

EJOT® SUPER-SAPHIR **self-drilling screw JT3-6-5.5**

Fastening profiled steel sheets, profiled aluminium sheets and sandwich panels to metal substructures

www.ejot.com

EJOT®

Self-drilling screws JF3/JT3

A2 stainless steel with hardened steel point / steel drill point



EJOT® SUPER-SAPHIR self-drilling screw JT3-6-5.5

Length [mm]	For sandwich panels [mm]	Clamp thickness [mm]	PU	Price/100 [EUR]	Order description	Article number
Sealing washer E16, Ø 16 mm						
25	-	0 - 7	500		JT3-6-5.5x25-E16*	3 572 211 361
30	-	0 - 11	500		JT3-6-5.5x30-E16	3 572 311 361
35	-	0 - 16	500		JT3-6-5.5x35-E16	3 572 511 361
50	-	0 - 31	250		JT3-6-5.5x50-E16	3 592 811 361
70	20 - 40	18 - 51	250		JT3-6-5.5x70-E16	3 593 911 361
90	40 - 60	38 - 71	200		JT3-6-5.5x90-E16	3 596 111 361
110	60 - 80	58 - 91	200		JT3-6-5.5x110-E16	3 596 211 361
130	80 - 100	78 - 111	100		JT3-6-5.5x130-E16	3 596 311 361
150	100 - 120	98 - 131	150		JT3-6-5.5x150-E16	3 596 411 361
170	120 - 140	118 - 151	150		JT3-6-5.5x170-E16	3 596 511 361
190	140 - 160	138 - 171	100		JT3-6-5.5x190-E16	3 596 611 361
Sealing washer E22, Ø 22 mm						
25	-	0 - 7	500		JT3-6-5.5x25-E22	3 572 213 361
30	-	0 - 11	500		JT3-6-5.5x30-E22	3 572 313 361
35	-	0 - 16	250		JT3-6-5.5x35-E22	3 572 513 361
50	-	0 - 31	250		JT3-6-5.5x50-E22	3 592 813 361
70	20 - 40	18 - 51	200		JT3-6-5.5x70-E22	3 593 913 361
90	40 - 60	38 - 71	150		JT3-6-5.5x90-E22	3 596 113 361
110	60 - 80	58 - 91	150		JT3-6-5.5x110-E22	3 596 213 361
130	80 - 100	78 - 111	100		JT3-6-5.5x130-E22	3 596 313 361
150	100 - 120	98 - 131	100		JT3-6-5.5x150-E22	3 596 413 361
170	120 - 140	118 - 151	100		JT3-6-5.5x170-E22	3 596 513 361
190	140 - 160	138 - 171	100		JT3-6-5.5x190-E22	3 596 613 361

*JT6 made of A4 stainless steel upon request



Approval
ETA-10/0200
ETA-13/0177

Cross reference

- Accessories
- ORKAN storm washers
- Self-tapping screw JZ3-6.3
- Metal screwdriver SCS 6.3
- Metal screwdriver SCS 6.3-SH2

Application area

- Fastening profiled steel sheet to 1.5–5 mm steel substructure
- Fastening profiled aluminium sheet and sandwich panels to 1.5–5 mm steel substructure

Properties

- A2 stainless steel with hardened drill point
- Stainless steel sealing washer
- Pre-assembled sealing washer

Technical Data

Drilling capacity $t_1 + t_2$	1.0 + 5.0 mm
Drive	Hexagon AF8
Ø screw	5.5 mm

Minimum tensile strength	
Ø mm	kN
5.5	10.0

Minimum shear strength	
Ø mm	kN
5.5	7.5

Note

See relevant annexes of European technical approvals at the following pages.

