

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-10/0198
of 29 June 2017

English translation prepared by DIBt - Original version in German language

General Part

Technical Assessment Body issuing the
European Technical Assessment:

Deutsches Institut für Bautechnik

Trade name of the construction product

Fastening Screws SFS SX, SLG, SL, TDA, TDB, TDC,
SD, SXW, SW

Product family
to which the construction product belongs

Fastening screws for metal members and sheeting

Manufacturer

SFS intec AG
Rosenbergsaustraße 10
9435 Heerbrugg
SCHWEIZ

Manufacturing plant

Factory 1
Factory 5
Factory 7
Factory 16
Factory 18

This European Technical Assessment
contains

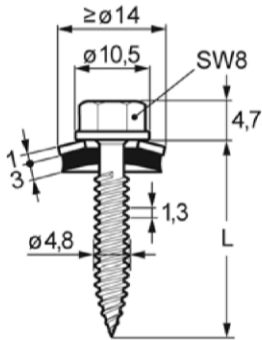
75 pages including 68 annexes which form an integral
part of this assessment

This European Technical Assessment is
issued in accordance with Regulation (EU)
No 305/2011, on the basis of

European Assessment Document (EAD)
330046-01-0602 "Fastening Screws for Metal Members
and Sheetting", Version 1

This version replaces

ETA-10/0198 issued on 26 June 2013



Materials

Fastener:	Stainless steel A2 or A4 - EN ISO 3506
Washer:	Stainless steel A2 or A4 - EN ISO 3506 with EPDM-seal
Component I:	S280GD to S450GD - EN 10346
Component II:	S280GD to S450GD - EN 10346 HX300LAD to HX460LAD - EN 10346

Drilling-capacity $\Sigma(t_I + t_{II}) \leq 2.00 \text{ mm}$

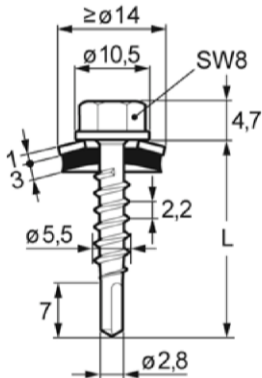
		$t_{II} [\text{mm}]$						
		0.40	0.50	0.55	0.63	0.75	0.88	1.00
$V_{R,k} [\text{kN}]$	0.40	0.66	0.66	0.66	0.66	0.66	0.66	0.66
	0.50	0.66	0.80	0.80	0.80	0.80	0.80	0.80
	0.55	0.66	0.80	0.98	0.98	0.98	0.98	0.98
	0.63	0.66	0.80	0.98	1.28	1.28	1.28	1.28
	0.75	0.66	0.80	0.98	1.28	1.72	1.72	1.72
	0.88	0.66	0.80	0.98	1.28	1.72	1.72	1.72
	1.00	0.66	0.80	0.98	1.28	1.72	1.72	1.72
$N_{R,k} [\text{kN}]$	0.40	0.52	0.73	0.82	0.95	0.95	0.95	0.95
	0.50	0.52	0.73	0.82	0.97	1.20	1.20	1.20
	0.55	0.52	0.73	0.82	0.97	1.20	1.20	1.20
	0.63	0.52	0.73	0.82	0.97	1.20	1.20	1.20
	0.75	0.52	0.73	0.82	0.97	1.20	1.20	1.20
	0.88	0.52	0.73	0.82	0.97	1.20	1.20	1.20
	1.00	0.52	0.73	0.82	0.97	1.20	1.20	1.20
$N_{R,II,k} [\text{kN}]$		0.52	0.73	0.82	0.97	1.20	n/a	n/a

No additional definitions

Self-drilling screw with sealing washer $\geq \varnothing 14 \text{ mm}$

SLG-S-S14-4,8 x L

Annex 23



Materials

Fastener:	Stainless steel A2 or A4 - EN ISO 3506
Washer:	Stainless steel A2 or A4 - EN ISO 3506 with EPDM-seal
Component I:	S280GD to S450GD - EN 10346
Component II:	S280GD to S450GD - EN 10346 HX300LAD to HX460LAD - EN 10346

