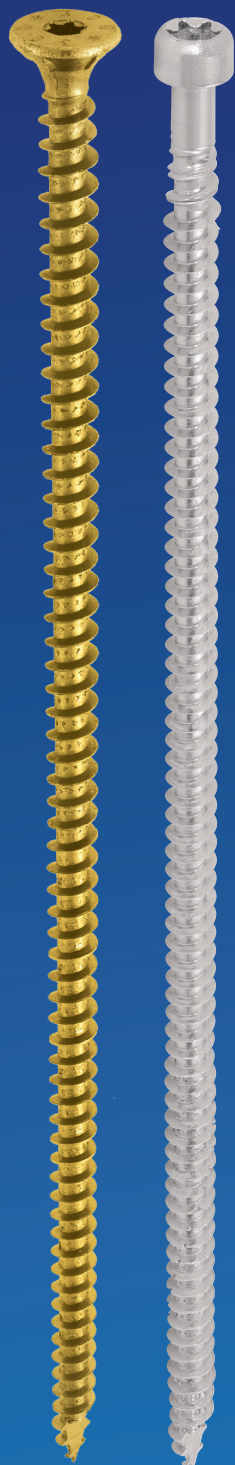


RAPID[®] Fullthread

schmied
schrauben hainfeld



Head shape - cylinder head



Head shape - countersunk head



Half-tip with compactor



Dimensions

8x120 to 12x1000mm
in Yellwin 500+

from 8x450 and 10x450
in Zinc-Nickel-Coating
available

8x120 to 8x300mm
in Stainless Steel
available



- > Highest quality
- > Innovative technology
- > Made in AUSTRIA



YellWin 500+

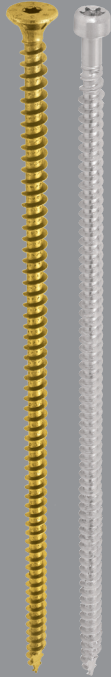
ZincNickel

Stainless steel



RAPID[®] Fullthread

Specially hardened, slide coating, YellWin 500+, ZincNickel, Stainless Steel



Tip

With patented half-tip, partially combined with compactor tip:

- > Reduced edge distance
- > Minimised blast effect
- > Improved service life of the screwing device thanks to 50 percent lower fastening torque
- > No pre-drilling required
- > Quick bite even when drilling in inclined position

Head geometry

- > Cylinder head: Reduced split effect. Deep counter-sinking of the head is possible
- > Countersunk head: Ideal for connecting steel components

Thread

Full thread optimised for more efficient screwing

- > Excellent pull-out values
- > Excellent pressure values
- > Maximum load-bearing capacity.

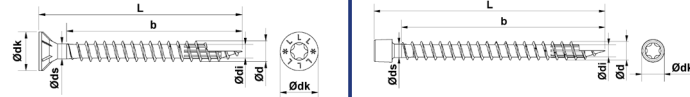


advantages of stainless steel

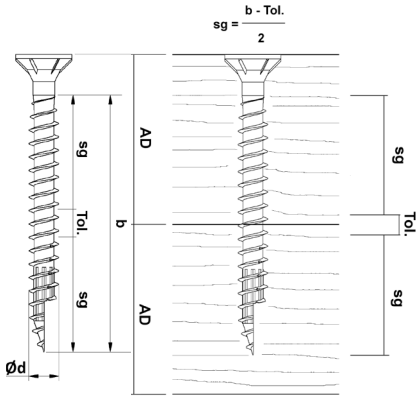
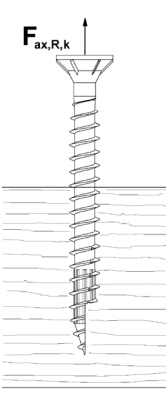
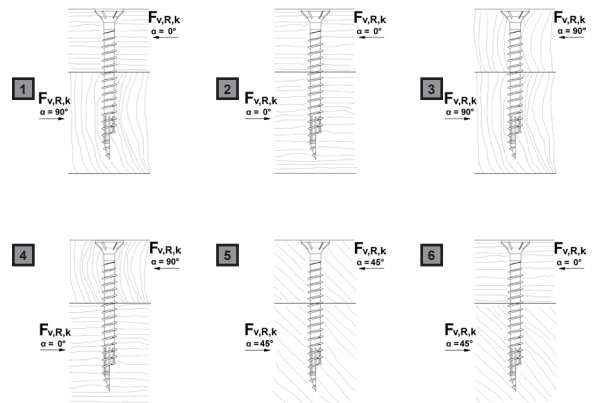
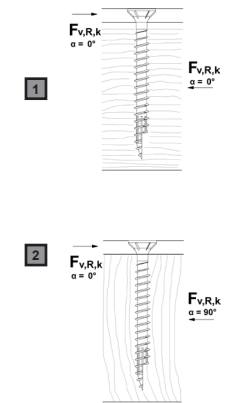
- > absolute corrosion resistant
- > ideal for every application outdoors for example terraces, balconies, facades, fences or railings



