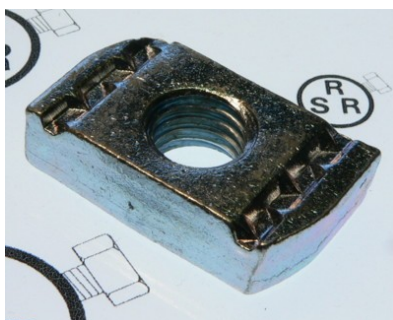
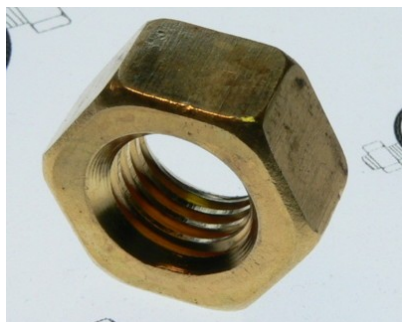


The RSR Product Catalogue 2008



The 2008 RSR Fixings & Tools Catalogue is designed to answer some of the most common questions we are asked, such as availability and dimensional data, and to showcase some of the 22,000 product lines available from us at RSR Fasteners.

We would like to thank all contributors of this catalogue for the information provided.

Whilst every effort has been made to ensure all technical data is correct please confirm specifications before designing or specifying products.



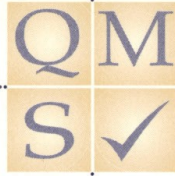
RSR Fasteners Ltd Unit 2, Pasadena Close Hayes Middlesex UB3 3NQ
Tel 0208 756 1818 Fax 0208 756 1819
sales@rsrfasteners.co.uk www.rsrfasteners.co.uk

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QMS Quality Management Systems

Registration Certificate

This document certifies that the quality management systems of

RSR FASTENERS LIMITED

have been assessed and approved by QMS Quality Management Systems to the following quality management systems, standards and guidelines:-

BS EN ISO 9001 : 2000

The approved quality management systems apply to the following:-

GENERAL ENGINEERS SUPPLIERS

Original Approval: 07 April 1997

Current Certificate: 06 April 2007

Certificate Expiry: 06 April 2017

Certificate Number: GB 1840




On behalf of QMS International plc



This Certificate remains valid while the holder maintains their quality management systems in accordance with the standards and guidelines above, which will be audited by QMS Quality Management Systems

This certificate is the property of QMS International plc and must be returned in the event of cancellation.



RSR Fasteners Ltd
Unit 2, Pasadena Close
Hayes, Middlesex
UB3 3NQ
Tel 0208 756 1818
Fax 0208 756 1819

Credit Application Form

Company Details

Company Trading Name:

Registered Office Address:

Delivery Address:

Postcode:

Postcode:

Telephone Number:

Telephone Number:

Fax Number:

Fax Number:

E-mail Address:

Company Registration No:

Website Address:

VAT Registration No:

Accounts Contact:

Purchasing Contact:

Credit Limit Required:

Please Supply two trade references

Trade Ref 1:

Trade Ref 2:

Address:

Address:

Postcode:

Postcode:

Telephone Number:

Telephone Number:

Fax Number:

Fax Number:

Credit terms

Payment is due 30 days from the end of the month of invoice

Declaration

I/We have read and understood the above terms and conditions and the trading terms printed overleaf / attached and I/we hereby agree and accept the aforementioned terms and conditions.

Authorised Signature:

Date:

Name:

Position:

RSR TERMS AND CONDITIONS

1a

These terms and conditions shall apply to all agreements made between R.S.R Group companies (the Vendor) of the purchaser. Acceptance by the vendor of the Purchaser's order is conditional upon acceptance by the Purchaser of these conditions which override all other terms or conditions inconsistent therewith, whether the same are expressed, implied or otherwise.

1b

Any variation of these conditions shall only be binding upon the vendor if specifically agreed by the Vendor in writing. Any stipulation or condition set out in a Purchaser's Order Form or otherwise shall be deemed to be inapplicable if it is inconsistent with the terms herein.

2

Prices are subject to alteration without notice and goods will be invoiced at the prices ruling at the date of dispatch.

3

Prices are quoted exclusive of VAT, which will be charged extra in accordance with the rate due to HM Customs and Excise at the appropriate tax point.

4

Prices are ex works cash. Where credit terms have been expressly agreed, payment is due by the 30th day of the month following that in which the goods are dispatched.

5a

Risk I the goods shall pass to the Purchaser on delivery of the goods to the Purchaser.

5b

- (1) Property in the goods shall not pass to the Purchaser but shall remain vested in the Vendor who shall retain the beneficial and legal ownership of goods until all monies due from the Purchaser in respect of this or any other contract shall have been paid.
- (2) The Purchaser shall as security for all monies due to the Vendor from the Purchaser hold the Vendor's goods as the Vendor's agent or Bailee.
- (3) The Purchaser shall be entitled with the Vendor's consent to sell the goods to a third party if done in the ordinary course of the Purchaser's business, and shall hold the gross proceeds of any such resale in trust for the Vendor.
- (4) The Purchaser hereby grants to the Vendor the right to enter upon the Purchaser's Premises for the purpose of repossessing the Vendor's goods in the event that the Purchaser fails to make payment of all or any monies due to the Vendor.
- (5) The purchaser agrees that so long as any monies remain due to the Vendor, it will store the Vendor's goods separately from the goods belonging to any other persons so that the Vendor's goods are readily identifiable.

6a

The Vendor will normally make no charge for carriage to a destination within the area served by the Vendors transport. The Vendor will charge for carriage to destinations outside that area, where the Purchaser demands special arrangements. Or where delivery is demanded outside normal working hours.

6b

Where special packaging is necessary, the Vendor will charge for the same at cost. Bags and cartons used by the Vendor for packing are not returned. The Vendor will charge for all pallets and crates used for packing but will credit the sums charged if such pallets and crates are redelivered by the Purchaser at the Purchasers cost within 30 days of the delivery to the Purchaser.

7a

Delivery Dates are estimated only and the time of delivery shall not be the essence of the contract. The Vendor shall not in the event be liable to compensate the Purchaser in damages or otherwise for any non-delivery or late delivery of goods or for any loss consequential or otherwise arising from therefrom.

7b

The Vendor shall not be liable to the Purchaser for any claim in respect of or arising from the loss of any consignment unless the Purchaser advises the Vendor of such loss within 14 days after the receipt by the Purchaser of the Vendor's advice of dispatch.

7c

The Vendor shall not be liable to the Purchaser for any claim, in respect of or arising from the partial loss of any consignment, unless the Purchaser advises the Vendor of such loss within 3 days after the delivery of the goods first having endorsed the carrier's receipt, that the goods have been accepted unexamined.

7d

The Purchaser shall inspect the goods immediately on delivery thereof and shall within seven days from such delivery give notice in writing to the vendor of any matter or thing by reason whereof the Purchaser may allege that the goods are not in accordance with the contract. If the Purchaser shall fail to give such notice the said goods shall be deemed to be I all respects in accordance with the contract and the Purchaser shall be deemed to have accepted the goods accordingly and shall be bound to pay the price thereof.

7e

Where any consignment, or part of any consignment is lost or where the Purchaser alleges any goods to be defective, such loss or partial loss or defects shall not form the subject of any claims against the vendor, arising out of any work done by the Purchaser, or of any claims for any loss damage cost or expense arising directly or indirectly from the said alleged defects.

8

No warranties as to the suitability of the goods for any purpose whatsoever or as to the merchant or as to the merchantable quality of the goods are made or implied. If the Vendor accepts the return of any goods, which it has agreed, are defective, it shall remain a matter for the Vendor's discretion whether to replace the defective goods so far as may be practicable to the Purchaser for the defective goods. The Vendor will not be liable to the Purchaser for any consequential loss, damage or injury however caused suffered by the Purchaser or any other party arising directly or indirectly from the supply of goods by the Vendor to the Purchaser.

9

The Purchaser will indemnify the Vendor against any claim whatsoever for damages and cost and against any other loss resulting from the vendor being held liable for any infringement of patent rights, trade marks, copyright or registered designs consequent upon the Vendor's compliance with the Purchaser's express or implied instructions.

10

The Vendor will not accept cancellation of any goods once production of the goods has been commenced.

11

Where there is a Schedule Order calling for delivery to be made at specified times over a specified period, that shall constitute unqualified authority to the Vendor to manufacture the entire quantity of goods so ordered, and this quantity shall be accepted, in full by the Purchaser during the period specified. Should the Purchaser fail to pay for any part consignment when payment becomes due then the whole outstanding balance of monies due in respect of the total number of goods to be supplied under the contract shall become due for immediate payment.

12

Where the vendor supplies part quantities against any order, the Purchaser shall accept and pay for such quantities.

13

The Vendor reserves the right to supply 10% more or less than the quantity ordered of any specially manufactured items, and to charge for the quantity supplied.

14

The Vendor reserves the right to terminate the contract in the event that the Purchaser comes to an arrangement with any of its creditors, or if an Administrator or receiver is appointed, or if winding-up proceedings are initiated.

15

Every contract to which these conditions apply shall be submitted to the jurisdiction of the English Courts of Law.

About RSR

Established as Rowland Nicholls & Co Ltd in 1948 to supply the construction, engineering and maintenance industries with industrial fasteners.

Our original offices and warehouse were based at Lionel Rd, Brentford where we remained for over 50 years.

We became RSR Fasteners Ltd in 1990 to give the company a clearer identity.



In 2001 we relocated to our new warehouse and offices at Hayes, Middlesex.

Based just 2 miles from Heathrow Airport, 1 Mile from Junction 3 of the M4 and 2 miles from the A40 we are ideally located for transport links into London.

Our own drivers are courteous and helpful and ensure your goods are delivered to the correct people.

Our drivers have mobile phones so they can contact sites and arrange deliveries.

We offer a UK next day service via our own transport and TNT, we can also offer a same day courier service.

We can also deliver 6 meter lengths of Unistrut channel.



About RSR

RSR have for many years been major importers of fixings and fasteners.

We source products from the UK, Europe and worldwide.

Over our many years of trading we have established close working relationships with some of the foremost fixings manufacturers.

Every customer has unique requirements and we work with our customers to provide the right procurement procedures to suit their business.



We have been involved in many major projects over the years including T5, Wembley and Emirates Stadiums, Kings Cross, Jubilee Line Extension and the service tunnels in the New Olympic Site.

We can supply your complete project requirements from fixings to site equipment, all from stock.

We have accumulated a great deal of knowledge of fixings and tools. Our staff have collectively over 200 years of experience in the industry.

This gives our customers the advantage of dealing with people who will help and advise on applications and fixings solutions.

We pride ourselves on providing our customers with quality service at competitive prices.

We have established ourselves in a number of different market places giving us a unique range of products.

This diversity of customer base has kept our business very stable over the past 60 years as we are not dependant on any one industry.

Our warehouse holds 22,000 stock lines with a valuation of over £300,000.

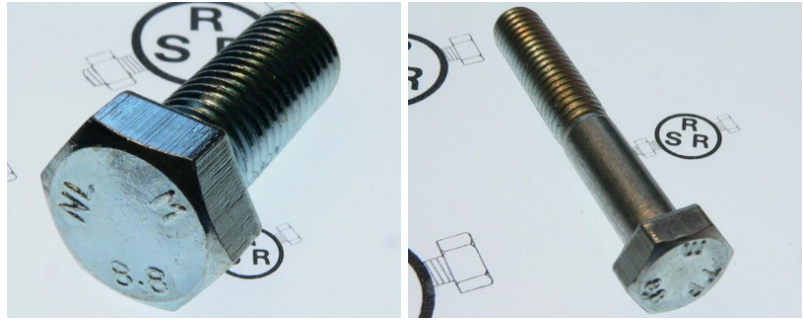


Hexagon Bolts and Setscrews DIN931

Bolts are partially threaded. The length of the thread is determined by the following formula,

Up to 125mm 2 x dia + 6mm
 125mm to 200mm 2 x dia + 12mm
 Over 200mm 2 x dia + 25mm

Setscrews are fully threaded.



Availability chart

| | M4 | M5 | M6 | M8 | M10 | M12 | M16 | M20 | M24 | M27 | M30 | M33 | M36 |
|-------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 6mm | Sets Only | | | | | | | | | | | | |
| 8mm | Sets Only | Sets Only | | | | | | | | | | | |
| 10mm | Sets Only | Sets Only | Sets Only | | | | | | | | | | |
| 12mm | Sets Only | Sets Only | Sets Only | Sets Only | | | | | | | | | |
| 16mm | Sets / Bolts | Sets Only | Sets Only | Sets Only | Sets Only | | | | | | | | |
| 20mm | Sets / Bolts | Sets / Bolts | Sets Only | Sets Only | Sets Only | Sets Only | | | | | | | |
| 25mm | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets Only | Sets Only | Sets Only | Sets Only | | | | | | |
| 30mm | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets Only | Sets Only | Sets Only | Sets Only | | | | | |
| 35mm | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets Only | Sets Only | Sets Only | | | | | |
| 40mm | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets Only | Sets Only | Sets Only | | | | |
| 45mm | Bolts Sets Special | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets Only | Sets Only | | | | |
| 50mm | Bolts Sets Special | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets Only | Sets Only | Sets Only | | | |
| 55mm | Bolts Sets Special | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets Only | Sets Only | Sets Only | | |
| 60mm | Special | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets Only | Sets Only | | |
| 65mm | | Bolts Sets Special | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets Only | Sets Only | Sets Only | |
| 70mm | | Bolts Sets Special | Bolts Sets Special | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets Only | Sets Only | |
| 75mm | | Bolts Sets Special | Bolts Sets Special | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets Only | Sets Only | Sets Only |
| 80mm | | Special | Bolts Sets Special | Bolts Sets Special | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets Only | Sets Only | Sets Only |
| 90mm | | Special | Bolts Sets Special | Bolts Sets Special | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets Only | Sets Only |
| 100mm | | Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets Only | Sets Only |
| 110mm | | | Special | Special | Bolts Sets Special | Bolts Sets Special | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets Only |
| 120mm | | | Special | Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets Only |
| 130mm | | | Special | Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts | Sets / Bolts |
| 140mm | | | | Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Sets / Bolts | Sets / Bolts | Sets / Bolts |
| 150mm | | | | Special | Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Sets / Bolts | Sets / Bolts |
| 160mm | | | | | Special | Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special |
| 180mm | | | | | Special | Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Special |
| 200mm | | | | | | Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Bolts Sets Special | Special | Special |
| 220mm | | | | | | | Special | Special | Bolts Sets Special | Bolts Sets Special | Special | Special | Special |
| 250mm | | | | | | | Special | Special | Bolts Sets Special | Bolts Sets Special | Special | Special | Special |

Hexagon Bolts and Setscrews

Hexagon Bolt & Setscrew Head Dimensions

| Thread Dia | Pitch | Width Across Flats | Width Across Flats | Height of Head | Height of Head |
|------------|--------|--------------------|--------------------|----------------|----------------|
| | Coarse | Max | Min | Max | Min |
| M6 | 1 | 10.00 | 9.64 | 4.24 | 3.76 |
| M8 | 1.25 | 13.00 | 12.57 | 5.74 | 5.26 |
| M10 | 1.5 | 17.00 | 16.57 | 7.29 | 6.71 |
| M12 | 1.75 | 19.00 | 18.48 | 8.29 | 7.71 |
| M16 | 2 | 24.00 | 23.16 | 10.29 | 9.71 |
| M20 | 2.5 | 30.00 | 29.16 | 13.35 | 12.65 |
| M22 | 2.5 | 32.00 | 31.00 | 14.35 | 13.65 |
| M24 | 3 | 36.00 | 35.00 | 15.35 | 14.62 |
| M27 | 3 | 41.00 | 40.00 | 17.35 | 16.65 |
| M30 | 3.5 | 46.00 | 45.00 | 19.42 | 18.58 |
| M33 | 3.5 | 50.00 | 49.00 | 21.42 | 20.58 |
| M36 | 4 | 55.00 | 53.80 | 23.42 | 22.58 |
| M39 | 4 | 60.00 | 58.80 | 25.42 | 24.58 |
| M42 | 4.5 | 65.00 | 63.80 | 26.42 | 25.58 |
| M45 | 4.5 | 70.00 | 68.8 | 28.42 | 27.58 |
| M48 | 5 | 75.00 | 73.80 | 30.42 | 29.58 |
| M52 | 5 | 80.00 | 78.80 | 33.50 | 32.50 |
| M56 | 5.5 | 85.00 | 83.60 | 35.50 | 34.50 |

All dimensions in millimetres

Materials and Finishes

| | | |
|------------|---|---|
| Materials; | High Tensile Grade 8.8 sets High Tensile Grade 8.8 Bolts Mild Steel Grade 4.6 Sets Mild Steel Grade 4.6 Bolts Stainless Steel A2/A4 grades Sets Stainless Steel A2/A4 grades Bolts Brass Setscrews Brass Bolts Nylon Setscrews High Tensile Grade 10.9 | (RSR CODE 0132) (RSR CODE 0131) (RSR CODE 0138) (RSR CODE 0011) (RSR CODE 0134) (RSR CODE 0133) (RSR CODE 0136) (RSR CODE 0135) (RSR CODE 0137) (Special Order Only) |
| Finishes | High Tensile & Mild Steel available in Bright Yellow passivated. | Zinc Plated, Galvanised, Sheridised, Zinc & |
| Threads | Metric, Metric Fine, BSW, BSF, UNC, UNF, BA | |

High Strength Friction Grip BS4395: Part 1:1969

The term 'high strength friction grip bolts' relates to bolts of high tensile steel, used in conjunction with high tensile steel nuts and quenched and tempered steel washers, which are tightened to a predetermined shank tension in order that the clamping force thus provided will transfer loads in the connected members by friction between the parts and not by shear in or bearing on the bolts or piles of connected members. Bolts shall be heat-treated under uniform conditions. They shall be hardened by quenching in oil or water and shall then be tempered.