Please download complete European technical approvals at our website:

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Self-drilling screws JF3/JT3

A2 stainless steel with hardened steel point / steel drill point

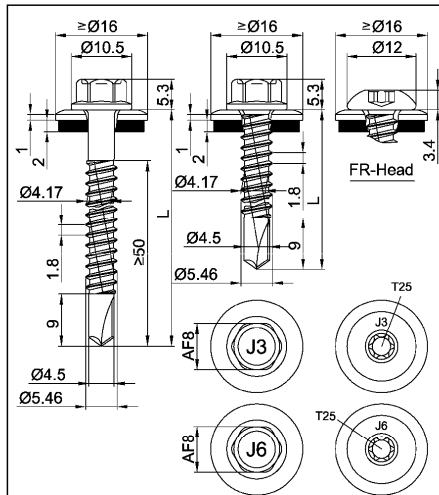


Page 65 of European technical approval
ETA-10/0200 of 27 June 2013

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Materials

Fastener: stainless steel (1.4301) - EN 10088,
stainless steel (1.4404) - EN 10088
Washer: stainless steel (1.4301) - EN 10088
Component I: S280GD, S320GD or S350GD - EN 10346
Component II: S235, S275 or S355 - EN 10025-1
S280GD, S320GD or S350GD - EN 10346

Drilling capacity $\Sigma t_i \leq 6,00$ mm

Timber substructures

no performance determined

$t_{N,II}$ [m mm]	1,50	2,00	2,50	3,00	4,00	—	2 x 1,50	—
$M_{t,nom}$	5 Nm							
$V_{R,x}$ [kN] for $t_{N,II}$ [mm]	0,50	—	—	—	—	—	—	—
	0,55	—	—	—	—	—	—	—
	0,63	2,10 ac	2,40 ac	2,60 ac	2,90 ac	2,90 ac	2,40 ac	—
	0,75	2,50 —	2,80 ac	3,10 ac	3,30 ac	3,30 ac	3,10 ac	—
	0,88	2,90 —	3,20 —	3,40 ac	3,70 ac	3,70 ac	3,70 ac	—
	1,00	3,10 —	3,40 —	4,00 —	4,20 ac	4,20 ac	3,70 —	—
	1,13	3,30 —	3,80 —	4,50 —	4,60 —	4,60 —	3,70 —	—
	1,25	3,40 —	3,90 —	4,70 —	4,90 —	4,90 —	3,70 —	—
	1,50	3,80 —	4,40 —	5,00 —	5,50 —	5,50 —	3,70 —	—
	1,75	3,80 —	4,40 —	5,00 —	5,50 —	5,50 —	3,70 —	—
	2,00	3,80 —	4,40 —	5,00 —	5,50 —	5,50 —	3,70 —	—
$N_{R,x}$ [kN] for $t_{N,II}$ [mm]	0,50	0,92 ac	1,30 ac	1,30 ac	1,30 ac	1,30 ac	1,30 ac	—
	0,55	1,16 ac	1,64 ac	1,64 ac	1,64 ac	1,64 ac	1,64 ac	—
	0,63	1,70 ac	2,40 ac	2,40 ac	2,40 ac	2,40 ac	2,40 ac	—
	0,75	1,70 —	2,60 ac	2,90 ac	2,90 ac	2,90 ac	2,70 ac	—
	0,88	1,70 —	2,60 —	3,50 ac	3,50 ac	3,50 ac	2,70 ac	—
	1,00	1,70 —	2,60 —	3,50 —	4,10 ac	4,10 ac	2,70 —	—
	1,13	1,70 —	2,60 —	3,50 —	4,10 —	4,10 —	2,70 —	—
	1,25	1,70 —	2,60 —	3,50 —	4,10 —	4,10 —	2,70 —	—
	1,50	1,70 —	2,60 —	3,50 —	4,50 —	4,50 —	2,70 —	—
	1,75	1,70 —	2,60 —	3,50 —	4,50 —	4,50 —	2,70 —	—
	2,00	1,70 —	2,60 —	3,50 —	4,50 —	4,50 —	2,70 —	—

Self drilling screw

JT3-6-5,5 x L
JT6-6-5,5 x L
JT3-FR-6-5,5 x L
JT6-FR-6-5,5 x L

with hexagon head or round head with Torx® drive system and sealing washer $\geq \text{Ø}16$ mm

