

## S-MD 55 S / S-MD 65 S / S-MD 75 S 5.5xL stainless steel self-drilling screw

### Product data

#### General information

##### Material specification:

made from A2 (AISI 304) material,  
with hardened carbon steel drill point and  
thread start, with fitted EPDM sealing  
washer  $\varnothing$  16, 19 or 22 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

##### Approvals:

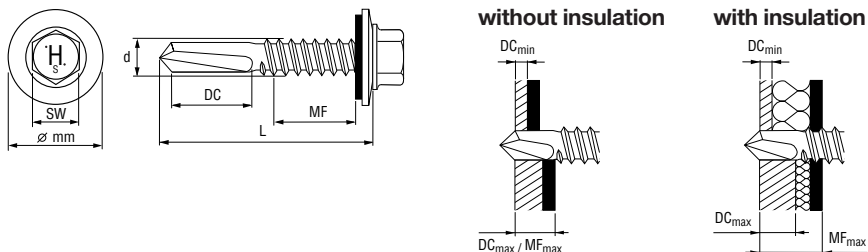


#### Dimensions

##### Uses:

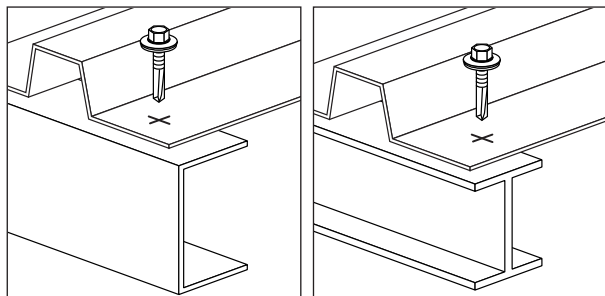
Fastening sheet metal to thick, hot-rolled steel beams, with or without intermediate insulation layers.

For corrosion-resistant and watertight joints.



#### Applications

##### Examples



**Load data**
**Design data**
**Drilling capacity  $\Sigma t$** 

max. 15.0 mm

**Tightening torque** (Recommendation)

Screw in end-stop oriented

Tightening torque: 5 Nm

**Component II steel with  $t_{II}$  [mm]**  
 S235J according to DIN EN 10025-2

**4.00      5.00      6.00      8.00      10.00**
**Component I steel with  $t_I$  [mm]**

S280GD or S320GD

(DIN EN 10326)

**Shear force  $V_{R,k}$  [kN]**

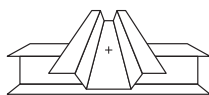
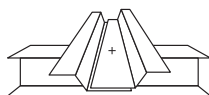
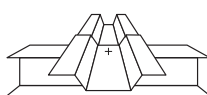
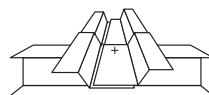
<b>0.63</b>	2.70 ac	2.70 ac	2.70 abcd	2.70 abcd	2.70 abcd
<b>0.75</b>	2.90 ac	2.90 ac	2.90 abcd	2.90 abcd	2.90 abcd
<b>0.88</b>	3.50 ac	3.50 ac	3.50 ac	3.50 ac	3.50 ac
<b>1.00</b>	4.00 ac	4.00 ac	4.00 ac	4.00 ac	4.00 ac
<b>1.13</b>	5.00	5.00	5.00 ac	5.00 ac	5.00 ac
<b>1.25</b>	6.00	6.00	6.00 ac	6.00 ac	6.00 a
<b>1.50</b>	6.00	6.20	6.50 ac	6.50	6.50 a
<b>1.75</b>	6.00	6.20	6.50	6.50	6.50
<b>2.00</b>	6.00	6.40	6.90	6.90	6.90