Bolts shall be identified as general grade high strength friction grip bolts by being marked with three radial lines 120 deg apart. They shall also bear the manufacturers identification mark and in addition shall be marked 'ISOM' or 'M' to signify ISO metric thread.

Washers. Flat round for use with the high strength grip bolts shall be identified by the provision of three nibs and an indented letter 'M'

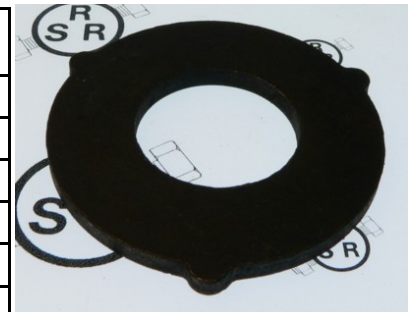


HSFG Bolt Dimensions

| Thread Dia | Pitch | Width Across Flats | Width Across Flats | Thickness of Head | Thickness of Head |
|------------|--------|--------------------|--------------------|-------------------|-------------------|
| | Coarse | Max | Min | Max | Min |
| M16 | 2 | 27.00 | 26.16 | 10.45 | 9.55 |
| M20 | 2.5 | 32.00 | 31.00 | 13.90 | 12.10 |
| M22 | 2.5 | 36.00 | 35.00 | 14.90 | 13.10 |
| M24 | 3 | 41.00 | 40.00 | 15.90 | 14.10 |
| M27 | 3 | 46.00 | 45.00 | 17.90 | 16.10 |
| M30 | 3.5 | 50.00 | 49.00 | 20.05 | 17.95 |
| M36 | 4 | 60.00 | 58.80 | 24.05 | 21.95 |

Thru Hardened Washer

| Diameter of | Inside Dia B | Inside Dia B | Outside Dia C | Outside Dia C | Thickness A | Thickness A |
|-------------|--------------|--------------|---------------|---------------|-------------|-------------|
| Thread | Max | Min | Max | Min | Max | Min |
| M16 | 17.8 | 17.4 | 37 | 36 | 3.4 | 3.0 |
| M20 | 21.5 | 21.1 | 44 | 43 | 3.7 | 3.3 |
| M22 | 23.4 | 23.0 | 50 | 48.5 | 4.2 | 3.8 |
| M24 | 26.4 | 26.0 | 56 | 54.5 | 4.2 | 3.8 |
| M27 | 29.4 | 29.0 | 60 | 58.5 | 4.2 | 3.8 |
| M30 | 32.8 | 32.4 | 66 | 64.5 | 4.2 | 3.8 |
| M36 | 38.8 | 38.4 | 85 | 83.5 | 4.6 | 4.2 |



Load Indicating Washer

The load indicating washer is a precise fool-proof and economic device that ensures the automatic tightening of high strength friction grip bolts to the required shank tension.

It is merely a hardened washer with a series of protrusions on one face. Induced bolt tension is indicated directly and so time is saved not only in tightening but in inspection. You are assured of maximum consistency in bolt tensions with a minimum of operator skill.

As the bolt is tightened the protrusions are flattened and the gap reduced. At a specific average gap measured by a feeler gauge as fig 2 the induced shank tension will not be less than the minimum required by standards.

Load Indicator Fitting

| | Inch Series |
|--------------------------------|---------------|
| | General Grade |
| Black Finish | 0.015 in |
| All Platings except Spun Galv | 0.015 in |
| Spun Galv | 0.010 in |
| Under nut with nut face washer | 0.010 in |

Metric Series

| | General Grade Part 1 |
|--|----------------------|
| | 0.40 mm |
| | 0.40 mm |
| | 0.25 mm |
| | 0.25 mm |

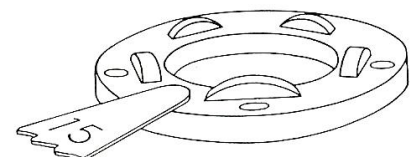


Fig. 2

Holding Down Bolts

Indented Foundation Bolts and Nuts

The indented foundation bolt is a proved and accepted means of obtaining a positive and permanent anchorage to Floors. The disposition of the angular faces on the indented portion has been designed to withstand high axial stresses.

Made from Grade 4.6 mild steel, foundation bolts can be supplied black (self colour), bright zinc plated or galvanised.

Available Sizes

| | M8 | M10 | M12 | M16 | M20 | M24 | M30 |
|-----|----|-----|-----|-----|-----|-----|-----|
| 100 | ● | ● | | | | | |
| 120 | ● | ● | ● | | | | |
| 160 | ● | ● | ● | ● | | | |
| 200 | ● | ● | ● | ● | ● | | |
| 225 | | ● | ● | ● | ● | ● | |
| 250 | | | ● | ● | ● | ● | |
| 275 | | | | ● | ● | ● | ● |
| 300 | | | | | ● | ● | ● |
| 350 | | | | | | ● | ● |
| 400 | | | | | | ● | ● |
| 450 | | | | | | ● | ● |



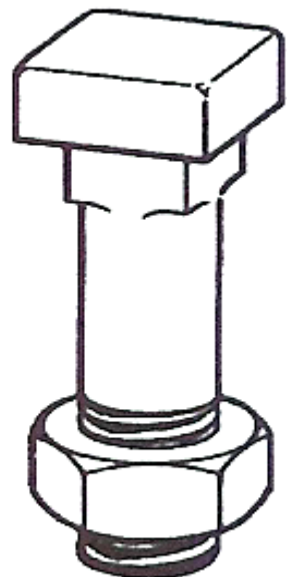
Square Square Round Hex Holding Down Bolts

The Square Square Round Hex Holding Down Bolt is the more modern approach for anchoring into floors. The system would usually comprise of the holding down bolt, a square plate washer and either a metal or poly bolt box.

The partnership of the bolt and square hole washer prevents the bolts rotation after installation. The bolt boxes are commonly used to create a void around the bolt which enables minor adjustment after the concrete has set.

Available Sizes

| | M16 | M20 | M24 | M30 | M36 |
|------|-----|-----|-----|-----|-----|
| 300 | ● | ● | | | |
| 375 | ● | ● | ● | | |
| 450 | ● | ● | ● | ● | ● |
| 525 | ● | ● | ● | ● | ● |
| 600 | ● | ● | ● | ● | ● |
| 750 | | ● | ● | ● | ● |
| 1000 | | ● | ● | ● | ● |
| 1250 | | | ● | ● | ● |



Coach Screws Din 571



Material; Mild Steel grade 4.6 Gimlet point
Finish; Bright Zinc Plated, Galvanised

Available Sizes

| | M6 | M8 | M10 | M12 | M16 |
|-----|----|----|-----|-----|-----|
| 20 | ● | | | | |
| 25 | ● | ● | ● | | |
| 30 | ● | ● | ● | | |
| 35 | ● | ● | ● | | |
| 40 | ● | ● | ● | ● | |
| 45 | ● | ● | ● | ● | |
| 50 | ● | ● | ● | ● | SP |
| 60 | ● | ● | ● | ● | SP |
| 65 | ● | ● | ● | ● | SP |
| 70 | ● | ● | ● | ● | SP |
| 80 | ● | ● | ● | ● | SP |
| 90 | ● | ● | ● | ● | SP |
| 100 | ● | ● | ● | ● | SP |
| 110 | ● | ● | ● | ● | SP |
| 120 | ● | ● | ● | ● | SP |
| 130 | ● | ● | ● | ● | SP |
| 140 | ● | ● | ● | ● | SP |
| 150 | ● | ● | ● | ● | SP |
| 160 | | | ● | ● | SP |
| 180 | | | ● | ● | SP |
| 200 | | | | ● | SP |

Key ● = Stock Item
SP = Special Order Only

Coachbolts Din 603



Material; Mild Steel grade 4.6
Finish; Self Colour, Bright Zinc Plated, Galvanised*

Available Sizes

| | M5 | M6 | M8 | M10 | M12 | M16 |
|-----|----|----|----|-----|-----|-----|
| 12 | ● | ● | | | | |
| 16 | ● | ● | ● | | | |
| 20 | ● | ● | ● | ● | | |
| 25 | ● | ● | ● | ● | ● | |
| 30 | ● | ● | ● | ● | ● | |
| 35 | | ● | ● | ● | ● | |
| 40 | ● | ● | ● | ● | ● | |
| 45 | | ● | ● | ● | ● | |
| 50 | ● | ● | ● | ● | ● | SP |
| 60 | | ● | ● | ● | ● | SP |
| 65 | | ● | ● | ● | ● | SP |
| 70 | | ● | ● | ● | ● | SP |
| 80 | | ● | ● | ● | ● | SP |
| 90 | | ● | ● | ● | ● | SP |
| 100 | | ● | ● | ● | ● | SP |
| 110 | | ● | ● | ● | ● | SP |
| 120 | | | ● | ● | ● | SP |
| 130 | | ● | ● | ● | ● | SP |
| 140 | | ● | ● | ● | ● | SP |
| 150 | | ● | ● | ● | ● | SP |
| 160 | | | ● | ● | ● | SP |
| 180 | | ● | ● | ● | ● | SP |
| 200 | | | ● | ● | ● | SP |
| 220 | | | | ● | ● | SP |
| 230 | | | | ● | ● | SP |
| 240 | | | | ● | ● | SP |
| 260 | | | | ● | ● | SP |
| 280 | | | | ● | ● | SP |
| 300 | | | | ● | ● | SP |
| 350 | | | | | ● | SP |
| 400 | | | | | ● | SP |

Fully threaded up to 100mm

Studding (Threaded Bar)

Mild Steel Grade 4.8

Finish; Self Colour, Bright Zinc Plated,
Galvanised (on dia M8 and over)

Also available in pre-cut lengths by advance order.



Available Sizes

| | M3 | M4 | M5 | M6 | M8 | M10 | M12 | M14 | M16 | M18 | M20 | M22 | M24 | M27 | M30 | M33 | M36 | M39 |
|---------|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 meter | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 2 meter | | | | ● | ● | ● | ● | SP | ● | SP | ● | SP | SP | SP | SP | SP | SP | SP |
| 3 meter | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

Key ● = Stock Item
SP = Special Order Only

High Tensile Grade 8.8

Finish; Self Colour, Bright Zinc Plated,, Galv

Also available in pre-cut lengths by advance order.

Available Sizes

| | M6 | M8 | M10 | M12 | M14 | M16 | M18 | M20 | M22 | M24 | M27 | M30 | M33 | M36 | M39 |
|---------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 meter | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 2 meter | SP | SP | SP | SP | SP | SP | SP | SP | SP | SP | SP | SP | SP | SP | |
| 3 meter | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

Key ● = Stock Item
SP = Special Order Only

Studding in other materials

| | M3 | M4 | M5 | M6 | M8 | M10 | M12 | M14 | M16 | M18 | M20 | M22 | M24 | M27 | M30 | M33 | M36 | M39 |
|-----------------|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Stainless Steel | ● | ● | ● | ● | ● | ● | ● | ● | ● | SP | ● | SP | ● | SP | ● | ● | ● | SP |
| Brass | SP | ● | ● | ● | ● | ● | SP | SP | SP | SP | SP | | | | | | | |
| Nylon | ● | ● | ● | ● | ● | ● | SP | SP | SP | | | | | | | | | |

Key ● = Stock Item
SP = Special Order Only

Machine Screws BS4183 : 1967

Countersunk Pozi & Slotted

| | | |
|------------|-------------------------|-----------------|
| Materials; | Mild Steel Slotted | (RSR CODE 0451) |
| | Mild Steel Pozi | (RSR CODE 0461) |
| | Stainless Steel Slotted | (RSR CODE 0471) |
| | Stainless Steel Pozi | (RSR CODE 0481) |
| | Brass Slotted | (RSR CODE 0491) |
| | Nylon Slotted | (RSR CODE 0442) |

Finish; Self Colour, Bright Zinc Plated (Mild Steel Only)



Dimensional Data

| Thread Dia | Head Dia Max mm | Head Dia Min mm | Head Height Max mm | Head Height Min mm | Thread Length mm |
|------------|--------------------|--------------------|-----------------------|-----------------------|---------------------|
| M2 | 4.40 | 3.50 | 1.20 | 1.08 | 16.0 |
| M3 | 6.30 | 5.25 | 1.62 | 1.50 | 19.0 |
| M3.5 | 7.35 | 6.12 | 1.93 | 1.75 | 20.0 |
| M4 | 8.40 | 7.04 | 2.20 | 2.00 | 22.0 |
| M5 | 10.00 | 8.75 | 2.50 | 2.25 | 25.0 |
| M6 | 12.00 | 10.50 | 3.00 | 2.70 | 28.0 |
| M8 | 16.00 | 14.00 | 4.00 | 3.60 | 34.0 |
| M10 | 20.00 | 17.50 | 5.00 | 4.50 | 40.0 |
| M12 | 24.00 | 21.00 | 6.00 | 5.40 | 45.0 |

Pan Head Pozi & Slotted

| | | |
|------------|-------------------------|-----------------|
| Materials; | Mild Steel Slotted | (RSR CODE 0452) |
| | Mild Steel Pozi | (RSR CODE 0462) |
| | Stainless Steel Slotted | (RSR CODE 0472) |
| | Stainless Steel Pozi | (RSR CODE 0482) |
| | Brass Slotted | (RSR CODE 0492) |
| | Nylon Slotted | (RSR CODE 0440) |

Finish; Self Colour, Bright Zinc Plated



Dimensional Data

| Thread Dia | Head Dia Max mm | Head Dia Min mm | Head Height Slotted Max mm | Head Height Slotted Min mm | Head Height Pozi Max mm | Head Height Pozi Min mm | Thread Length mm |
|------------|--------------------|--------------------|----------------------------------|----------------------------------|-------------------------------|-------------------------------|------------------------|
| M2.5 | 5.00 | 4.70 | 1.50 | 1.36 | 1.75 | 1.61 | 18.0 |
| M3 | 6.00 | 5.70 | 1.80 | 1.66 | 2.10 | 1.96 | 19.0 |
| M3.5 | 7.00 | 6.64 | 2.10 | 1.96 | 2.45 | 2.31 | 20.0 |
| M4 | 8.00 | 7.64 | 2.40 | 2.26 | 2.80 | 2.66 | 22.0 |
| M5 | 10.00 | 9.64 | 3.00 | 2.86 | 3.50 | 3.32 | 25.0 |
| M6 | 12.00 | 11.57 | 3.60 | 3.42 | 4.20 | 3.98 | 28.0 |
| M8 | 16.00 | 15.57 | 4.80 | 4.62 | 5.60 | 5.42 | 34.0 |
| M10 | 20.00 | 19.48 | 6.00 | 5.82 | 7.00 | 6.78 | 40.0 |