Drilling-capacity $\Sigma(t_I + t_{II}) \leq 2.50 \text{ mm}$

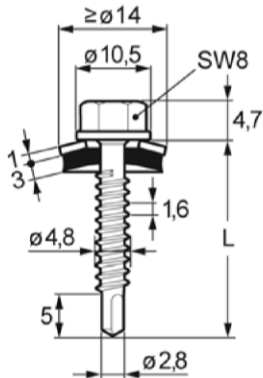
		$t_{II} [\text{mm}]$								
		0.40	0.50	0.55	0.63	0.75	0.88	1.00	1.25	1.50
$V_{R,k} [\text{kN}]$	0.40	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
	0.50	0.48	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
	0.55	0.48	0.75	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	0.63	0.48	0.75	0.90	1.13	1.13	1.13	1.13	1.13	1.13
	0.75	0.48	0.75	0.90	1.13	1.48	1.48	1.48	1.48	1.48
	0.88	0.48	0.75	0.90	1.13	1.48	1.73	1.73	1.73	1.73
	1.00	0.48	0.75	0.90	1.13	1.48	1.73	1.97	1.97	1.97
	1.25	0.48	0.75	0.90	1.13	1.48	1.73	1.97	1.97	-
	1.50	0.48	0.75	0.90	1.13	1.48	1.73	1.97	-	-
$N_{R,k} [\text{kN}]$	0.40	0.43	0.57	0.65	0.79	1.00	1.00	1.00	1.00	1.00
	0.50	0.43	0.57	0.65	0.79	1.03	1.32	1.61	1.61	1.61
	0.55	0.43	0.57	0.65	0.79	1.03	1.32	1.61	1.61	1.61
	0.63	0.43	0.57	0.65	0.79	1.03	1.32	1.61	1.61	1.61
	0.75	0.43	0.57	0.65	0.79	1.03	1.32	1.61	1.61	1.61
	0.88	0.43	0.57	0.65	0.79	1.03	1.32	1.61	1.61	1.61
	1.00	0.43	0.57	0.65	0.79	1.03	1.32	1.61	1.61	1.61
	1.25	0.43	0.57	0.65	0.79	1.03	1.32	1.61	1.61	-
	1.50	0.43	0.57	0.65	0.79	1.03	1.32	1.61	-	-
$N_{R,II,k} [\text{kN}]$		0.43	0.57	0.65	0.79	1.03	1.32	1.61	n/a	n/a

No additional definitions

Self-drilling screw with sealing washer $\geq \varnothing 14 \text{ mm}$

SL2-S-S14-5,5 x L

Annex 25



Materials

Fastener:	Carbon steel with anticorrosion coating
Washer:	Aluminum alloy - EN 573 with EPDM-seal
Component I:	S280GD to S450GD - EN 10346
Component II:	S280GD to S450GD - EN 10346 HX300LAD to HX460LAD - EN 10346

Drilling-capacity $\Sigma(t_I + t_{II}) \leq 2.50 \text{ mm}$

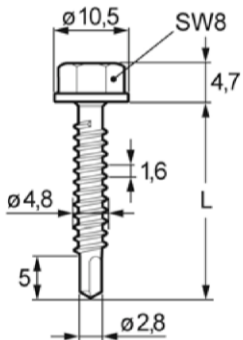
		$t_{II} [\text{mm}]$								
		0.40	0.50	0.55	0.63	0.75	0.88	1.00	1.25	1.50
$V_{R,k} [\text{kN}]$	0.40	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58
	0.50	0.58	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
	0.55	0.58	0.69	0.80	0.80	0.80	0.80	0.80	0.80	0.80
	0.63	0.58	0.69	0.80	0.98	0.98	0.98	0.98	0.98	0.98
	0.75	0.58	0.69	0.80	0.98	1.26	1.26	1.26	1.26	1.26
	0.88	0.58	0.69	0.80	0.98	1.26	1.82	1.82	1.82	1.82
	1.00	0.58	0.69	0.80	0.98	1.26	1.82	2.35	2.35	2.35
	1.25	0.58	0.69	0.80	0.98	1.26	1.82	2.35	2.35	-
	1.50	0.58	0.69	0.80	0.98	1.26	1.82	2.35	-	-
$N_{R,k} [\text{kN}]$	0.40	0.30	0.42	0.49	0.80	1.00	1.09	1.09	1.09	1.09
	0.50	0.30	0.42	0.49	0.80	1.00	1.40	1.70	1.92	1.92
	0.55	0.30	0.42	0.49	0.80	1.00	1.40	1.70	2.10	2.10
	0.63	0.30	0.42	0.49	0.80	1.00	1.40	1.70	2.10	2.10
	0.75	0.30	0.42	0.49	0.80	1.00	1.40	1.70	2.10	2.10
	0.88	0.30	0.42	0.49	0.80	1.00	1.40	1.70	2.10	2.10
	1.00	0.30	0.42	0.49	0.80	1.00	1.40	1.70	2.10	2.10
	1.25	0.30	0.42	0.49	0.80	1.00	1.40	1.70	2.10	-
	1.50	0.30	0.42	0.49	0.80	1.00	1.40	1.70	-	-
$N_{R,II,k} [\text{kN}]$		0.30	0.42	0.49	0.80	1.00	1.40	1.70	2.10	n/a

No additional definitions

Self-drilling screw with sealing washer $\geq \text{Ø } 14 \text{ mm}$

SL2-T-A14-4,8 x L

Annex 43



Materials

Fastener:	Carbon steel with anticorrosion coating
Washer:	-
Component I:	S280GD to S450GD - EN 10346
Component II:	S280GD to S450GD - EN 10346 HX300LAD to HX460LAD - EN 10346

