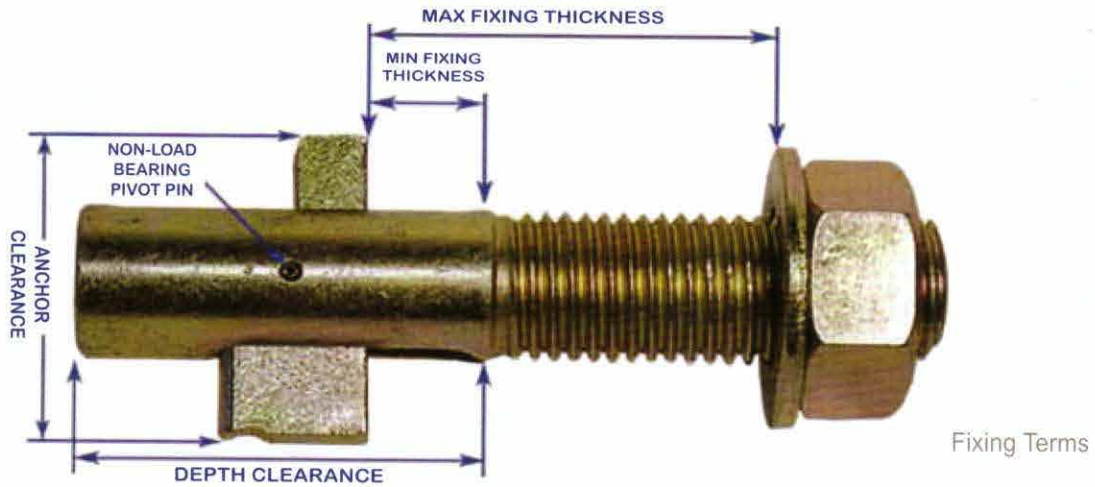


Full technical details and distributor information can be found on our website [www.blindbolt.co.uk](http://www.blindbolt.co.uk)

All dimensions are stated in millimetres unless noted otherwise.



## ZINC & YELLOW BLIND BOLTS- DESIGN TO BS 5950-1

Diameter	Tension Capacity $P_t$ (kN)	Shear Capacity Over Thread $P_{s, thread}$ (kN)	Shear Capacity Over Slot $P_{s, slot}$ (kN)	Bearing Capacity in 10mm Plate	
				S275 $P_b$ (kN)	S355 $P_b$ (kN)
M8	6.9	14.6	9.3	20.7	24.8
M10	12.9	23.2	15.9	27.6	33.0
M12	18.8	33.7	22.0	32.2	38.5
M16	40.2	62.7	42.9	46.0	55.0
M20	57.9	97.9	63.4	55.2	66.0
M24	82.4	141.0	87.8	64.4	77.0

$$\frac{F_s}{P_s} + \frac{F_t}{P_t} \leq 1.4$$

These values are suitable for design to BS 5950-1 and can be used without further reduction for comparison to factored loads. Bearing resistances for different plate thicknesses can be calculated by scaling the values in proportion to the thickness, but should only be used where the distance from the centre line of the hole to the end of the plate is greater than 1.25d. Combined tension and shear should satisfy the following equation.

## ZINC & YELLOW BLIND BOLTS DESIGN TO BS EN 1993-1-8

Diameter	Tension Resistance $F_{t, Rd}$ (kN)	Shear Resistance Over Thread $F_{v, Rd, thread}$ (kN)	Shear Resistance Over Slot $F_{v, Rd, slot}$ (kN)
M8	6.9	14.6	11.1
M10	12.9	23.2	19.0
M12	18.8	33.7	26.3
M16	40.1	62.7	51.5
M20	57.8	97.9	76.1
M24	82.3	141.0	105.4



These are design values for use with BS EN 1993-1-8, and a partial safety factor of  $\gamma_{M2} = 1.25$  has already been applied. Bearing resistances should be calculated from BS EN 1993-1-8, Table 3.4, taking  $d$  as the nominal diameter of the bolt.

Combined shear and tension should satisfy the following equation:

$$\frac{F_{v, Ed}}{F_{v, Rd}} + \frac{F_{t, Ed}}{1.4 F_{t, Rd}} \leq 1.0$$

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## BLIND BOLT PRODUCT SPECIFICATION ZINC & YELLOW / DORRELTECH



Bolt Size	Box Qty	Hole Diameter	Fixing Thickness Min	Fixing Thickness Max	Anchor Clearance	Depth Clearance	Minimum Hole Centers
M8 x 50	50	9	9	24	19	25	20
M10 x 60	40	11	10	30	23	30	20
M10 x 130	20	11	55	100	23	30	20
M12 x 70	20	13	12	35	26	35	25
M12 x 120	20	13	30	85	26	35	25
M12 x 180	20	13	80	140	26	35	25
M16 x 90*	20	17	13	43	36	43	35
M20 x 110*	10	22	21	56	44	56	48
M20 x 140*	10	22	51	86	44	56	48
M20 x 160*	10	22	65	100	44	56	48
M20 x 180*	10	22	80	120	44	56	48
M20 x 250*	10	22	130	185	44	56	48
M24 x 130*	5	26	21	66	53	64	48



\* = We strongly recommend the use of our safety gauges when installing these bolts!