Self Tapping Screws BS4174 :1972

Countersunk Slotted & Pozi Head Type AB and B

Materials; Mild Steel Slotted (RSR CODE 0501)
 Mild Steel Pozi (RSR CODE 0505)
 Stainless Steel Slotted (RSR CODE 0541)
 Stainless Steel Pozi (RSR CODE 0545)

Finish; Bright Zinc Plated (Mild Steel Only)



Availability Chart

| | No4 | No6 | No8 | No10 | No12 | No14 |
|--------|-----|-----|-----|------|------|------|
| 1/4" | ● | | | | | |
| 5/16" | ● | ● | | | | |
| 3/8" | ● | ● | ● | | | |
| 1/2" | ● | ● | ● | ● | | |
| 5/8" | ● | ● | ● | ● | ● | |
| 3/4" | ● | ● | ● | ● | ● | |
| 1" | ● | ● | ● | ● | ● | ● |
| 1.1/4" | | ● | ● | ● | ● | ● |
| 1.1/2" | | ● | ● | ● | ● | ● |
| 1.3/4" | | ● | ● | ● | ● | ● |
| 2" | | | ● | ● | ● | ● |

Countersunk Head Dimensions

| Gauge | Diameter of Head mm | Depth of Head mm |
|-------|------------------------|---------------------|
| No2 | 3.73 | 1.30 |
| No4 | 4.95 | 1.70 |
| No6 | 6.20 | 2.11 |
| No8 | 7.42 | 2.54 |
| No10 | 8.64 | 2.95 |
| No12 | 9.88 | 3.35 |
| No14 | 11.48 | 3.89 |

Pan Slotted & Pozi Head Type AB and B

Materials; Mild Steel Slotted (RSR CODE 0502)
 Mild Steel Pozi (RSR CODE 0506)
 Stainless Steel Slotted (RSR CODE 0542)
 Stainless Steel Pozi (RSR CODE 0546)

Finish; Bright Zinc Plated (Mild Steel Only)



Availability Chart

| | No4 | No6 | No8 | No10 | No12 | No14 |
|--------|-----|-----|-----|------|------|------|
| 3/16" | ● | | | | | |
| 1/4" | ● | ● | | | | |
| 5/16" | ● | ● | ● | | | |
| 3/8" | ● | ● | ● | ● | | |
| 1/2" | ● | ● | ● | ● | ● | ● |
| 5/8" | ● | ● | ● | ● | ● | ● |
| 3/4" | ● | ● | ● | ● | ● | ● |
| 1" | ● | ● | ● | ● | ● | ● |
| 1.1/4" | | ● | ● | ● | ● | ● |
| 1.1/2" | | ● | ● | ● | ● | ● |
| 1.3/4" | | ● | ● | ● | ● | ● |
| 2" | | | ● | ● | ● | ● |

Pan Head Dimensions

| Gauge | Dia of Head Max | Dia of Head Min | Depth of Head Slotted Max | Depth of Head Slotted Min | Depth of Head Pozi Max | Depth of Head Pozi Min |
|-------|--------------------|--------------------|------------------------------|------------------------------|---------------------------|---------------------------|
| No2 | 4.24 | 3.94 | 1.35 | 1.14 | 1.57 | 1.35 |
| No4 | 5.56 | 5.21 | 1.73 | 1.47 | 2.03 | 1.78 |
| No6 | 6.86 | 6.50 | 2.08 | 1.83 | 2.46 | 2.21 |
| No8 | 8.18 | 7.77 | 2.44 | 2.16 | 2.92 | 2.67 |
| No10 | 9.47 | 9.07 | 2.79 | 2.51 | 3.38 | 3.10 |
| No12 | 10.80 | 10.34 | 3.18 | 2.84 | 3.84 | 3.53 |
| No14 | 12.50 | 12.01 | 3.57 | 3.23 | 4.44 | 4.11 |

Self Tapping Screws BS4174 : 1972

Recommended Hole & Drill Sizes

| Gauge | Material Thickness mm | Material Thickness SWG | Hole Dia Required mm |
|-------|--------------------------|---------------------------|-------------------------|
| No2 | 0.45 | 26 | 1.60 |
| | 0.91 | 20 | 1.85 |
| | 1.62 | 16 | 1.95 |
| No4 | 0.45 | 26 | 2.05 |
| | 0.91 | 20 | 2.30 |
| | 1.62 | 16 | 2.40 |
| | 2.03 | 14 | 2.60 |
| No6 | 0.45 | 26 | 2.35 |
| | 0.91 | 20 | 2.80 |
| | 1.62 | 16 | 2.95 |
| | 2.03 | 14 | 3.10 |
| | 2.64 | 12 | 3.20 |
| No8 | 0.71 | 22 | 2.90 |
| | 0.91 | 20 | 3.10 |
| | 1.22 | 18 | 3.20 |
| | 1.62 | 16 | 3.40 |
| | 2.64 | 12 | 3.70 |
| | 3.18 | 1/8" | 3.80 |
| No10 | 0.71 | 22 | 3.40 |
| | 1.22 | 18 | 3.60 |
| | 1.62 | 16 | 3.80 |
| | 2.64 | 12 | 4.10 |
| | 3.18 | 1/8" | 4.30 |
| | 4.75 | 3/16" | 4.50 |
| No12 | 0.71 | 22 | 4.10 |
| | 1.22 | 18 | 4.30 |
| | 1.62 | 16 | 4.50 |
| | 2.64 | 12 | 4.80 |
| | 3.18 | 1/8" | 4.90 |
| | 4.75 | 3/16" | 5.10 |
| No14 | 1.22 | 18 | 4.80 |
| | 1.62 | 16 | 5.20 |
| | 2.03 | 14 | 5.40 |
| | 3.18 | 1/8" | 5.70 |
| | 4.75 | 3/16" | 5.90 |
| | 6.35 | 1/4" | 6.00 |

Pozi Woodscrews Zinc and Yellow Tropicalized

REISSER®

- Yellow Tropicalized giving approximately 20 times more resistance than the standard BZP screw
- The very sharp 25 deg point with the thread running to the end allowing immediate starting.
- Specially hardened steel gives the R2 maximum tensile and torsional strength.
- The invisible Reisser lubricant helps the screw drive in quickly and easily



Countersunk Availability

| | 3.0mm | 3.5mm | 4.0mm | 4.5mm | 5.0mm | 6mm | 8mm |
|-------|-------|-------|-------|-------|-------|-----|-----|
| 10mm | ● | | | | | | |
| 12mm | ● | ● | ● | | | | |
| 16mm | ● | ● | ● | ● | | | |
| 20mm | ● | ● | ● | ● | ● | | |
| 25mm | ● | ● | ● | ● | ● | | |
| 30mm | ● | ● | ● | ● | ● | | |
| 35mm | ● | ● | ● | ● | ● | ● | |
| 40mm | ● | ● | ● | ● | ● | ● | |
| 45mm | ● | ● | ● | ● | ● | ● | |
| 50mm | | ● | ● | ● | ● | ● | |
| 60mm | | | ● | ● | ● | ● | |
| 70mm | | | ● | ● | ● | ● | |
| 80mm | | | | ● | ● | ● | ● |
| 90mm | | | | | ● | ● | ● |
| 100mm | | | | | ● | ● | ● |
| 120mm | | | | | ● | ● | ● |
| 130mm | | | | | | ● | ● |
| 140mm | | | | | | ● | ● |
| 150mm | | | | | | ● | ● |
| 180mm | | | | | | ● | ● |
| 200mm | | | | | | ● | ● |
| 240mm | | | | | | ● | ● |
| 260mm | | | | | | ● | ● |
| 280mm | | | | | | ● | ● |
| 300mm | | | | | | ● | ● |

Pan Head (Roundhead) Availability

| | 3.0mm | 3.5mm | 4.0mm | 4.5mm | 5.0mm | 6mm |
|-------|-------|-------|-------|-------|-------|-----|
| 10mm | | | | | | |
| 12mm | ● | ● | ● | | | |
| 16mm | ● | ● | ● | ● | ● | |
| 20mm | ● | ● | ● | ● | ● | |
| 25mm | ● | ● | ● | ● | ● | |
| 30mm | ● | ● | ● | ● | ● | |
| 35mm | | ● | ● | ● | ● | ● |
| 40mm | | ● | ● | ● | ● | ● |
| 45mm | | | ● | ● | ● | ● |
| 50mm | | | ● | ● | ● | ● |
| 60mm | | | ● | ● | ● | ● |
| 70mm | | | | | ● | ● |
| 80mm | | | | | ● | ● |
| 90mm | | | | | | ● |
| 100mm | | | | | | ● |
| 120mm | | | | | | ● |

Imperial to Metric Equivalents

| Woodscrew Gauge | Exact Metric Equivalent | Nearest Woodscrew |
|-----------------|-------------------------|-------------------|
| No4 | 3.10mm | 3.0mm |
| No6 | 3.45mm | 3.5mm |
| No8 | 4.17mm | 4.00mm |
| No10 | 4.88mm | 5.00mm |
| No12 | 5.59mm | 6.00mm |
| No14 | 6.30mm | 6.00mm |



Self Drilling Screws

Ejot Saphir Self Drilling Heavy Section Fasteners JT2 with Washers

For steel sections 4.0 to 12mm in thickness.
Assembled with a aluminium / EPDM vulcanised sealing Washer



| Order | Dia | Length | Fixing Range | |
|-------------|-----|--------|--------------|--------|
| Code | mm | mm | Min mm | Max mm |
| 0539hs38g16 | 5.5 | 38 | 4.00 | 14.00 |
| 0539hs55g16 | 5.5 | 55 | 4.00 | 28.00 |
| 0539hs65g16 | 5.5 | 65 | 4.00 | 39.00 |
| 0539hs76g16 | 5.5 | 76 | 4.00 | 50.00 |

Ejot Saphir Self Drilling Heavy Section Fasteners JT2

For steel sections 4.0 to 12mm in thickness.



| Order | Dia | Length | Fixing Range | |
|-----------|-----|--------|--------------|--------|
| Code | mm | mm | Min mm | Max mm |
| 0539hs38 | 5.5 | 38 | 4.00 | 16.00 |
| 0539hs55 | 5.5 | 55 | 4.00 | 30.00 |
| 0539hs65 | 5.5 | 65 | 4.00 | 41.00 |
| 0539hs76 | 5.5 | 76 | 4.00 | 52.00 |
| 0539hs100 | 5.5 | 100 | 42.00 | 76.00 |
| 0539hs115 | 5.5 | 115 | 42.00 | 91.00 |
| 0539hs125 | 5.5 | 125 | 42.00 | 101.00 |

Ejot Saphir Self Drilling Light Section Fasteners JT2 with Washers

For steel sections 1.2 to 3.0mm in thickness.
Assembled with a aluminium / EPDM vulcanised sealing Washer



| Order | Dia | Length | Fixing Range | |
|-------------|-----|--------|--------------|--------|
| Code | mm | mm | Min mm | Max mm |
| 0539ls25g16 | 5.5 | 25 | 1.20 | 6.00 |
| 0539ls32g16 | 5.5 | 32 | 1.20 | 11.00 |
| 0539ls38g16 | 5.5 | 38 | 1.20 | 14.00 |
| 0539ls50g16 | 5.5 | 50 | 1.20 | 35.00 |
| 0539ls70g16 | 5.5 | 70 | 27.00 | 55.00 |

Ejot Saphir Self Drilling Light Section Fasteners

For steel sections 1.2 to 3.0mm in thickness.



| Order | Dia | Length | Fixing Range | |
|----------|-----|--------|--------------|--------|
| Code | mm | mm | Min mm | Max mm |
| 0539ls25 | 5.5 | 25 | 1.20 | 8.00 |
| 0539ls50 | 5.5 | 50 | 1.20 | 37.00 |
| 0539ls70 | 5.5 | 70 | 30.00 | 57.00 |

Self Drilling Screws & Drywall Screws



Ejot Saphir Self Drilling Light Section Wing Drill Fasteners JT2



For steel sections 1.5 to 3.0mm in thickness.

| Order | Dia | Length | Fixing Range | |
|-------------|-----|--------|--------------|--------|
| Code | mm | mm | Min mm | Max mm |
| 0539wdls25 | 4.2 | 25 | 6.00 | 12.00 |
| 0539wdls38 | 4.8 | 38 | 6.50 | 22.00 |
| 0539wdls50 | 5.5 | 50 | 6.50 | 34.00 |
| 0539wdls85 | 5.5 | 85 | 23.00 | 67.00 |
| 0539wdls100 | 5.5 | 100 | 38.00 | 82.00 |
| 0539wdls127 | 5.5 | 127 | 65.00 | 109.00 |
| 0539wdls85 | 6.3 | 85 | 23.00 | 67.00 |

Ejot Saphir Self Drilling Heavy Section Wing Drill Fasteners JT2

For steel sections 4.0 to 10.0mm in thickness.

| Order | Dia | Length | Fixing Range | |
|-------------|-----|--------|--------------|--------|
| Code | mm | mm | Min mm | Max mm |
| 0539wdhs25 | 5.5 | 65 | 8.00 | 35.00 |
| 0539wdhs85 | 5.5 | 85 | 30.00 | 55.00 |
| 0539wdhs119 | 5.5 | 119 | 60.00 | 89.00 |

Please contact sales for our separate cd-rom on the full range of Ejot self drilling fixings available from RSR

Drywall Screws



Standard Drywall Screws Black Phosphate or Zinc Plated

3.5mm x 25mm Boxed in 1,000's
3.5mm x 32mm Boxed in 1,000's
3.5mm x 38mm Boxed in 1,000's
3.5mm x 42mm Boxed in 1,000's
3.5mm x 45mm Boxed in 1,000's
3.5mm x 50mm Boxed in 1,000's
3.5mm x 55mm Boxed in 500's
3.5mm x 60mm Boxed in 500's
4.2mm x 65mm Boxed in 500's
4.2mm x 75mm Boxed in 200's
4.8mm x 100mm Boxed in 200's

Jackpoint Drywall Screws Zinc Plated

3.5mm x 25mm Boxed in 1,000's
3.5mm x 32mm Boxed in 1,000's
3.5mm x 38mm Boxed in 1,000's
3.5mm x 42mm Boxed in 1,000's
3.5mm x 50mm Boxed in 1,000's
3.5mm x 55mm Boxed in 500's
4.2mm x 65mm Boxed in 500's
4.2mm x 75mm Boxed in 200's

Phillips Recess Driver bits
No2 Self Drilling Tip
Made from C10-8 Steel
Bugle Head

Wafer head Self-drilling Screws

4.2mm x 13.5mm (No 8 x 9/16") Boxed in 1,000's

Phillips Recess Driver bits
No2 Self Drilling Tip
Made from C10-8 Steel



Brass and Stainless Slotted Woodscrews



Brass Countersunk Availability

| Length | No4 | No6 | No8 | No10 | No12 | No14 |
|--------|-----|-----|-----|------|------|------|
| 1/2" | ● | ● | ● | | | |
| 5/8" | ● | ● | ● | | | |
| 3/4" | ● | ● | ● | ● | | |
| 1" | ● | ● | ● | ● | ● | |
| 1.1/4" | | ● | ● | ● | ● | |
| 1.1/2" | | ● | ● | ● | ● | |
| 2" | | ● | ● | ● | ● | ● |
| 2.1/2" | | | ● | ● | ● | |
| 3" | | | ● | ● | ● | |
| 3.1/2" | | | | ● | ● | |
| 4" | | | | ● | ● | ● |



Brass Roundhead Availability

| | No4 | No6 | No8 | No10 | No12 |
|--------|-----|-----|-----|------|------|
| 3/8" | ● | ● | ● | | |
| 1/2" | ● | ● | ● | | |
| 5/8" | ● | ● | ● | | |
| 3/4" | ● | ● | ● | ● | |
| 1" | ● | ● | ● | ● | ● |
| 1.1/4" | | ● | ● | ● | ● |
| 1.1/2" | | ● | ● | ● | ● |
| 2" | | ● | ● | ● | ● |
| 2.1/2" | | | ● | ● | ● |
| 3" | | | ● | ● | ● |