Drilling-capacity $\Sigma(t_I + t_{II}) \leq 2.50 \text{ mm}$

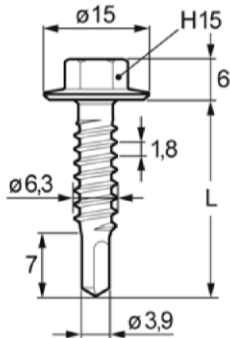
		$t_{II} \text{ [mm]}$					
		0.63	0.75	0.88	1.00	1.25	1.50
$V_{R,k} \text{ [kN]}$	0.63	1.40	1.40	1.90	2.40	2.40	2.40
	0.75	1.40	1.90	1.90	2.60	2.60	2.60
	0.88	1.80	1.90	2.80	2.80	2.80	2.80
	$t_I \text{ [mm]}$ 1.00	2.10	2.50	2.80	3.60	3.60	3.60
	1.25	2.10	2.50	2.80	3.60	3.60	-
	1.50	2.10	2.50	2.80	3.60	-	-
$N_{R,k} \text{ [kN]}$	0.63	0.80	1.00	1.40	1.70	2.10	2.10
	0.75	0.80	1.00	1.40	1.70	2.10	2.10
	0.88	0.80	1.00	1.40	1.70	2.10	2.10
	$t_I \text{ [mm]}$ 1.00	0.80	1.00	1.40	1.70	2.10	2.10
	1.25	0.80	1.00	1.40	1.70	2.10	-
	1.50	0.80	1.00	1.40	1.70	-	-
$N_{R,II,k} \text{ [kN]}$		0.80	1.00	1.40	1.70	2.10	n/a

No additional definitions

Self-drilling screw

SL2-4,8 x L

Annex 44



Materials

Fastener: Carbon steel with anticorrosion coating

Washer: -

Component I: S280GD to S450GD - EN 10346

Component II: S280GD to S450GD - EN 10346
HX300LAD to HX460LAD - EN 10346

Drilling-capacity $\Sigma(t_I + t_{II}) \leq 2.50 \text{ mm}$

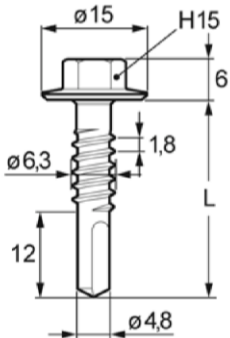
		$t_{II} \text{ [mm]}$					
		0.63	0.75	0.88	1.00	1.25	1.50
$V_{R,k} \text{ [kN]}$	0.63	0.90	1.00	1.10	1.30	1.60	1.60
	0.75	0.90	2.70	2.70	2.70	2.70	2.70
	0.88	0.90	2.70	3.60	3.60	3.60	3.60
	1.00	0.90	2.70	3.60	3.90	4.10	4.10
	1.25	0.90	2.70	3.60	3.90	4.10	-
	1.50	0.90	2.70	3.60	3.90	-	-
$N_{R,k} \text{ [kN]}$	0.63	0.80	1.10	1.40	1.60	2.10	2.10
	0.75	0.80	1.10	1.40	1.60	2.10	2.10
	0.88	0.80	1.10	1.40	1.60	2.10	2.10
	1.00	0.80	1.10	1.40	1.60	2.10	2.10
	1.25	0.80	1.10	1.40	1.60	2.10	-
	1.50	0.80	1.10	1.40	1.60	-	-
$N_{R,II,k} \text{ [kN]}$		0.80	1.10	1.40	1.60	2.10	n/a

No additional definitions

Self-drilling screw

SL2-H15-6,3 x L

Annex 45



Materials

Fastener: Carbon steel with anticorrosion coating

Washer: -

Component I: S280GD to S450GD - EN 10346

Component II: S280GD to S450GD - EN 10346
HX300LAD to HX460LAD - EN 10346

Drilling-capacity $\Sigma(t_I + t_{II}) \leq 3.50 \text{ mm}$

		$t_{II} [\text{mm}]$				
		1.00	1.25	1.50	1.75	2.00
$V_{R,k} [\text{kN}]$	1.00	-	3.50	4.10	4.10	4.10
	1.25	3.20	3.60	4.10	4.10	4.10
	1.50	3.20	3.60	5.40	5.40	4.10
	1.75	3.20	3.60	5.40	5.40	-
	2.00	3.20	3.60	5.40	-	-
$N_{R,k} [\text{kN}]$	1.00	-	2.20	2.60	2.60	2.60
	1.25	1.40	2.20	2.60	2.60	2.60
	1.50	1.40	2.20	2.60	2.60	2.60
	1.75	1.40	2.20	2.60	2.60	-
	2.00	1.40	2.20	2.60	-	-
$N_{R,II,k} [\text{kN}]$		1.40	2.20	2.60	n/a	n/a

No additional definitions

Self-drilling screw

SL3-H15-6,3 x L

Annex 46