## BLIND BOLT PRODUCT SPECIFICATION A4 STAINLESS STEEL

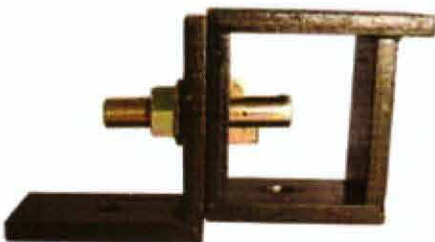
Bolt Size	Box Qty	Hole Diameter	Fixing Thickness Min	Fixing Thickness Max	Anchor Clearance	Depth Clearance	Minimum Hole Centers
M8 x 50	50	9	9	24	19	25	20
M10 x 60	40	11	10	30	23	30	20
M12 x 90	20	13	12	55	26	35	25
M16 x 100*	20	17	13	53	36	43	35



\* = We strongly recommend the use of our safety gauges when installing these bolts!

## A4 STAINLESS STEEL BLIND BOLT

Diameter	ULTIMATE Tensile (kN)	ULTIMATE Shear (kN) (Over Thread)	ULTIMATE Shear (kN) (Over Slot)	MAXIMUM Torque (Nm)
M 8	9.6	18.6	10.1	5.5
M 10	12.2	35	28.4	12
M 12	16.9	64	34.7	19
M 16	31.4	61.1	46.1	59

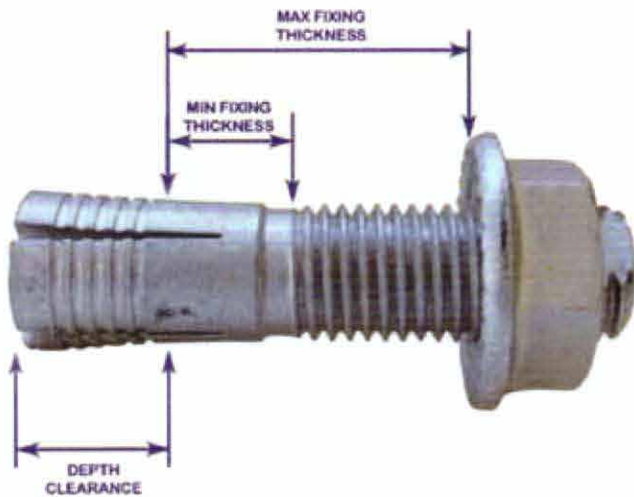


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## HEAVY DUTY BOLT PRODUCT SPECIFICATION (DACRALON)

Bolt Size	Box Qty	Hole Diameter	Fixing Thickness		Depth Clearance
			Min	Max	
M12 x 60	20	12	10	25	15
M16 x 75	20	16	10	30	30
M20 x 85	10	20	15	45	30



## HIGH TENSILE DACRALON HD BOLT

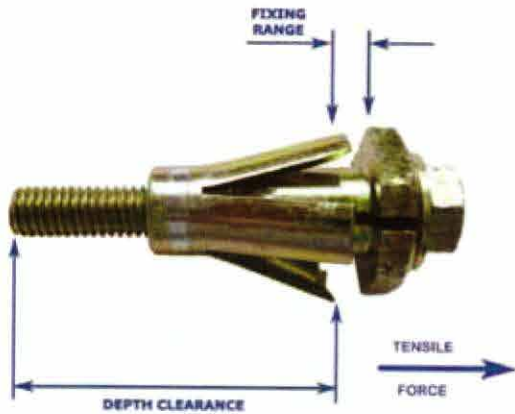
Diameter	ULTIMATE Tensile (kN)	ULTIMATE Shear (kN)
M 12	30	42.1
M 16	60	76.5
M 20	104	128



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## THIN WALL BOLT (ZINC & YELLOW) PRODUCT SPECIFICATION

Bolt Size	Hole Diameter	Fixing Thickness		Depth Clearance
		Min	Max	
TW6ZY	8	2	8	40
TW8ZY	13	2	10	40
TW10ZY	17	2	10	40



## GRADE 8.8 ZINC & YELLOW THIN WALL BOLT

Bolt Size	Bolt Grade	Tensile (kN) (Fixed to 0.7mm Plastic Coated Steel)			Tensile (kN) (Fixed to 0.9mm Aluminium Sheet)		
		MAX PULLOUT Fixing Thickness			MAX PULLOUT Fixing Thickness		
		10mm	6mm	2mm	10mm	6mm	2mm
TW6ZY	8.8	N/A	4.39	4.39	N/A	0.75	1.31
TW8ZY	8.8	4.47	5.31	5.31	0.2	1.03	1.05
TW10ZY	8.8	2.09	6.69	6.69	1.33	1.29	2.23

