Product data sheet – Paneltwistec SK magazine

Product description

The Paneltwistec collated countersunk head screw with a shortened thread is a fastener for load-bearing timber structures between components made of solid wood, glued laminated timber, laminated veneer timber or similar glued wood materials.

The screw has a scraper groove at the screw tip and is available as a "countersunk head" screw. This is a special application for press-glued wooden walls and ceilings. The unique feature of the collated screw here is the shortened thread which makes the pressing on of stronger attachment parts possible.

The screw's special geometry ensures a reduced splitting effect.

Material

Hardened **carbon steel**, blue galvanized.
- Corrosion resistant
- Suitable for service classes 1 and 2 according to DIN EN 1995 Eurocode 5
- Good resistance to mechanical stress
- Not suitable for timbers containing tannins

Advantages

- Shortened thread length enables stronger attachment parts to be pressed on
- Resistant to mechanical stress
- Scraper groove and ribs ensure quick and easy screwing in
- The scraper groove reduces the risk of wood splitting
- National and international certifications
- No hitting the screw when screwing in through TX-drive

Applications

- OSB panels
- Solid structural timber
- Laminated veneer timber
- Glued laminated timber

Suitable for the production of press-glued woods.

E.u.r.o.Tec GmbH • Unter dem Hofe 5 • D-58099 Hagen
Tel. 0049 (0) 2331 62 45-0 • Fax 0049 (0) 2331 62 45-200 • **info@eurotec.team**

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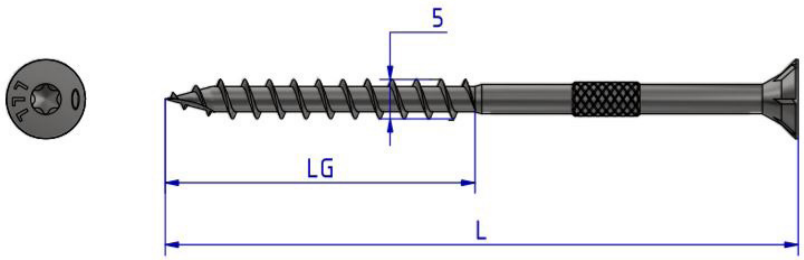
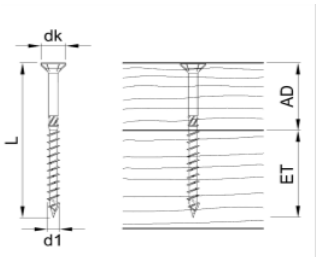
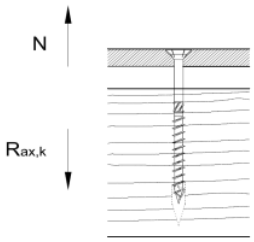
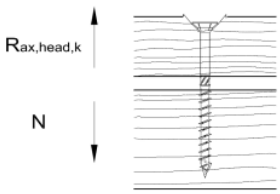
Product table

Art. no.	Dimensions Ød x L [mm]	Thread length lg [mm]	Head diameter Ødh [mm]	Drive	Piece/Belt	Coil/Cardboard
905638	5,0 x 70	35	10,0	TX25 •	125	5
905642	5,0 x 80	40	10,0	TX25 •	125	5

Drawing



Properties

Dimensions				Extraction resistance	Head pull-through resistance
					
d1 x L mm	**dk** mm	**AD** mm	**ET** mm	**$F_{ax,90,Rk}$ kN**	**$F_{ax,head,Rk}$ kN**
5,0 x 70	10,0	35	35	2,12	1,20
5,0 x 80	10,0	40	40	2,42	1,20

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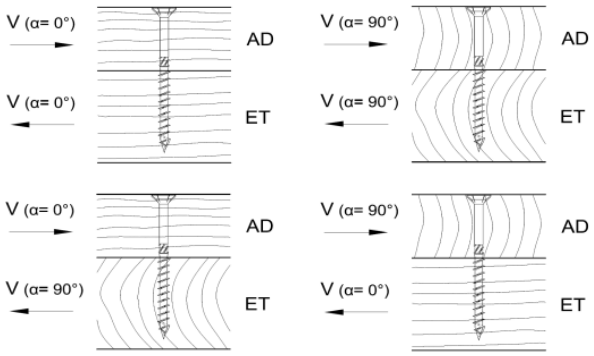
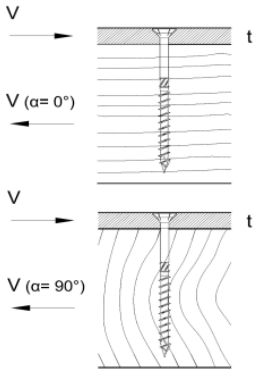
Wood-wood shearing				Steel-wood shearing		
						
$F_{Ia,Rk}$	$F_{Ia,Rk}$	$F_{Ia,Rk}$	$F_{Ia,Rk}$	t	$F_{Ia,Rk}$	$F_{Ia,Rk}$
kN	kN	kN	kN	mm	kN	kN
		α_{AD}= 0°	α_{AD}= 90°			
α= 0°	α= 90°	α_{ET}= 90°	α_{ET}= 0°		α= 0°	α= 90°
1,52				2	1,74	
1,52				2	1,82	

Calculation according to ETA 11/0024. Gross density ρk = 350 kg/m³. All mechanical values provided should be viewed as subject to the assumptions that have been made and represent example calculations. All values are calculated minimum values. Typesetting and printing errors are excepted.
a) The characteristic values of the load-bearing capacity Rk should not be treated as equivalent to the max. possible load (the max. force). Characteristic values of the load-bearing Rk shall be reduced to the design values Rd with respect to the service class and load duration class: Rd= Rk x kmod / γM. The design values of the load-bearing capacity Rd should be compared to the design values of the loads Ed (Rd ≥ Ed).

Example: Characteristic value for constant load (dead load) Gk= 2.00 kN and variable load (e.g. snow load) Qk= 3.00 kN. kmod= 0,9. γM= 1,3.
→ design value of the load Ed= 2.00 · 1.35 + 3.00 · 1.5= 7.20 kN.

Load-bearing capacity of the connection is proved if Rd ≥ Ed. → min Rk = Rd · γM / kmod
This means the characteristic minimum value of the load-bearing capacity should be measured at: min Rk= Rd · γM / kmod → Rk= 7.20 kN · 1,3/0,9= 10.40 kN
→ Comparison with table values.

Please note: These are planning aids. Projects must only be calculated by authorised persons.

If you are not familiar with how this product is used, and particularly with the product's intended use, please contact our Application Technology department (Technik@eurotec.team).

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