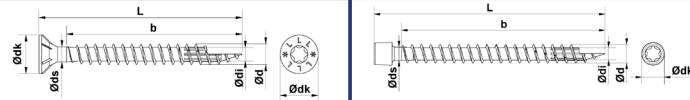
Characteristic		Unit	Ø 8,0	Ø 10,0	Ø 12,0
Head diameter	Countersunk head	d _k [mm]	15,0	18,5	18,5
	Cylinder head	d _k [mm]	10,2	13,4	14,2
Core diameter		d _i [mm]	5,2	6,1	6,8
Shaft diameter		d _s [mm]	5,9	7,1	8,2
Drive		TX	40	50	50
Tensile load	Steel	f _{tens,k} [kN]	24,1	40,0	46,7
	Stainless Steel	f _{tens,k} [kN]	13,8	-	-
Yield moment	Steel	M _{y,k} [Nm]	20,3	36,7	48,5
	Stainless Steel	M _{y,k} [Nm]	14,2	-	-
Tolerance ^{e)}		Tol. [mm]	20,0	20,0	20,0



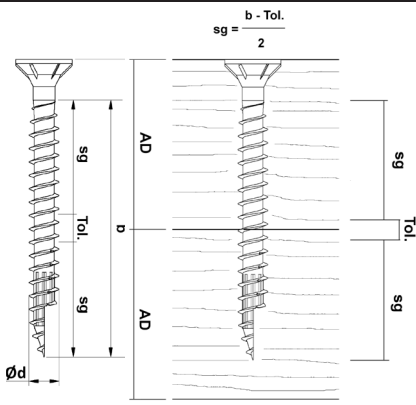
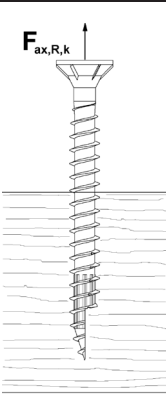
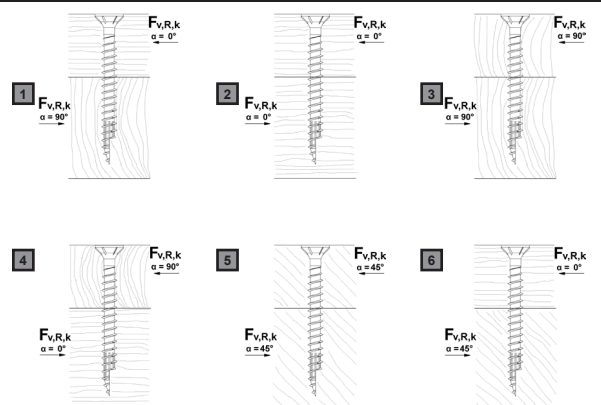
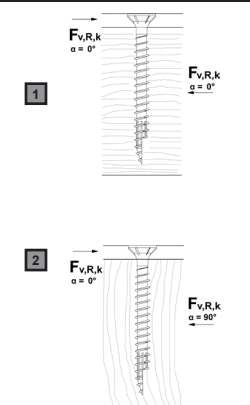
Values are applied for countersunk head (S) and cylinder head (Z)