Stainless DIN97 Countersunk Availability

| | 2.5mm | 3.0mm | 3.5mm | 4.0mm | 4.5mm | 5.0mm | 6.0mm |
|-------|-------|-------|-------|-------|-------|-------|-------|
| 12mm | ● | | | | | | |
| 16mm | ● | ● | ● | ● | | | |
| 20mm | | ● | ● | ● | | ● | |
| 25mm | | ● | ● | ● | ● | ● | ● |
| 30mm | | ● | ● | ● | ● | ● | ● |
| 35mm | | | ● | ● | ● | ● | ● |
| 40mm | | | ● | ● | ● | ● | ● |
| 45mm | | | ● | ● | ● | ● | ● |
| 50mm | | | | ● | ● | ● | ● |
| 60mm | | | | ● | ● | ● | ● |
| 70mm | | | | ● | | ● | ● |
| 80mm | | | | | | ● | ● |
| 90mm | | | | | | ● | ● |
| 100mm | | | | | | ● | ● |



Stainless DIN96 Roundhead Availability

| | 3.0mm | 3.5mm | 4.0mm | 4.5mm | 5.0mm | 6.0mm |
|-------|-------|-------|-------|-------|-------|-------|
| 12mm | | | | | | |
| 16mm | ● | ● | ● | | | |
| 20mm | ● | ● | ● | | ● | |
| 25mm | | ● | ● | | ● | |
| 30mm | | ● | ● | ● | ● | ● |
| 35mm | | ● | ● | ● | ● | ● |
| 40mm | | | ● | ● | ● | ● |
| 45mm | | | ● | ● | ● | ● |
| 50mm | | | ● | ● | ● | ● |
| 60mm | | | ● | | ● | ● |
| 70mm | | | | | ● | ● |
| 80mm | | | | | ● | ● |
| 90mm | | | | | ● | ● |
| 100mm | | | | | ● | |

Snake Eye Security Screws A2 Stainless Steel

Snake eye Pan Head Self Tappers

| | 3/8" | 1/2" | 5/8" | 1" | 1.1/4" | 1.1/2" | 2" | 2.1/2" | 3" | Bit Size |
|------|------|------|------|----|--------|--------|----|--------|----|----------|
| No4 | ● | ● | ● | ● | | ● | | | | TH3 |
| No6 | ● | ● | ● | ● | ● | ● | ● | | | TH4 |
| No8 | ● | ● | ● | ● | ● | ● | ● | | | TH5 |
| No10 | ● | ● | ● | ● | ● | ● | ● | ● | | TH6 |
| No12 | | ● | | | | | ● | | | TH7 |
| No14 | | | ● | ● | ● | ● | ● | | | TH8 |



Snake eye Countersunk Head Self Tappers

| | 3/8" | 1/2" | 5/8" | 1" | 1.1/4" | 1.1/2" | 2" | 2.1/2" | 3" | Bit Size |
|------|------|------|------|----|--------|--------|----|--------|----|----------|
| No4 | ● | ● | | ● | ● | ● | | | | TH3 |
| No6 | ● | ● | ● | ● | ● | ● | ● | | | TH4 |
| No8 | ● | ● | ● | ● | ● | ● | ● | | | TH5 |
| No10 | | ● | ● | ● | ● | ● | ● | ● | | TH6 |
| No12 | | | | ● | | ● | ● | | | TH7 |
| No14 | | | ● | ● | ● | ● | ● | | | TH8 |



Snake eye Countersunk Head Machine Screws

| | 6mm | 10mm | 12mm | 16mm | 20mm | 25mm | 30mm | 35mm | 40mm | Bit Size |
|-----|-----|------|------|------|------|------|------|------|------|----------|
| M3 | | ● | ● | ● | | | ● | | | TH3 |
| M4 | | ● | ● | ● | ● | ● | ● | ● | | TH5 |
| M5 | | | ● | ● | ● | ● | ● | ● | | TH6 |
| M6 | | | ● | ● | ● | ● | ● | | ● | TH8 |
| M8 | | | SP | SP | SP | SP | SP | SP | SP | TH9 |
| M10 | | | | SP | SP | SP | SP | SP | SP | TH10 |



Snake eye Pan Head Machine Screws

| | 6mm | 10mm | 12mm | 16mm | 20mm | 25mm | 30mm | 35mm | 40mm | Bit Size |
|-----|-----|------|------|------|------|------|------|------|------|----------|
| M3 | | ● | ● | ● | | | | | | TH3 |
| M4 | ● | ● | ● | ● | ● | ● | | | | TH5 |
| M5 | | | ● | ● | ● | ● | ● | | | TH6 |
| M6 | | | ● | ● | ● | ● | ● | | ● | TH8 |
| M8 | | | SP | SP | SP | SP | SP | SP | SP | TH9 |
| M10 | | | | SP | SP | SP | SP | SP | SP | TH10 |



Pin Hex Security Screws A2 Stainless Steel

Pin Hex Countersunk Head Self Tappers

| | 3/8" | 1/2" | 5/8" | 1" | 1.1/4" | 1.1/2" | 2" | 2.1/2" | 3" | Bit Size |
|------|------|------|------|----|--------|--------|----|--------|----|----------|
| No4 | | | | | | | | | | |
| No6 | • | • | • | • | | • | | | | H30 |
| No8 | | • | • | • | • | • | • | | | H40 |
| No10 | | • | • | • | • | • | • | • | | H40 |
| No12 | | | | • | • | • | | | | H40 |
| No14 | | | | • | • | • | • | | | H40 |



Pin Hex Button Head Self Tappers

| | 3/8" | 1/2" | 5/8" | 1" | 1.1/4" | 1.1/2" | 2" | 2.1/2" | 3" | Bit Size |
|------|------|------|------|----|--------|--------|----|--------|----|----------|
| No4 | | | | | | | | | | |
| No6 | • | • | • | • | | • | | | | H30 |
| No8 | • | • | • | • | • | • | • | | | H40 |
| No10 | | • | • | • | • | • | • | • | | H40 |
| No12 | | | | • | • | • | • | | | H40 |
| No14 | | | | • | • | • | • | • | | H40 |



Pin Hex Countersunk Head Machine Screws

| | 8mm | 10mm | 12mm | 16mm | 20mm | 25mm | 30mm | 35mm | 40mm | 50mm | 60mm | Bit Size |
|-----|-----|------|------|------|------|------|------|------|------|------|------|----------|
| M3 | | • | • | • | | | | | | | | H20 |
| M4 | • | • | • | • | • | • | • | | • | | | H40 |
| M5 | | • | • | • | • | • | • | | • | • | • | H40 |
| M6 | • | • | • | • | • | • | • | | • | • | • | H40 |
| M8 | | | • | • | • | • | • | • | • | • | • | H50 |
| M10 | | | | | • | • | • | | • | • | • | H60 |



Pin Hex Button Head Machine Screws

| | 8mm | 10mm | 12mm | 16mm | 20mm | 25mm | 30mm | 35mm | 40mm | 50mm | 60mm | 100mm | Bit Size |
|-----|-----|------|------|------|------|------|------|------|------|------|------|-------|----------|
| M3 | | • | • | • | | | | | | | | | H20 |
| M4 | • | • | • | • | • | • | • | | • | | | | H40 |
| M5 | | • | • | • | • | • | • | | • | • | • | | H40 |
| M6 | | • | • | • | • | • | • | | • | • | • | | H40 |
| M8 | | | • | • | • | • | • | • | • | • | • | | H50 |
| M10 | | | | • | • | • | • | | • | • | • | • | H60 |



Security Fasteners

Clutch Head Woodscrews

Clutch head woodscrews are a tried and tested screws which can only be turned in a clockwise direction.



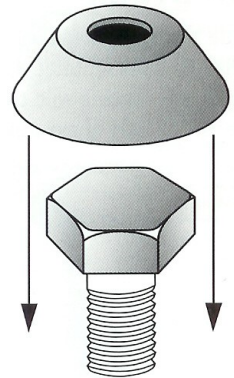
6-Lobe Resistorx



6-Lobe security screws with internal pin provide excellent results in high torque applications

Armour Ring

Simple collar when tapped over standard bolts and nuts makes them tamper resistant.



4 Hole Security Nut

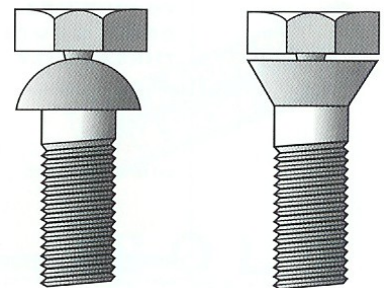


This special security nut is almost impossible to remove without the special matching tool.

High security permanent fixings. Hexagonal part sheers off leaving a cone.



Shear Bolts and Nuts



Oval Pan Machine Screws



This special security screw is designed to look round but is actually oval and can be installed and removed with the matching tool.

ISO Metric Socket Cap Screws BS4168 DIN912

Materials; High Tensile Grade 12.9 (RSR CODE 0401)
 High Tensile Grade 8.8 Special Order Only
 Stainless Steel A2 (RSR CODE 0411)
 Stainless Steel A4 Special Order Only

Finish; Self Colour, Bright Zinc Plated



Wrench Key Sizes

| | | | | | |
|----|----------|-----|-----------|-----|-----------|
| M3 | 2.5mm AF | M10 | 8.0mm AF | M24 | 19.0mm AF |
| M4 | 3.0mm AF | M12 | 10.0mm AF | M27 | 19.0mm AF |
| M5 | 4.0mm AF | M16 | 14.0mm AF | M30 | 22.0mm AF |
| M6 | 5.0mm AF | M20 | 17.0mm AF | M36 | 27.0mm AF |
| M8 | 6.0mm AF | | | | |

High Tensile Socket Cap Screw Availability

| | M3 | M4 | M5 | M6 | M8 | M10 | M12 | M16 | M20 | M24 | M27 | M30 | M36 |
|-------|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|
| 5mm | SP | SP | | | | | | | | | | | |
| 6mm | ● | SP | SP | | | | | | | | | | |
| 8mm | ● | ● | ● | SP | | | | | | | | | |
| 10mm | ● | ● | ● | ● | SP | SP | | | | | | | |
| 12mm | ● | ● | ● | ● | ● | ● | SP | | | | | | |
| 14mm | SP | SP | SP | SP | ● | SP | | | | | | | |
| 16mm | ● | ● | ● | ● | ● | ● | SP | | | | | | |
| 20mm | ● | ● | ● | ● | ● | ● | ● | | | | | | |
| 25mm | ● | ● | ● | ● | ● | ● | ● | ● | | | | | |
| 30mm | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| 35mm | | ● | ● | ● | ● | ● | ● | ● | ● | | | | |
| 40mm | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | |
| 45mm | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | |
| 50mm | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | |
| 60mm | | | ● | ● | ● | ● | ● | ● | ● | ● | | | |
| 70mm | | | ● | ● | ● | ● | ● | ● | ● | ● | | | |
| 80mm | | | | ● | ● | ● | ● | ● | ● | ● | SP | ● | ● |
| 90mm | | | | ● | ● | ● | ● | ● | ● | ● | SP | ● | |
| 100mm | | | | ● | ● | ● | ● | ● | ● | ● | SP | ● | ● |
| 110mm | | | | ● | ● | ● | ● | ● | ● | ● | | ● | |
| 120mm | | | | ● | ● | ● | ● | ● | ● | ● | SP | ● | ● |
| 130mm | | | | | ● | ● | ● | ● | ● | ● | | ● | ● |
| 140mm | | | | | ● | ● | ● | ● | ● | ● | SP | ● | ● |
| 150mm | | | | | ● | ● | ● | ● | ● | ● | SP | ● | ● |
| 160mm | | | | | ● | ● | ● | ● | ● | ● | | ● | ● |
| 180mm | | | | | ● | ● | ● | ● | ● | ● | SP | ● | ● |
| 200mm | | | | | ● | ● | ● | ● | ● | ● | | ● | ● |
| 220mm | | | | | | ● | | | ● | ● | | ● | ● |
| 240mm | | | | | | | | | ● | ● | | ● | ● |
| 260mm | | | | | | | SP | | ● | ● | | ● | ● |
| 280mm | | | | | | | | | ● | ● | | ● | ● |
| 300mm | | | | | | | | ● | ● | ● | | ● | ● |

Socket Countersunk Screws BS4168 DIN7991

Materials; High Tensile Grade 10.9
High Tensile Grade 8.8
Stainless Steel A2
Stainless Steel A4

(RSR CODE 0402)
Special Order Only
(RSR CODE 0412)
Special Order Only

Finish; Self Colour, Bright Zinc Plated

Wrench Key Sizes

| | | | |
|----|----------|-----|-----------|
| M3 | 2.0mm AF | M10 | 6.0mm AF |
| M4 | 2.5mm AF | M12 | 8.0mm AF |
| M5 | 3.0mm AF | M16 | 10.0mm AF |
| M6 | 4.0mm AF | M20 | 12.0mm AF |
| M8 | 5.0mm AF | M24 | 14.0mm AF |



High Tensile Socket Countersunk Screw Availability

[illegible]

Socket Button Screws BS4168

Materials; High Tensile Grade 10.9
 Stainless Steel A2
 Stainless Steel A4

(RSR CODE 0403)
(RSR CODE 0413)
Special Order Only

Finish; Self Colour, Bright Zinc Plated

Wrench Key Sizes

| | | | |
|----|----------|-----|----------|
| M3 | 2.0mm AF | M10 | 6.0mm AF |
| M4 | 2.5mm AF | M12 | 8.0mm AF |
| M5 | 3.0mm AF | | |
| M6 | 4.0mm AF | | |
| M8 | 5.0mm AF | | |



High Tensile Socket Button Screw Availability

| | | | | | | | | |
|--------|------|----|----|----|----|----|-----|-----|
| Length | | M3 | M4 | M5 | M6 | M8 | M10 | M12 |
| | 5mm | ● | | | | | | |
| | 6mm | ● | ● | ● | SP | | | |
| | 8mm | ● | ● | ● | ● | | | |
| | 10mm | ● | ● | ● | ● | ● | | |
| | 12mm | ● | ● | ● | ● | ● | | |
| | 15mm | | SP | ● | ● | ● | | |
| | 16mm | ● | ● | ● | ● | ● | ● | ● |
| | 18mm | | | SP | SP | ● | ● | |
| | 20mm | | | ● | ● | ● | ● | SP |
| | 22mm | | | SP | | ● | ● | |
| | 25mm | | | ● | ● | ● | ● | ● |
| | 30mm | | | ● | ● | ● | ● | ● |
| | 35mm | | | | | ● | ● | ● |
| | 40mm | | | | | ● | ● | ● |
| | 45mm | | | | | | | ● |
| | 50mm | | | | | | | ● |

Socket Set Screws BS4168 DIN916

Plain Cup Point

Materials; High Tensile 14.9 (RSR CODE 0405)
Stainless Steel A2 (RSR CODE 0415)

Finish; Self Colour, Bright Zinc Plated



Wrench Key Sizes

| | | | |
|----|----------|-----|-----------|
| M3 | 1.5mm AF | M10 | 5.0mm AF |
| M4 | 2.0mm AF | M12 | 6.0mm AF |
| M5 | 2.5mm AF | M16 | 8.0mm AF |
| M6 | 3.0mm AF | M20 | 10.0mm AF |
| M8 | 4.0mm AF | M24 | 12.0mm AF |

Used against hardened shafts in zinc, die castings and other soft materials where high tightening torques are impractical.