Annex 52

Self-drilling screws JF3/JT3

A2 stainless steel with hardened steel point / steel drill point

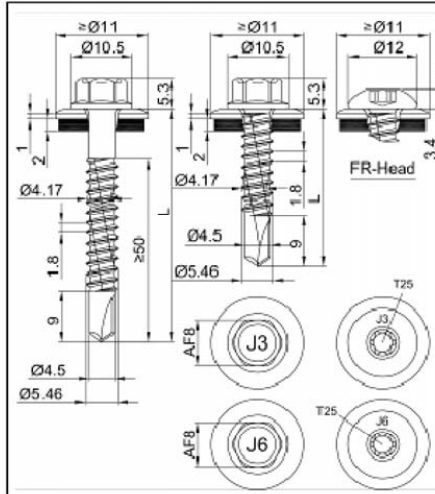


Page 66 of European technical approval
ETA-10/0200 of 27 June 2013

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Materials

Fastener: stainless steel (1.4301 / 1.4567) – EN 10088
stainless steel (1.4401 / 1.4578) – EN 10088

Washer: stainless steel (1.4301) – EN 10088
with vulcanised EPDM seal

Component I: aluminium alloy
with $R_{m,min} = 165 \text{ N/mm}^2$ – EN 573

Component II: aluminium alloy
with $R_{m,min} = 165 \text{ N/mm}^2$ – EN 573

Drilling capacity $\Sigma t_i \leq 6,50 \text{ mm}$

Timber substructures

for timber substructures no performance determined

$t_{N,II} =$	2,00	2,50	3,00	4,00	
$M_{t,nom} =$	—				
$V_{R,k}$ for $t_{N,I} =$	0,50	0,71 ac	0,71 ac	0,71 ac	0,71 ac
	0,60	0,89 ac	0,91 ac	0,93 ac	0,93 ac
	0,70	1,07 ac	1,11 ac	1,15 ac	1,15 ac
	0,80	1,25 ac	1,31 ac	1,36 ac	1,36 ac
	0,90	1,43 ac	1,51 ac	1,58 ac	1,58 ac
	1,00	1,61 ac	1,71 ac	1,80 ac	1,80 ac
	1,20	1,80 -	1,93 -	2,06 -	2,17 ac
	1,50	2,09 -	2,27 -	2,45 -	2,72 a
2,00	2,56 -	2,83 -	3,10 -	3,63 a	
$N_{R,III,k} =$	1,03	1,68	2,33	3,63	

Pull-through resistance of component I according to EN 1999-1-4, chapter 8.3.3.1 or specifications of the manufacturer of the aluminium structural sheeting.

Self-drilling screw

JT3-6-5,5xL JT6-6-5,5xL
JT3-FR-6-5,5xL JT6-FR-6-5,5xL
With hexagon head or FR-head and seal washer $\geq \text{Ø } 11,0 \text{ mm}$

Annex 53

Self-drilling screws JF3/JT3

A2 stainless steel with hardened steel point / steel drill point

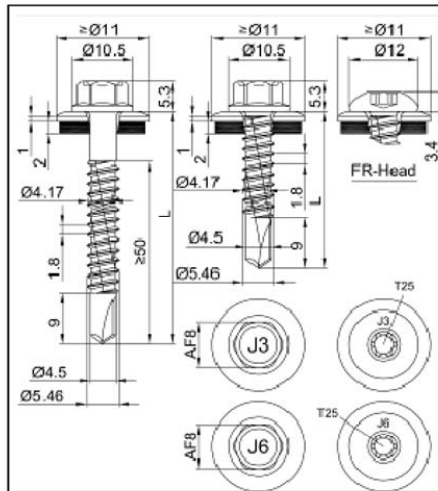


Page 67 of European technical approval
ETA-10/0200 of 27 June 2013

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Materials

Fastener: stainless steel (1.4301 / 1.4567) – EN 10088
stainless steel (1.4401 / 1.4578) – EN 10088