Dimensions					Extraction resistance		Wood - wood shearing						Steel - wood shearing				
																	
d x L [mm]	b [mm]	Head types on stock ^{h)}	AD ^{f)} [mm]	sg [mm]	R _{ASD} [kN]	F _{ax,R,k} [kN]	R _{ASD} [kN]	1. F _{V,R,k} [kN]	2. F _{V,R,k} [kN]	3. F _{V,R,k} [kN]	4. F _{V,R,k} [kN]	5. F _{V,R,k} [kN]	6. F _{V,R,k} [kN]	R _{ASD} [kN]	1. F _{V,R,k} [kN]	2. F _{V,R,k} [kN]	
								α=0°...90°	α _{AD} =90° α _{ET} =0°	α=0°	α=90°	α _{AD} =0° α _{ET} =90°	α _{AD} =45° α _{ET} =45°	α _{AD} =0° α _{ET} =45°	α=0°...90°	α=0°	α=90°
Ø 8,0																	
8,0 x 120	110	S / Z ^{j)}	65	45	1,80	4,71	0,77	4,20	4,54	3,95	4,20	4,20	4,36	1,36	7,64	6,80	
8,0 x 140	130	S / Z ^{j)}	75	55	2,20	5,76	1,02	4,47	4,80	4,21	4,47	4,47	4,62	1,36	8,16	7,33	
8,0 x 160	150	S / Z ^{j)}	85	65	2,60	6,81	1,09	4,73	5,07	4,48	4,73	4,73	4,88	1,36	8,69	7,85	
8,0 x 180	170	S / Z ^{j)}	95	75	3,00	7,86	1,09	4,99	5,33	4,74	4,99	4,99	5,15	1,36	9,21	7,85	
8,0 x 200	190	S / Z ^{j)}	105	85	3,40	8,90	1,09	5,25	5,59	5,00	5,25	5,25	5,41	1,36	9,52	7,85	
8,0 x 220	210	S / Z ^{j)}	115	95	3,80	9,95	1,09	5,51	5,85	5,26	5,51	5,51	5,67	1,36	9,52	7,85	
8,0 x 240	230	S / Z ^{j)}	125	105	4,20	11,00	1,09	5,78	6,11	5,52	5,78	5,78	5,93	1,36	9,52	7,85	
8,0 x 260	250	S / Z ^{j)}	135	115	4,60	12,05	1,09	6,04	6,38	5,55	6,04	6,04	6,19	1,36	9,52	7,85	
8,0 x 280	270	S / Z ^{j)}	145	125	5,00	13,10	1,09	6,06	6,64	5,55	6,06	6,06	6,37	1,36	9,52	7,85	
8,0 x 300	290	S / Z ^{j)}	155	135	5,40	14,14	1,09	6,06	6,73	5,55	6,06	6,06	6,37	1,36	9,52	7,85	
8,0 x 350	340	S / Z ^{j)}	180	160	6,40	16,76	1,09	6,06	6,73	5,55	6,06	6,06	6,37	1,36	9,52	7,85	
8,0 x 400	390	S / Z ^{j)}	205	185	7,40	19,38	1,09	6,06	6,73	5,55	6,06	6,06	6,37	1,36	9,52	7,85	
8,0 x 450	428	S / Z	236	204	8,16	21,37	1,09	6,06	6,73	5,55	6,06	6,06	6,37	1,36	9,52	7,85	
8,0 x 500	478	S / Z	261	229	9,16	23,99	1,09	6,06	6,73	5,55	6,06	6,06	6,37	1,36	9,52	7,85	
8,0 x 600	578	S / Z	311	279	11,10	24,10	1,09	6,06	6,73	5,55	6,06	6,06	6,37	1,36	9,52	7,85	
Stainless Steel																	
Ø 8,0																	
8,0 x 120	110	S	65	45	-	4,71	-	3,71	3,99	3,50	3,71	3,71	3,84	-	6,86	6,16	
8,0 x 140	130	S	75	55	-	5,76	-	3,97	4,25	3,76	3,97	3,97	4,10	-	7,38	6,57	
8,0 x 160	150	S	85	65	-	6,81	-	4,23	4,51	4,02	4,23	4,23	4,36	-	7,43	6,57	
8,0 x 180	170	S	95	75	-	7,86	-	4,49	4,78	4,28	4,49	4,49	4,62	-	7,43	6,57	
8,0 x 200	190	S	105	85	-	8,90	-	4,75	5,04	4,54	4,75	4,75	4,88	-	7,43	6,57	
8,0 x 220	210	S	115	95	-	9,95	-	5,02	5,30	4,64	5,02	5,02	5,15	-	7,43	6,57	
8,0 x 240	230	S	125	105	-	11,00	-	5,06	5,56	4,64	5,06	5,06	5,32	-	7,43	6,57	
8,0 x 260	250	S	135	115	-	12,05	-	5,06	5,63	4,64	5,06	5,06	5,32	-	7,43	6,57	
8,0 x 280	270	S	145	125	-	13,10	-	5,06	5,63	4,64	5,06	5,06	5,32	-	7,43	6,57	
8,0 x 300	290	S	155	135	-	13,80	-	5,06	5,63	4,64	5,06	5,06	5,32	-	7,43	6,57	