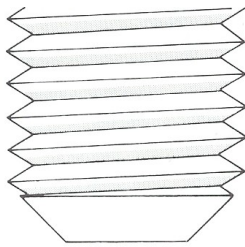
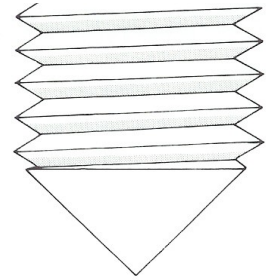
High Tensile Socket Set Screw Availability

| | M3 | M4 | M5 | M6 | M8 | M10 | M12 | M16 | M20 | M24 |
|------|----|----|----|----|----|-----|-----|-----|-----|-----|
| 3mm | ● | | | | | | | | | |
| 4mm | ● | ● | | | | | | | | |
| 5mm | ● | ● | ● | | | | | | | |
| 6mm | ● | ● | ● | ● | | | | | | |
| 8mm | ● | ● | ● | ● | ● | | | | | |
| 10mm | ● | ● | ● | ● | ● | | | | | |
| 12mm | ● | ● | ● | ● | ● | ● | ● | | | |
| 15mm | | SP | ● | ● | SP | ● | ● | | | |
| 16mm | ● | ● | ● | ● | ● | ● | ● | ● | | |
| 20mm | | ● | ● | ● | ● | ● | ● | ● | ● | |
| 25mm | | | ● | ● | ● | ● | ● | ● | ● | ● |
| 30mm | | | ● | ● | ● | ● | ● | ● | ● | SP |
| 35mm | | | | SP | ● | ● | ● | SP | SP | SP |
| 40mm | | | | ● | ● | ● | ● | ● | ● | ● |
| 45mm | | | | SP | | SP | SP | SP | | |
| 50mm | | | | ● | ● | ● | ● | ● | ● | SP |
| 55mm | | | | | | | | SP | | |
| 60mm | | | | | | | ● | ● | ● | SP |

Socket Set Screws - Other Points

Cone Point

Used for permanent location of parts. Deep penetration gives highest axial and torsional holding power. UNBRAKO cone point set screws are ideally suited for use as pivots, and for applications where fine adjustments are necessary.

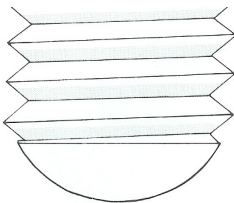
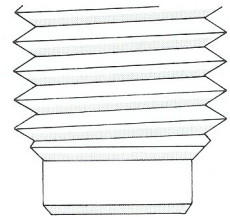


Flat Point

Used where parts must be frequently re-set, as it causes little or no damage to the part it bears against. Can be used against hardened shafts (usually with ground flat for better contact) and as adjusting screw. Preferred for thin wall thickness and on soft plugs.

Dog Point

Used for permanent location of one part to another. The point is usually spotted in a hole drilled in a shaft or on a flat surfaced milled on the shaft

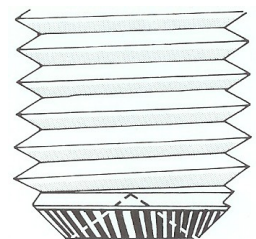


Oval Point

Used for frequent adjustment without deformation of part it bears against, also for seating against an angular surface. Circular U-grooves or axial V-grooves sometimes put in shaft to permit rotational or longitudinal adjustment.

Knurled Cup Point

Knurled Cup Point—Used for quick, permanent location of gears, collars and pulleys on shafts. Resists severe vibration. On all set screws over 6mm the cup is counter-bored to provide maximum holding power.



Nuts

Hexagon Full Nuts and Lock Nuts (Half Nuts)

| | | |
|-----------|--|-----------------|
| Materials | High Tensile Grade 8 | (RSR CODE 0203) |
| | Mild Steel Grade 4.6 | (RSR CODE 0201) |
| | Stainless Steel A2 and A4 grades | (RSR CODE 0205) |
| | Brass | (RSR CODE 0206) |
| | Nylon | (RSR CODE 0224) |
| Finishes | High Tensile and Mild Steel only available in Self Colour, Bright Zinc Plated, Galvanised, Sherardized, Zinc & Yellow Passivate. | |
| Threads | Metric, Metric Fine, BSW, BSF, UNC, UNF, BA | |



Full Nuts

Self Locking Nuts Binx and Nylocs

The self locking nut as the name implies feature inbuilt methods to resist movement through vibration. The Binx nut has grooves cut into the face of the nut then the top is compressed, the action of threading onto a bolt then pushes against the face of the nut applying an opposing force. The nyloc nut contains a Nylon insert, when tightening onto a bolt a thread is formed in the nylon holding the nut in place. Nylocs are available in both Type T (Thin Type) or Type P (Standard)



Lock Nuts (Half Nuts)

| | | |
|-----------|---|-----------------|
| Materials | High Tensile Grade 8 Nylocs | (RSR CODE 0223) |
| | Stainless Steel A2/A4 grades Nylocs | (RSR CODE 0224) |
| | High Tensile Grade 8 Binx | (RSR CODE 0221) |
| | Stainless Steel A2/A4 grades Binx | (RSR CODE 0222) |
| Finishes | High Tensile available in Bright Zinc Plated, Galvanised, Sherardized, Zinc & Yellow Passivate. | |
| Threads | Metric, Metric Fine, BSW, BSF, UNC, UNF, BA | |



Binx Nut

Specialized Nuts

Studding connectors are elongated nuts that form as a connector to either join two matching threads or can also be provided to connect two different threads.

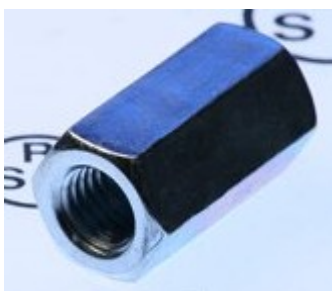
Dome nuts are capped and are primarily used in applications where the nut is to be seen and to protect people against abrasions with the screwed thread.

Wing Nuts form a simple means of hand tightening and unscrewing without the need of tools.

| | | |
|-----------|---------------------------------|-----------------|
| Materials | Mild Steel Grade 4.6 Connectors | (RSR CODE 0850) |
| | Mild Steel Dome Nuts | (RSR CODE 0241) |
| | Stainless Steel Dome Nuts | (RSR CODE 0242) |
| | Brass Dome Nuts | (RSR CODE 0223) |
| | Nylon Dome Nuts | (RSR CODE 0244) |
| | Mild Steel Wing Nuts | (RSR CODE 0231) |
| | Stainless Steel Wing Nuts | (RSR CODE 0232) |
| | Brass Wing Nuts | (RSR CODE 0233) |



Nyloc Nut



Studding Connectors



Wing Nut



Dome Nut

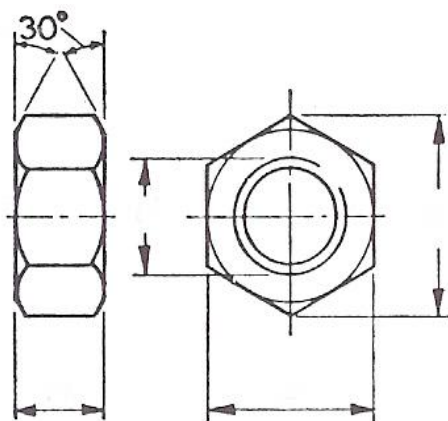
Full Nuts BS4190

Hexagon Full Nuts and Lock Nuts (Half Nuts)



Full & Lock Nut Dimensions

| Thread Dia | Pitch Coarse | Width Across Flats | | Thickness of Full Nut | | Thickness of Lock Nut | |
|------------|-----------------|--------------------|-------|-----------------------|-------|-----------------------|-------|
| | | Max | Min | Max | Min | Max | Min |
| M3 | 0.5 | 5.50 | 5.38 | 2.40 | 2.15 | | |
| M4 | 0.7 | 7.00 | 6.85 | 3.20 | 2.90 | | |
| M5 | 0.8 | 8.00 | 7.85 | 4.00 | 3.70 | | |
| M6 | 1 | 10.00 | 9.78 | 5.00 | 4.70 | | |
| M8 | 1.25 | 13.00 | 12.73 | 6.50 | 6.14 | 5.00 | 4.70 |
| M10 | 1.5 | 17.00 | 16.73 | 8.00 | 7.64 | 6.00 | 5.70 |
| M12 | 1.75 | 19.00 | 18.67 | 10.00 | 9.64 | 7.00 | 6.64 |
| M16 | 2 | 24.00 | 23.67 | 13.00 | 12.57 | 8.00 | 7.64 |
| M20 | 2.5 | 30.00 | 29.67 | 16.00 | 15.57 | 9.00 | 8.64 |
| M22 | 2.5 | 32.00 | 31.61 | 18.00 | 17.57 | 10.00 | 9.64 |
| M24 | 3 | 36.00 | 35.38 | 19.00 | 18.48 | 10.00 | 9.64 |
| M27 | 3 | 41.00 | 40.38 | 22.00 | 21.48 | 12.00 | 11.57 |
| M30 | 3.5 | 46.00 | 45.38 | 24.00 | 23.48 | 12.00 | 11.57 |
| M33 | 3.5 | 50.00 | 49.38 | 26.00 | 25.48 | 14.00 | 13.57 |
| M36 | 4 | 55.00 | 54.26 | 29.00 | 28.48 | 14.00 | 13.57 |
| M39 | 4 | 60.00 | 59.26 | 31.00 | 30.38 | 16.00 | 15.57 |
| M42 | 4.5 | 65.00 | 64.26 | 34.00 | 33.38 | 16.00 | 15.57 |
| M45 | 4.5 | 70.00 | 69.26 | 36.00 | 35.38 | 18.00 | 17.57 |
| M48 | 5 | 75.00 | 74.26 | 38.00 | 37.38 | 18.00 | 17.57 |
| M52 | 5 | 80.00 | 79.26 | 42.00 | 41.38 | 20.00 | 19.48 |
| M56 | 5.5 | 85.00 | 84.13 | 45.00 | 44.38 | | |



Full Nut



Lock Nut

Washers Form A & B BS4320: 1968

| | | |
|-----------|--------------------------|-----------------|
| Materials | Bright Mild Steel Form A | (RSR CODE 0333) |
| | Bright Mild Steel Form B | (RSR CODE 0331) |
| | Stainless Steel Form A | (RSR CODE 0343) |
| | Stainless Steel Form B | (RSR CODE 0341) |
| | Brass Form A | (RSR CODE 0353) |
| | Brass Form B | (RSR CODE 0351) |

| | |
|------------------|---|
| Finish for Steel | Bright Zinc Plated, Zinc & Yell Passivate, Galv (M6 and Up), Sherardized |
|------------------|---|



Form A and B washer dimensions

| Inside Diameter | | | | Outside Diameter | | | Thickness | | | | | |
|-----------------|------|------|------|------------------|------|------|-----------|-----|-----|--------|------|------|
| | | | | | | | Form A | | | Form B | | |
| | Nom | Max | Min | Nom | Max | Min | Nom | Max | Min | Nom | Max | Min |
| M2 | | | | 5.0 | 5.0 | | 0.3 | | | | | |
| M2.5 | | | | | | | 0.5 | | | | | |
| M3 | | | | 7.0 | 7.0 | 6.7 | 0.5 | 0.6 | 0.4 | | | |
| M3.5 | 3.7 | 3.9 | 3.7 | 7.0 | 7.0 | 6.7 | 0.5 | 0.6 | 0.4 | | | |
| M4 | 4.3 | 4.5 | 4.3 | 9.0 | 9.0 | 8.7 | 0.8 | 0.9 | 0.7 | | | |
| M5 | 5.3 | 5.5 | 5.3 | 10.0 | 10.0 | 9.7 | 1.0 | 1.1 | 0.9 | | | |
| M6 | 6.4 | 6.7 | 6.4 | 12.5 | 12.5 | 12.1 | 1.6 | 1.8 | 1.4 | 0.8 | 0.9 | 0.7 |
| M8 | 8.4 | 8.7 | 8.4 | 17.0 | 17.0 | 16.6 | 1.6 | 1.8 | 1.4 | 1.0 | 1.1 | 0.9 |
| M10 | 10.5 | 10.9 | 10.5 | 21.0 | 21.0 | 20.5 | 2.0 | 2.2 | 1.8 | 1.25 | 1.45 | 1.05 |
| M12 | 13.0 | 13.4 | 13.0 | 24.0 | 24.0 | 23.5 | 2.5 | 2.7 | 2.3 | 1.6 | 1.8 | 1.4 |
| M14 | 15.0 | 15.4 | 15.0 | 28.0 | 28.0 | 27.5 | 2.5 | 2.7 | 2.3 | 1.6 | 1.8 | 1.4 |
| M16 | 17.0 | 17.4 | 17.0 | 30.0 | 30.0 | 29.5 | 3.0 | 3.3 | 2.7 | 2.0 | 2.2 | 1.8 |
| M18 | 19.0 | 19.5 | 19.0 | 34.0 | 34.0 | 33.2 | 3.0 | 3.3 | 2.7 | 2.0 | 2.2 | 1.8 |
| M20 | 21.0 | 21.5 | 21.0 | 37.0 | 37.0 | 36.2 | 3.0 | 3.3 | 2.7 | 2.0 | 2.2 | 1.8 |
| M24 | 25.0 | 25.5 | 25.0 | 44.0 | 44.0 | 43.2 | 4.0 | 4.3 | 3.7 | 2.5 | 2.7 | 2.3 |
| M27 | 28.0 | 28.5 | 28.0 | 50.0 | 50.0 | 49.2 | 4.0 | 4.3 | 3.7 | 2.5 | 2.7 | 2.3 |
| M30 | 31.0 | 31.6 | 31.0 | 56.0 | 56.0 | 55.0 | 4.0 | 4.3 | 3.7 | 2.5 | 2.7 | 2.3 |
| M33 | 34.0 | 34.6 | 34.0 | 60.0 | 60.0 | 59.0 | 5.0 | 5.6 | 4.4 | 3.0 | 3.3 | 2.7 |
| M36 | 37.0 | 37.6 | 37.0 | 66.0 | 66.0 | 65.0 | 5.0 | 5.6 | 4.4 | 3.0 | 3.3 | 2.7 |
| M39 | 40.0 | 40.6 | 40.0 | 72.0 | 72.0 | 71.0 | 6.0 | 6.6 | 5.4 | 3.0 | 3.3 | 2.7 |

Washers Form C & D BS4320: 1968

| | | |
|------------------|--|-----------------|
| Materials | Bright Mild Steel Form C | (RSR CODE 0337) |
| | Bright Mild Steel Form D | (RSR CODE 0335) |
| | Stainless Steel Form C | (RSR CODE 0347) |
| | Stainless Steel Form D | (RSR CODE 0345) |
| | Brass Form C | (RSR CODE 0357) |
| | Brass Form D | (RSR CODE 0355) |
| Finish for Steel | Bright Zinc Plated, Zinc & Yell Passivate, | |
| | Galv (M6 and Up), Sherardized | |



Form C and D washer dimensions

| | Inside Diameter | | | Outside Diameter | | | Thickness | | | | | |
|-----|-----------------|------|------|------------------|------|------|-----------|-----|-----|--------|------|------|
| | | | | | | | Form C | | | Form D | | |
| | Nom | Max | Min | Nom | Max | Min | Nom | Max | Min | Nom | Max | Min |
| M4 | 4.3 | 4.5 | 4.3 | 10.0 | 10.0 | 9.7 | 0.8 | 0.9 | 0.7 | | | |
| M5 | 5.3 | 5.5 | 5.3 | 12.5 | 12.5 | 12.1 | 1.0 | 1.1 | 0.9 | | | |
| M6 | 6.4 | 6.7 | 6.4 | 14.0 | 14.0 | 13.6 | 1.6 | 1.8 | 1.4 | 0.8 | 0.9 | 0.7 |
| M8 | 8.4 | 8.7 | 8.4 | 21.0 | 21.0 | 20.5 | 1.6 | 1.8 | 1.4 | 1.0 | 1.1 | 0.9 |
| M10 | 10.5 | 10.9 | 10.5 | 24.0 | 24.0 | 23.5 | 2.0 | 2.2 | 1.8 | 1.25 | 1.45 | 1.05 |
| M12 | 13.0 | 13.4 | 13.0 | 28.0 | 28.0 | 27.5 | 2.5 | 2.7 | 2.3 | 1.6 | 1.8 | 1.4 |
| M14 | 15.0 | 15.4 | 15.0 | 30.0 | 30.0 | 29.5 | 2.5 | 2.7 | 2.3 | 1.6 | 1.8 | 1.4 |
| M16 | 17.0 | 17.4 | 17.0 | 34.0 | 34.0 | 33.2 | 3.0 | 3.3 | 2.7 | 2.0 | 2.2 | 1.8 |
| M18 | 19.0 | 19.5 | 19.0 | 37.0 | 37.0 | 36.2 | 3.0 | 3.3 | 2.7 | 2.0 | 2.2 | 1.8 |
| M20 | 21.0 | 21.5 | 21.0 | 39.0 | 39.0 | 38.2 | 3.0 | 3.3 | 2.7 | 2.0 | 2.2 | 1.8 |
| M24 | 25.0 | 25.5 | 25.0 | 50.0 | 50.0 | 49.2 | 4.0 | 4.3 | 3.7 | 2.5 | 2.7 | 2.3 |
| M27 | 28.0 | 28.5 | 28.0 | 56.0 | 56.0 | 55.0 | 4.0 | 4.3 | 3.7 | 2.5 | 2.7 | 2.3 |
| M30 | 31.0 | 31.6 | 31.0 | 60.0 | 60.0 | 59.0 | 4.0 | 4.3 | 3.7 | 2.5 | 2.7 | 2.3 |
| M33 | 34.0 | 34.6 | 34.0 | 66.0 | 66.0 | 65.0 | 5.0 | 5.6 | 4.4 | 3.0 | 3.3 | 2.7 |
| M36 | 37.0 | 37.6 | 37.0 | 72.0 | 72.0 | 71.0 | 5.0 | 5.6 | 4.4 | 3.0 | 3.3 | 2.7 |

