

## **EJOT® SUPER-SAPHIR** **self-drilling screw JT3-FR-12-5.5**

Fastening corrugated profile steel and  
aluminium sheet to 4–10 mm steel substructure

## Self-drilling screws JF3/JT3

A2 stainless steel with hardened steel point / steel drill point

# EJOT®

### EJOT® SUPER-SAPHIR self-drilling screw JT3-FR-12-5.5

with truss head

Ø [mm]	Length [mm]	Clamp thickness [mm]	PU	Price/100 [EUR]	Order description	Article number
Sealing washer E11, Ø 11 mm						
5.5	40	11	500		JT3-FR-12-5.5x40-E11	3 595 669 318

#### Application Range

- Fastening corrugated profile steel and aluminium sheet to 4–10 mm steel sub-structure
- Fastening corrugated profile aluminium sheet to 4–12 mm aluminium substructure

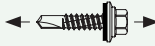
#### Properties

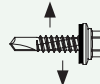
- A2 stainless steel with hardened drill point
- Stainless steel sealing washer
- Pre-assembled sealing washer

#### Technical Data

Drilling capacity $t_1 + t_2$	1.0 + 12.0 mm / 2.0 + 10.0 mm
Drive	Hexalobular drive T25

[WWW.AUSSCHREIBEN.DE](http://WWW.AUSSCHREIBEN.DE)

Minimum tensile strength	
	
Ø mm	kN
5.5	10.0

Minimum shear strength	
	
Ø mm	kN
5.5	7.5



#### Cross reference

Accessories  
FR-tool  
Metal screwdriver SCS 6.3

#### Note

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

Please download complete European technical approvals at our website:

[www.ejot.es](http://www.ejot.es)

# Self-drilling screws JF3/JT3

A2 stainless steel with hardened steel point / steel drill point

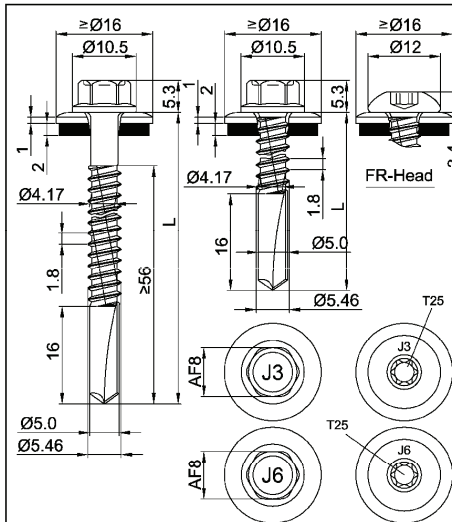


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### Materials

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

### Drilling capacity

$\Sigma t_i \leq 13,00$  mm

### Timber substructures

no performance determined

$t_{N,II}$ [mm]	4,00	5,00	6,00	8,00	10,0	12,0	13,0	14,0
$M_{t,nom}$	7 Nm							
$V_{R,k}$ [kN] for $t_{N,I}$ [mm]	0,50	—	—	—	—	—	—	—
	0,55	—	—	—	—	—	—	—
	0,63	2,20 ac	2,20 ac	2,20 ac	2,20 ac	2,20 ac	2,20 ac	—
	0,75	2,80 ac	2,80 ac	2,80 ac	2,80 ac	2,80 ac	2,80 ac	—
	0,88	3,50 ac	3,50 ac	3,50 ac	3,50 ac	3,50 ac	3,50 a	—
	1,00	4,20 —	4,20 ac	4,20 ac	4,20 ac	4,20 ac	4,20 a	—
	1,13	4,20 —	4,90 —	4,90 —	4,90 —	4,90 —	—	—
	1,25	4,20 —	5,60 —	5,60 —	5,60 —	5,60 —	—	—
	1,50	4,20 —	6,40 —	7,20 —	7,20 —	7,20 —	—	—
	1,75	4,20 —	6,40 —	7,20 —	7,20 —	7,20 —	—	—
	2,00	4,20 —	6,40 —	7,20 —	7,20 —	7,20 —	—	—
$N_{R,k}$ [kN] for $t_{N,I}$ [mm]	0,50	1,30 ac	1,30 ac	1,30 ac	1,30 ac	1,30 ac	1,30 ac	—
	0,55	1,64 ac	1,64 ac	1,64 ac	1,64 ac	1,64 ac	1,64 ac	—
	0,63	2,40 ac	2,40 ac	2,40 ac	2,40 ac	2,40 ac	2,40 ac	—
	0,75	3,10 ac	3,10 ac	3,10 ac	3,10 ac	3,10 ac	3,10 ac	—
	0,88	3,90 ac	3,90 ac	3,90 ac	3,90 ac	3,90 ac	3,90 a	—
	1,00	4,70 —	4,70 ac	4,70 ac	4,70 ac	4,70 ac	4,70 a	—
	1,13	4,70 —	5,60 —	5,60 —	5,60 —	5,60 —	—	—
	1,25	4,70 —	6,40 —	6,40 —	6,40 —	6,40 —	—	—
	1,50	4,70 —	6,40 —	6,40 —	6,40 —	6,40 —	—	—
	1,75	4,70 —	6,40 —	6,40 —	6,40 —	6,40 —	—	—
	2,00	4,70 —	6,40 —	6,40 —	6,40 —	6,40 —	—	—