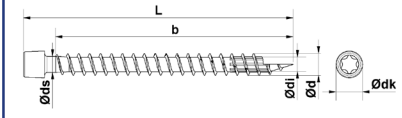
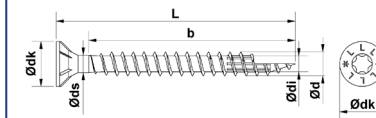
Characteristic		Unit	Ø 8,0	Ø 10,0	Ø 12,0
Head diameter	Countersunk head	d _k [mm]	15,0	18,5	18,5
	Cylinder head	d _k [mm]	10,2	13,4	14,2
Core diameter		d _i [mm]	5,2	6,1	6,8
Shaft diameter		d _s [mm]	5,9	7,1	8,2
Drive		TX	40	50	50
Tensile load	Steel	f _{tens,k} [kN]	24,1	40,0	46,7
	Stainless Steel	f _{tens,k} [kN]	13,8	-	-
Yield moment	Steel	M _{y,k} [Nm]	20,3	36,7	48,5
	Stainless Steel	M _{y,k} [Nm]	14,2	-	-
Tolerance ^{e)}		Tol. [mm]	20,0	20,0	20,0



Values are applied for countersunk head (S) and cylinder head (Z)

Dimensions					Extraction resistance		Wood - wood shearing						Steel - wood shearing			
																
