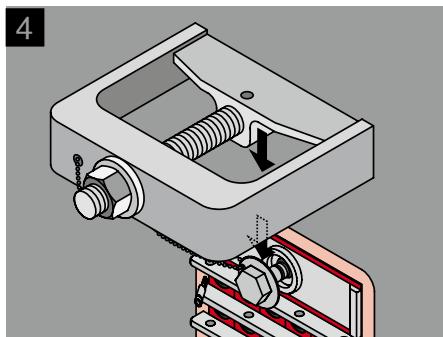
Use a wrench to unscrew the bolt in the wedge seal.

2
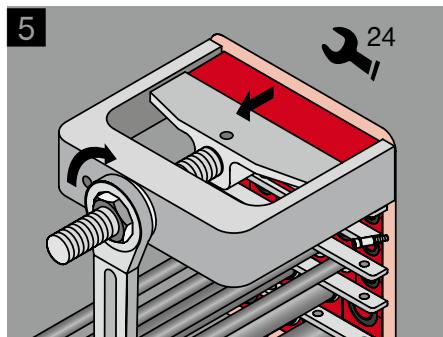
Remove the bolt from the wedge seal.

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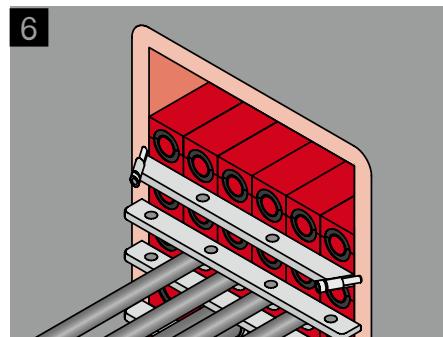
Insert the pulling bolt (attached to the wedge puller).

4

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

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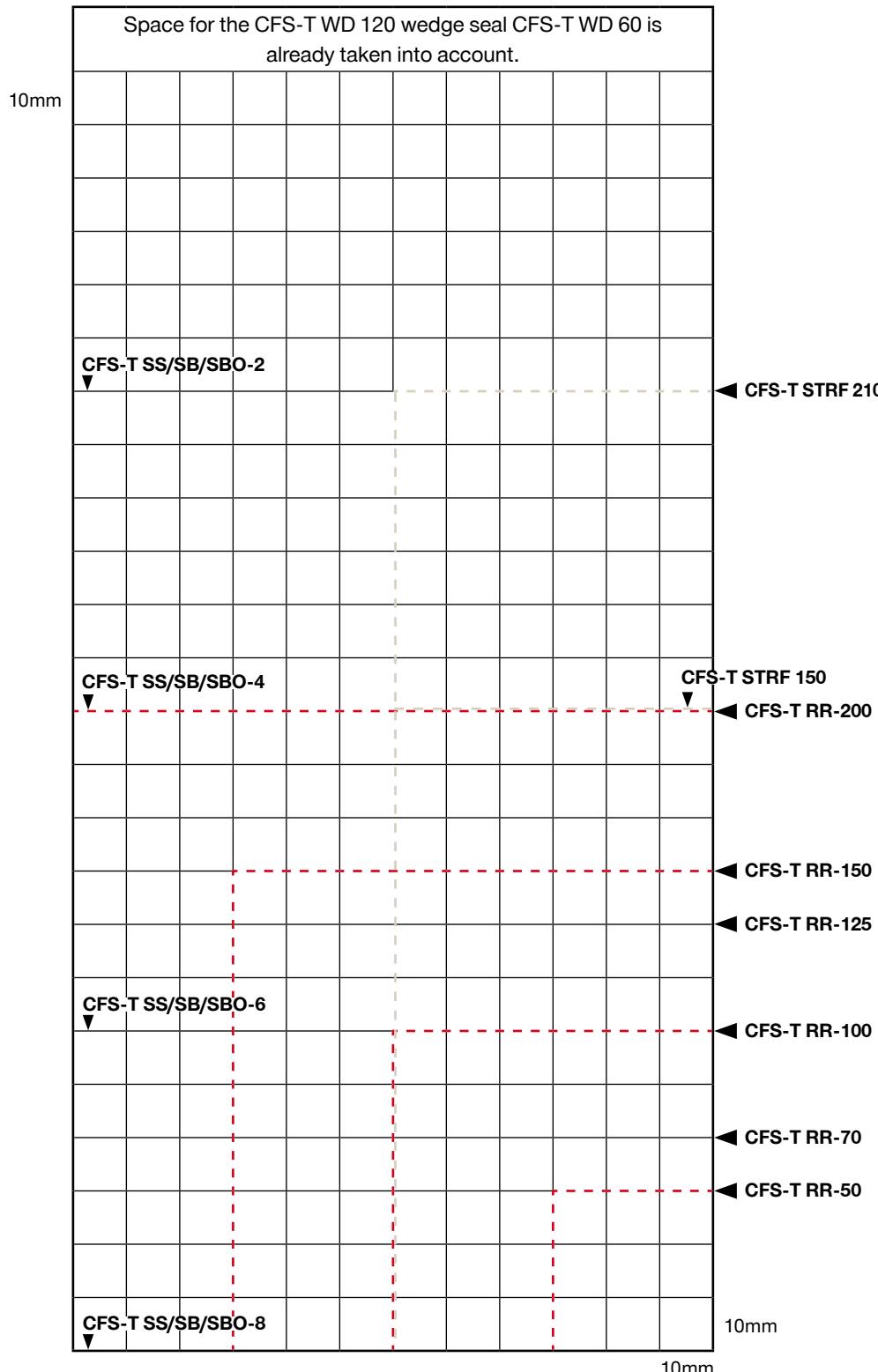
Pull the wedge seal out of the frame by turning the nut on the puller with an M24 ring wrench.

6

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

FRAME PACKING PLAN

The drawing shows the space available in one frame window of the types SB-2/4/6/8 and for the plug seals of the types RR-50/70/100/125/150/200 in 10 mm increments and thus serves as a planning aid for positioning the modules.

Space for the CFS-T WD 120 wedge seal CFS-T WD 60 is already taken into account.