Self drilling screw

JT3-12-5,5 x L  
JT6-12-5,5 x L  
JT3-FR-12-5,5 x L  
JT6-FR-12-5,5 x L

with hexagon head or round head with Torx® drive system and sealing washer  $\geq$   $\varnothing$ 16 mm

Annex 57

# Self-drilling screws JF3/JT3

A2 stainless steel with hardened steel point / steel drill point

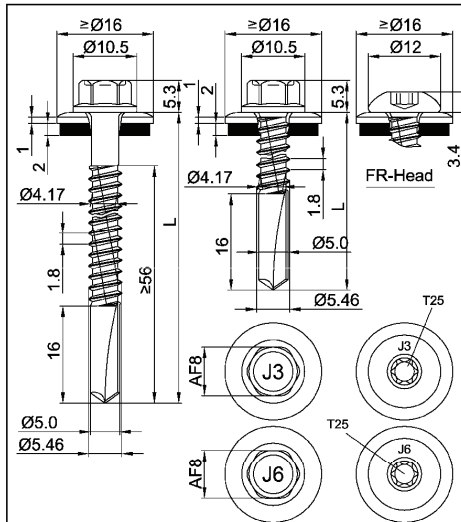


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### Materials

Fastener: stainless steel (1.4301) - EN 10088,  
stainless steel (1.4404) - EN 10088

Washer: stainless steel (1.4301) - EN 10088

Component I: S320GD or S350GD - EN 10346

Component II: S235, S275 or S355 - EN 10025-1

### Drilling capacity

$\Sigma t_i \leq 13,00 \text{ mm}$

### Timber substructures

no performance determined

$t_{N,II}$ [mm]	4,00	5,00	6,00	8,00	10,0	12,0	13,0	14,0
$M_{t,nom}$	7 Nm							
$V_{R,k}$ [kN] for $t_{N,I}$ [mm]	0,50	—	—	—	—	—	—	—
	0,55	—	—	—	—	—	—	—
	0,63	2,50 ac	2,50 ac	2,50 ac	2,50 ac	2,50 ac	2,50	—
	0,75	3,20 ac	3,20 ac	3,20 ac	3,20 ac	3,20 ac	3,20	—
	0,88	3,90 ac	3,90 ac	3,90 ac	3,90 ac	3,90 ac	3,90	—
	1,00	4,20 —	4,60 ac	4,60 ac	4,60 ac	4,60 ac	4,60	—
	1,13	4,20 —	5,30 —	5,30 —	5,30 —	5,30 —	—	—
	1,25	4,20 —	6,00 —	6,00 —	6,00 —	6,00 —	—	—
	1,50	4,20 —	6,40 —	7,20 —	7,60 —	7,60 —	—	—
	1,75	4,20 —	6,40 —	7,20 —	7,60 —	7,60 —	—	—
	2,00	4,20 —	6,40 —	7,20 —	7,60 —	7,60 —	—	—
$N_{R,k}$ [kN] for $t_{N,I}$ [mm]	0,50	1,40 ac	1,40 ac	1,40 ac	1,40 ac	1,40 ac	1,40	—
	0,55	1,77 ac	1,77 ac	1,77 ac	1,77 ac	1,77 ac	1,77	—
	0,63	2,60 ac	2,60 ac	2,60 ac	2,60 ac	2,60 ac	2,60	—
	0,75	3,30 ac	3,30 ac	3,30 ac	3,30 ac	3,30 ac	3,30	—
	0,88	4,20 ac	4,20 ac	4,20 ac	4,20 ac	4,20 ac	4,20	—
	1,00	4,70 —	5,00 ac	5,00 ac	5,00 ac	5,00 ac	5,00	—
	1,13	4,70 —	6,00 —	6,00 —	6,00 —	6,00 —	—	—
	1,25	4,70 —	6,90 —	6,90 —	6,90 —	6,90 —	—	—
	1,50	4,70 —	6,90 —	6,90 —	6,90 —	6,90 —	—	—
	1,75	4,70 —	6,90 —	6,90 —	6,90 —	6,90 —	—	—
	2,00	4,70 —	6,90 —	6,90 —	6,90 —	6,90 —	—	—