d x L [mm]	b [mm]	Head types on stock h)	AD 1) [mm]	sg [mm]	R ASD [kN]	F ax,R,k [kN]	R ASD [kN]	1. F v,R,k [kN]	2. F v,R,k [kN]	3. F v,R,k [kN]	4. F v,R,k [kN]	5. F v,R,k [kN]	6. F v,R,k [kN]	R ASD [kN]	1. F v,R,k [kN]	2. F v,R,k [kN]
$\alpha=0^{\circ} \dots 90^{\circ}$ $\alpha_{AD}=90^{\circ}$ $\alpha_{ET}=0^{\circ}$ $\alpha=0^{\circ}$ $\alpha=90^{\circ}$ $\alpha_{AD}=0^{\circ}$ $\alpha_{ET}=90^{\circ}$ $\alpha_{AD}=45^{\circ}$ $\alpha_{ET}=45^{\circ}$ $\alpha=0^{\circ} \dots 90^{\circ}$ $\alpha=0^{\circ}$ $\alpha=90^{\circ}$																
Ø 10,0																
10,0 x 120	108	S	66	44	2,20	5,50	0,94	5,85	6,38	5,30	5,57	5,85	6,09	2,13	10,45	8,85
10,0 x 160	148	S	86	64	3,20	8,00	1,36	6,47	7,00	6,08	6,47	6,47	6,72	2,13	11,70	10,40
10,0 x 180	168	S	96	74	3,70	9,25	1,57	6,79	7,31	6,40	6,79	6,79	7,03	2,13	12,33	11,03
10,0 x 200	188	S / Z	106	84	4,20	10,50	1,70	7,10	7,63	6,71	7,10	7,10	7,34	2,13	12,95	11,56
10,0 x 220	208	S / Z	116	94	4,70	11,75	1,70	7,41	7,94	7,02	7,41	7,41	7,65	2,13	13,58	11,56
10,0 x 240	228	S / Z	126	104	5,20	13,00	1,70	7,72	8,25	7,33	7,72	7,72	7,97	2,13	14,16	11,56
10,0 x 260	248	S / Z	136	114	5,70	14,25	1,70	8,04	8,56	7,65	8,04	8,04	8,28	2,13	14,16	11,56
10,0 x 280	268	S / Z	146	124	6,20	15,50	1,70	8,35	8,88	7,96	8,35	8,35	8,59	2,13	14,16	11,56
10,0 x 300	288	S / Z	156	134	6,70	16,75	1,70	8,66	9,19	8,17	8,66	8,66	8,90	2,13	14,16	11,56
10,0 x 350	338	S / Z	181	159	7,95	19,87	1,70	8,95	9,97	8,17	8,95	8,95	9,44	2,13	14,16	11,56
10,0 x 400	388	S / Z	206	184	9,20	23,00	1,70	8,95	10,01	8,17	8,95	8,95	9,44	2,13	14,16	11,56
10,0 x 450	426	S / Z	237	203	10,15	25,37	1,70	8,95	10,01	8,17	8,95	8,95	9,44	2,13	14,16	11,56
10,0 x 500	476	S / Z	262	228	11,40	28,50	1,70	8,95	10,01	8,17	8,95	8,95	9,44	2,13	14,16	11,56
10,0 x 600	576	S / Z	312	278	13,90	34,75	1,70	8,95	10,01	8,17	8,95	8,95	9,44	2,13	14,16	11,56
10,0 x 800	776	S / Z	412	378	15,50	40,00	1,70	8,95	10,01	8,17	8,95	8,95	9,44	2,13	14,16	11,56
10,0 x 1000	976	S / Z	512	478	15,50	40,00	1,70	8,95	10,01	8,17	8,95	8,95	9,44	2,13	14,16	11,56
Ø 12,0																
12,0 x 200	180	S	110	80	4,80	10,75	2,04	8,23	8,92	7,72	8,23	8,23	8,54	3,06	14,86	13,17
12,0 x 220	200	S	120	90	5,40	12,09	2,30	8,56	9,25	8,06	8,56	8,56	8,88	3,06	15,53	13,84
12,0 x 240	220	S	130	100	6,00	13,44	2,45	8,90	9,59	8,40	8,90	8,90	9,21	3,06	16,20	14,26
12,0 x 260	240	S	140	110	6,60	14,78	2,45	9,23	9,93	8,73	9,23	9,23	9,55	3,06	16,88	14,25
12,0 x 280	260	S	150	120	7,20	16,12	2,45	9,57	10,26	9,07	9,57	9,57	9,88	3,06	17,55	14,25
12,0 x 300	280	S	160	130	7,80	17,47	2,45	9,91	10,60	9,40	9,91	9,91	10,22	3,06	17,63	14,25
12,0 x 350	330	S	185	155	9,30	20,83	2,45	10,75	11,44	10,08	10,75	10,75	11,06	3,06	17,64	14,25
12,0 x 400	380	S	210	180	10,80	24,19	2,45	11,08	12,28	10,08	11,08	11,08	11,71	3,06	17,64	14,25
12,0 x 500	480	S	260	230	13,80	30,91	2,45	11,08	12,47	10,08	11,08	11,08	11,71	3,06	17,64	14,25
12,0 x 600	580	S	310	280	16,80	37,63	2,45	11,08	12,47	10,08	11,08	11,08	11,71	3,06	17,64	14,25
12,0 x 800	780	S	410	380	18,00	46,70	2,45	11,08	12,47	10,08	11,08	11,08	11,71	3,06	17,64	14,25
12,0 x 1000	980	S	510	480	18,00	46,70	2,45	11,08	12,47	10,08	11,08	11,08	11,71	3,06	17,64	14,25

