S-CD 63 C 5.5×L coated, case-hardened carbon steel self-drilling screw

Product data

General information

Material specification:

Carbon steel: Case-hardened

Coating: Kaitex RSP Silver

With fitted EPDM sealing washer ∅ 19 mm.

Coloured screws available on request.

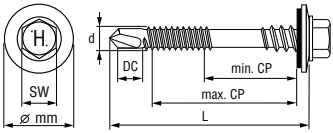
Fastening tools

Screwdriver:	Hilti ST 1800
Drive using depth gauge set:	Item no. 304611
Nut set driver S-NSD 8:	Item no. 308901

Dimensions

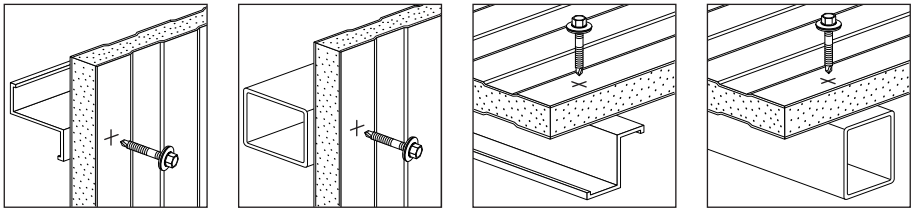
Uses:

The Hilti S-CD self-drilling screw features a threadless shank for fastening sandwich panels without tension (no denting) and a threaded section below the head for good sealing washer contact with the surface of the sandwich panel.



Applications

Examples



Load data

Design data

Drilling capacity Σ

max. 5,5 mm

	Component II steel with t_{II} [mm] S280GD or S320GD (DIN EN 10326)		
	2.00	**3.00**	**4.00**
Component I steel with t_I [mm] S280GD or S320GD (DIN EN 10326)	**Shear force $V_{R,k}$** [kN]		
0.50	1.30	1.30	1.30
0.63	1.70	1.70	1.70
0.75	2.00	2.00	2.00
1.00	2.60	2.60	2.60
	Tension force $N_{R,k}$ [kN]		
0.50	2.60	2.60	2.60
0.63	2.72	3.40	3.40
0.75	2.72	4.20	4.20
1.00	2.72	5.07	6.95

Max. screw head deflection u depending on the sandwich panel thickness [mm]			
40	4.0	3.5	3.0
50	6.0	4.5	3.5
60	8.0	6.0	4.0
70	9.0	7.0	5.0
80	10.0	8.0	6.0
100	10.0	8.0	6.0
120	10.0	8.0	6.0
≥140	10.0	8.0	6.0

Safety factors according to EN 1993-1-3 and CUAP 06.02/07		
	Tension	**Shear**
Partial safety concept		
Partial safety factor	$\gamma_M = 1.33$	$\gamma_M = 1.33$
Influence of cyclic loading	$\alpha_{cyclic} = 1.0$	– / –
Design load	$N_{Rd} = 1.0 \cdot N_{Rk} / 1.33$	$V_{Rd} = V_{Rk} / 1.33$
Global safety concept		
Global safety factor *	$\gamma_{GLOB} = 2.0$	$\gamma_{GLOB} = 2.0$
Recommended load	$N_{rec} = 1.0 \cdot N_{Rk} / 2.0$	$V_{rec} = V_{Rk} / 2.0$

* Note: The global safety factor of 2.0 includes a partial safety factor of $\gamma_F = 1.5$ for wind load. For other loads safety factors should be applied in accordance with the appropriate standards.

Screw selection

Screw program

Drilling thickness **DC** mm	**Sandwich panel thickness CP** min.–max. in mm	Dimensions (dxL) mm	Sealing washer ∅ mm	Head size AF	Package contents	Ordering designation	Item no.
2.0–5.5	22– 47	5.5x75	19	8	100	S-CD 63 C 5.5x75	**206965**
2.0–5.5	32– 57	5.5x85	19	8	100	S-CD 63 C 5.5x85	**206966**
2.0–5.5	42– 67	5.5x95	19	8	100	S-CD 63 C 5.5x95	**206967**
2.0–5.5	62– 87	5.5x115	19	8	100	S-CD 63 C 5.5x115	**206968**
2.0–5.5	82–107	5.5x135	19	8	100	S-CD 63 C 5.5x135	**206969**
2.0–5.5	102–127	5.5x155	19	8	100	S-CD 63 C 5.5x155	**206970**
2.0–5.5	122–147	5.5x175	19	8	100	S-CD 63 C 5.5x175	**206971**
2.0–5.5	137–182	5.5x210	19	8	100	S-CD 63 C 5.5x210	**206972**