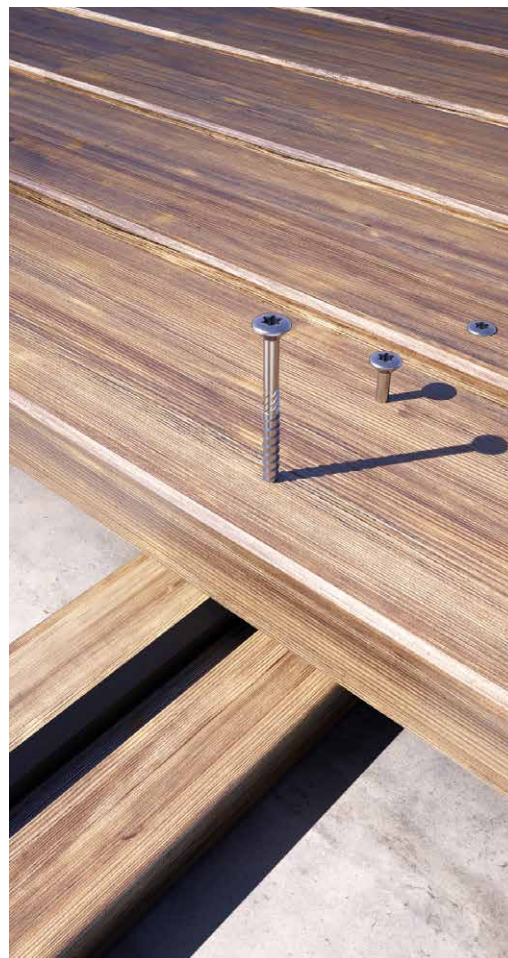


# BFO

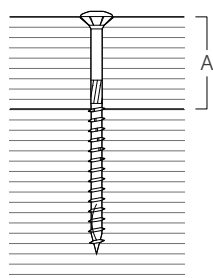
## ROUND-HEAD SCREW AND REINFORCED SHANK

- Countersunk teardrop shaped head with curved surface for a pleasant look and firm grip with the bit
- The increased shank diameter with high torsional strength for a strong, safe screwing even in high density woods
- In A2 | AISI305 stainless steel, it is suitable for service classes 1-2-3
- It can be used without pre-drill, in woods having a maximum density of 550 kg/m<sup>3</sup>



**MATERIAL:** A2 | AISI305 austenitic stainless steel

A maximum fastening thickness



d <sub>1</sub> [mm]	d <sub>k</sub> [mm]	CODE	L [mm]	b [mm]	A [mm]	pcs
5 TX 25	8,00	BFO550	50	30	20	200
		BFO560	60	36	24	200
		BFO570	70	42	28	100

# BFO BUCKET

## SCREWS IN BUCKET 1000

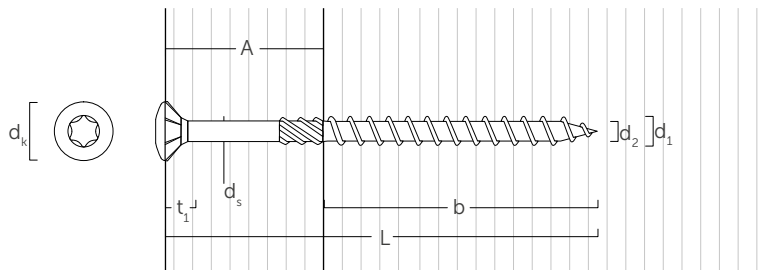
- Practical version with 1000 pieces per package
- Packaging that guarantees durability even in rainy conditions
- PET plastic box, durable, impact-resistant and reusable



d <sub>1</sub> [mm]	d <sub>k</sub> [mm]	CODE	L [mm]	b [mm]	A [mm]	pcs
5 TX 25	8,00	BFOBUC550	50	30	20	1000
		BFOBUC560	60	36	24	1000



## GEOMETRY AND MECHANICAL CHARACTERISTICS



nominal diameter	$d_1$	[mm]	5,3
head diameter	$d_k$	[mm]	8,00
thread diameter	$d_2$	[mm]	3,90
shank diameter	$d_s$	[mm]	4,10
head thickness	$t_1$	[mm]	3,65
pre-drilling hole diameter <sup>(1)</sup>	$d_v$	[mm]	3,50
characteristic yield moment	$M_{y,k}$	[Nm]	9,7
characteristic withdrawal-resistance parameter <sup>(2)</sup>	$f_{ax,k}$	[N/mm <sup>2</sup> ]	16,62
characteristic head-pull-through parameter <sup>(2)</sup>	$f_{head,k}$	[N/mm <sup>2</sup> ]	21,44
characteristic tensile strength	$f_{tens,k}$	[kN]	7,35

<sup>(1)</sup>For high density materials, pre-bored holes are recommended based on the wood species.

<sup>(2)</sup>Associated density  $\rho_a = 350 \text{ kg/m}^3$ .

## STRUCTURAL VALUES

geometry	SHEAR		TENSION	
	timber-to-timber without pre-drilling hole	timber-to-timber with pre-drilling hole	thread withdrawal <sup>(1)</sup>	head pull-through <sup>(2)</sup>
$d_1$ [mm]	$R_{v,k}$ [kN]	$R_{v,k}$ [kN]	$R_{ax,k}$ [kN]	$R_{head,k}$ [kN]
L [mm]	1,39	1,80	2,88	1,59
b [mm]	1,55	2,08	3,46	1,59
A [mm]	1,68	2,14	4,04	1,59

### NOTES

- <sup>(1)</sup> The axial thread withdrawal resistance was calculated considering a 90° angle between the grain and the connector and for a fixing length of b.
- <sup>(2)</sup> The axial resistance to head pull-through was calculated using timber elements.

### GENERAL PRINCIPLES

- Characteristic values according to EN 1995:2014.
- Design values can be obtained from characteristic values as follows:

$$R_d = \frac{R_k \cdot k_{mod}}{\gamma_M}$$

The coefficients  $\gamma_M$  and  $k_{mod}$  should be taken according to the current regulations used for the calculation.

- Mechanical strength values and screw geometry according to CE marking according to EN 14592.
- For the calculation process a timber characteristic density  $\rho^k = 420 \text{ kg/m}^3$  has been considered.
- Values were calculated considering the threaded part as being completely inserted into the wood.
- Dimensioning and verification of timber and steel elements must be carried out separately.