Other types of Washers

Penny Washers (Mudguard / Repair) Plated

| | | | |
|-----------|------------|---------|-----------------|
| Materials | Mild Steel | 20mm od | (RSR CODE 0390) |
| | Mild Steel | 25mm od | (RSR CODE 0391) |
| | Mild Steel | 32mm od | (RSR CODE 0392) |
| | Mild Steel | 38mm od | (RSR CODE 0393) |
| | Mild Steel | 50mm od | (RSR CODE 0394) |

Finish; Self Colour, Bright Zinc Plated (standard), Galvanised, Sherardized, Zinc & Yellow Passivate.



| | M5 | M6 | M8 | M10 | M12 |
|------|----|----|----|-----|-----|
| 20mm | ● | ● | | | |
| 25mm | ● | ● | ● | ● | |
| 30mm | | ● | ● | ● | |
| 40mm | | ● | ● | ● | ● |
| 50mm | | ● | ● | ● | ● |

Single Coil Spring Washers DIN7980

| | | |
|-----------|-------------------------------|-----------------|
| Materials | Square Section Steel | (RSR CODE 0361) |
| | Rectangular Section Steel | (RSR CODE 0368) |
| | Square Section Stainless | (RSR CODE 0362) |
| | Rectangular Section Stainless | (RSR CODE 0369) |

Finish; Self Colour, Bright Zinc Plated (standard), Galvanised, Sherardized, Zinc & Yellow Passivate.



Double Coil Spring Washers

| | | |
|-----------|----------------------------|-----------------|
| Materials | Double Coil Square Section | (RSR CODE 0364) |
| | Double Coil Rect Section | (RSR CODE 0369) |
| | Double Coil Phos Bronze | (RSR CODE 0366) |
| | Double Coil Stainless | (RSR CODE 0365) |

Finish; Self Colour, Bright Zinc Plated (standard), Galvanised, Sherardized, Zinc & Yellow Passivate.



Internal Shake Proof Washers DIN6797 J

| | | |
|-----------|-----------------|-----------------|
| Materials | Steel | (RSR CODE 0371) |
| | Stainless Steel | (RSR CODE 0373) |
| | Phosphor Bronze | (RSR CODE 0329) |

Finish Self Colour, Bright Zinc Plated (standard), Galvanised, Sherardized, Zinc & Yellow Passivate.



External Shake Proof Washers DIN6797 A

| | | |
|-----------|-----------------|-----------------|
| Materials | Steel | (RSR CODE 0372) |
| | Stainless Steel | (RSR CODE 0374) |
| | Phosphor Bronze | (RSR CODE 0330) |

Finish Self Colour, Bright Zinc Plated (standard), Galvanised, Sherardized, Zinc & Yellow Passivate.



CFS Chemical Dispensing System

The RAWL CFS is entirely cartridge free and easy to set up using:

RP30 POLYESTER
RM50 POLYESTER STYRENE FREE
RV200 VINYLESTER STYRENE FREE

The RAWL CFS is safe on site with no cutting or trimming required, simply insert the foil and pump.



RP30 Polyester Resin 300ml



| DESCRIPTION | QUANTITY | PRODUCT CODE |
|-----------------------|----------|--------------|
| 4 FOILS & 4 NOZZLES | 4 Pack | CFS-RP30-4 |
| 12 FOILS & 12 NOZZLES | 12 Pack | CFS-RP30-12 |
| 24 FOILS | 24 Pack | CFS-RP30-24 |

RM50 Polyester Styrene Free 300ml



| DESCRIPTION | QUANTITY | PRODUCT CODE |
|-----------------------|----------|--------------|
| 4 FOILS & 4 NOZZLES | 4 Pack | CFS-RM50-4 |
| 12 FOILS & 12 NOZZLES | 12 Pack | CFS-RM50-12 |
| 24 FOILS | 24 Pack | CFS-RM50-24 |

RV200 Vinylester Styrene Free Resin 300ml



| DESCRIPTION | QUANTITY | PRODUCT CODE |
|-----------------------|----------|--------------|
| 4 FOILS & 4 NOZZLES | 4 Pack | CFS-RV200-4 |
| 12 FOILS & 12 NOZZLES | 12 Pack | CFS-RV200-12 |
| 24 FOILS | 24 Pack | CFS-RV200-24 |



Wedge Anchors

The Rawl Wedge Anchor is a steel internally threaded socket fixing, slotted at one end to allow for expansion. Suitable for the insertion of a bolt or stud. Expansion is achieved by driving down the steel wedge in the anchor using a setting tool. The Wedge Anchor becomes permanently fixed, which allows the bolt or stud to be removed without detriment to the fixing. Suitable for fixing cable trays, pipe runs, suspended ceilings and other mechanical and electrical services. Available in zinc plated steel and stainless steel grade 316 (A4). To be used in concrete only. Manual and Mechanical setting tools are available. Lipped version will be available.



Size Chart

| THREAD SIZE | ANCHOR LENGTH (mm) | THREAD LENGTH (mm) | HOLE DIAMETER (mm) | HOLE DEPTH (mm) | MAXIMUM RECOMMENDED TORQUE (Nm) | PRODUCT CODE | | | |
|-------------|--------------------|--------------------|--------------------|-------------------|---------------------------------|--------------|--------------------|---------------------|-------------------------|
| | | | | | | ZINC PLATED | STAINLESS STEEL A4 | MANUAL SETTING TOOL | MECHANICAL SETTING TOOL |
| (d) | (l) | (l _G) | (d _p) | (b _O) | (T _{inst}) | | | | |
| M6 | 25 | 11 | 8 | 27 | 4.5 | 77-108 | 77-608 | 77-208 | 77-209 (SDS+) |
| M8 | 30 | 13 | 10 | 32 | 11 | 77-120 | 77-620 | 77-220 | 77-221 (SDS+) |
| M10 | 40 | 15 | 12 | 42 | 22 | 77-132 | 77-632 | 77-232 | 77-233 (SDS+) |
| M12 | 50 | 20 | 15 | 52 | 38 | 77-141 | 77-641 | 77-241 | 77-242 (SDS+) |
| M16 | 65 | 25 | 20 | 67 | 95 | 77-150 | 77-650 | 77-250 | 77-251 (SDS MAX) |
| M20 | 80 | 35 | 25 | 82 | 185 | 77-162 | - | 77-262 | 77-263 (SDS MAX) |

| Size | Concrete, $f_{ck,cube} = 30\text{N/mm}^2$ (C20/25) | | | | | | | | |
|------|--|--------------------|------------------------|--------------------|-----------------------|---------------------|-----------------------------------|----------------------|---|
| | Characteristic Load (kN) | | Design Resistance (kN) | | Recommended Load (kN) | | Characteristic Edge Distance (mm) | | Characteristic Spacing (mm) |
| | Tension (N_{Rk}) | Shear (V_{Rk}) | Tension (N_{Rd}) | Shear (V_{Rd}) | Tension (N_{rec}) | Shear (V_{rec}) | Tension ($C_{cr,N}$) | Shear ($C_{cr,V}$) | Tension & Shear ($S_{cr,N}$) ($S_{cr,V}$) |
| M6 | 7.9 | 4.3 | 3.7 | 2.4 | 3.1 | 2.0 | 80 | 80 | 90 |
| M8 | 9.5 | 7.5 | 4.4 | 4.1 | 3.7 | 3.4 | 90 | 90 | 110 |
| M10 | 15.9 | 11.8 | 7.4 | 6.6 | 6.2 | 5.5 | 120 | 120 | 140 |
| M12 | 20.3 | 17.2 | 9.4 | 9.6 | 7.8 | 8.0 | 160 | 160 | 170 |
| M16 | 31.8 | 32.0 | 14.7 | 17.8 | 12.3 | 14.8 | 220 | 220 | 250 |
| M20 | 43.1 | 49.9 | 20.0 | 27.7 | 16.7 | 23.1 | 250 | 250 | 300 |

Setting Tools

Manual Setting Tool



M6, M8, M10, M12, M16 & M20.

SDS+ Setting Tool



M16 & M20.



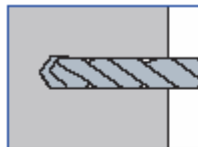
The Rawlbolt® Shield Anchor is the world's most popular, high quality torque controlled expanding shield anchor, combining ease of installation with good load carrying capacity. The Rawlbolt is the ideal general purpose anchor bolt having higher degrees of expansion than other types of expansion anchor and excellent tolerance to variations in hole sizes. The collapsible ferrule ensures positive

clamping force is transmitted to the fixture. Available in zinc plated yellow passivated steel in loose bolt, and bolt projecting versions. Please note that the performance data for the Rawlbolt is based on a 5.8 grade bolt.

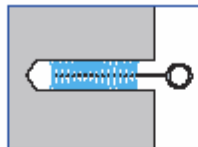
Size Chart

| REFERENCE | BOLT SIZE | BOLT LENGTH (mm) | SHIELD LENGTH (mm) | FIXTURE THICKNESS (mm) | | HOLE DIAMETER (mm) | | MINIMUM HOLE DEPTH (mm) | MINIMUM SUBSTRATE THICKNESS (mm) | RECOMMENDED TORQUE (Nm) | | PRODUCT CODE |
|--------------------------------|-----------|-------------------|--------------------|----------------------------|----------------------------|------------------------|----------------------|-------------------------|----------------------------------|---|---|----------------------------|
| | | | | MAXIMUM (mm) (T_{fix}) | MINIMUM (mm) (T_{fix}) | IN STRUCTURE (d_f) | IN FIXTURE (d_f) | | | 30N/mm ² CONCRETE (T_{inst}) | 20.5N/mm ² CONCRETE (T_{inst}) | |
| M6 10P M6 25P M6 60P | M6 | 65 80 115 | 45 | 10 25 60 | 0 | 12 | 6.5 | 50 | 70 | 6.5 | 5.0 | 44-505 44-510 44-515 |
| M8 10P M8 25P M8 60P | M8 | 75 90 125 | 50 | 10 25 60 | 0 | 14 | 9.0 | 55 | 80 | 15 | 7.5 | 44-555 44-560 44-565 |
| M10 15P M10 30P M10 60P | M10 | 90 105 135 | 60 | 15 30 60 | 0 | 16 | 11 | 65 | 100 | 27 | 13 | 44-605 44-610 44-615 |
| M12 15P M12 30P M12 75P | M12 | 110 125 170 | 75 | 15 30 75 | 0 | 20 | 13 | 85 | 120 | 50 | 23 | 44-655 44-660 44-665 |
| M16 15P M16 35P M16 75P | M16 | 150 170 210 | 115 | 15 35 75 | 0 10 35 | 25 | 17 | 125 | 190 | 120 | - | 44-705 44-710 44-715 |
| M20 15P M20 30P M20 100P | M20 | 170 185 255 | 130 | 15 30 100 | 0 10 30 | 32 | 22 | 140 | 220 | 230 | - | 44-755 44-760 44-765 |
| M24 75P M24 120P | M24 | 255 300 | 150 | 75 120 | 0 75 | 38 | 26 | 160 | 240 | 400 | - | 44-805 44-810 |

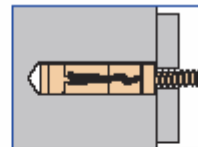
Installation



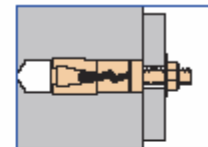
1. Drill a hole of required diameter and depth. Note: When fixing into brickwork, mortar joints should be avoided.



2. Remove debris and thoroughly clean hole with brush and pump.



3. Insert the shield.



4. Position fixture and insert bolt. Tighten to recommended torque.

Specification Data

| Size | Concrete, $f_{ck,cube} = 30\text{N/mm}^2$ (C20/25) | | | | | | | | | Brickwork = 20.5N/mm ² |
|------|--|--------------------|------------------------|--------------------|-----------------------|---------------------|-----------------------------------|----------------------|---|--|
| | Characteristic Load (kN) | | Design Resistance (kN) | | Recommended Load (kN) | | Characteristic Edge Distance (mm) | | Characteristic Spacing (mm) | Recommended Load (kN) |
| | Tension (N_{Rk}) | Shear (V_{Rk}) | Tension (N_{Rd}) | Shear (V_{Rd}) | Tension (N_{rec}) | Shear (V_{rec}) | Tension ($C_{cr,N}$) | Shear ($C_{cr,V}$) | Tension & Shear ($S_{cr,N}$ / $S_{cr,V}$) | Tension & Shear (N_{rec} / V_{rec}) |
| M6 | 9.6 | 8.2 | 4.5 | 4.5 | 3.8 | 3.8 | 80 | 100 | 120 | 1.8 |
| M8 | 12.1 | 12.8 | 5.6 | 7.1 | 4.7 | 5.9 | 100 | 120 | 150 | 2.3 |
| M10 | 16.7 | 20.9 | 7.7 | 11.6 | 6.4 | 9.7 | 120 | 160 | 180 | 2.9 |
| M12 | 24.6 | 30.5 | 11.4 | 16.9 | 9.5 | 14.1 | 160 | 180 | 250 | 4.3 |
| M16 | 57.4 | 55.3 | 26.6 | 30.7 | 22.2 | 25.6 | 190 | 260 | 290 | Bolts above M12 are not recommended in brickwork |
| M20 | 79.4 | 88.1 | 36.8 | 48.9 | 30.7 | 40.8 | 250 | 300 | 330 | |
| M24 | 99.0 | 122.8 | 45.8 | 68.2 | 38.2 | 56.8 | 280 | 350 | 420 | |

Rawlbolts Loose Bolt



Features

1. Bolt lengths suitable fixture thickness up to 150mm.
2. Ferrule marked with diameter for correct installation.
3. Pressed steel segments ensure consistent dimensional accuracy.
4. Optimum taper nut for maximum expansion all substrates.

DESCRIPTION

World's most popular expanding shield anchor. Easy to use with good load carrying capacity. Ideal general purpose anchor bolt with excellent tolerance to variation in hole size. The collapsible ferrule ensures positive clamping force is transmitted to the fixture.

Suitable for use in:

Concrete, Brickwork, Stone.

