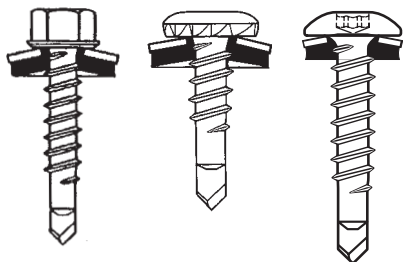


SX3



SX3 Ø 5,5xL SX3-L12 Ø 5,5xL SX3-D12 Ø 5,5xL

Admission: **SX3**
 SX3-L12

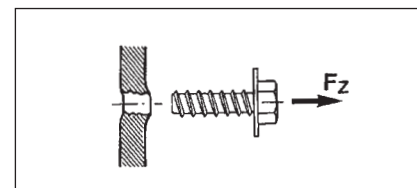
DIBt Z-14.1-4 Page 3.6a / 3.7a / 3.8a

Material
Fastener:
 stainless steel A2, 18/8
 Material number 1.4301, AISI 304

Washer:
 stainless steel A2, 18/8
 Material number 1.4301, AISI 304
 with vulcanized EPDM

Size
Head/Drive:
 - Hex., 8 mm A/F
 - L12 Head (Ø 12 mm) **irus®** Drive
 - D12 pan head (Ø 12 mm) Torx T25

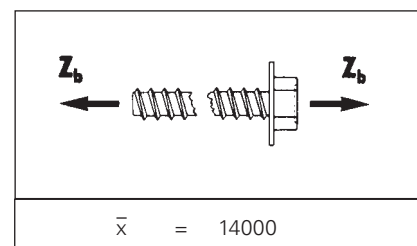
Pull-out load Fz (N)



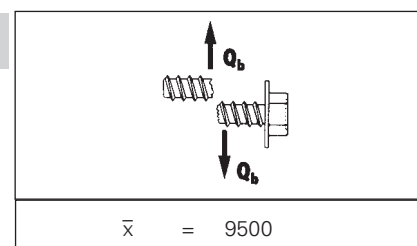
Part II (Subconstruction)

Material	Thickness (mm)	\bar{x}	s	
St37 (375 N/mm ²)	1,0	1500	90	
	1,5	2700	110	
	2,0	3800	140	
	2,5	5000	170	
	2x0,63	1900	40	
	2x0,75	2300	70	
	2x1,0	3300	100	
	2x1,25	4300	130	
	St52 (530 N/mm ²)	1,0	2100	90
		1,25	3008	66
1,5		3500	120	
2,0		5200	140	
2,5		8400	190	
2x0,63		2300	320	
2x0,75		2800	300	
2x1,0		4000	250	
2x1,25		5100	200	
Alu (230 N/mm ²)		1,5	2100	80
	2,0	2900	110	
	2,5	3800	130	
	2x0,63	1000	70	
	2x0,75	1600	120	
	2x1,0	2300	160	
	2x1,2	3100	200	

Tensile breaking load Z_b (N)



Shear breaking load Q_b (N)



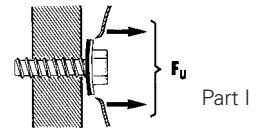
\bar{x} = arithmetical mean value
 s = Standard deviation

All stated values are \bar{x} values, representing the arithmetical mean value from laboratory testing concluded up to now, appropriate safety margins should be applied for field conditions. Consult also your country's approval documents.

SX3

Pull-over load F_u (N)

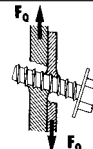
Part II



Material	Blechdicke Part I (mm)	Washer A10/12		Washer S16		Washer S19		Washer S22	
		\bar{x}	s	\bar{x}	s	\bar{x}	s	\bar{x}	s
St37 (375 N/mm ²)	0,5	–	–	5800 ¹	200	5800 ¹	200	–	–
	0,63	–	–	5800	200	5800	200	–	–
	0,7	–	–	5800	200	5800	200	–	–
	0,75	–	–	5800	200	5800	200	–	–
	0,88	–	–	5800	200	5800	200	–	–
	1,0	–	–	5800	200	5800	200	–	–
St52 (530 N/mm ²)	0,4	–	–	3400	340	4300	370	–	–
	0,5	–	–	4500	230	5000	200	–	–
	0,63	–	–	6200	100	8400 ¹	190	–	–
	0,7	–	–	8400 ¹	190	8400	190	–	–
	0,75	–	–	8400	190	8400	190	–	–
	0,88	–	–	8400	190	8400	190	–	–
Aluminium (230 N/mm ²)	0,4	–	–	1800	280	2500	420	2800	230
	0,5	722	101	2100	270	2850	440	3200	600
	0,6	–	–	2400	255	3200	470	3600	290
	0,7	–	–	2650	240	3500	500	3900	320
	0,8	2297	196	2950	230	3800	530	4900	350
	0,9	–	–	3200	200	4150	560	4650	385
	1,0	–	–	3500	200	4500	590	5000	420
	1,25	3000	82	–	–	–	–	–	–

¹ = Pull-over load fail in Part I

Shear load F_Q (N)



Material	Thickness in mm		Washer S16		Washer S19	
	Part I	Part II	\bar{x}	s	\bar{x}	s
St37 (375 N/mm ²)	0,63	0,75	2150	320	–	–
	0,63	2x0,63	2430	370	2360	200
	0,63	1,5	3040	220	–	–
	0,63	2,0	3580	200	–	–
	0,63	2x1,25	2170	315	–	–
	0,75	2x0,75	3220	570	3190	330
	0,75	1,5	4270	235	–	–
	0,75	2x1,25	3770	320	–	–
	1,0	1,0	3000	260	–	–
	1,0	1,5	5020	610	–	–
	1,0	2x1,0	4300	315	4380	140
	1,0	2	4800	290	–	–
	1,0	2x1,25	6140	780	–	–
1,25	1,5	6160	435	–	–	
Alu (230 N/mm ²)	0,5	0,8	1200	100	1200	450
	0,5	1,0	1500	170	1750	100
	0,5	2,0	1200	120	1800	200
	0,8	2,0	2500	180	3000	150
	1,0	1,0	2300	120	2000	450
	1,0	2,0	3800	320	3800	300

Shear load: Figures obtained with displacement of 3 mm between purlin and sheet.

\bar{x} = arithmetical mean value
s = Standard deviation

All stated values are \bar{x} values, representing the arithmetical mean value from laboratory testing concluded up to now, appropriate safety margins should be applied for field conditions. Consult also your country's approval documents.