10mm

CFS-T SS/SB/SBO-2

CFS-T SS/SB/SBO-4

CFS-T SS/SB/SBO-6

CFS-T SS/SB/SBO-8

◄ CFS-T STRF 210

CFS-T STRF 150
◄ CFS-T RR-200

◄ CFS-T RR-150

◄ CFS-T RR-125

◄ CFS-T RR-100

◄ CFS-T RR-70

◄ CFS-T RR-50

10mm

10mm

Not to scale
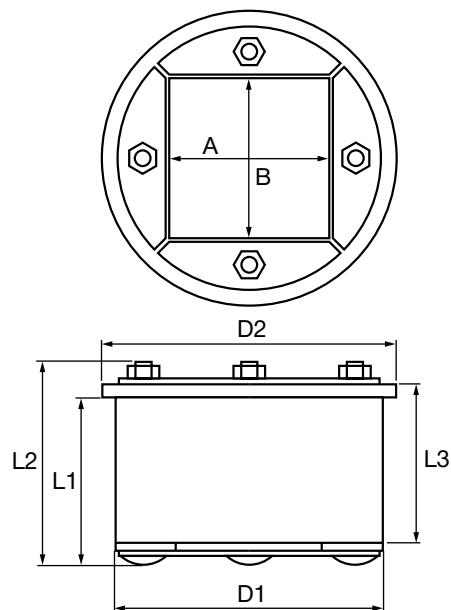
Module capacity / space requirements:

CFS-T SS/SB/SBO-2:   120x60mm
CFS-T SS/SB/SBO-4:   120x120mm
CFS-T SS/SB/SBO-6:   120x180mm
CFS-T SS/SB/SBO-8:   120x240mm

CFS-T RR 50:   30x30mm
CFS-T RR 70:   40x40mm
CFS-T RR 100:   60x60mm
CFS-T RR 125:   80x80mm
CFS-T RR 150:   90x90mm
CFS-T RR 200:   120x120mm
CFS-T STRF 150: 60x120mm
CFS-T STRF 210: 60x180mm

INFORMATION

![HILTI]

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.	Dimensions in mm				Module length	Tensioning bolts
	AxB	cm²	ø mm	D 1	D 2	L 1	L 2	L 3	DIN603(DIN84)
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
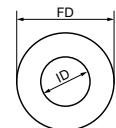
Type	Filler	Maximum cable capacity (example)
CFS-T RR 50	1 pcs. 30/0 or 4 pcs. 15/0	4 cables 3-9 mm dia. or 1 cable up to 23 mm dia.
CFS-T RR 70	4 pcs. 20/0	4 cables 3-12 mm dia. or 1 cable up to 33 mm dia.
CFS-T RR 100	4 pcs. 30/0	9 cables 5-12 mm dia. or 1 cable 34-51 mm dia.
CFS-T RR 125	16 pcs. 20/0	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**
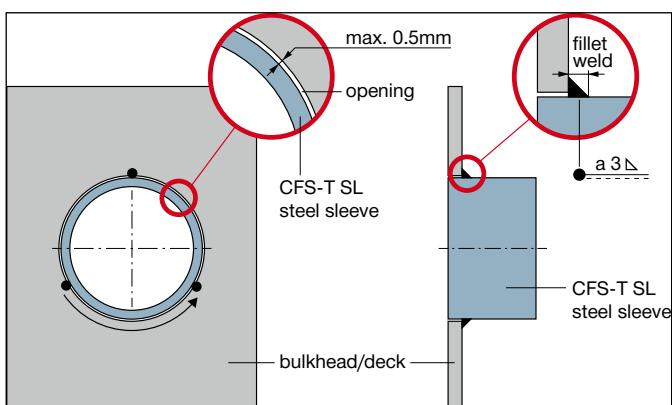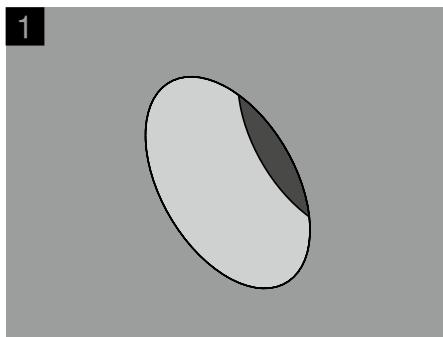
Sleeve type	To be used for	ID	OD	FD	T
CFS-T SL 50 **CFS-T SLF 50**	CFS-T RR 50	51.2 mm	57.0 mm	157 mm	70 mm
CFS-T SL 70 **CFS-T SLF 70**	CFS-T RR 70	70.3 mm	76.1 mm	176 mm	70 mm
CFS-T SL 100 **CFS-T SLF 100**	CFS-T RR 100	102.2 mm	108.0 mm	210 mm	70 mm
CFS-T SL 125 **CFS-T SLF 125**	CFS-T RR 125	127.0 mm	140.0 mm	240 mm	80 mm
CFS-T SL 150 **CFS-T SLF 150**	CFS-T RR 150	150.0 mm	159.0 mm	260 mm	80 mm
CFS-T SL 200 **CFS-T SLF 200**	CFS-T RR 200	203.1 mm	219.1 mm	320 mm	80 mm
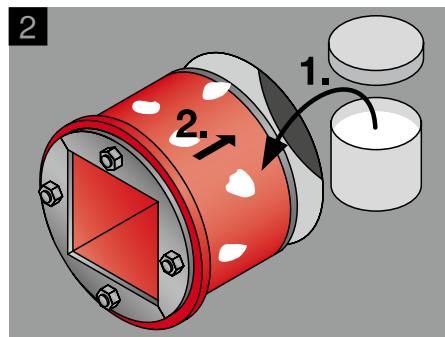
Welding procedure for transit sleeves CFS-T SL
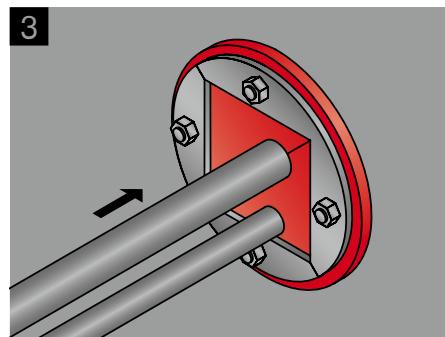
INSTALLING THE SYSTEM - THIS IS HOW IT'S DONE IN A FEW EASY STEPS.

1

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

2
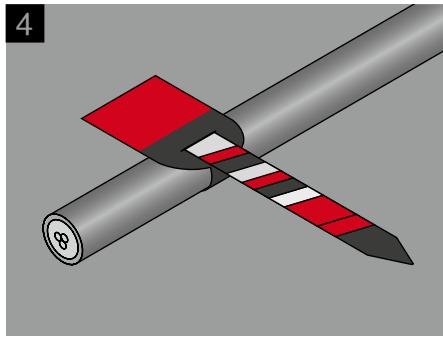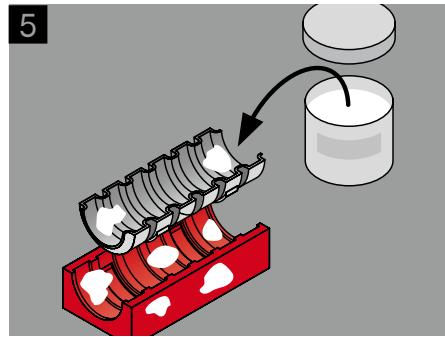
Lubricate and push the plug seal into the opening.

