

#### **Firestop sleeve CFS-SL**



#### **Applications**

- Sealing penetrations for single cables and cable bundles
- Suitable for small to medium-sized circular openings in walls and ceilings
- For use on concrete, masonry and drywall

#### **Advantages**

- Easy to install and to inspect
- Fully functional immediately after installation
- Robust
- Optimum smoke-proofing performance
- Easy subsequent installation of additional cables
- Fire resistance rating of up to 2 hours









Technical data	
Base materials	Concrete, Masonry, Drywall
Approvals	ETA-11/0153
Repenetration	Easy
Acoustics performance	Test report available
Application temperature range	-5 - 50 °C
Temperature resistance range	-30 - 100 °C
Reaction to fire class (EN 13501-1)	Е
Max. annular space	7 mm
Shelf life <sup>1)</sup>	Not relevant
Mould and mildew resistant	Yes

 $<sup>^{\</sup>mbox{\tiny 1)}}$  at 77 °F / 25 °C and 50% relative humidity; from date of manufacture





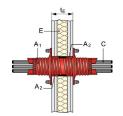
Order description	Outside diameter	Recommended opening size	Wall / Floor thickness	Sales pack quantity	Item number
CFS-SL Small	63 mm	63 - 73 mm	100 - 200 mm	1 pc	2019717
CFS-SL Medium	110 mm	113 - 122 mm	100 - 200 mm	1 pc	2019718
CFS-SL Large	110 mm	113 - 122 mm	200 - 300 mm	1 pc	2075168

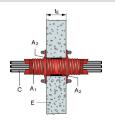
hilti.co.uk/r5223 | Issue 08/2016

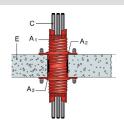


### **General information**









Partition	Flexible wall	Rigid wall	Rigid floor
Base material thickness (t <sub>E</sub> )	≥ 100 mm	≥ 100 mm	≥ 150 mm
Opening diameter	CFS-SL Small: 63 - 73 mm, CFS-SL Medium / Large: 113 - 122 mm		
Fixing to wall	No fixing required. flanges hold device in place		
Gap filler	CFS-S ACR		
Penetration	Sheathed cables and cable bundles		

## Main approved applications

Excerpt of ETA document. Check the exact field of application for configuration in the ETA 11/0153 document.







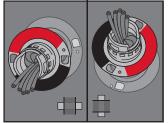
				1.1.03	80.13 %	1,311 (1.1.5)
		Flexible wall	Rigid wall		Rigid floor	
Penetration	Cable Ø mm	100 - 200 mm	100 - 200 mm	200 - 300 mm	150 - 200 mm	250 - 300 mm
All sheathed cables		EI (CFS-SI EI 1 (CFS-SL	L Small) 120	El 120 (CFS-SL Large)	El 120 (CFS-SL Small)	
Tied cable bundle Ø ≤ 36 mm	≤ 21	EI (CFS-SI EI (CFS-SL	L Small) 90	EI 90 (CFS-SL Large)	(CFS-SL Medium)	EI 120 (CFS-SL Large)
Tied cable bundle Ø ≤ 86 mm		EI (CFS-SL		EI 90 (CFS-SL Large)	EI 120 (CFS-SL Medium)	
All sheathed cables	≤ 50	EI (CFS-SL		EI 90 (CFS-SL Large)	EI 120 (CFS-SL Medium)	El 120 (CFS-SL Large)
All sheathed cables	≤ 80	El 60 (CFS-SL Medium)		El 60 (CFS-SL Large)	El 60 (CFS-SL Medium)	El 60 (CFS-SL Large)
None (Blank Seal)	-	EI (CFS-SI EI 1 (CFS-SL	L Small) 120	EI 120 (CFS-SL Large)	EI 120 (CFS-SL Small (CFS-SL Medium)	El 120 (CFS-SL Large)

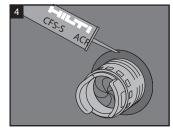
<sup>\*</sup>All sheathed cable types currently and commonly used in building practice in Europe (e.g. power, control, signal, telecommunication, data, optical fibre cables)

2 Issue 08/2016 | hilti.co.uk/r5223



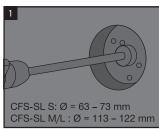
## General instructions for use

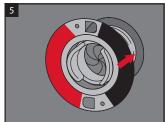


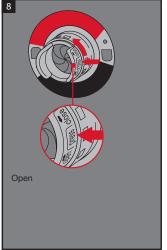


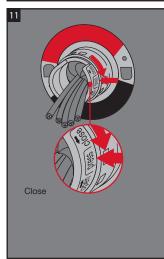


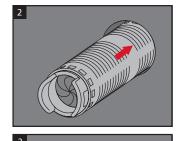


















## Maximum number of cables per device

Cable Ø (mm)	Maximum number of cables			
	CFS-SL Small	CFS-SL Medium / Large		
3.0	163	819		
3.5	121	596		
4.0	88	451		
4.5	69	356		
5.0	56	287		
5.5	45	240		
6.0	37	199		
6.5	32	164		
7.0	27	141		
8.0	19	109		
9.0	16	85		
12.5	7	38		
15.0	5	26		
18.0	3	19		
20.0	2	14		
25.0	1	8		
30.0	1	7		
35.0	1	3		

hilti.co.uk/r5223 | Issue 08/2016 3



# **Characteristics of CFS-SL**

Characteristics	Assessment of characteristics Norm, standard, test	
Health and the environment Dangerous substances	According to the manufacturer's declaration, the product specification has been compared with the list of dangerous substances of the European Commission to verify that that it does not contain such substances above the acceptable limits. CFS-SL is in compliance concerning the registration, evaluation, authorisation and restriction of Chemicals (REACH).	Material safety datasheet
Durability and serviceability	Hilti Firestop Sleeve CFS-SL has been assessed for the $Z_2$ use category, and the results of the tests have demonstrated suitability for penetration seals intended for use at internal conditions with humidity classes other than $Z_1$ , excluding temperatures below 0 °C ("internal dry conditions").	ETAG 026-2
Reaction to fire	Class E	EN 13501-1