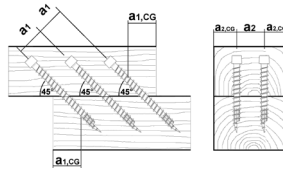
Characteristic		Unit	Ø 8,0	Ø 10,0	Ø 12,0
Head diameter	Countersunk head	d _k [mm]	15,0	18,5	18,5
	Cylinder head	d _k [mm]	10,2	13,4	14,2
Core diameter		d _i [mm]	5,2	6,1	6,8
Shaft diameter		d _s [mm]	5,9	7,1	8,2
Drive		TX	40	50	50
Tensile load	Steel	f _{tens,k} [kN]	24,1	40,0	46,7
	Stainless Steel	f _{tens,k} [kN]	13,8	-	-
Yield moment	Steel	M _{y,k} [Nm]	20,3	36,7	48,5
	Stainless Steel	M _{y,k} [Nm]	14,2	-	-
Tolerance ^{e)}		Tol. [mm]	10,0	10,0	10,0



Values are applied for countersunk head (S) and cylinder head (Z)

Dimensions			Shear stress				Crosswise screw connection – primary and secondary supports									
d x L [mm]	b [mm]	Head type on stock ^{h)}	AD _{min} ^{g)} [mm]	sg [mm]	R _{ASD} [kN]	F _{v,Rk} [kN]	$h_{HTmin} = h_{NTmin}$ [mm]	b_{HTmin} [mm]	$b_{NTmin}^{d)}$ [mm]			m [mm]	m_{OFL} [mm]	F _{v,Rk} [kN]		
									Number of pairs					Number of pairs		
									1	2	3			1	2	3
Ø 8,0																
8,0 x 120	110	S / Z ⁱ⁾	51 ^{c)}	50	1,41	3,71	99	60	84	124	164	46	51	7,41	14,32	21,07
8,0 x 140	130	S / Z ⁱ⁾	58 ^{c)}	60	1,70	4,44	114	67	84	124	164	53	58	8,89	17,18	25,27
8,0 x 160	150	S / Z ⁱ⁾	65 ^{c)}	70	1,98	5,18	128	74	84	124	164	60	65	10,37	20,05	29,49
8,0 x 180	170	S / Z ⁱ⁾	72 ^{c)}	80	2,26	5,93	142	81	84	124	164	67	72	11,85	22,91	33,71
8,0 x 200	190	S / Z ⁱ⁾	79 ^{c)}	90	2,55	6,67	156	88	84	124	164	74	80	13,34	25,78	37,93
8,0 x 220	210	S / Z ⁱ⁾	86 ^{c)}	100	2,83	7,41	170	95	84	124	164	81	87	14,82	28,65	42,15
8,0 x 240	230	S / Z ⁱ⁾	93 ^{c)}	110	3,11	8,15	184	102	84	124	164	88	94	16,30	31,50	46,35
8,0 x 260	250	S / Z ⁱ⁾	100	120	3,39	8,89	198	109	84	124	164	96	101	17,26	33,33	49,01
8,0 x 280	270	S / Z ⁱ⁾	108	130	3,68	9,63	213	117	84	124	164	103	108	18,00	34,72	51,00
8,0 x 300	290	S / Z ⁱ⁾	115	140	3,96	10,37	227	124	84	124	164	110	115	18,75	36,10	53,00
8,0 x 350	340	S / Z ⁱ⁾	132	165	4,67	12,23	262	141	84	124	164	127	133	20,60	39,56	57,98
8,0 x 400	390	S / Z ⁱ⁾	150	190	5,37	14,08	297	159	84	124	164	145	150	22,45	43,02	62,96
8,0 x 450	428	S / Z	172	209	5,91	15,91	333	177	84	124	164	167	172	23,86	45,64	66,74
8,0 x 500	478	S / Z	190	234	6,62	17,04	368	194	84	124	164	185	190	25,41	48,54	70,92
8,0 x 600	578	S / Z	225	284	7,85	17,04	439	230	84	124	164	220	225	25,41	48,54	70,92
Stainless Steel																
Ø 8,0																
8,0 x 120	110	S	51 ^{c)}	50	1,41	3,71	99	60	84	124	164	46	51	7,41	14,32	21,07
8,0 x 140	130	S	58 ^{c)}	60	1,70	4,44	114	67	84	124	164	53	58	8,89	17,18	25,27
8,0 x 160	150	S	65 ^{c)}	70	1,98	5,18	128	74	84	124	164	60	65	10,37	20,05	29,49
8,0 x 180	170	S	72 ^{c)}	80	2,26	5,93	142	81	84	124	164	67	72	11,85	22,91	33,71
8,0 x 200	190	S	79 ^{c)}	90	2,55	6,67	156	88	84	124	164	74	80	13,34	25,78	37,93
8,0 x 220	210	S	86 ^{c)}	100	2,83	7,41	170	95	84	124	164	81	87	14,15	27,31	40,13
8,0 x 240	230	S	93 ^{c)}	110	3,11	8,15	184	102	84	124	164	88	94	14,88	28,68	42,11
8,0 x 260	250	S	100	120	3,39	8,89	198	109	84	124	164	96	101	15,63	30,06	44,11
8,0 x 280	270	S	108	130	3,68	9,63	213	117	84	124	164	103	108	16,37	31,45	46,10
8,0 x 300	290	S	115	140	3,96	10,37	227	124	84	124	164	110	115	16,50	31,69	46,44