3
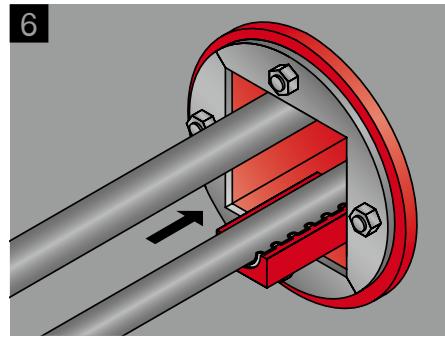
Install the cables in accordance with the frame packing plan.
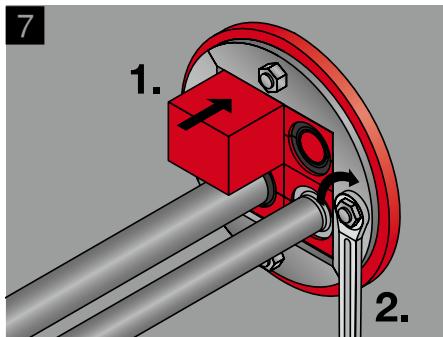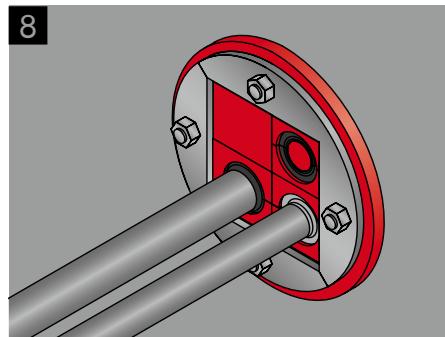
4

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 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
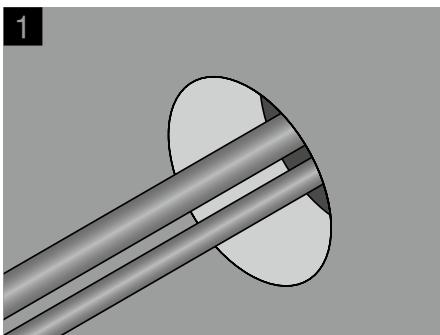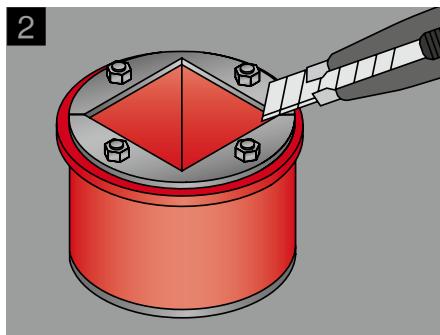
Check that the modules are seated and installed correctly.
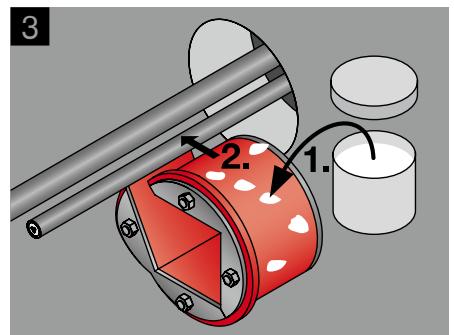
INSTALLING THE SYSTEM WHERE CABLES ARE ALREADY IN PLACE.
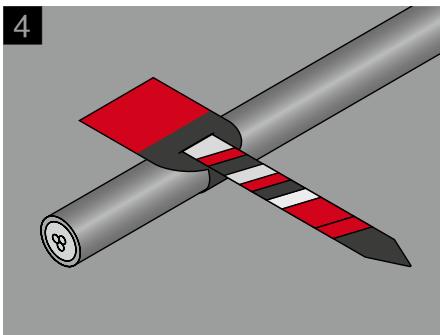
1

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

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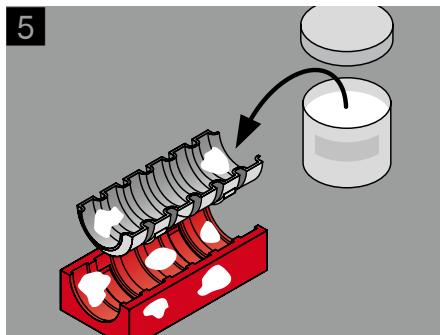
In situations where cables are already in place, use a sharp knife to cut right through the plug seal at a corner of the frame.

3
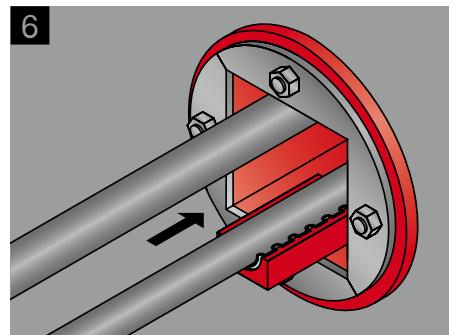
Lubricate and slip the opened frame over the cables and then push the plug seal into the opening (tap in with a hammer if necessary).
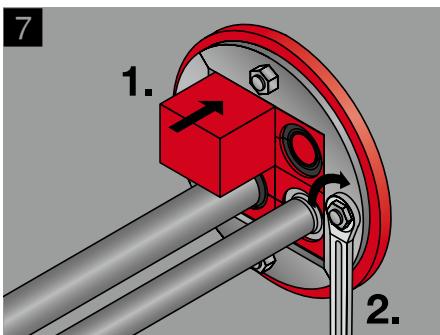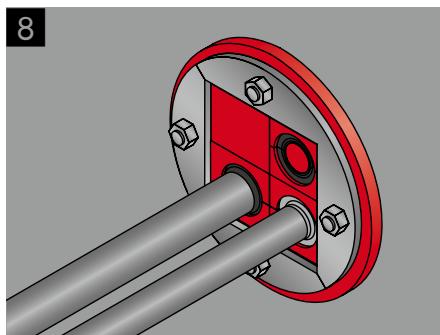
4

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 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
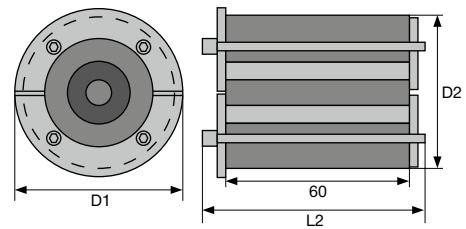
Check that the modules are seated and installed correctly.