Self drilling screw

JT3-12-5,5 x L  
JT6-12-5,5 x L  
JT3-FR-12-5,5 x L  
JT6-FR-12-5,5 x L

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

Annex 58

# Self-drilling screws JF3/JT3

A2 stainless steel with hardened steel point / steel drill point

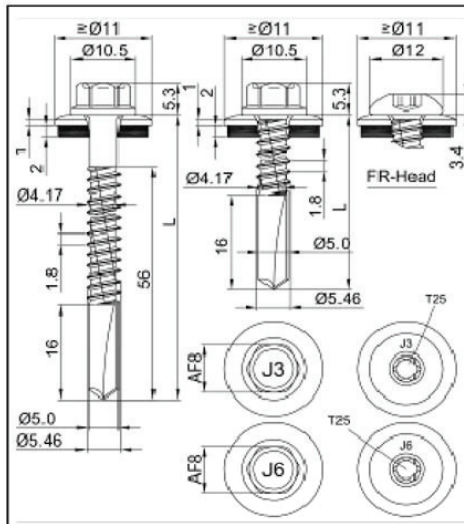


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### Materials

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**  $\Sigma t_i \leq 13,00 \text{ mm}$

### Timber substructures

for timber substructures no performance determined

$t_{N,II} =$	4,00	5,00	6,00	8,00	10,00	12,00
$M_{nom} =$	—					
$V_{R,k}$ for $t_{N,II} =$	0,50	0,77 ac	0,77 ac	0,77 ac	0,77 ac	0,77 ac
	0,60	0,94 ac	0,94 ac	0,94 ac	0,94 ac	0,94 ac
	0,70	1,10 ac	1,10 ac	1,10 ac	1,10 ac	1,10 a
	0,80	1,27 ac	1,27 ac	1,27 ac	1,27 ac	1,27 a
	0,90	1,48 ac	1,48 ac	1,48 ac	1,48 ac	1,48 a
	1,00	1,69 ac	1,69 ac	1,69 ac	1,69 ac	1,69 a
	1,20	1,94 -	1,94 -	1,94 -	1,94 ac	1,94 ac
	1,50	2,32 -	2,32 -	2,32 -	2,32 ac	2,32 ac
2,00	2,91 -	3,00 -	3,09 -	3,26 ac	3,26 a	-
$N_{R,II,k} =$	1,11	1,58	2,21	3,48	3,48	3,48

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

JT3-12-5,5xL      JT6-12-5,5xL  
JT3-FR-12-5,5xL      JT6-FR-12-5,5xL  
With hexagon head or FR-head and seal washer  $\geq \text{Ø } 11,0 \text{ mm}$

**Annex 59**



# Self-drilling screws JF3/JT3

A2 stainless steel with hardened steel point / steel drill point

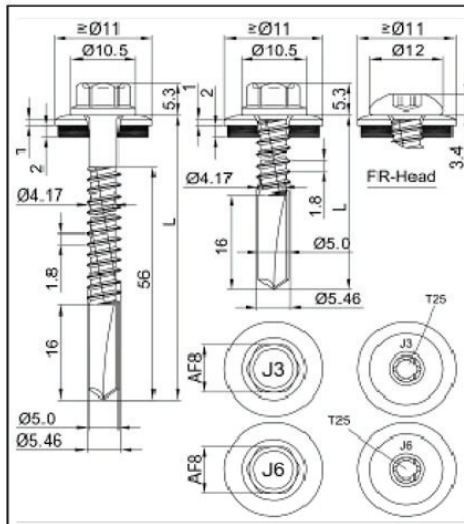


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### Materials

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**  $\Sigma t_i \leq 13,00 \text{ mm}$