**Tension force  $N_{R,k}$  [kN]**

<b>0.50</b>	1.35 ac	1.35 ac	1.35 abcd	1.35 abcd	1.35 abcd
<b>0.55</b>	1.71 ac	1.71 ac	1.71 abcd	1.71 abcd	1.71 abcd
<b>0.63</b>	2.50 ac	2.50 ac	2.50 abcd	2.50 abcd	2.50 abcd
<b>0.75</b>	3.30 ac	3.30 ac	3.30 abcd	3.30 abcd	3.30 abcd
<b>0.88</b>	4.10 ac	4.10 ac	4.10 ac	4.10 ac	4.10 ac
<b>1.00</b>	4.70 ac	4.70 ac	4.70 ac	4.70 ac	4.70 ac
<b>1.13</b>	5.40	5.40	5.40 ac	5.40 ac	5.40 ac
<b>1.25</b>	5.90	5.90	5.90 ac	5.90 ac	5.90 a
<b>1.50</b>	6.90	6.90	6.90 ac	6.90 ac	6.90 a
<b>1.75</b>	6.90	6.90	6.90	6.90	6.90
<b>2.00</b>	8.00	8.00	8.00	8.00	8.00

Additional provisions:

For steel grade S275J and S350GD characteristic loads can be increased by 10%.

(a)  
single(b)  
side lap(c)  
end overlap(d)  
side lap and end overlap
**Safety factors according to EN 1993-1-3 and CUAP 06.02/07**

	Tension	Shear
<b>Partial safety concept</b>		
Partial safety factor	$\gamma_M = 1.33$	$\gamma_M = 1.33$
Influence of cyclic loading	$\alpha_{\text{cyclic}} = 1.0$	- / -
Design load	$N_{Rd} = 1.0 \cdot N_{Rk} / 1.33$	$V_{Rd} = V_{Rk} / 1.33$
<b>Global safety concept</b>		
Global safety factor *	$\gamma_{\text{GLOB}} = 2.0$	$\gamma_{\text{GLOB}} = 2.0$
Recommended load	$N_{\text{rec}} = 1.0 \cdot N_{Rk} / 2.0$	$V_{\text{rec}} = V_{Rk} / 2.0$

\* 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	Fastening thickness MF max. mm	Dimensions (dxL) mm	Sealing washer $\varnothing$ mm	Head size AF	Package contents	Ordering designation	Item no.
<b>4.6-15</b>	12	5.5 x 45	16	8	250	S-MD55 S 5.5 x 45	<b>375239</b>
<b>4.6-15</b>	17	5.5 x 50	16	8	250	S-MD55 S 5.5 x 50	<b>375240</b>
<b>4.6-15</b>	30	5.5 x 63	16	8	100	S-MD55 S 5.5 x 63	<b>375241</b>
<b>4.6-15</b>	47	5.5 x 80	16	8	100	S-MD55 S 5.5 x 80	<b>375242</b>
<b>4.6-15</b>	67	5.5 x 100	16	8	100	S-MD55 S 5.5 x 100	<b>375243</b>
<b>4.6-15</b>	12	5.5 x 45	19	8	250	S-MD65 S 5.5 x 45	<b>283065</b>
<b>4.6-15</b>	17	5.5 x 50	19	8	250	S-MD65 S 5.5 x 50	<b>283066</b>
<b>4.6-15</b>	30	5.5 x 63	19	8	100	S-MD65 S 5.5 x 63	<b>283067</b>
<b>4.6-15</b>	47	5.5 x 80	19	8	100	S-MD65 S 5.5 x 80	<b>283068</b>
<b>4.6-15</b>	67	5.5 x 100	19	8	100	S-MD65 S 5.5 x 100	<b>283069</b>
<b>4.6-15</b>	12	5.5 x 45	22	8	250	S-MD75 S 5.5 x 45	<b>285603</b>
<b>4.6-15</b>	17	5.5 x 50	22	8	250	S-MD75 S 5.5 x 50	<b>285604</b>
<b>4.6-15</b>	30	5.5 x 63	22	8	100	S-MD75 S 5.5 x 63	<b>285605</b>
<b>4.6-15</b>	47	5.5 x 80	22	8	100	S-MD75 S 5.5 x 80	<b>285606</b>
<b>4.6-15</b>	67	5.5 x 100	22	8	100	S-MD75 S 5.5 x 100	<b>285607</b>