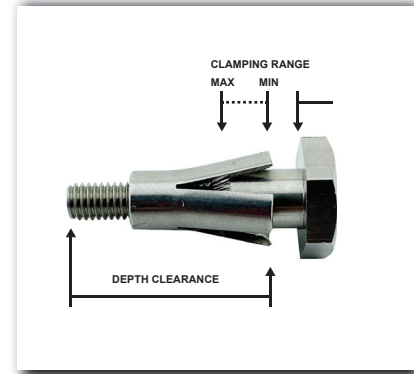


## Thin Wall Bolt Product Specification Zinc Nickel

Product Code	Hole Diameter (mm)	Depth Clearance (mm)	Clamping Range (mm)	
			Min	Max
TW5ZF-10	8	35	2	10
TW5ZF-16	8	40	8	16
TW6ZF-10	10	35	2	10
TW6ZF-16	10	40	8	16
TW8ZF-10	13	45	2	10
TW8ZF-16	13	50	8	16



## Design Resistance for TW Type Blind Bolts Design to BS 5950 - Zinc Nickel

TW Bolt Size	Set Screw Diameter (mm)	Collar Outside Diameter (mm)	Hole Diameter (mm)	Shear Resistance (kN)	Tension Resistance (kN)
TW5	5	7.8	8	13.2	4.8
TW6	6	9.5	10	19.5	14.1
TW8	8	12.6	13	34.5	25.6

Design resistances in shear and tension are presented above. The resistance values may be compared directly with the ultimate loads applied to the fixing.

The bearing resistance may be calculated in accordance with the design standard, based on the external diameter of the collar, as given above.

Fixings subject to combined shear and tension should be verified in accordance with the design standard, using the design resistances presented above.

If tension is applied to a fixing in a relatively thin wall application, the deformation of the connected material should be considered at serviceability (working loads) and at the ultimate limit state, as deformation is likely to be the limiting feature of the connection.

## Design Resistance for TW Type Blind Bolts Design to BS EN 1993 - Zinc Nickel

TW Bolt Size	Set Screw Diameter (mm)	Collar Outside Diameter (mm)	Hole Diameter (mm)	Shear Resistance (kN)	Tension Resistance (kN)
TW5	5	7.8	8	15.9	4.8
TW6	6	9.5	10	23.4	10.1
TW8	8	12.6	13	41.4	18.4

Design resistances in shear and tension are presented above. The resistance values may be compared directly with the ultimate loads applied to the fixing.

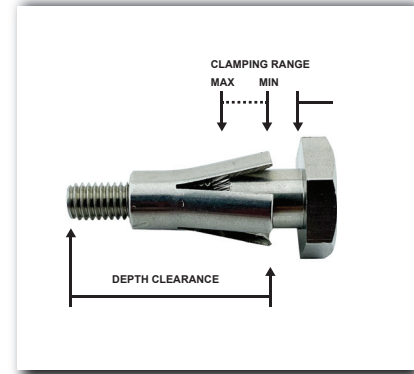
The bearing resistance may be calculated in accordance with the design standard, based on the external diameter of the collar, as given above.

Fixings subject to combined shear and tension should be verified in accordance with the design standard, using the design resistances presented above.

If tension is applied to a fixing in a relatively thin wall application, the deformation of the connected material should be considered at serviceability (working loads) and at the ultimate limit state, as deformation is likely to be the limiting feature of the connection.

## Thin Wall Bolt Product Specification Stainless Steel A2-70

Product Code	Hole Diameter (mm)	Depth Clearance (mm)	Clamping Range (mm)	
			Min	Max
TW5SS-10	8	35	2	10
TW5SS-16	8	40	8	16
TW6SS-10	10	35	2	10
TW6SS-16	10	40	8	16
TW8SS-10	13	45	2	10
TW8SS-16	13	50	8	16



## Design Resistance for TW Type Blind Bolts Design to BS 5950 - Stainless Steel A2-70

TW Bolt Size	Set Screw Diameter (mm)	Collar Outside Diameter (mm)	Hole Diameter (mm)	Shear Resistance (kN)	Tension Resistance (kN)
TW5	5	7.8	8	11.6	7.0
TW6	6	9.5	10	17.3	9.8
TW8	8	12.6	13	30.4	17.9

Design resistances in shear and tension are presented above. The resistance values may be compared directly with the ultimate loads applied to the fixing.

The bearing resistance may be calculated in accordance with the design standard, based on the external diameter of the collar, as given above.

Fixings subject to combined shear and tension should be verified in accordance with the design standard, using the design resistances presented above.

If tension is applied to a fixing in a relatively thin wall application, the deformation of the connected material should be considered at serviceability (working loads) and at the ultimate limit state, as deformation is likely to be the limiting feature of the connection.

## Design Resistance for TW Type Blind Bolts Design to BS EN 1993 - Stainless Steel A2-70

TW Bolt Size	Set Screw Diameter (mm)	Collar Outside Diameter (mm)	Hole Diameter (mm)	Shear Resistance (kN)	Tension Resistance (kN)
TW5	5	7.8	8	14.0	5.0
TW6	6	9.5	10	20.8	7.1
TW8	8	12.6	13	36.4	12.9

Design resistances in shear and tension are presented above. The resistance values may be compared directly with the ultimate loads applied to the fixing.

The bearing resistance may be calculated in accordance with the design standard, based on the external diameter of the collar, as given above.

Fixings subject to combined shear and tension should be verified in accordance with the design standard, using the design resistances presented above.

If tension is applied to a fixing in a relatively thin wall application, the deformation of the connected material should be considered at serviceability (working loads) and at the ultimate limit state, as deformation is likely to be the limiting feature of the connection.