

# Technical data sheet



## TSS Countersunk Preassembled Nylon Plug

The TSS nylon plug in Ø6 and Ø8 mm versions are approved for fastening in concrete. When the nail screw is driven into the anchor plug, it is expanded and securely anchored in the building material.

### Features

#### Material

- Plug: grey nylon
- Screw: white zinc plated steel

#### Benefits

- Countersunk rim for roofing professionals
- Innovative geometry

### Applications

#### Applications

- Wooden battens
- Electrical components
- Skirting boards

#### Suitable for

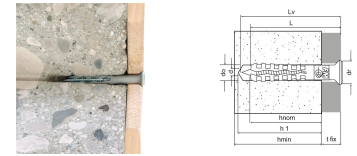
- Non-cracked concrete
- Solid brick
- Honeycomb brick (partially suitable)
- Cell like clay brick (partially suitable)
- Lightweight honeycomb brick (partially suitable)
- Hollow dense aggregate block (partially suitable)
- Hollow light aggregate block (partially suitable)
- Aerated concrete (partially suitable)
- Solid stone



TSS  
Countersunk Preassembled Nylon Plug

## Technical Data

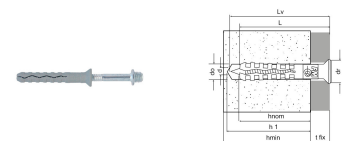
### Product Dimensions



References	Product Reference	Hole diameter x anchor length [d <sub>o</sub> xL] [mm]	Fixture thickness [t <sub>fix</sub> ] [mm]	Min. hole depth [h <sub>1</sub> ] [mm]	Nominal embedment depth [h <sub>nom</sub> ] [mm]	Min. support thickness [h <sub>min</sub> ] [mm]	Screw diameter [d] [mm]	Screw length [L <sub>v</sub> ] [mm]	Collar diameter [d <sub>c</sub> ] [mm]	Qty per box	Qty per outer box
62200B0503000	TSS	Ø5x30*	5	35	25	50	3.4	35	8.5	300	3000
62200B0504000		Ø5x40*	15	35	25	50	3.4	45	8.5	200	2000
62200B0505000		Ø5x50*	25	35	25	50	3.4	55	8.5	200	2000
62200B0604000		Ø6x40	10	40	30	100	3.8	45	10	200	2000
62200B0605000		Ø6x50	20	40	30	100	3.8	55	10	100	1000
62200B0606000		Ø6x60	30	40	30	100	3.8	65	10	100	1000
62200B0608000		Ø6x80	50	40	30	100	3.8	85	10	100	1000
62200B0806000		Ø8x60	20	50	40	100	4.8	65	12	150	1500
62200B0808000		Ø8x80	40	50	40	100	4.8	85	12	150	1500
62200B0810000		Ø8x100	60	50	40	100	4.8	105	12	100	1000
62200B0812000		Ø8x120	80	50	40	100	4.8	125	12	100	1000
62200B0814000		Ø8x140	100	50	40	100	4.8	145	12	100	1000
62200B1008000		Ø10x80*	30	60	50	100	7	85	14	100	1000
62200B1010000		Ø10x100*	50	60	50	100	7	105	14	100	400
62200B1013500		Ø10x135*	85	60	50	100	7	140	14	50	500
62200B1016000		Ø10x160*	110	60	50	100	7	165	14	50	500

\*Not covered by CE certification

### Product Dimensions Double Threaded Screw



References	Product Reference	Hole diameter x anchor length [d <sub>o</sub> xL] [mm]	Min. hole depth [h <sub>1</sub> ] [mm]	Nominal embedment depth [h <sub>nom</sub> ] [mm]	Min. support thickness [h <sub>min</sub> ] [mm]	Screw diameter [d] [mm]	Screw length [L <sub>v</sub> ] [mm]	Collar diameter [d <sub>c</sub> ] [mm]	External Thread	Qty per box	Qty per outer box
62202B0604000	TSS	Ø6x40	50	40	100	3.8	52	10	M6x6	200	2000
62204B0604000		Ø6x40	50	40	100	3.8	52	10	M7x6	100	1000