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

CFS-T RRS – plug seal

Sealing individual cables and pipes against fire, gas and to 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.
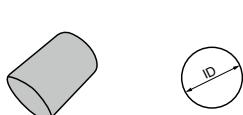
Type	Cable/pipe diameter	D2	D1	Tolerance / bore type	L2	No. of bolts	Bolts
CFS-T RRS-43/0+5-23	0+5-23 mm	43 mm	53 mm	43 - 45 mm	75 mm	4	M5x70
CFS-T RRS-50/0+13-33	0+13-33 mm	50 mm	60 mm	50 - 52 mm	75 mm	4	M5x70
CFS-T RRS-70/0+23-51	0+23-51 mm	70 mm	80 mm	70 - 72 mm	75 mm	4	M5x70
CFS-T RRS-100/0+34-78	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
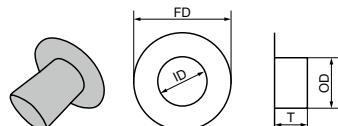
CFS-T RRS-43/0+5-23		CFS-T RRS-50/0+13-33		CFS-T RRS-70/0+23-51	
Cable diameter and corresponding system part					
22 - 23 mm	Basic	**32 - 33 mm**	Basic	**49 - 51 mm**	Basic
17 - 21 mm	Adapter grey L	**27 - 31 mm**	Adapter grey L	**44 - 48 mm**	Adapter red L
13 - 16 mm	Adapter black L	**23 - 26 mm**	Adapter black L	**39 - 43 mm**	Adapter grey L
11 - 12 mm	Adapter ring red	**22 - 23 mm**	Adapter ring red	**34 - 38 mm**	Adapter black L
8 - 10 mm	Adapter grey S	**17 - 21 mm**	Adapter grey S	**32 - 33 mm**	Adapter ring red
5 - 7 mm	Adapter black S	**13 - 16 mm**	Adapter black S	**27 - 31 mm**	Adapter grey 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 grey XL	**58 - 63 mm**	Adapter grey 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 grey L	**39 - 43 mm**	Adapter grey L
34 - 38 mm	Adapter black M	**34 - 38 mm**	Adapter black M
		32 - 33 mm	Adapter ring red S
		27 - 31 mm	Adapter grey S
		23 - 26 mm	Adapter black S

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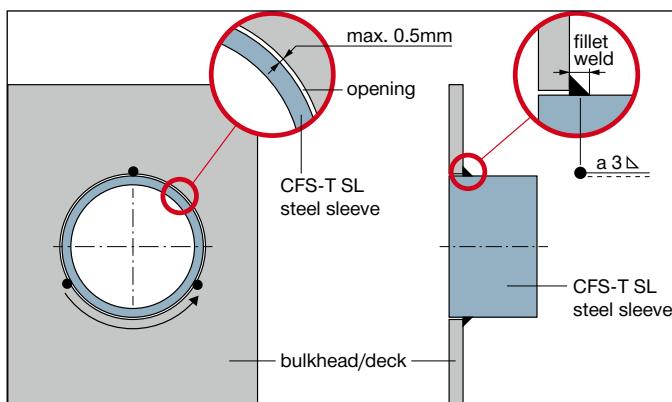
Sleeve type	To be used for	ID	OD	FD	T
CFS-T SL 50 **CFS-T SLF 50**	CFS-T RRS 50	51.2 mm	57.0 mm	157 mm	70 mm
CFS-T SL 70 **CFS-T SLF 70**	CFS-T RRS 70	70.3 mm	76.1 mm	176 mm	70 mm
CFS-T SL 100 **CFS-T SLF 100**	CFS-T RRS 100	102.2 mm	108.0 mm	210 mm	70 mm

Welding procedure for transit sleeves CFS-T SL

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.
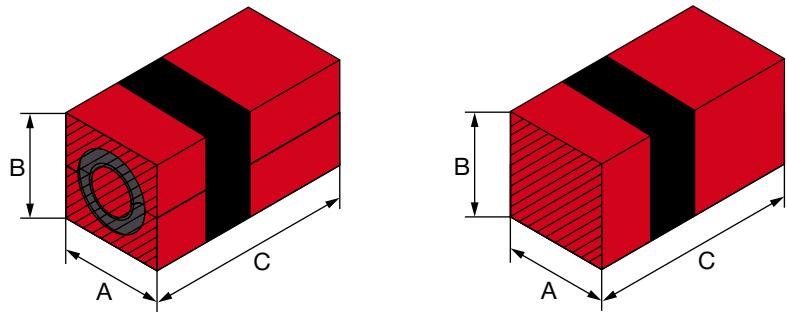
Applications

- 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
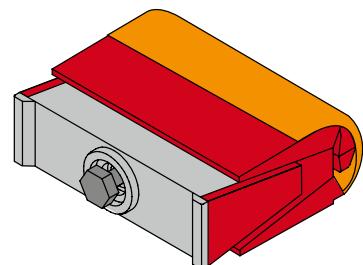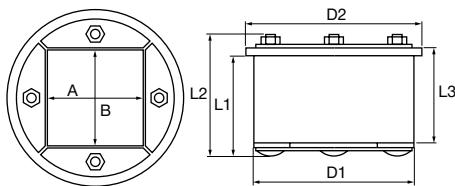
Module	Dimension A	Dimension B	Dimension C	Diameter range	Diameter range per module / adapter
	Cable modules				
CFS-T EMC 20/0+5-12	20 mm	20 mm	60 mm	5 - 12 mm	Black adapter = 5 - 7 mm Grey adapter = 8 - 10 mm Basic module = 11 - 12 mm
CFS-T EMC 30/0+13-23	30 mm	30 mm	60 mm	13 - 23 mm	Black adapter = 13 - 16 mm Grey 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 Grey 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 Grey 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 Grey 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 Grey 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 aluminium.

CFS-T RR EMC plug seals

Material availablity 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	cm²	∅ 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.