Size Chart

| REFERENCE | BOLT SIZE | BOLT LENGTH (mm) | SHIELD LENGTH (mm) | FIXTURE THICKNESS (mm) | | HOLE DIAMETER (mm) | | MINIMUM HOLE DEPTH (mm) | MINIMUM SUBSTRATE THICKNESS (mm) | RECOMMENDED TORQUE (Nm) (<i>T_{req}</i>) | | PRODUCT CODE |
|--|--------------|-------------------------|--------------------------|---|---|--|--|----------------------------------|---|---|------------------------------------|--------------------------------------|
| | | | | MAXIMUM (mm) (<i>T_{fix}</i>) | MINIMUM (mm) (<i>T_{fix}</i>) | IN FIXTURE (<i>d_f</i>) | IN SUBSTRATE (<i>d_o</i>) | | | 30N/mm ² CONCRETE | 20.5N/mm ² BRICKWORK | |
| | | | | | | | | | | | | |
| M6 10L M6 25L M6 40L | M6 | 55 70 85 | 45 | 10 25 40 | 0 | 6.5 | 12 | 50 | 70 | 6.5 | 5.0 | 44-015 44-020 44-025 |
| M8 10L M8 25L M8 40L | M8 | 65 80 95 | 50 | 10 25 40 | 0 | 9.0 | 14 | 55 | 80 | 15 | 7.5 | 44-055 44-060 44-065 |
| M10 10L M10 25L M10 50L M10 75L | M10 | 75 90 115 140 | 60 | 10 25 50 75 | 0 | 11 | 16 | 65 | 100 | 27 | 13 | 44-105 44-110 44-115 44-120 |
| M12 10L M12 25L M12 40L M12 60L | M12 | 90 105 120 140 | 75 | 10 25 40 60 | 0 | 13 | 20 | 85 | 120 | 50 | 23 | 44-155 44-160 44-165 44-170 |
| M16 15L M16 30L M16 60L | M16 | 135 150 180 | 115 | 15 30 60 | 0 10 30 | 17 | 25 | 125 | 190 | 120 | - | 44-205 44-210 44-215 |
| M20 60L M20 100L | M20 | 195 235 | 130 | 60 100 | 25 60 | 22 | 32 | 140 | 220 | 230 | - | 44-255 44-260 |
| M24 100L M24 150L | M24 | 255 300 | 150 | 100 150 | 25 100 | 26 | 38 | 160 | 240 | 400 | - | 44-305 44-310 |

Specification Data

| Size | Concrete, $f_{ck,cube} = 30N/mm^2$ (C20/25) | | | | | | | | | | Brickwork = 20.5N/mm ² |
|------|---|--------------------|------------------------|--------------------|-----------------------|---------------------|-----------------------------------|----------------------|--------------------------------|----------------------|--|
| | Characteristic Load (kN) | | Design Resistance (kN) | | Recommended Load (kN) | | Characteristic Edge Distance (mm) | | Characteristic Spacing (mm) | | Recommended Load (kN) |
| | Tension (N_{Rk}) | Shear (V_{Rk}) | Tension (N_{Rd}) | Shear (V_{Rd}) | Tension (N_{rec}) | Shear (V_{rec}) | Tension ($C_{cr,N}$) | Shear ($C_{cr,V}$) | Tension & Shear ($S_{cr,N}$) | Shear ($S_{cr,V}$) | Tension & Shear (N_{rec}) |
| M6 | 9.6 | 8.2 | 4.5 | 4.5 | 3.8 | 3.8 | 80 | 100 | 120 | | 1.8 |
| M8 | 12.1 | 12.8 | 5.6 | 7.1 | 4.7 | 5.9 | 100 | 120 | 150 | | 2.3 |
| M10 | 16.7 | 20.9 | 7.7 | 11.6 | 6.4 | 9.7 | 120 | 160 | 180 | | 2.9 |
| M12 | 24.6 | 30.5 | 11.4 | 16.9 | 9.5 | 14.1 | 160 | 180 | 250 | | 4.3 |
| M16 | 57.4 | 55.3 | 26.6 | 30.7 | 22.2 | 25.6 | 190 | 260 | 290 | | Bolts above M12 are not recommended in brickwork |
| M20 | 79.4 | 88.1 | 36.8 | 48.9 | 30.7 | 40.8 | 250 | 300 | 330 | | |
| M24 | 99.0 | 122.8 | 45.8 | 68.2 | 38.2 | 56.8 | 280 | 350 | 420 | | |

Rawlbolts

Eyebolts



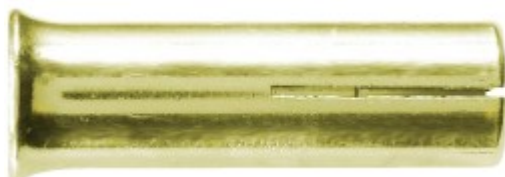
| REFERENCE | BOLT SIZE | SHIELD LENGTH (mm) | OVERALL LENGTH (mm) | HOLE DIAMETER IN STRUCTURE (mm) | MINIMUM HOLE DEPTH (mm) | APPROXIMATE DIAMETER IN EYE (mm) | RECOMMENDED TORQUE FOR 30N/mm ² CONCRETE (Nm) (T_{INST}) | PRODUCT CODE |
|-----------|-----------|--------------------|---------------------|---------------------------------|-------------------------|----------------------------------|---|--------------|
| | (d) | (S) | (L) | (d_o) | (b_o) | (E) | | |
| M6E | M6 | 45 | 73 | 12 | 50 | 10 | 6.5 | 44-432 |
| M8E | M8 | 50 | 87 | 14 | 55 | 12 | 15 | 44-437 |
| M10E | M10 | 60 | 108 | 16 | 65 | 14 | 27 | 44-442 |
| M12E | M12 | 75 | 130 | 20 | 85 | 17 | 50 | 44-447 |

Hook Bolts



| REFERENCE | BOLT SIZE | SHIELD LENGTH (mm) | OVERALL LENGTH (mm) | HOLE DIAMETER IN STRUCTURE (mm) | MINIMUM HOLE DEPTH (mm) | APPROXIMATE DIAMETER IN HOOK (mm) | RECOMMENDED TORQUE FOR 30N/mm ² CONCRETE (Nm) (T_{INST}) | PRODUCT CODE |
|-----------|-----------|--------------------|---------------------|---------------------------------|-------------------------|-----------------------------------|---|--------------|
| | (d) | (S) | (L) | (d_o) | (b_o) | (H) | | |
| M6H | M6 | 45 | 83 | 12 | 50 | 8 | 6.5 | 44-401 |
| M8H | M8 | 50 | 98 | 14 | 55 | 10 | 15 | 44-406 |
| M10H | M10 | 60 | 120 | 16 | 65 | 12 | 27 | 44-411 |
| M12H | M12 | 75 | 145 | 20 | 85 | 16 | 50 | 44-416 |

Lipped Wedge Anchor



DESCRIPTION

The Lipped Wedge Anchor provides an easy to install fixing. Allows for bolts and studs to be installed and removed without damaging the anchor. Install with manual setting tool or mechanical setting tool for use with hammer action drilling machines.

Suitable for use in:

Concrete Stone

| THREAD SIZE | ANCHOR LENGTH (mm) | THREAD LENGTH (mm) | HOLE DIAMETER (mm) | HOLE DEPTH (mm) | MAXIMUM RECOMMENDED TORQUE (Nm) (T_{INST}) | PRODUCT CODE | | |
|-------------|--------------------|--------------------|--------------------|-----------------|--|--------------|---------------------|-------------------------|
| | | | | | | ZINC PLATED | MANUAL SETTING TOOL | MECHANICAL SETTING TOOL |
| (d) | (L) | (LG) | (d_ϕ) | (b_o) | | | | |
| M6 | 25 | 11 | 8 | 27 | 4.5 | 77-908 | 77-208 | 77-209 (SDS+) |
| M8 | 30 | 13 | 10 | 32 | 11 | 77-920 | 77-220 | 77-221 (SDS+) |
| M10 | 40 | 15 | 12 | 42 | 22 | 77-932 | 77-232 | 77-233 (SDS+) |
| M12 | 50 | 20 | 15 | 52 | 38 | 77-941 | 77-241 | 77-242 (SDS+) |
| M16 | 65 | 25 | 20 | 67 | 95 | 77-950 | 77-250 | 77-251 (SDS MAX) |

Throughbolts RSPT



Features

1. Embedment depth markings to ensure correct installation.
2. Cold formed body ensures constant dimensional accuracy.
3. Optimum cone angle for controlled expansion.
4. Tested and approved by the independent UK and international approval bodies.

DESCRIPTION

The RAWL® Throughbolt range has been developed to meet the changing demands of the market in terms of product approval levels, ease of fixing and product quality.

The versatile through fixing for use in a wide range of applications in concrete of 20N/mm² and over.

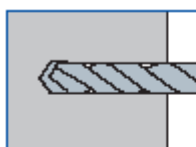
Available in: Zinc plated steel, Hot dip galvanised, Stainless steel grade A4.

Suitable for use in: Concrete.

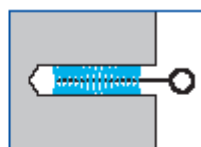
Size Chart

| BOLT SIZE/HOLE IN CONCRETE (d) (d _o) | BOLT LENGTH (mm) (l) | WASHER DIAMETER (mm) (w) | THREAD LENGTH (mm) (l _o) | HOLE DIAMETER IN FIXTURE (mm) (d _f) | STANDARD EMBEDMENT | | REDUCED EMBEDMENT | | REG. TORQUE (Nm) (T _{inst}) | PRODUCT CODE | | |
|--|-------------------------|-----------------------------|---|--|--|---|--|---|--|--------------|--------------------|--------------------------------|
| | | | | | MINIMUM HOLE DEPTH (mm) (h _o) | MAXIMUM FIXTURE THICKNESS (mm) (T _{fix}) | MINIMUM HOLE DEPTH (mm) (h _o) | MAXIMUM FIXTURE THICKNESS (mm) (T _{fix}) | | ZINC PLATED | HOT DIP GALVANISED | STAINLESS STEEL GRADE 316 (A4) |
| M6 6mm | 55 | 12.5 | 25 | 6.5 | - | - | 30 | 16 | 5 | 56-104 | * | 56-604 |
| | 70 | | 25 | | 50 | 12 | 30 | 32 | | 56-108 | * | * |
| | 85 | | 25 | | 50 | 26 | 30 | 46 | | 56-110 | * | 56-610 |
| M8 8mm | 50 | 17 | 14 | 9 | - | - | 40 | 5 | 15 | 56-114 | 56-814 | * |
| | 65 | | 25 | | - | - | 40 | 15 | | 56-116 | 56-816 | 56-616 |
| | 80 | | 40 | | 55 | 15 | 40 | 30 | | 56-120 | 56-820 | 56-620 |
| | 95 | | 55 | | 55 | 30 | 40 | 45 | | 56-122 | 56-822 | * |
| | 105 | | 25 | | 55 | 40 | 40 | 55 | | * | * | 56-624 |
| | 115 | | 75 | | 55 | 50 | 40 | 65 | | 56-125 | 56-825 | * |
| M10 10mm | 65 | 21 | 21 | 11 | - | - | 50 | 5 | 25 | 56-129 | 56-829 | * |
| | 80 | | 30 | | 60 | 7 | 50 | 16 | | 56-128 | 56-828 | 56-628 |
| | 95 | | 45 | | 60 | 22 | 50 | 32 | | 56-132 | 56-832 | 56-632 |
| | 115 | | 65 | | 60 | 42 | 50 | 52 | | 56-136 | 56-836 | 56-636 |
| | 130 | | 80 | | 60 | 57 | 50 | 67 | | 56-138 | 56-838 | 56-638 |
| | 130 | | 80 | | 60 | 57 | 50 | 67 | | 56-138 | 56-838 | 56-638 |
| M12 12mm | 80 | 24 | 30 | 13 | - | - | 60 | 5 | 45 | 56-139 | 56-839 | * |
| | 100 | | 40 | | 80 | 4 | 60 | 24 | | 56-140 | 56-840 | 56-640 |
| | 120 | | 60 | | 80 | 24 | 60 | 44 | | 56-144 | 56-844 | 56-644 |
| | 135 | | 75 | | 80 | 39 | 60 | 58 | | 56-148 | 56-848 | 56-648 |
| | 150 | | 90 | | 80 | 54 | 60 | 75 | | 56-150 | 56-850 | 56-650 |
| | 160 | | 100 | | 80 | 84 | 60 | 105 | | 56-147 | 56-847 | * |
| | 180 | | 120 | | 80 | 124 | 60 | 145 | | 56-149 | * | * |
| | 220 | | 120 | | 80 | 124 | 60 | 145 | | 56-149 | * | * |
| M16 16mm | 90 | 30 | 32 | 18 | - | - | 50 | 20 | 110 | 56-154 | * | * |
| | 105 | | 55 | | - | - | 80 | 25 | | 56-153 | 56-853 | 56-651 |
| | 140 | | 80 | | 100 | 20 | 80 | 40 | | 56-152 | 56-852 | 56-652 |
| | 160 | | 100 | | 100 | 60 | 80 | 80 | | 56-156 | 56-856 | 56-656 |
| | 220 | | 140 | | 100 | 100 | 80 | 120 | | 56-158 | 56-858 | 56-658 |
| M20 20mm | 125 | 37 | 65 | 22 | - | - | 100 | 5 | 180 | 56-159 | 56-859 | 56-659 |
| | 160 | | 65 | | 120 | 20 | 100 | 40 | | 56-160 | 56-860 | 56-660 |
| | 200 | | 100 | | 120 | 60 | 100 | 80 | | 56-164 | 56-864 | 56-664 |
| | 300 | | 100 | | 120 | 160 | 100 | 180 | | 56-166 | * | 56-666 |
| M24 24mm | 180 | 44 | 65 | 26 | 135 | 20 | 120 | 35 | 320 | 56-168 | * | * |
| | 260 | | 65 | | 135 | 100 | 120 | 115 | | 56-172 | 56-872 | 56-672 |

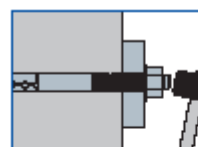
Installation



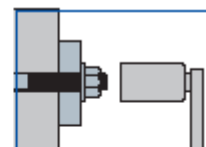
1. Drill a hole of required diameter and depth.



2. Remove debris and thoroughly clean hole with brush and pump.



3. Lightly tap the throughbolt through the fixture into hole with a hammer, until fixing depth is reached.



4. Tighten to the recommended torque.

Specification Data

| Size | Concrete, $f_{ck,cube} = 30\text{N/mm}^2$ (C20/25) | | | | | | | | | | | | | | | |
|------|--|--------------------|------------------------|--------------------|-----------------------|---------------------|--------------------------|--------------------|------------------------|--------------------|-----------------------|---------------------|-----------------------------------|----------------------|--------------------------------|--------------------------------|
| | Standard Embedment Depth | | | | | | Reduced Embedment Depth | | | | | | Characteristic Edge Distance (mm) | | Characteristic Spacing (mm) | |
| | Characteristic Load (kN) | | Design Resistance (kN) | | Recommended Load (kN) | | Characteristic Load (kN) | | Design Resistance (kN) | | Recommended Load (kN) | | | | | |
| | Tension (N_{Rk}) | Shear (V_{Rk}) | Tension (N_{Rd}) | Shear (V_{Rd}) | Tension (N_{rec}) | Shear (V_{rec}) | Tension (N_{Rk}) | Shear (V_{Rk}) | Tension (N_{Rd}) | Shear (V_{Rd}) | Tension (N_{rec}) | Shear (V_{rec}) | Tension ($C_{cr,N}$) | Shear ($C_{cr,V}$) | Tension & Shear ($S_{cr,N}$) | Tension & Shear ($S_{cr,V}$) |
| M6 | 6.8 | 7.1 | 3.1 | 3.9 | 2.6 | 3.3 | 4.5 | 4.7 | 2.1 | 2.6 | 1.8 | 2.2 | 60 | 60 | 80 | |
| M8 | 10.5 | 13.6 | 4.9 | 7.5 | 4.1 | 6.3 | 8.5 | 10.1 | 4.0 | 5.6 | 3.3 | 4.7 | 80 | 80 | 100 | |
| M10 | 15.1 | 18.4 | 7.0 | 10.2 | 5.8 | 8.5 | 10.7 | 15.3 | 5.0 | 8.5 | 4.2 | 7.1 | 100 | 100 | 120 | |
| M12 | 23.7 | 26.6 | 11.0 | 14.8 | 9.2 | 12.3 | 15.0 | 22.9 | 7.0 | 12.7 | 5.8 | 10.6 | 120 | 120 | 150 | |
| M16 | 36.6 | 50.3 | 17.0 | 28.0 | 14.2 | 23.3 | 23.0 | 42.5 | 10.7 | 23.6 | 8.9 | 19.7 | 160 | 160 | 180 | |
| M20 | 45.7 | 73.3 | 21.2 | 40.7 | 17.7 | 33.9 | 38.0 | 63.2 | 17.6 | 35.1 | 14.7 | 29.3 | 190 | 190 | 260 | |
| M24 | 52.8 | 94.5 | 24.4 | 52.5 | 20.3 | 43.8 | 48.9 | 87.2 | 22.7 | 48.4 | 18.9 | 40.3 | 250 | 250 | 300 | |

Reduction Factors - Edge and Spacing Distances for Rawl® R-SPT The full characteristic edge and spacing distances shown in the table above are the minimum allowable for the quoted DESIGN RESISTANCE or RECOMMENDED LOAD, depending on your design method. Where these dimensions are not achievable, the

appropriate reduction factor/s from the tables below must be applied to the DESIGN RESISTANCE or RECOMMENDED LOAD.