## TSS Countersunk Preassembled Nylon Plug

Design capacities - single anchor - no edge distances

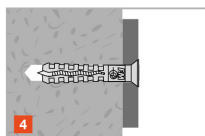
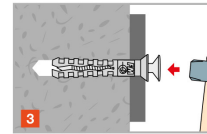
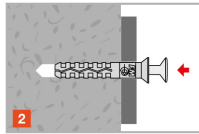
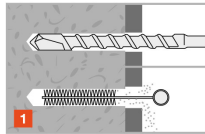
References	Design capacities - single anchor - no edge distances				
	Design capacity - Non-cracked concrete (3)				
	Tension - NRd (1)		Shear - VRd (1-2)		Bending moment MRd [Nm]
	C20/25 [kN]	Solid Brick [kN]	C20/25 [kN]	Solid Brick [kN]	
62200B0503000	0.23	0.2	0.6	0.6	-
62200B0504000	0.23	0.2	0.6	0.6	-
62200B0505000	0.23	0.2	0.6	0.6	-
62200B0604000	0.6	0.36	0.6	0.6	-
62200B0605000	0.6	0.36	0.6	0.6	-
62200B0606000	0.6	0.36	0.6	0.6	-
62200B0608000	0.6	0.36	0.6	0.6	-
62200B0806000	0.6	0.45	1.2	1.2	-
62200B0808000	0.6	0.45	1.2	1.2	-
62200B0810000	0.6	0.45	1.2	1.2	-
62200B0812000	0.6	0.45	1.2	1.2	-
62200B0814000	0.6	0.45	1.2	1.2	-
62200B1008000	0.6	0.48	1.65	1.65	-
62200B1010000	0.6	0.48	1.65	1.65	-
62200B1013500	0.6	0.48	1.65	1.65	-
62200B1016000	0.6	0.48	1.65	1.65	-
62202B0604000	-	-	-	-	-
62204B0604000	-	-	-	-	-

1. The design loads have been calculated using the partial safety factors for resistances stated in ETA-approval(s). The loading figures are valid for unreinforced concrete and reinforced concrete with a rebar spacing  $s \geq 15$  cm (any diameter) or with a rebar spacing  $s \geq 10$  cm, if the rebar diameter is 10mm or smaller.
2. The figures for shear are based on a single anchor without influence of concrete edges. For anchorages close to edges ( $c \leq \max [10 \text{ hef}; 60d]$ ) the concrete edge failure shall be checked per ETAG 001, Annex C, design method A.
3. Concrete is considered non-cracked when the tensile stress within the concrete is  $\sigma_L + \sigma_R \leq 0$ . In the absence of detailed verification  $\sigma_R = 3 \text{ N/mm}^2$  can be assumed ( $\sigma_L$  equals the tensile stress within the concrete induced by external loads, anchors loads included).

\*Not covered by ETA-11/0080

## TSS Countersunk Preassembled Nylon Plug

### Installation



### Spacing and edge distance

References	Product Reference	Hole diameter x anchor length [d <sub>o</sub> xL] [mm]	Min. edge distance [cmin] [mm]	Min. spacing [smin] [mm]
62200B0503000	TSS	Ø5x30*	50	50
62200B0504000	TSS	Ø5x40*	50	50
62200B0505000	TSS	Ø5x50*	50	50
62200B0604000	TSS	Ø6x40	100	100
62200B0605000	TSS	Ø6x50	100	100
62200B0606000	TSS	Ø6x60	100	100
62200B0608000	TSS	Ø6x80	100	100
62200B0806000	TSS	Ø8x60	100	100
62200B0808000	TSS	Ø8x80	100	100
62200B0810000	TSS	Ø8x100	100	100
62200B0812000	TSS	Ø8x120	100	100
62200B0814000	TSS	Ø8x140	100	100
62200B1008000	TSS	Ø10x80*	100	100
62200B1010000	TSS	Ø10x100*	100	100
62200B1013500	TSS	Ø10x135*	100	100
62200B1016000	TSS	Ø10x160*	100	100
62202B0604000	TSS	Ø6x40	-	-
62204B0604000	TSS	Ø6x40	-	-

\* Not included in the approval

## TSS Countersunk Preassembled Nylon Plug

### Installation data

References	Product Reference	Hole diameter x anchor length [d <sub>0</sub> xL] [mm]	Ø drilling hole [d0] [mm]	Min. hole depth [h <sub>1</sub> ] [mm]	Min. support thickness [h <sub>min</sub> ] [mm]
62200B0503000	TSS	Ø5x30*	5	35	50
62200B0504000	TSS	Ø5x40*	5	35	50
62200B0505000	TSS	Ø5x50*	5	35	50
62200B0604000	TSS	Ø6x40	6	40	100
62200B0605000	TSS	Ø6x50	6	40	100
62200B0606000	TSS	Ø6x60	6	40	100
62200B0608000	TSS	Ø6x80	6	40	100
62200B0806000	TSS	Ø8x60	8	50	100
62200B0808000	TSS	Ø8x80	8	50	100
62200B0810000	TSS	Ø8x100	8	50	100
62200B0812000	TSS	Ø8x120	8	50	100
62200B0814000	TSS	Ø8x140	8	50	100
62200B1008000	TSS	Ø10x80*	10	60	100
62200B1010000	TSS	Ø10x100*	10	60	100
62200B1013500	TSS	Ø10x135*	10	60	100
62200B1016000	TSS	Ø10x160*	10	60	100
62202B0604000	TSS	Ø6x40	-	50	100
62204B0604000	TSS	Ø6x40	-	50	100