Washer: stainless steel (1.4301) – EN 10088
with vulcanised EPDM seal

Component I: aluminium alloy
with $R_{m,min} = 215 \text{ N/mm}^2$ – EN 573

Component II: aluminium alloy
with $R_{m,min} = 215 \text{ N/mm}^2$ – EN 573

Drilling capacity $\Sigma t \leq 6,50 \text{ mm}$

Timber substructures

for timber substructures no performance determined

$t_{N,II} =$	2,00		2,50		3,00		4,00		
$M_{t,nom} =$	—								
$V_{F,k}$ for $t_{N,I} =$	0,50	0,93	ac	0,93,	ac	0,93	ac	0,93	ac
	0,60	1,16	ac	1,19	ac	1,21	ac	1,21	ac
	0,70	1,39	ac	1,45	ac	1,50	ac	1,50	ac
	0,80	1,63	ac	1,70	ac	1,78	ac	1,78	ac
	0,90	1,86	ac	1,96	ac	2,07	ac	2,07	ac
	1,00	2,09	ac	2,22	ac	2,35	ac	2,35	ac
	1,20	2,34	-	2,51	-	2,69	-	2,72	ac
	1,50	2,71	-	2,95	-	3,19	-	3,48	a
2,00	3,33	-	3,68	-	4,03	-	4,73	a	
$N_{R,II,k} =$	1,35		2,20		3,04		4,73		

Pull-through resistance of component I according to EN 1999-1-4, chapter 8.3.3.1 or specifications of the manufacturer of the aluminium structural sheeting.

Self-drilling screw

JT3-6-5,5xL JT6-6-5,5xL
JT3-FR-6-5,5xL JT6-FR-6-5,5xL
With hexagon head or FR-head and seal washer $\geq \varnothing 11,0 \text{ mm}$

Annex 54

Self-drilling screws JF3/JT3

A2 stainless steel with hardened steel point / steel drill point

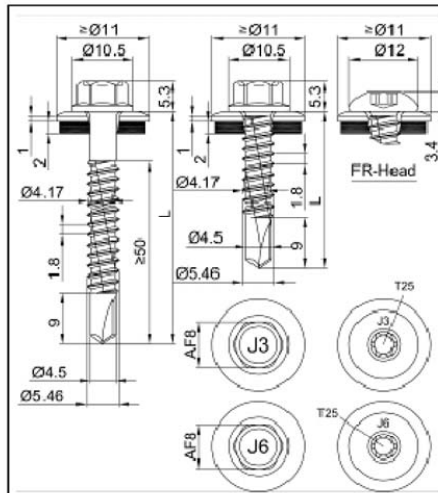


Page 68 of European technical approval
ETA-10/0200 of 27 June 2013

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Materials

Fastener: stainless steel (1.4301 / 1.4567) – EN 10088
stainless steel (1.4401 / 1.4578) – EN 10088