### Timber substructures

for timber substructures no performance determined

$t_{N,II} =$	4,00	5,00	6,00	8,00	10,00	12,00	
$M_{nom} =$	—						
$V_{R,k}$ for $t_{N,II} =$	0,50	1,00 ac	1,00 ac	1,00 ac	1,00 ac	1,00 ac	1,00 ac
	0,60	1,22 ac	1,22 ac	1,22 ac	1,22 ac	1,22 ac	1,22 a
	0,70	1,44 ac	1,44 ac	1,44 ac	1,44 ac	1,44 ac	1,44 a
	0,80	1,66 ac	1,66 ac	1,66 ac	1,66 ac	1,66 ac	1,66 a
	0,90	1,93 ac	1,93 ac	1,93 ac	1,93 ac	1,93 ac	1,93 a
	1,00	2,20 ac	2,20 ac	2,20 ac	2,20 ac	2,20 ac	2,20 a
	1,20	2,52 -	2,52 -	2,52 -	2,52 ac	2,52 ac	-
	1,50	3,02 -	3,02 -	3,02 -	3,02 ac	3,02 ac	-
2,00	3,79 -	3,91 -	4,02 -	4,25 ac	4,25 a	-	
$N_{R,II,k} =$	1,45	2,06	2,89	4,54	4,54	4,54	

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

JT3-12-5,5xL      JT6-12-5,5xL  
JT3-FR-12-5,5xL      JT6-FR-12-5,5xL  
With hexagon head or FR-head and seal washer  $\geq \text{Ø } 11,0 \text{ mm}$

**Annex 60**

# Self-drilling screws JF3/JT3

A2 stainless steel with hardened steel point / steel drill point

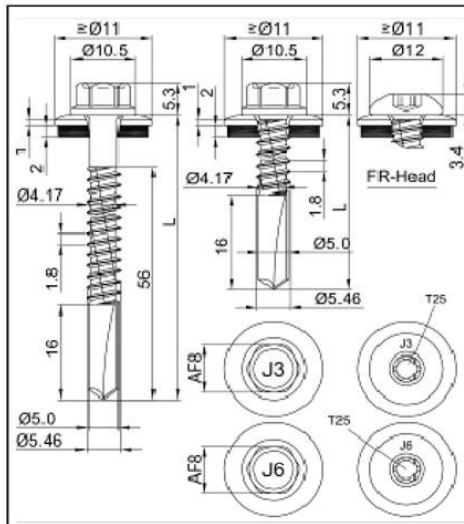


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### Materials

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**  $\Sigma t_i \leq 13,00 \text{ mm}$

### Timber substructures

for timber substructures no performance determined

$t_{N,II} =$	4,00	5,00	6,00	8,00	10,00	12,00
$M_{nom} =$	—					
$V_{R,k}$ for $t_{N,II} =$	0,50	0,77 ac	0,77 ac	0,77 ac	0,77 ac	0,77 ac
	0,60	0,94 ac	0,94 ac	0,94 ac	0,94 ac	0,94 ac
	0,70	1,10 ac	1,10 ac	1,10 ac	1,10 ac	1,10 a
	0,80	1,27 ac	1,27 ac	1,27 ac	1,27 ac	1,27 a
	0,90	1,48 ac	1,48 ac	1,48 ac	1,48 ac	1,48 a
	1,00	1,69 ac	1,69 ac	1,69 ac	1,69 ac	1,69 a
	1,20	1,94 -	1,94 -	1,94 -	1,94 ac	1,94 ac -
	1,50	2,32 -	2,32 -	2,32 -	2,32 ac	2,32 ac -
2,00	2,91 -	3,00 -	3,09 -	3,26 ac	3,26 a -	
$N_{R,II,k} =$	4,70	6,40	6,40	6,40	6,40	6,40

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

JT3-12-5,5xL      JT6-12-5,5xL  
JT3-FR-12-5,5xL      JT6-FR-12-5,5xL  
With hexagon head or FR-head and seal washer  $\geq \text{Ø } 11,0 \text{ mm}$

**Annex 61**

# Self-drilling screws JF3/JT3

A2 stainless steel with hardened steel point / steel drill point

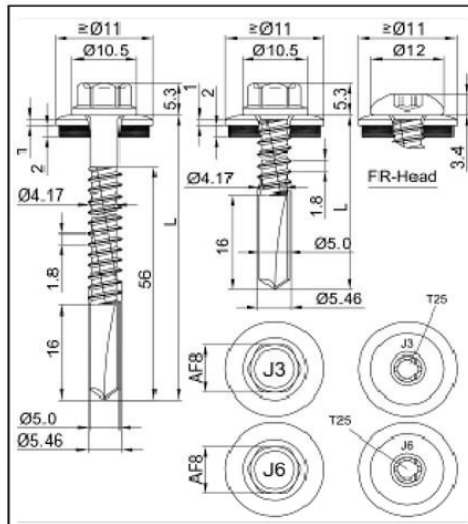


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### Materials

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**  $\Sigma t_i \leq 13,00 \text{ mm}$

