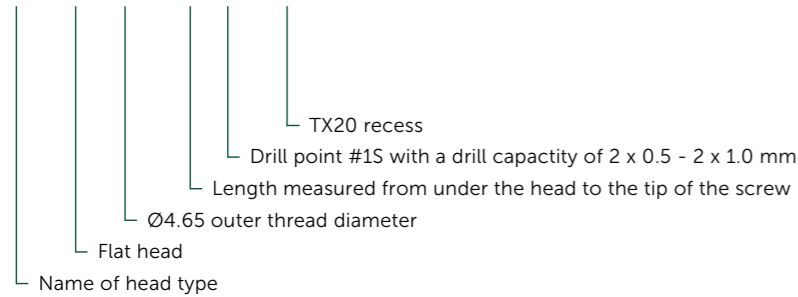


## Acoustic panel screw

### TRABO FH 4.65 X L #1S TX20



### Product range

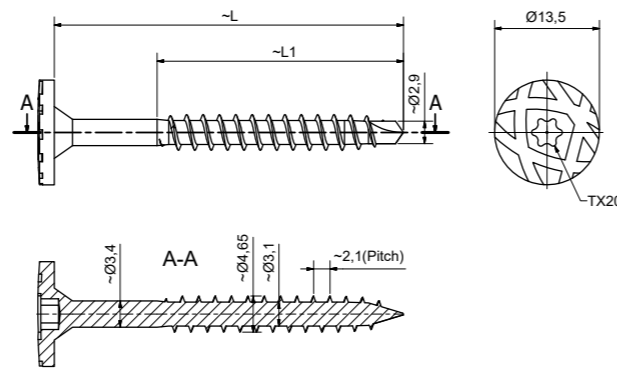
Art.no.	Item name	Thread [mm]	Length L [mm]	Shaft [mm]	Drill point	Drill cap. [mm]	Head [mm]	Unit
17770	TRABO FH 4.65 X 45 #1S TX20	Ø4.65	45	12	#1S	0.5 - 1.5	Ø13.5 TX20	250

### Advantages

- Suitable for fastening of acoustic panels to steel or wood
- Large head for better load distribution
- Specially designed pattern on the head for better concealing
- Surface treated with ZYTEC™ GX for optimal corrosion protection
- Available in more than 500 colours (Qualicoat certified facade quality powder)

### Product data

Technical data	
Head:	Ø13.8 mm flat head with TX20 recess
Diameter:	Ø4.65 mm
Shaft:	12 mm
Drill point:	#1S
Drill capacity:	0.5 - 1.5 mm (Steel S280GD)
Material:	Hardened steel
Surface treatment:	ZYTEC™ GX
Corrosivity category:	C3 (high) according to EN ISO 12944-2



### Design resistance

The design resistance of the screw is determined in accordance with EN 1993-1-3:2006 + AC:2009 and EN 1995-1-1:2004 + AC:2006 + A1:2008 + A2:2014.

The resistance when loaded in tension,  $N_{Rd}$ , appears from the table on the right and is the minimum value of the pull-out resistance of the supporting object and the tension resistance of the screw. Thus, the pull-through resistance of the fixed object is not taken into account.

The theoretical values must be considered indicative since the conditions of the construction site may vary. Practical tests of the specific application are recommended for verification of the listed values.

### Assumptions:

- Fixed object: Steel S280GD - EN 10346
- Supporting object: Steel S280GD - EN 10346
- Supporting object: Structural wood, C24
- Density,  $\rho_k = 350 \text{ kg/m}^3$
- Withdrawal parameter,  $f_{ax,k} = 11 \text{ N/mm}^2$

L = Length of the screw [mm]

$t_f$  = Thickness of the fixed object [mm]

$t_{II}$  = Thickness of the supporting object [mm]

All resistances are stated in kN (1 kN  $\approx$  100 kg)

Safety factor:  $\gamma_M = 1.35$ ,  $k_{mod} = 0.90$

Design resistance when loaded in tension, $N_{Rd}$ [kN] - Steel support		
$t_f$ \ L	45	
0.50	0.28	
0.63	0.35	
0.75	0.42	
0.88	0.49	
1.00	0.56	
1.25	0.70	
1.50	0.84	

Design resistance when loaded in tension, $N_{Rd}$ [kN] - Wooden support		
$t_{II}$ \ L	45	
5	1.00	
10	1.00	
15	0.91	
20	0.74	
25	0.57	