Washer: stainless steel (1.4301) – EN 10088
with vulcanised EPDM seal

Component I: aluminium alloy
with $R_{m,min} = 165 \text{ N/mm}^2$ – EN 573

Component II: S235 – EN 10025-1
S280GD, S320GD – EN 10346

Drilling capacity $\Sigma t \leq 6,50 \text{ mm}$

Timber substructures

for timber substructures no performance determined

$t_{N,II} =$	1,50	1,75	2,00	2,50	3,00	4,00	-	2x1,50	
$M_{t, nom} =$	—								
$V_{R,k}$ for $t_{N,I} =$	0,50 0,60 0,70 0,80 0,90 1,00 1,20 1,50 2,00	0,71 ac 0,91 ac 1,10 ac 1,30 ac 1,49 ac 1,69 ac 1,69 - 1,69 - 1,69 -	0,71 ac 0,91 ac 1,11 ac 1,31 ac 1,51 ac 1,71 ac 1,79 - 1,92 - 2,13 -	0,71 ac 0,91 ac 1,12 ac 1,32 ac 1,53 ac 1,73 ac 1,90 - 2,15 - 2,56 -	0,71 ac 0,92 ac 1,13 ac 1,34 ac 1,55 ac 1,76 ac 1,97 - 2,30 - 2,83 -	0,71 ac 0,93 ac 1,15 ac 1,36 ac 1,58 ac 1,80 ac 2,06 - 2,45 - 3,10 -	0,71 ac 0,93 ac 1,15 ac 1,36 ac 1,58 ac 1,80 ac 2,17 ac 2,72 a 3,63 a	- - - - - - - - - - - - - - - - - -	0,71 ac 0,91 ac 1,10 ac 1,30 ac 1,49 ac 1,69 ac 1,69 - 1,69 - 1,69 -
$N_{R,II,k} =$	1,70	2,15	2,60	3,50	4,50	4,50	-	2,70	

Pull-through resistance of component I according to EN 1999-1-4, chapter 8.3.3.1 or specifications of the manufacturer of the aluminium structural sheeting.

Self-drilling screw

JT3-6-5,5xL JT6-6-5,5xL
JT3-FR-6-5,5xL JT6-FR-6-5,5xL
With hexagon head or FR-head and seal washer $\geq \varnothing 11,0 \text{ mm}$

Annex 55

Self-drilling screws JF3/JT3

A2 stainless steel with hardened steel point / steel drill point

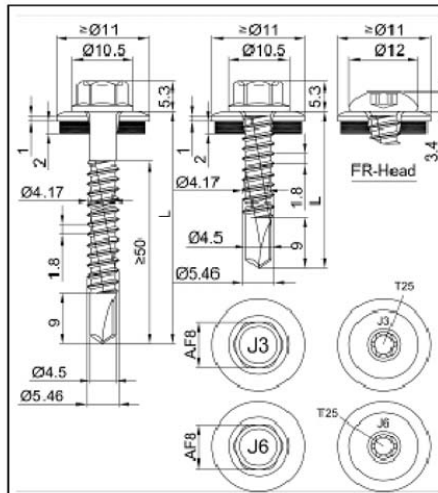


Page 69 of European technical approval
ETA-10/0200 of 27 June 2013

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Materials

Fastener: stainless steel (1.4301 / 1.4567) – EN 10088
stainless steel (1.4401 / 1.4578) – EN 10088

Washer: stainless steel (1.4301) – EN 10088
with vulcanised EPDM seal

Component I: aluminium alloy
with $R_{m,min} = 215 \text{ N/mm}^2$ – EN 573

Component II: S235 – EN 10025-1
S280GD, S320GD – EN 10346

Drilling capacity $\Sigma t \leq 6,50 \text{ mm}$

Timber substructures

for timber substructures no performance determined

$t_{N,II} =$	1,50	1,75	2,00	2,50	3,00	4,00	-	2x1,50			
$M_{t, nom} =$	—										
$V_{R,k}$ for $t_{N,I} =$	0,50	0,93 ac	0,93 ac	0,93 ac	0,93 ac	0,93 ac	0,93 ac	0,93 ac	-	-	0,93 ac
	0,60	1,18 ac	1,19 ac	1,19 ac	1,20 ac	1,21 ac	1,21 ac	1,21 ac	-	-	1,18 ac
	0,70	1,44 ac	1,45 ac	1,46 ac	1,48 ac	1,50 ac	1,50 ac	1,50 ac	-	-	1,44 ac
	0,80	1,69 ac	1,71 ac	1,72 ac	1,75 ac	1,78 ac	1,78 ac	1,78 ac	-	-	1,69 ac
	0,90	1,95 ac	1,97 ac	1,99 ac	2,03 ac	2,07 ac	2,07 ac	2,07 ac	-	-	1,95 ac
	1,00	2,20 ac	2,23 ac	2,25 ac	2,30 ac	2,35 ac	2,35 ac	2,35 ac	-	-	2,20 ac
	1,20	2,20 -	2,32 -	2,45 -	2,58 -	2,69 -	2,72 ac	2,72 ac	-	-	2,20 -
	1,50	2,20 -	2,45 -	2,79 -	2,99 -	3,19 -	3,48 a	3,48 a	-	-	2,20 -
	2,00	2,20 -	2,67 -	3,33 -	3,68 -	4,03 -	4,73 a	4,73 a	-	-	2,20 -
$N_{R,II,k} =$	1,70	2,15	2,60	3,50	4,50	4,50	-	2,70			

Pull-through resistance of component I according to EN 1999-1-4, chapter 8.3.3.1 or specifications of the manufacturer of the aluminium structural sheeting.