Minimum distances for screw groups upon shear load



In a joint with a screw group subject to stress caused by a force component in the direction of the shank, the effective number of screws is:

$$n_{ef} = n^{0,9}$$

$$F_{ef} = F_{V,Rk} \cdot n_{ef}$$

n...Number of screws interacting in a joint

F_{ef}...effective force

n_{ef}...effective number of screws

Minimum distances for load at an angle to or in the screw axis^{b)}

			Ø8,0	Ø10,0	Ø12,0
a ₁ [mm]	Minimum screw distances on a plane parallel to the direction of the grain and the screw axis	ETA	40,0	50,0	60,0
a ₂ [mm]	Minimum screw distances perpendicular to a plane parallel to the direction of the grain and the screw axis	ETA	40,0	50,0	60,0
a _{1,CG} [mm]	Minimum edge distance of the end-grain stubs from the centre of gravity of the screw thread relative to the structural component	ETA	40,0	50,0	60,0
a _{2,CG} [mm]	Minimum edge distance of the centre of gravity of the screw thread relative to the structural component	ETA	32,0	40,0	48,0
a _{2,red} [mm]	Distance a ₂ can be reduced to 2.5 x d if 25 x d° can be maintained for the product for the distances a ₁ and a ₂ .	ETA	20,0	25,0	30,0

Values are applied for countersunk head (S) and cylinder head (Z)

