

FEATURES

- Through bolts made of carbon steel, zinc plated
- Hot dipped galvanised min 42µm - bonds with the steel to provide a strong protective layer
- Available in a range sizes

RS PRO Carbon Steel Anchor Bolt M16, fixing hole diameter 16mm, length 110mm

RS Stock No.: 908-6713



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

RS PRO range of galvanised through bolts. The through bolt is a torque controlled anchor suitable for use in concrete over C20/25

Through bolt range includes the following sizes:

[908-6696](#) - M10x80 mm

[908-6690](#) - M10x100 mm

[908-6700](#) - M10x125 mm

[908-6703](#) - M12x85 mm

[908-6707](#) - M12x100 mm

[908-6716](#) - M12x115 mm

[908-6719](#) - M12x145 mm

[908-6713](#) - M16x110 mm

[908-6722](#) - M16x125 mm

General Specifications

Thread Size	M16
Type	Galvanised Through Bolt
Material	Carbon Steel
Application	Outdoor seating; Handrails; Barriers; Warehouse racking; Facade systems
Grade	316 A4

Mechanical Specifications

Length	110mm
Fixing Hole Diameter	16mm
Maximum Fixing Thickness	15mm
Eye Inside Diameter	10; 12; 17mm
Hook Inside Diameter	8; 12; 16mm
Internal Thread Length	13mm
Minimum Hole Depth	85mm
Thread Length	10mm
Thread Diameter	10mm
Anchor Length	80mm
Maximum Fixture Thickness	10mm
Fixture Clearance Hole	14mm
Embed Depth	75mm
Structure Thickness	150mm
Installation Torque	100Nm
Maximum Load	77kg
Edge Clearance	50mm
Centre-to-Centre Distance	100mm
Nominal Tensile Strength	880N/mm ²
Yield Strength	755N/mm ²
Stressed Cross-Section	39.6mm ²
Moment Of Resistance	35 ³
Characteristics Bending Resistance	37Nm

Operation Environment Specifications

Minimum Temperature Resistance	-40°C
Maximum Temperature Resistance	80°C

Approvals

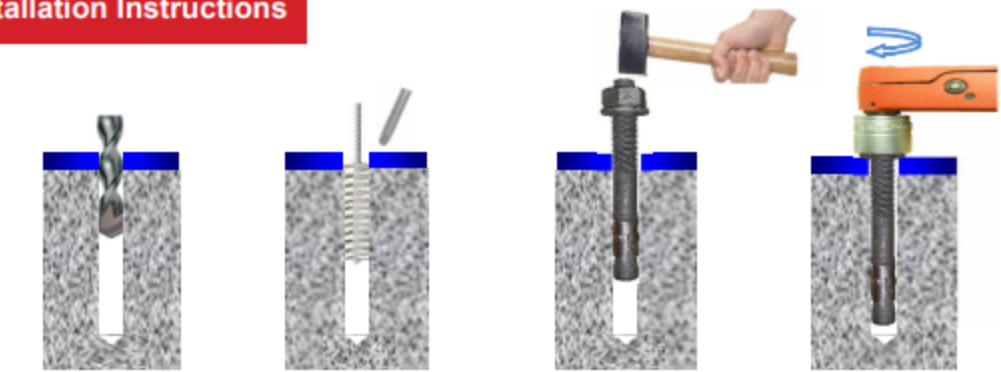
Compliance/Certifications	CE / UR / cUR
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Range Data

RS Stock No	Thread Diam.	Anchor Length	Hole Diam	Max Fixture Thickness	Fixture Clearance Hole	Embed Depth	Min Hole Depth	Structure Thickness	Installation Torque
	mm	mm	mm	mm	mm	mm	mm	mm	Nm
9086696	10	80	10	10	12	60	70	105	30
9086690		100		30					
9086700		125		50					
9086703	12	85	12	10	14	60	70	100	50
9086707		100		5		80	90	140	
9086716		115		20					
9086719		145		50					
9086713	16	110	16	15	18	75	85	150	100
9086722		130		10		100	110	180	
1777064		150		30					

Installation Instructions



Position fixture and drill correct diameter hole to correct depth

Clean hole by brushing and blowing to remove all dust and drilling debris

Insert assembled anchor through fixture into concrete

Tighten with torque wrench to Installation Torque

Standard Embedment

Performance Data (C20/25 non-cracked Concrete)											
Thread Diam.	Minimum Structure Thickness	Characteristic Resistance		Design Resistance		Recommended Resistance		Design Spacing	Design Edge Distance		Tight Torque
		kN		kN		kN			mm		
mm	mm	Tensile	Shear	Tensile	Shear	Tensile	Shear	mm	Tensile	Shear*	
8	100	13.5	11.0	7.4	8.7	5.2	6.2	85	70	95	15
10	110	18.3	18.9	10.1	12.6	7.2	9.0	145	100	125	30
12	140	27.4	25.0	15.2	19.9	10.8	14.2	240	130	175	50
16	180	41.6	44.0	23.1	33.0	16.5	23.5	265	180	250	100
20	215	55.1	69.0	30.6	55.1	22.6	39.3	320	210	380	200

Shear loads towards a free edge are for single anchors where spacing $\geq 3 \times$ Edge Distance

Reduced Embedment

Performance Data (C20/25 non-cracked Concrete)											
Thread Diam.	Minimum Structure Thickness	Characteristic Resistance		Design Resistance		Recommended Resistance		Design Spacing	Design Edge Distance		Tight Torque
		kN		kN		kN			mm		
mm	mm	Tensile	Shear	Tensile	Shear	Tensile	Shear	mm	Tensile	Shear*	
8	100	7.5	7.4	4.1	4.9	3.0	3.5	85	60	60	15
10	100	9.1	9.1	5.0	6.0	3.6	4.2	95	65	65	30
12	110	17.9	25.0	9.9	19.9	7.0	14.2	150	100	210	50
16	130	25.3	44.0	14.0	33.0	10.0	23.5	190	125	315	100

* Reduce embedment only for shorter anchors as indicated in range table.
Shear loads towards a free edge are for single anchors where spacing $\geq 3 \times$ Edge Distance