Self-drilling screw

JT3-6-5,5xL JT6-6-5,5xL
JT3-FR-6-5,5xL JT6-FR-6-5,5xL
With hexagon head or FR-head and seal washer $\geq \varnothing 11,0 \text{ mm}$

Annex 56

Self-drilling screws JF3/JT3

A2 stainless steel with hardened steel point / steel drill point



Page 16 of European technical approval
ETA-13/0177 of 26 April 2013

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Materials:

Fastener: stainless steel (1.4301) – EN 10088
stainless steel (1.4401) – EN 10088

Washer: stainless steel (1.4301) – EN 10088

Component I: S280GD – EN 10346

Component II: S235, S275 or S355 – EN 10025-1
S280GD, S320GD or S350GD – EN 10346

Drilling capacity: $\Sigma(t_{N2} + t_{II}) \leq 6,5 \text{ mm}$

Timber supporting structures:
No performance determined

t_{N1}, t_{N2}, d, D [mm]	t_{II} [mm]									
	1,50	2,0	2,50	3,00	4,00	5,00	—	—	—	
$V_{R,k}$ [kN]	0,40	0,60	0,60	0,60	0,60	0,60	0,60	—	—	—
	0,50	1,50	1,50	1,50	1,50	1,50	1,50	—	—	—
	0,55	1,50	1,50	1,50	1,50	1,50	1,50	—	—	—
	0,63	1,60	1,60	1,60	1,60	1,60	1,60	—	—	—
	0,75	2,70	2,70	2,70	2,70	2,70	2,70	—	—	—
	0,88	2,70	2,70	2,70	2,70	2,70	2,70	—	—	—
	1,00	2,70	2,70	2,70	2,70	2,70	2,70	—	—	—
$N_{R,k}$ [kN]	0,40	1,57	1,57	1,57	1,57	1,57	1,57	—	—	—
	0,50	1,70	1,70	1,70	1,70	1,70	1,70	—	—	—
	0,55	2,00	2,00	2,00	2,00	2,00	2,00	—	—	—
	0,63	1,90	2,20	2,20	2,20	2,20	2,20	—	—	—
	0,75	1,90	2,60	3,40	3,40	3,40	3,40	—	—	—
	0,88	1,90	2,60	4,10	4,10	4,10	4,10	—	—	—
	1,00	1,90	2,60	4,20	4,90	4,90	4,90	—	—	—
max u [mm]	40	20,0	15,5	7,0	7,0	7,0	6,0	—	—	—
	50	23,0	18,5	9,0	9,0	8,5	7,0	—	—	—
	60	26,0	21,5	11,0	11,0	10,0	8,0	—	—	—
	70	28,5	24,0	13,5	13,5	13,0	11,0	—	—	—
	80	31,5	27,0	16,0	16,0	15,0	13,0	—	—	—
	100	37,5	33,0	21,5	21,5	19,0	16,0	—	—	—
	120	40,0	38,5	27,0	27,0	23,0	20,0	—	—	—
	140	40,0	40,0	32,5	32,5	26,0	23,0	—	—	—
≥ 160	40,0	40,0	32,5	32,5	26,0	23,0	—	—	—	
$M_{t,nom}$ [Nm]										

Self drilling screw		Annex 6
EJOT® JT3-6-5,5 x L	EJOT® JT6-6-5,5 x L	
EJOT® JT3-FR-6-5,5 x L	EJOT® JT6-FR-6-5,5 x L	
with sealing washer $\geq \varnothing 16 \text{ mm}$		