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.
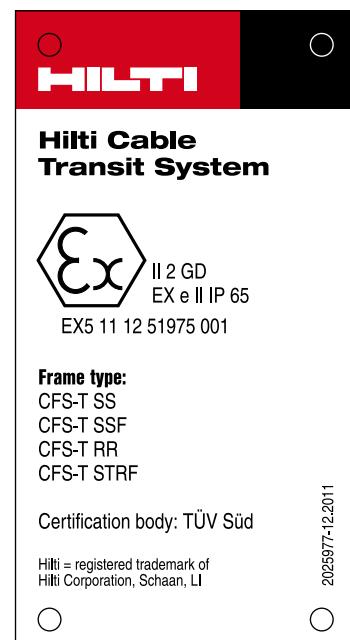
Sealing solution certified according to ATEX ("Atmosphères Explosibles") for use in areas with a potentially explosive atmosphere.

Hilti Cable Transit System

⟨Ex⟩ 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

202597-12.2011

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 anchorplat
- Galvanised steel
- Stainless steel

CFS-T EX Cable Module

CFS-T EX Filler Module

![HILTI]

SEALING SOLUTIONS FOR SWITCH CABINETS

CFS-T STRF basic frame

CFS-T GF
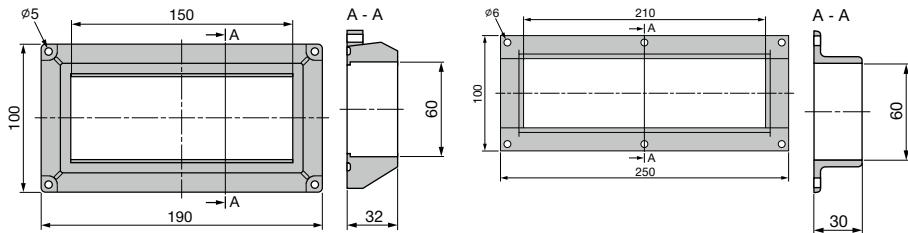
CFS-T GS

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 210mm)

Material availability options
- Galvanised steel
- Fiberglass
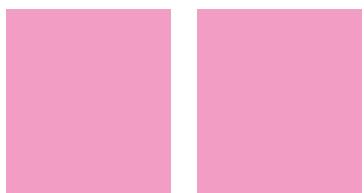
Sealing cables, pipes and other conduits leading into switch cabinets, appliances and casings.

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 SBS SYSTEM

Cable modules

Ordering designation	Package contents	Item no.
CFS-T SBS 2x15/0+3-5 cable module incl. adapter and core modules	32	2210515
CFS-T SBS 2x15/0+6-7 cable module incl. adapter and core modules	32	2210516
CFS-T SBS 20/0+5-12 cable module incl. adapter and core modules	36	2210517
CFS-T SBS 20/0+5-16 cable module incl. adapter and core modules	24	2210518
CFS-T SBS 30/0+13-23 cable module incl. adapter and core modules	16	2210519
CFS-T SBS 40/0+23-33 cable module incl. adapter and core modules	9	2210520
CFS-T SBS SM 40/23-33 cable module incl. adapter and core modules	1	2211011
CFS-T SBS SM 60/33-51 cable module incl. adapter and core modules	1	2211012

Filler modules

Ordering designation	Package contents	Item no.
CFS-T FB SBS 12x10/0	18	2210521
CFS-T FB SBS 24x5/0	36	2210522
CFS-T FB SBS 15/0	96	2210523
CFS-T SBS FB 20/0	54	2210524
CFS-T SBS FB 30/0	24	2210525

Wedge seals

Ordering designation	Package contents	Item no.
CFS-T WD 120 SBS GS wedge seal	1	2210528
CFS-T WD 120 SBS S/S wedge seal	1	2210529

Anchor plates
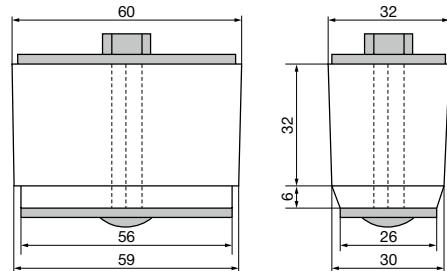
Ordering designation	Package contents	Item no.
CFS-T LAP SBS 120 GS anchor plate (galvanized)	1 Kit (20 anchor plates)	2210526
CFS-T LAP SBS 120 S/S anchor plate (stainless steel)	1 Kit (20 anchor plates)	2210527
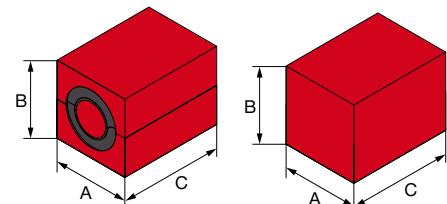
Casting mould

Ordering designation	Package contents	Item no.
CFS-T SBS CM-4 casting mould	1	2210512
CFS-T SBS CM-6 casting mould	1	2210513
CFS-T SBS CM-8 casting mould	1	2210514

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 Grey 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 Grey 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 Grey 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 Grey 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 (aluminium), 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 (aluminium)	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

![HILTI]

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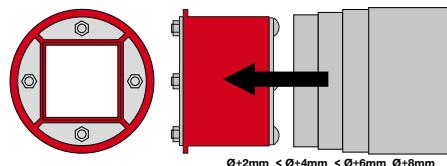
Ordering designation	Package contents	Item no.
CFS-T RRS-43/0+5-23 S/S plug seal incl. adapter and core modules	1	2042730
CFS-T RRS-50/0+13-33 S/S plug seal incl. adapter and core modules	1	2042732
CFS-T RRS-70/0+23-51 S/S plug seal incl. adapter and core modules	1	2042734
CFS-T RRS-100/0+34-78 S/S plug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

Ø+2mm < Ø+4mm < Ø+6mm Ø+8mm
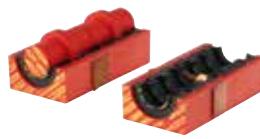
Sealing strip

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 (aluminium), 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 (aluminium)	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 SB TRANSIT FRAMES

CFS-T SB transit frames (single–row)

