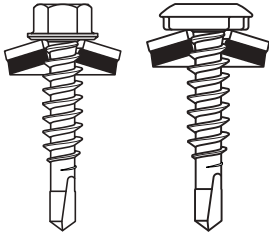


SL2-S-Ø 6,3



SL2-S
6,3xL

SL2-S-L12
6,3xL

Approval DIBt Z-14.1-4



Material

Fastener:

austenitic stainless steel,
material grade A2 / AISI 304
Mat. -1.4301

Washer:

A = aluminium AlMg3 or
S = stainless steel A2,
with vulcanized EPDM sealant

Head type

- Hexagonal head, 8 mm A/F



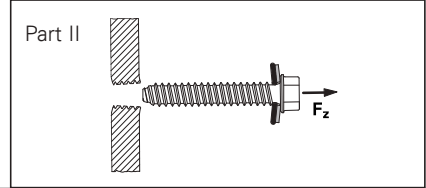
- **irius**[®] L12, Ø12mm underhead drive



- D12, Ø12mm pan head, T25 recess



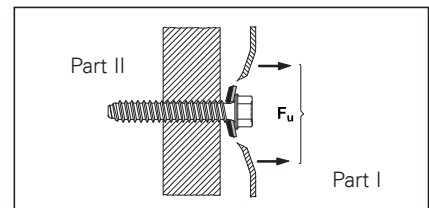
Pull-out load F_z (N)



Material grade/ $R_{m, \min}$ t_{II} (mm)	Material grade/ $R_{m, \min}$ t_I (mm)	Test result (N)				
		$F_{z, \text{avg}}$	s	R_k		
Steel						
S350GD, 420 N/mm ²	0.50	S350GD*	0.50	2063	100	1607
S350GD, 420 N/mm ²	0.63	S350GD*	0.50	2874	97	2402
S350GD, 420 N/mm ²	0.63			1380	56	1136
S320GD, 390 N/mm ²	0.75			1732	57	1284
S320GD, 390 N/mm ²	0.88			2197	80	1594
Aluminium						
AlSi1MgMn, 275 N/mm ²	0.50			564	26	420
AlSi1MgMn, 275 N/mm ²	0.80			1246	45	871

* Subconstruction existing in two parts

Pull-over load F_u (N)



Part I			Test results (N)		
Material grade/ $R_{m, \min}$	t_I (mm)	Washer Mat. Ø mm	$F_{u, \text{avg}}$	s	R_k
Steel					
S350GD, 420 N/mm ²	0.50	Steel S 16	4453	437	3077
S320GD, 390 N/mm ²	0.75	S 16	7127	718	4606
Aluminium					
AlSi1MgMn, 275 N/mm ²	0.50	Steel S 16	1545	160	1001
PE300 1/4 hart, 220 N/mm ²	0.80	S 16	3139	130	2413

All calculations, measurements, fasteners and design methods have to be verified by a responsible designer or engineer, regarding the corresponding structure and load. Please consult your national norms and approvals.

$R_{m, \min}$ is the minimum standard tensile strength of Part 1 or 2.

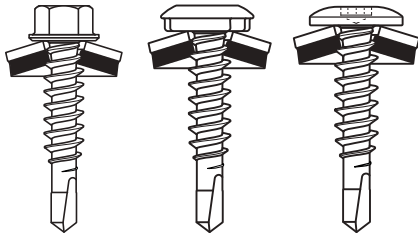
t is the nominal steel thickness of Part 1 or 2

F_{avg} or \bar{x} are the arithmetic mean values of the test results.

s is the standard deviation.

R_k is the characteristic resistance of fastenings according to the EN requirements.

SL2-S-Ø 6,3



SL2-S-6,3xL

SL2-S-L12 6,3xL

SL2-S-D12 6,3xL

Approval DIBt Z-14.1-4



Material

Fastener:

austenitic stainless steel,
material grade A2 / AISI 304
Mat. -1.4301

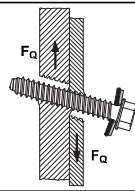
Washer:

A = aluminium AlMg3 or
S = stainless steel A2,
with vulcanized EPDM sealant

Shear load F_q (N)

$F_{q,avg}$ is measured between a displacement of 0,5 - 3,00 mm

Part II



Part I

Part I Material grade/ $R_{m, min}$ t_i (mm)	Part II Material grade t_{ii} (mm)	Washer Mat. Ø mm	Test result (N)		
			$F_{q,avg}$	s	R_k
Steel	Steel	Steel			
S350GD, 420 N/mm ² 0.50	S350GD, 420 N/mm ² 0.50	S 16	1567	141	1083
S350GD, 420 N/mm ² 0.63	S350GD, 420 N/mm ² 0.63	S 16	2012	131	1649
S320GD, 390 N/mm ² 0.75	S320GD, 390 N/mm ² 0.75	S 16	2922	215	2001
S320GD, 390 N/mm ² 0.88	S320GD, 390 N/mm ² 0.88	S 16	3701	238	2432
Aluminium	Aluminium				
AlSi1MgMn 275 N/mm ² 0.50	AlSi1MgMn 0.50	S 16	785	135	427
AlMg3 ¼h, 220 N/mm ² 0.80	AlMg3 ¼h 0.80	S 16	1565	123	1032

All calculations, measurements, fasteners and design methods have to be verified by a responsible designer or engineer, regarding the corresponding structure and load. Please consult your national norms and approvals.

Head type

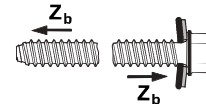
- Hexagonal head, 8 mm A/F



- **irius**® L12, Ø12mm underhead drive

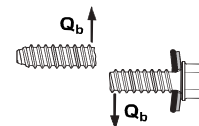


Tensile breaking load Z_b (N)



\bar{x} = 16641
s = 108

Shear breaking load Q_b (N)



\bar{x} = 12444
s = 362

$R_{m, min}$ is the minimum standard tensile strength of Part 1 or 2.

t is the nominal steel thickness of Part 1 or 2

F_{avg} or \bar{x} are the arithmetic mean values of the test results.

s is the standard deviation.

R_k is the characteristic resistance of fastenings according to the EN requirements.