### Timber substructures

for timber substructures no performance determined

$t_{N,II} =$	4,00	5,00	6,00	8,00	10,00	12,00
$M_{t,form} =$	—					
$V_{R,k}$ for $t_{N,II} =$	0,50	1,00 ac	1,00 ac	1,00 ac	1,00 ac	1,00 ac
	0,60	1,22 ac	1,22 ac	1,22 ac	1,22 ac	1,22 ac
	0,70	1,44 ac	1,44 ac	1,44 ac	1,44 ac	1,44 ac
	0,80	1,66 ac	1,66 ac	1,66 ac	1,66 ac	1,66 ac
	0,90	1,93 ac	1,93 ac	1,93 ac	1,93 ac	1,93 ac
	1,00	2,20 ac	2,20 ac	2,20 ac	2,20 ac	2,20 ac
	1,20	2,52 -	2,52 -	2,52 -	2,52 ac	2,52 ac
	1,50	3,02 -	3,02 -	3,02 -	3,02 ac	3,02 ac
2,00	3,79 -	3,91 -	4,02 -	4,25 ac	4,25 a	- -
$N_{R,II,k} =$	4,70	6,40	6,40	6,40	6,40	6,40

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

JT3-12-5,5xL      JT6-12-5,5xL  
JT3-FR-12-5,5xL      JT6-FR-12-5,5xL  
With hexagon head or FR-head and seal washer  $\geq \varnothing 11,0 \text{ mm}$

**Annex 62**



# Self-drilling screws JF3/JT3

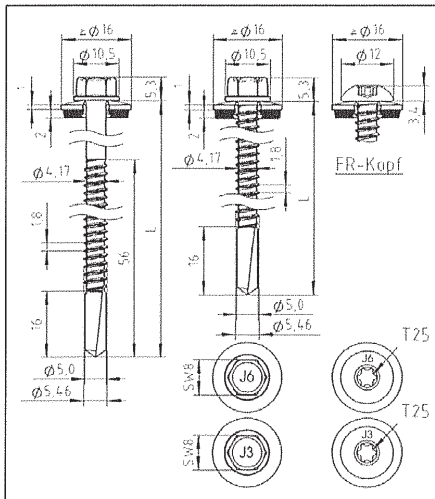
A2 stainless steel with hardened steel point / steel drill point



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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:  $\Sigma(t_{N2} + t_{II}) \leq 13,0 \text{ mm}$

### Timber supporting structures:

No performance determined

$t_{N1}, t_{N2}, d, D$ [mm]	3,00	4,00	5,00	6,00	$t_{II}$ [mm]				
					8,00	10,0	12,0	—	—
$V_{R,k}$ [kN]	0,40	0,90	0,90	0,90	0,90	0,90	0,90	—	—
	0,50	0,90	0,90	0,90	0,90	0,90	0,90	—	—
	0,55	0,90	0,90	0,90	0,90	0,90	0,90	—	—
	0,63	1,10	1,10	1,10	1,10	1,10	1,10	—	—
	0,75	1,60	1,60	1,60	1,60	1,60	1,60	—	—
	0,88	2,20	2,20	2,20	2,20	2,20	2,20	—	—
	1,00	2,90	2,90	2,90	2,90	2,90	2,90	—	—
$N_{R,k}$ [kN]	0,40	1,54	1,54	1,54	1,54	1,54	1,54	—	—
	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	2,40	2,40	2,40	2,40	2,40	2,40	—	—
	0,75	3,00	3,10	3,10	3,10	3,10	3,10	—	—
	0,88	3,00	3,90	3,90	3,90	3,90	3,90	—	—
	1,00	3,00	4,70	4,70	4,70	4,70	4,70	—	—
max $u$ [mm]	40	14,0	7,0	6,0	5,0	5,0	5,0	—	—
	50	16,0	8,5	7,5	6,5	6,5	6,5	—	—
	60	18,5	10,0	9,0	8,0	8,0	8,0	—	—
	70	20,0	12,5	11,0	10,0	10,0	10,0	—	—
	80	22,0	15,0	13,5	12,0	12,0	12,0	—	—
	100	26,0	19,0	18,0	15,0	15,0	15,0	—	—
	120	29,0	22,5	20,0	18,0	18,0	18,0	—	—
	140	33,0	26,0	23,5	21,0	21,0	21,0	—	—
$\geq 160$	33,0	26,0	23,5	21,0	21,0	21,0	—	—	
$M_{t, nom}$ [Nm]									