Ordering designation	Package contents	Item no.
CFS-T SB-2x1 GS transit frame (galvanized steel)	1	2060542
CFS-T SB-4x1 GS transit frame (galvanized steel)	1	2060543
CFS-T SB-4x2 GS transit frame (galvanized steel)	1	2060544
CFS-T SB-4x3 GS transit frame (galvanized steel)	1	2060545
CFS-T SB-4x4 GS transit frame (galvanized steel)	1	2060546
CFS-T SB-4x5 GS transit frame (galvanized steel)	1	2060547
CFS-T SB-4x6 GS transit frame (galvanized steel)	1	2060548
CFS-T SB-4x7 GS transit frame (galvanized steel)	1	2060549
CFS-T SB-4x8 GS transit frame (galvanized steel)	1	2060570
CFS-T SB-4x9 GS transit frame (galvanized steel)	1	2060571
CFS-T SB-4x10 GS transit frame (galvanized steel)	1	2060572
CFS-T SB-6x1 GS transit frame (galvanized steel)	1	2060593
CFS-T SB-6x2 GS transit frame (galvanized steel)	1	2060594
CFS-T SB-6x3 GS transit frame (galvanized steel)	1	2060595
CFS-T SB-6x4 GS transit frame (galvanized steel)	1	2060596
CFS-T SB-6x5 GS transit frame (galvanized steel)	1	2060597
CFS-T SB-6x6 GS transit frame (galvanized steel)	1	2060598
CFS-T SB-6x7 GS transit frame (galvanized steel)	1	2060599
CFS-T SB-6x8 GS transit frame (galvanized steel)	1	2060600
CFS-T SB-6x9 GS transit frame (galvanized steel)	1	2060601
CFS-T SB-6x10 GS transit frame (galvanized steel)	1	2060602
CFS-T SB-8x1 GS transit frame (galvanized steel)	1	2060623
CFS-T SB-8x2 GS transit frame (galvanized steel)	1	2060624
CFS-T SB-8x3 GS transit frame (galvanized steel)	1	2060625
CFS-T SB-8x4 GS transit frame (galvanized steel)	1	2060626
CFS-T SB-8x5 GS transit frame (galvanized steel)	1	2060627
CFS-T SB-8x6 GS transit frame (galvanized steel)	1	2060628
CFS-T SB-8x7 GS transit frame (galvanized steel)	1	2060629
CFS-T SB-8x8 GS transit frame (galvanized steel)	1	2060630
CFS-T SB-8x9 GS transit frame (galvanized steel)	1	2060631
CFS-T SB-8x10 GS transit frame (galvanized steel)	1	2060632

CFS-T SB transit frames (double–row)

Ordering designation	Package contents	Item no.
CFS-T SB-4+4x1 GS transit frame (galvanized steel)	1	2060573
CFS-T SB-4+4x2 GS transit frame (galvanized steel)	1	2060574
CFS-T SB-4+4x3 GS transit frame (galvanized steel)	1	2060575
CFS-T SB-4+4x4 GS transit frame (galvanized steel)	1	2060576
CFS-T SB-4+4x5 GS transit frame (galvanized steel)	1	2060577
CFS-T SB-4+4x6 GS transit frame (galvanized steel)	1	2060578
CFS-T SB-4+4x7 GS transit frame (galvanized steel)	1	2060579
CFS-T SB-4+4x8 GS transit frame (galvanized steel)	1	2060580
CFS-T SB-4+4x9 GS transit frame (galvanized steel)	1	2060581
CFS-T SB-4+4x10 GS transit frame (galvanized steel)	1	2060582
CFS-T SB-6+6x1 GS transit frame (galvanized steel)	1	2060603
CFS-T SB-6+6x2 GS transit frame (galvanized steel)	1	2060604
CFS-T SB-6+6x3 GS transit frame (galvanized steel)	1	2060605
CFS-T SB-6+6x4 GS transit frame (galvanized steel)	1	2060606
CFS-T SB-6+6x5 GS transit frame (galvanized steel)	1	2060607
CFS-T SB-6+6x6 GS transit frame (galvanized steel)	1	2060608
CFS-T SB-6+6x7 GS transit frame (galvanized steel)	1	2060609
CFS-T SB-6+6x8 GS transit frame (galvanized steel)	1	2060610
CFS-T SB-6+6x9 GS transit frame (galvanized steel)	1	2060611
CFS-T SB-6+6x10 GS transit frame (galvanized steel)	1	2060612
CFS-T SB-8+8x1 GS transit frame (galvanized steel)	1	2060633
CFS-T SB-8+8x2 GS transit frame (galvanized steel)	1	2060634
CFS-T SB-8+8x3 GS transit frame (galvanized steel)	1	2060635
CFS-T SB-8+8x4 GS transit frame (galvanized steel)	1	2060636
CFS-T SB-8+8x5 GS transit frame (galvanized steel)	1	2060637
CFS-T SB-8+8x6 GS transit frame (galvanized steel)	1	2060638
CFS-T SB-8+8x7 GS transit frame (galvanized steel)	1	2060639
CFS-T SB-8+8x8 GS transit frame (galvanized steel)	1	2060640
CFS-T SB-8+8x9 GS transit frame (galvanized steel)	1	2060641
CFS-T SB-8+8x10 GS transit frame (galvanized steel)	1	2060642

CFS-T SB transit frames (triple–row)

Ordering designation	Package contents	Item no.
CFS-T SB-4+4+4x1 GS transit frame (galvanized steel)	1	2060583
CFS-T SB-4+4+4x2 GS transit frame (galvanized steel)	1	2060584
CFS-T SB-4+4+4x3 GS transit frame (galvanized steel)	1	2060585
CFS-T SB-4+4+4x4 GS transit frame (galvanized steel)	1	2060586
CFS-T SB-4+4+4x5 GS transit frame (galvanized steel)	1	2060587
CFS-T SB-4+4+4x6 GS transit frame (galvanized steel)	1	2060588
CFS-T SB-4+4+4x7 GS transit frame (galvanized steel)	1	2060589
CFS-T SB-4+4+4x8 GS transit frame (galvanized steel)	1	2060590
CFS-T SB-4+4+4x9 GS transit frame (galvanized steel)	1	2060591
CFS-T SB-4+4+4x10 GS transit frame (galvanized steel)	1	2060592
CFS-T SB-6+6+6x1 GS transit frame (galvanized steel)	1	2060613
CFS-T SB-6+6+6x2 GS transit frame (galvanized steel)	1	2060614
CFS-T SB-6+6+6x3 GS transit frame (galvanized steel)	1	2060615
CFS-T SB-6+6+6x4 GS transit frame (galvanized steel)	1	2060616
CFS-T SB-6+6+6x5 GS transit frame (galvanized steel)	1	2060617
CFS-T SB-6+6+6x6 GS transit frame (galvanized steel)	1	2060618
CFS-T SB-6+6+6x7 GS transit frame (galvanized steel)	1	2060619
CFS-T SB-6+6+6x8 GS transit frame (galvanized steel)	1	2060620
CFS-T SB-6+6+6x9 GS transit frame (galvanized steel)	1	2060621
CFS-T SB-6+6+6x10 GS transit frame (galvanized steel)	1	2060622
CFS-T SB-8+8+8x1 GS transit frame (galvanized steel)	1	2060643
CFS-T SB-8+8+8x2 GS transit frame (galvanized steel)	1	2060644
CFS-T SB-8+8+8x3 GS transit frame (galvanized steel)	1	2060645
CFS-T SB-8+8+8x4 GS transit frame (galvanized steel)	1	2060646
CFS-T SB-8+8+8x5 GS transit frame (galvanized steel)	1	2059988
CFS-T SB-8+8+8x6 GS transit frame (galvanized steel)	1	2059989
CFS-T SB-8+8+8x7 GS transit frame (galvanized steel)	1	2060460
CFS-T SB-8+8+8x8 GS transit frame (galvanized steel)	1	2060461
CFS-T SB-8+8+8x9 GS transit frame (galvanized steel)	1	2060462
CFS-T SB-8+8+8x10 GS transit frame (galvanized steel)	1	2060463