Z36918.13

8.06.02-210/10

Self-drilling screws JF3/JT3

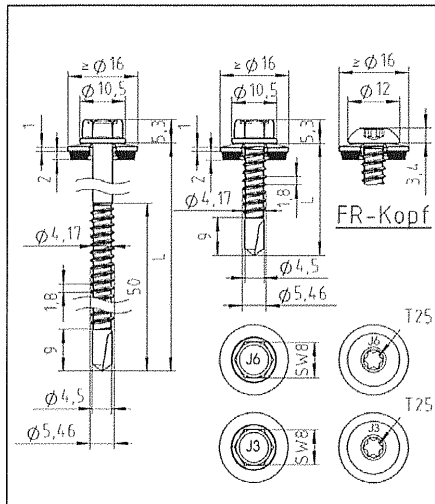
A2 stainless steel with hardened steel point / steel drill point



Page 17 of European technical approval
ETA-13/0177 of 26 April 2013

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Materials:

Fastener: stainless steel (1.4301) – EN 10088
stainless steel (1.4401) – EN 10088

Washer: stainless steel (1.4301) – EN 10088

Component I: S320GD or S350GD – EN 10346

Component II: S235, S275 or S355 – EN 10025-1
S280GD, S320GD or S350GD – EN 10346

Drilling capacity: $\Sigma(t_{N2} + t_H) \leq 6,50$ mm

Timber supporting structures:

No performance determined

t_{N1}, t_{N2}, d, D [mm]	t_H [mm]									
	1,50	2,00	2,50	3,00	4,00	5,00	—	—	—	
$V_{R,k}$ [kN]	0,40	0,65	0,65	0,65	0,65	0,65	0,65	—	—	—
	0,50	1,60	1,60	1,60	1,60	1,60	1,60	—	—	—
	0,55	1,70	1,70	1,70	1,70	1,70	1,70	—	—	—
	0,63	1,80	1,80	1,80	1,80	1,80	1,80	—	—	—
	0,75	2,80	2,80	2,80	2,80	2,80	2,80	—	—	—
	0,88	2,80	2,80	2,80	2,80	2,80	2,80	—	—	—
	1,00	2,80	2,80	2,80	2,80	2,80	2,80	—	—	—
$N_{R,k}$ [kN]	0,40	1,70	1,70	1,70	1,70	1,70	1,70	—	—	—
	0,50	1,90	1,90	1,90	1,90	1,90	1,90	—	—	—
	0,55	1,90	2,10	2,10	2,10	2,10	2,10	—	—	—
	0,63	1,90	2,40	2,40	2,40	2,40	2,40	—	—	—
	0,75	1,90	2,60	3,60	3,60	3,60	3,60	—	—	—
	0,88	1,90	2,60	4,20	4,50	4,50	4,50	—	—	—
	1,00	1,90	2,60	4,20	5,00	5,00	5,00	—	—	—
max u [mm]	40	20,0	15,5	7,0	7,0	7,0	6,0	—	—	—
	50	23,0	18,5	9,0	9,0	8,5	7,0	—	—	—
	60	26,0	21,5	11,0	11,0	10,0	8,0	—	—	—
	70	28,5	24,0	13,5	13,5	13,0	11,0	—	—	—
	80	31,5	27,0	16,0	16,0	15,0	13,0	—	—	—
	100	37,5	33,0	21,5	21,5	19,0	16,0	—	—	—
	120	40,0	38,5	27,0	27,0	23,0	20,0	—	—	—
	140	40,0	40,0	32,5	32,5	26,0	23,0	—	—	—
≥ 160	40,0	40,0	32,5	32,5	26,0	23,0	—	—	—	
$M_{t,nom}$ [Nm]										

Self drilling screw

EJOT® JT3-6-5,5 x L EJOT® JT6-6-5,5 x L
EJOT® JT3-FR-6-5,5 x L EJOT® JT6-FR-6-5,5 x L

with sealing washer $\geq \phi 16$ mm

Annex 7