Dimensions			Shear stress				Crosswise screw connection – primary and secondary supports										
d x L [mm]	b [mm]	Head type on stock ^{h)}	AD _{min} ^{g)} [mm]	sg [mm]	R _{ASD} [kN]	F _{v,Rk} [kN]	h _{HTmin} = h _{NTmin} [mm]	b _{HTmin} [mm]	b _{NTmin} ^{d)} [mm]			m [mm]	m _{OFL} [mm]	F _{v,Rk} [kN]			
									Number of pairs					Number of pairs			
12																	
10,0 x 120	108	S	52 ^{c)}	49	1,73	4,33	120	60	105	155	205	47	53	8,66	16,74	24,62	
10,0 x 160	148	S	66 ^{c)}	69	2,44	6,10	128	74	105	155	205	61	67	12,19	23,57	34,68	
10,0 x 180	168	S	73 ^{c)}	79	2,79	6,98	142	81	105	155	205	68	74	13,96	26,99	39,71	
10,0 x 200	188	S / Z	80 ^{c)}	89	3,15	7,86	156	88	105	155	205	75	81	15,73	30,41	44,73	
10,0 x 220	208	S / Z	87 ^{c)}	99	3,50	8,75	170	95	105	155	205	82	89	17,50	33,82	49,76	
10,0 x 240	228	S / Z	94 ^{c)}	109	3,85	9,63	184	102	105	155	205	89	96	19,27	37,24	54,79	
10,0 x 260	248	S / Z	101 ^{c)}	119	4,21	10,51	198	109	105	155	205	96	103	21,03	40,66	59,82	
10,0 x 280	268	S / Z	108 ^{c)}	129	4,56	11,40	213	117	105	155	205	103	110	22,80	44,07	64,84	
10,0 x 300	288	S / Z	115 ^{c)}	139	4,91	12,28	227	124	105	155	205	110	117	24,02	46,40	68,23	
10,0 x 350	338	S / Z	133	164	5,80	14,50	262	141	105	155	205	128	135	26,23	50,33	74,18	
10,0 x 400	388	S / Z	151	189	6,68	16,70	297	159	105	155	205	146	152	28,44	54,64	80,11	
10,0 x 450	426	S / Z	173	208	7,35	18,38	333	177	105	155	205	168	174	30,12	57,78	84,63	
10,0 x 500	476	S / Z	190	233	8,24	20,59	368	194	105	155	205	185	192	32,33	61,90	90,56	
10,0 x 600	576	S / Z	226	283	10,01	25,01	439	230	105	155	205	221	227	36,75	70,15	102,44	
10,0 x 800	776	S / Z	296	383	10,96	28,28	580	300	105	155	205	291	298	40,02	76,26	111,24	
10,0 x 1000	976	S / Z	367	483	10,96	28,28	722	371	105	155	205	362	369	40,02	76,26	111,24	
Ø 12,0																	
12,0 x 200	180	S	83 ^{c)}	85	3,61	8,08	156	88	126	186	246	78	85	16,15	31,22	45,94	
12,0 x 220	200	S	90 ^{c)}	95	4,03	9,02	170	95	126	186	246	85	92	18,05	34,89	51,34	
12,0 x 240	220	S	97 ^{c)}	105	4,45	9,98	184	102	126	186	246	92	99	19,96	38,58	56,75	
12,0 x 260	240	S	104 ^{c)}	115	4,88	10,92	198	109	126	186	246	99	106	21,85	42,24	62,15	
12,0 x 280	260	S	111 ^{c)}	125	5,30	11,88	213	117	126	186	246	106	113	23,76	45,93	67,57	
12,0 x 300	280	S	118 ^{c)}	135	5,73	12,83	227	124	126	186	246	113	121	25,66	49,60	72,97	
12,0 x 350	330	S	136 ^{c)}	160	6,79	15,20	262	141	126	186	246	131	138	30,04	58,05	85,39	
12,0 x 400	380	S	153	185	7,85	17,58	297	159	126	186	246	148	156	32,42	62,49	91,78	
12,0 x 500	480	S	189	235	9,97	22,33	368	194	126	186	246	184	191	37,17	71,35	104,55	
12,0 x 600	580	S	224	285	12,09	27,08	439	230	126	186	246	219	227	41,92	80,22	117,32	
12,0 x 800	780	S	295	385	12,73	33,02	580	300	126	186	246	290	297	47,86	91,31	133,29	
12,0 x 1000	980	S	366	485	12,73	33,02	722	371	126	186	246	361	368	47,86	91,31	133,29	