Self drilling screw

EJOT® JT3-12-5,5 x L EJOT® JT6-12-5,5 x L  
EJOT® JT3-FR-12-5,5 x L EJOT® JT6-FR-12-5,5 x L  
with sealing washer  $\geq \varnothing 16 \text{ mm}$

Annex 8

# Self-drilling screws JF3/JT3

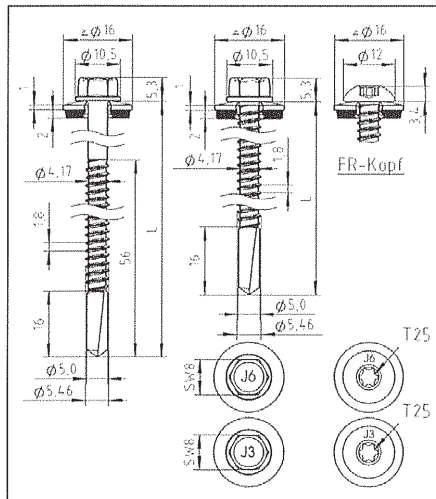
A2 stainless steel with hardened steel point / steel drill point



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Bautechnik



### 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:  $\Sigma(t_{N2} + t_{II}) \leq 13,0$  mm

### Timber supporting structures:

No performance determined

$t_{N1}, t_{N2}, d, D$ [mm]	3,00	4,00	5,00	6,00	$t_{II}$ [mm]					
					8,00	10,0	12,0	—	—	
$V_{R,k}$ [kN]	0,40	0,98	0,98	0,98	0,98	0,98	0,98	0,98	—	—
	0,50	0,98	0,98	0,98	0,98	0,98	0,98	0,98	—	—
	0,55	0,98	0,98	0,98	0,98	0,98	0,98	0,98	—	—
	0,63	1,20	1,20	1,20	1,20	1,20	1,20	1,20	—	—
	0,75	1,70	1,70	1,70	1,70	1,70	1,70	1,70	—	—
	0,88	2,40	2,40	2,40	2,40	2,40	2,40	2,40	—	—
	1,00	3,10	3,10	3,10	3,10	3,10	3,10	3,10	—	—
$N_{R,k}$ [kN]	0,40	1,66	1,66	1,66	1,66	1,66	1,66	1,66	—	—
	0,50	1,90	1,90	1,90	1,90	1,90	1,90	1,90	—	—
	0,55	2,20	2,20	2,20	2,20	2,20	2,20	2,20	—	—
	0,63	2,60	2,60	2,60	2,60	2,60	2,60	2,60	—	—
	0,75	3,00	3,30	3,30	3,30	3,30	3,30	3,30	—	—
	0,88	3,00	4,20	4,20	4,20	4,20	4,20	4,20	—	—
	1,00	3,00	4,70	5,00	5,00	5,00	5,00	5,00	—	—
max u [mm]	40	14,0	7,0	6,0	5,0	5,0	5,0	5,0	—	—
	50	16,0	8,5	7,5	6,5	6,5	6,5	6,5	—	—
	60	18,5	10,0	9,0	8,0	8,0	8,0	8,0	—	—
	70	20,0	12,5	11,0	10,0	10,0	10,0	10,0	—	—
	80	22,0	15,0	13,5	12,0	12,0	12,0	12,0	—	—
	100	26,0	19,0	18,0	15,0	15,0	15,0	15,0	—	—
	120	29,0	22,5	20,0	18,0	18,0	18,0	18,0	—	—
	140	33,0	26,0	23,5	21,0	21,0	21,0	21,0	—	—
$\geq 160$	33,0	26,0	23,5	21,0	21,0	21,0	21,0	—	—	
$M_{t,nom}$ [Nm]										

Self drilling screw

EJOT® JT3-12-5,5 x L EJOT® JT6-12-5,5 x L  
EJOT® JT3-FR-12-5,5 x L EJOT® JT6-FR-12-5,5 x L  
with sealing washer  $\geq \phi 16$  mm

Annex 9