Accessories for CFS-T SB transit frames

Ordering designation	Package contents	Item no.
CFS-T CM-2 casting mould	1	2060538
CFS-T CM-4 casting mould	1	2060539
CFS-T CM-6 casting mould	1	2060540
CFS-T CM-8 casting mould	1	2060541

CFS-T SBS TRANSIT FRAMES

CFS-T SBS transit frames (single-row)

Ordering designation	Package contents	Item no.
Frame size 4		
CFS-T SBS-4x1 GS transit frame (galvanized steel)	1	2210426
CFS-T SBS-4x2 GS transit frame (galvanized steel)	1	2210427
CFS-T SBS-4x3 GS transit frame (galvanized steel)	1	2210428
CFS-T SBS-4x4 GS transit frame (galvanized steel)	1	2210429
CFS-T SBS-4x5 GS transit frame (galvanized steel)	1	2210440
CFS-T SBS-4x6 GS transit frame (galvanized steel)	1	2210441
CFS-T SBS-4x7 GS transit frame (galvanized steel)	1	2210458
CFS-T SBS-4x8 GS transit frame (galvanized steel)	1	2210459
CFS-T SBS-4x9 GS transit frame (galvanized steel)	1	2210460
CFS-T SBS-4x10 GS transit frame (galvanized steel)	1	2210461
Frame size 6		
CFS-T SBS-6x1 GS transit frame (galvanized steel)	1	2210462
CFS-T SBS-6x2 GS transit frame (galvanized steel)	1	2210463
CFS-T SBS-6x3 GS transit frame (galvanized steel)	1	2210464
CFS-T SBS-6x4 GS transit frame (galvanized steel)	1	2210465
CFS-T SBS-6x5 GS transit frame (galvanized steel)	1	2210466
CFS-T SBS-6x6 GS transit frame (galvanized steel)	1	2210467
CFS-T SBS-6x7 GS transit frame (galvanized steel)	1	2210468
CFS-T SBS-6x8 GS transit frame (galvanized steel)	1	2210469
CFS-T SBS-6x9 GS transit frame (galvanized steel)	1	2210470
CFS-T SBS-6x10 GS transit frame (galvanized steel)	1	2210471
Frame size 8		
CFS-T SBS-8x1 GS transit frame (galvanized steel)		2210472
CFS-T SBS-8x2 GS transit frame (galvanized steel)		2210473
CFS-T SBS-8x3 GS transit frame (galvanized steel)		2210474
CFS-T SBS-8x4 GS transit frame (galvanized steel)		2210475
CFS-T SBS-8x5 GS transit frame (galvanized steel)		2210476
CFS-T SBS-8x6 GS transit frame (galvanized steel)		2210477
CFS-T SBS-8x7 GS transit frame (galvanized steel)		2210478
CFS-T SBS-8x8 GS transit frame (galvanized steel)		2210479
CFS-T SBS-8x9 GS transit frame (galvanized steel)		2210480
CFS-T SBS-8x10 GS transit frame (galvanized steel)		2210481

CFS-T SBO TRANSIT FRAMES

CFS-T SBO transit frames (single–row)

Ordering designation	Package contents	Item no.
CFS-T SBO-2x1 GS transit frame (galvanized steel)	1	2060464
CFS-T SBO-4x1 GS transit frame (galvanized steel)	1	2060465
CFS-T SBO-4x2 GS transit frame (galvanized steel)	1	2060466
CFS-T SBO-4x3 GS transit frame (galvanized steel)	1	2060467
CFS-T SBO-4x4 GS transit frame (galvanized steel)	1	2060468
CFS-T SBO-4x5 GS transit frame (galvanized steel)	1	2060469
CFS-T SBO-4x6 GS transit frame (galvanized steel)	1	2060470
CFS-T SBO-4x7 GS transit frame (galvanized steel)	1	2060471
CFS-T SBO-4x8 GS transit frame (galvanized steel)	1	2060472
CFS-T SBO-4x9 GS transit frame (galvanized steel)	1	2060473
CFS-T SBO-4x10 GS transit frame (galvanized steel)	1	2060474
CFS-T SBO-6x1 GS transit frame (galvanized steel)	1	2060485
CFS-T SBO-6x2 GS transit frame (galvanized steel)	1	2060486
CFS-T SBO-6x3 GS transit frame (galvanized steel)	1	2060487
CFS-T SBO-6x4 GS transit frame (galvanized steel)	1	2060488
CFS-T SBO-6x5 GS transit frame (galvanized steel)	1	2060489
CFS-T SBO-6x6 GS transit frame (galvanized steel)	1	2060490
CFS-T SBO-6x7 GS transit frame (galvanized steel)	1	2060491
CFS-T SBO-6x8 GS transit frame (galvanized steel)	1	2060492
CFS-T SBO-6x9 GS transit frame (galvanized steel)	1	2060493
CFS-T SBO-6x10 GS transit frame (galvanized steel)	1	2060494
CFS-T SBO-8x1 GS transit frame (galvanized steel)	1	2060505
CFS-T SBO-8x2 GS transit frame (galvanized steel)	1	2060506
CFS-T SBO-8x3 GS transit frame (galvanized steel)	1	2060507
CFS-T SBO-8x4 GS transit frame (galvanized steel)	1	2060508
CFS-T SBO-8x5 GS transit frame (galvanized steel)	1	2060509
CFS-T SBO-8x6 GS transit frame (galvanized steel)	1	2060510
CFS-T SBO-8x7 GS transit frame (galvanized steel)	1	2060511
CFS-T SBO-8x8 GS transit frame (galvanized steel)	1	2060512
CFS-T SBO-8x9 GS transit frame (galvanized steel)	1	2060513
CFS-T SBO-8x10 GS transit frame (galvanized steel)	1	2060514

CFS-T SBO transit frames (double–row)

Ordering designation	Package contents	Item no.
CFS-T SBO-4+4x1 GS transit frame (galvanized steel)	1	2060475
CFS-T SBO-4+4x2 GS transit frame (galvanized steel)	1	2060476
CFS-T SBO-4+4x3 GS transit frame (galvanized steel)	1	2060477
CFS-T SBO-4+4x4 GS transit frame (galvanized steel)	1	2060478
CFS-T SBO-4+4x5 GS transit frame (galvanized steel)	1	2060479
CFS-T SBO-4+4x6 GS transit frame (galvanized steel)	1	2060480
CFS-T SBO-4+4x7 GS transit frame (galvanized steel)	1	2060481
CFS-T SBO-4+4x8 GS transit frame (galvanized steel)	1	2060482
CFS-T SBO-4+4x9 GS transit frame (galvanized steel)	1	2060483
CFS-T SBO-4+4x10 GS transit frame (galvanized steel)	1	2060484
CFS-T SBO-6+6x1 GS transit frame (galvanized steel)	1	2060495
CFS-T SBO-6+6x2 GS transit frame (galvanized steel)	1	2060496
CFS-T SBO-6+6x3 GS transit frame (galvanized steel)	1	2060497
CFS-T SBO-6+6x4 GS transit frame (galvanized steel)	1	2060498
CFS-T SBO-6+6x5 GS transit frame (galvanized steel)	1	2060499
CFS-T SBO-6+6x6 GS transit frame (galvanized steel)	1	2060500
CFS-T SBO-6+6x7 GS transit frame (galvanized steel)	1	2060501
CFS-T SBO-6+6x8 GS transit frame (galvanized steel)	1	2060502
CFS-T SBO-6+6x9 GS transit frame (galvanized steel)	1	2060503
CFS-T SBO-6+6x10 GS transit frame (galvanized steel)	1	2060504
CFS-T SBO-8+8x1 GS transit frame (galvanized steel)	1	2060515
CFS-T SBO-8+8x2 GS transit frame (galvanized steel)	1	2060516
CFS-T SBO-8+8x3 GS transit frame (galvanized steel)	1	2060517
CFS-T SBO-8+8x4 GS transit frame (galvanized steel)	1	2060518
CFS-T SBO-8+8x5 GS transit frame (galvanized steel)	1	2060519
CFS-T SBO-8+8x6 GS transit frame (galvanized steel)	1	2060520
CFS-T SBO-8+8x7 GS transit frame (galvanized steel)	1	2060521
CFS-T SBO-8+8x8 GS transit frame (galvanized steel)	1	2060522
CFS-T SBO-8+8x9 GS transit frame (galvanized steel)	1	2060523
CFS-T SBO-8+8x10 GS transit frame (galvanized steel)	1	2060524

CFS-T SB/CONT. TRANSIT FRAMES

CFS-T SB/cont. transit frames

Ordering designation	Package contents	Item no.
CFS-T SB/cont-4x1 GS transit frame (galvanized steel)	1	2060525
CFS-T SB/cont-6x1 GS transit frame (galvanized steel)	1	2060526
CFS-T SB/cont-8x1 GS transit frame (galvanized steel)	1	2060527

Accessories for CFS-T SB/Cont. transit frames

Ordering designation	Package contents	Item no.
CFS-T SST 40x10x5000 sealing strip	1	2042739

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	2014745
CFS-T SS-2x1 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2014746
CFS-T SS-2x2 MSP transit frame (steel, rust preventive coated)	1	2014748
CFS-T SS-2x2 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2014749
CFS-T SS-2x3 MSP transit frame (steel, rust preventive coated)	1	2014931
CFS-T SS-2x3 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2014932
CFS-T SS-2x4 MSP transit frame (steel, rust preventive coated)	1	2014934
CFS-T SS-2x4 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2014935
CFS-T SS-2x5 MSP transit frame (steel, rust preventive coated)	1	2014937
CFS-T SS-2x5 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2014938
CFS-T SS-4x1 MSP transit frame (steel, rust preventive coated)	1	2014940
CFS-T SS-4x1 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2014941
CFS-T SS-4x2 MSP transit frame (steel, rust preventive coated)	1	2014943
CFS-T SS-4x2 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2014944
CFS-T SS-4x3 MSP transit frame (steel, rust preventive coated)	1	2014946
CFS-T SS-4x3 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2014947
CFS-T SS-4x4 MSP transit frame (steel, rust preventive coated)	1	2014949
CFS-T SS-4x4 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2014950
CFS-T SS-4x5 MSP transit frame (steel, rust preventive coated)	1	2014952
CFS-T SS-4x5 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2014953
CFS-T SS-6x1 MSP transit frame (steel, rust preventive coated)	1	2014955
CFS-T SS-6x1 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2014956
CFS-T SS-6x2 MSP transit frame (steel, rust preventive coated)	1	2014958
CFS-T SS-6x2 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2014959
CFS-T SS-6x3 MSP transit frame (steel, rust preventive coated)	1	2014961
CFS-T SS-6x3 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2014962
CFS-T SS-6x4 MSP transit frame (steel, rust preventive coated)	1	2014964
CFS-T SS-6x4 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2014965
CFS-T SS-6x5 MSP transit frame (steel, rust preventive coated)	1	2014967
CFS-T SS-6x5 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2014968
CFS-T SS-8x1 MSP transit frame (steel, rust preventive coated)	1	2014970
CFS-T SS-8x1 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2014971
CFS-T SS-8x2 MSP transit frame (steel, rust preventive coated)	1	2014973
CFS-T SS-8x2 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2014974
CFS-T SS-8x3 MSP transit frame (steel, rust preventive coated)	1	2014976
CFS-T SS-8x3 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2014977
CFS-T SS-8x4 MSP transit frame (steel, rust preventive coated)	1	2014979
CFS-T SS-8x4 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2014980
CFS-T SS-8x5 MSP transit frame (steel, rust preventive coated)	1	2014982
CFS-T SS-8x5 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2014983

CFS-T RRS/R30 TRANSIT FRAMES

CFS-T RRS/R30 transit frames

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

CFS-T RRS 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	2050965
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	2050966
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	2050967
CFS-T SSF-4x2 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2050983
CFS-T SSF-4x3 MSP transit frame (steel, rust preventive coated)	1	2050968
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	2050969
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	2050970
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	2050971
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	2050972
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	2050973
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	2050974
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	2050975
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	2050976
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	2050977
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	2050978
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	2050979
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	2050980
CFS-T SSF-8x5 S/S transit frame (stainless steel material 1.4571 / V4A (AISI 316 Ti))	1	2050996

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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