Choose the required bolt diameter across the top of the appropriate table and read down the left hand column until actual edge or spacing distance is found.

Read off the reduction factor where the two lines intersect (interpolate as required). Multiply this factor by the DESIGN RESISTANCE or RECOMMENDED LOAD quoted in the table.

On the occasion that multiple close edge and/or spacing distances occur, the appropriate reduction factors must be applied.

Metal Self Drive Plasterboard Fixings

DESCRIPTION

No drill required—simply pierce paper skin and screw home. Can be used in single and double thickness plasterboard. Ideal for use with either a power or standard Pozi Drive screwdriver. Must only be used with screws provided.

Suitable for use in:

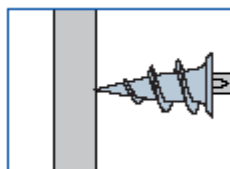
Plasterboard.

Features

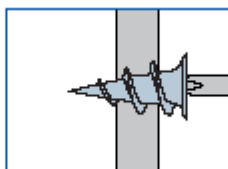
1. Flange prevents accidental push through in plasterboard.
2. Short length ideally suited



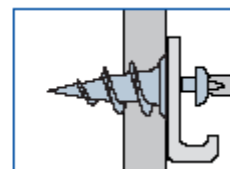
| MATERIAL | RECOMMENDED LOAD |
|---------------------|------------------|
| Plasterboard 9.5mm | 6kg |
| Plasterboard 12.5mm | 8kg |



1. Position the fixture and mark out holes. Using a No. 2 Pozi Drive screwdriver or screwdriver bit, push firmly into the board until thread engages.



2. Maintaining a firm pressure, screw in fixing until flush with the base material.



3. Place fixture in position, insert screw and tighten until secure.

Safety Plus Loose Bolt



DESCRIPTION

SafetyPlus™ is an all steel high performance expansion anchor, suitable for the most demanding safety critical applications. This range offers exceptional tension, shear and combined load performance in concrete.

Suitable for use in: Concrete.

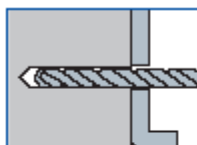
Features

1. 8.8 grade bolt.
2. High strength steel washer.
3. Integral controlled collapse and anti-rotation feature ensures fixture is firmly secured.
4. Unique zig-zag feature provides balanced expansion ensuring secure setting and maximum load carrying capacity.
5. Case-hardened nut with optimum angle taper for maximum expansion.

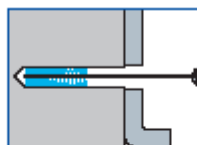
Size Chart

| BOLT SIZE (d) | BOLT LENGTH (mm) (l) | WASHER DIAMETER (mm) (w) | MAXIMUM FIXTURE THICKNESS (mm) (T _{fix}) | HOLE DIAMETER | | MINIMUM HOLE DEPTH IN CONCRETE (mm) (b _O) | MINIMUM SUBSTRATE THICKNESS (mm) (b _{min}) | RECOMMENDED TORQUE (Nm) (T _{inst}) | PRODUCT CODE ZINC PLATED |
|------------------|----------------------------|-----------------------------------|--|---|--|---|--|---|-----------------------------|
| | | | | IN FIXTURE (mm) (d _f) | IN CONCRETE (mm) (d _O) | | | | |
| M8 | 90 110 | 21 | 15 40 | 14 | 12 | 80 | 120 | 25 | 50-010 50-015 |
| M10 | 105 120 140 | 24 | 20 40 60 | 17 | 15 | 90 | 140 | 50 | 50-020 50-025 50-030 |
| M12 | 120 150 170 | 30 | 25 50 70 | 20 | 18 | 105 | 160 | 80 | 50-035 50-040 50-045 |
| M16 | 145 170 | 40 | 25 50 | 26 | 24 | 125 | 200 | 180 | 50-050 50-055 |
| M20 | 175 | 50 | 30 | 30 | 28 | 155 | 240 | 275 | 50-065 |

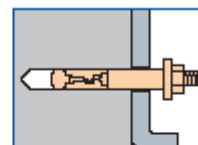
Installation



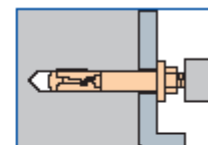
1. Drill a hole of required diameter and depth through clearance hole in the fixture into concrete.



2. Remove debris and thoroughly clean hole.



3. Insert SafetyPlus™ anchor through fixture into hole and tap home.



4. Tighten to the recommended torque.

Specification Data

| Size | Concrete, $f_{ck, cube} = 30 \text{ N/mm}^2$ (C20/25) | | | | | | | | |
|------|---|--------------------|------------------------|--------------------|-----------------------|---------------------|-----------------------------------|----------------------|---|
| | Standard Embedment Depth | | | | | | Characteristic Edge Distance (mm) | | Characteristic Spacing (mm) |
| | Characteristic Load (kN) | | Design Resistance (kN) | | Recommended Load (kN) | | | | |
| | Tension (N_{Rk}) | Shear (V_{Rk}) | Tension (N_{Rd}) | Shear (V_{Rd}) | Tension (N_{rec}) | Shear (V_{rec}) | Tension ($C_{cr,N}$) | Shear ($C_{cr,V}$) | Tension & Shear ($S_{cr,N}$) ($S_{cr,V}$) |
| M8 | 19.7 | 25.7 | 9.1 | 14.3 | 7.6 | 11.9 | 160 | 160 | 180 |
| M10 | 33.3 | 39.7 | 15.4 | 22.0 | 12.8 | 18.3 | 180 | 180 | 220 |
| M12 | 43.4 | 56.5 | 20.1 | 31.4 | 16.8 | 26.2 | 200 | 200 | 260 |
| M16 | 66.8 | 90.1 | 30.9 | 50.1 | 25.8 | 41.8 | 280 | 280 | 340 |
| M20 | 95.6 | 132.0 | 44.3 | 73.3 | 36.9 | 61.1 | 320 | 320 | 380 |

Safety Plus Bolt Projecting



DESCRIPTION

SafetyPlus™ is an all steel high performance expansion anchor, suitable for the most demanding safety critical applications. This range offers exceptional tension, shear and combined load performance in concrete.

Suitable for use in:
Concrete.

Features

1. 8.8 grade stud with slot for final adjustment.
2. High strength steel washer.
3. Sleeve provides maximum shear load performance.
4. Integral controlled collapse and anti-rotation feature ensures fixture is firmly secured.
5. Unique zig-zag feature provides balanced expansion ensuring secure setting and maximum load carrying capacity.
6. Case-hardened nut with optimum angle taper for maximum expansion.
7. Nut and washer allow for fixture to be removed and relocated easily.

Size Chart

| BOLT SIZE | BOLT LENGTH (mm) | WASHER DIAMETER (mm) | MAXIMUM FIXTURE THICKNESS (mm) | HOLE DIAMETER | | MINIMUM HOLE DEPTH IN CONCRETE (mm) | MINIMUM SUBSTRATE THICKNESS (mm) | RECOMMENDED TORQUE (Nm) | PRODUCT CODE |
|-----------|---------------------|----------------------------|---|--------------------|---------------------|--|---|-------------------------------|------------------|
| | | | | IN FIXTURE (mm) | IN CONCRETE (mm) | | | | ZINC PLATED |
| (d) | (l) | (w) | (T _{fix}) | (d _f) | (d _c) | (b _c) | (b _{min}) | (T _{inst}) | |
| M8 | 95 | 21 | 15 | 14 | 12 | 80 | 120 | 25 | 50-110 |
| M10 | 110 130 | 24 | 20 40 | 17 | 15 | 90 | 140 | 50 | 50-120 50-125 |
| M12 | 135 160 | 30 | 25 50 | 20 | 18 | 105 | 160 | 80 | 50-135 50-140 |
| M16 | 160 185 | 40 | 25 50 | 26 | 24 | 125 | 200 | 180 | 50-150 50-155 |
| M20 | 190 | 50 | 30 | 30 | 28 | 155 | 240 | 275 | 50-165 |

Reduction Factors - Edge and Spacing Distances For SafetyPlus™ Bolt Projecting

The full characteristic edge and spacing distances shown in the table above are the minimum allowable for the quoted DESIGN

RESISTANCE or RECOMMENDED LOAD, depending on your design method. Where these dimensions are not achievable, the appropriate reduction factor/s from the tables below must be applied to the

DESIGN RESISTANCE or RECOMMENDED LOAD.

Choose the required bolt diameter across the top of the appropriate table and read down the left hand column until actual edge or spacing distance is found. Read off the reduction factor where the two lines intersect (interpolate as required). Multiply this factor by the DESIGN RESISTANCE or RECOMMENDED LOAD quoted in the table. On the occasion that multiple close edge and/or spacing distances occur, the appropriate reduction factors must be applied.

Specification Data

| Size | Concrete, $f_{ck, cube} = 30\text{N/mm}^2$ (C20/25) | | | | | | | | |
|------|---|--------------------|------------------------|--------------------|-----------------------|---------------------|-----------------------------------|----------------------|--|
| | Standard Embedment Depth | | | | | | Characteristic Edge Distance (mm) | | Characteristic Spacing (mm) |
| | Characteristic Load (kN) | | Design Resistance (kN) | | Recommended Load (kN) | | | | |
| | Tension (N_{Rk}) | Shear (V_{Rk}) | Tension (N_{Rd}) | Shear (V_{Rd}) | Tension (N_{rec}) | Shear (V_{rec}) | Tension ($C_{cr,N}$) | Shear ($C_{cr,V}$) | Tension & Shear ($S_{cr,N}$ ($S_{cr,V}$)) |
| M8 | 19.7 | 25.7 | 9.1 | 14.3 | 7.6 | 11.9 | 160 | 160 | 180 |
| M10 | 33.3 | 39.7 | 15.4 | 22.0 | 12.8 | 18.3 | 180 | 180 | 220 |
| M12 | 43.4 | 56.5 | 20.1 | 31.4 | 16.8 | 26.2 | 200 | 200 | 260 |
| M16 | 66.8 | 90.1 | 30.9 | 50.1 | 25.8 | 41.8 | 280 | 280 | 340 |
| M20 | 95.6 | 132.0 | 44.3 | 73.3 | 36.9 | 61.1 | 320 | 320 | 380 |

RKF2 Resin



DESCRIPTION

R-KF2 and R-KSF are General purpose resins, for solid and hollow structures with both products having a relatively short cure time.

Suitable for use in:

Concrete
Brickwork
Blockwork.

Features

1. Suitable for Solid and Hollow substrates.
2. 150ml K-KSF is ideal for small applications.
3. R-KSF fits a standard mastic gun.
4. R-KSF Odourless

R-KF2

| BASE MATERIAL TEMPERATURE (°C) | GEL TIME | CURE TIME |
|--------------------------------|----------|-----------|
| 30 | 4 mins | 30 mins |
| 25 | 7 mins | 60 mins |
| 15 | 15 mins | 120 mins |
| 5 | 30 mins | 180 mins |

R-KSF

| BASE MATERIAL TEMPERATURE (°C) | GEL TIME | CURE TIME |
|--------------------------------|----------|-----------|
| 30 | 4 mins | 30 mins |
| 20 | 8 mins | 50 mins |
| 15 | 14 mins | 120 mins |
| 5 | 30 mins | 250 mins |

Size Chart

| Stud Thread Size (mm) (d) | STUD OVERALL LENGTH (mm) (l) | | WASHER DIAMETER (mm) (w) | MAXIMUM FIXTURE THICKNESS (mm) (T _{fix}) | | HOLE DIAMETER IN CONCRETE (mm) (d _o) | HOLE DIAMETER IN FIXTURE (mm) (d _f) | STANDARD EMBEDMENT IN CONCRETE (mm) (b _c) | RECOMMENDED TORQUE (Nm) (T _{req}) | | STUD PRODUCT CODES | | APPROX No OF BOLTS PER 450ML CARTRIDGE | |
|---------------------------------|---------------------------------|-------|--------------------------------|---|-------|--|---|---|--|--------------|--------------------|------------------------------|--|---|
| | | | | | | | | | | | | | | |
| | BEP | ST.ST | | BEP | ST.ST | | | | IN CONCLITE | IN BRICKWORK | ZINC PLATED | STAINLESS STEEL GRADE 303 A2 | | |
| M8 | 110 | | 17 | 17 | 10 | 9 | 80 | 3 | 2 | 60-708 | 60-906 | 84 | 33 | |
| M10 | 130 | | 21 | 28 | 12 | 11 | 90 | 9 | 6 | 60-710 | 60-911 | 61 | 24 | |
| M12 | 160 | | 24 | 36 | 14 | 13 | 110 | 17 | 11 | 60-712 | 60-916 | 42 | 16 | |
| M16 | 190 | | 30 | 42 | 18 | 17 | 125 | 36 | 24 | 60-716 | 60-921 | 28 | 11 | |
| M20 | 260 | 240 | 37 | 90 | 70 | 24 | 22 | 145 | 53 | - | 60-720 | 60-926 | 7 | 3 |
| M24 | 295 | | 44 | 85 | 28 | 26 | 180 | 60 | - | 60-724 | 60-931 | 6 | 2 | |

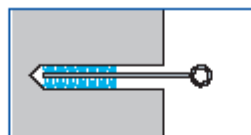
Installation

INSTALLATION

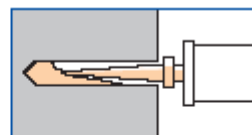
Solid substrates



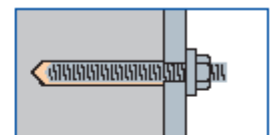
1. Drill hole to correct diameter and depth for stud size being used.



2. Thoroughly clean hole using brush or air,



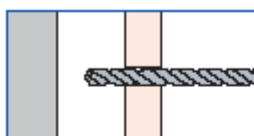
3. Insert cartridge into cartridge gun and attach nozzle. Dispense to waste until an even colour and then pump into hole.



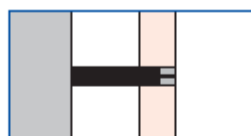
4. Insert stud or socket with a twisting action. Leave the anchor undisturbed until the resin has cured and then attach fixture.

INSTALLATION

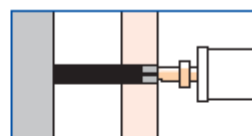
Hollow substrates & substrates with voids



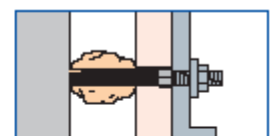
1. Drill hole to correct diameter and depth for mesh sleeve size being used.



2. Insert sleeve into hole.



3. Insert cartridge into cartridge gun and attach nozzle. Dispense to waste until even colour. Then insert nozzle and pump to fill sleeve.



4. Insert stud or socket with a twisting action. Leave the anchor undisturbed until the resin has set and then attach fixture.



DESCRIPTION

R-KEA is specially formulated epoxy acrylate/Vinyl Ester resin, which offers protection in damp and corrosive applications, as well as giving high loads in concrete.

Suitable for use in:
Concrete.

Features

1. Easy to extrude.
2. Short Gel and Cure times.
3. Ideal for close edge and spacing applications.

Typical applications

- Starter Bar
- Barriers in marine environments
- Safety barriers
- Roadside signage.

Curing Times

| BASE MATERIAL TEMPERATURE (°C) | GEL TIME | CURE TIME |
|--------------------------------|----------|-----------|
| 30 | 3 mins | 20 mins |
| 25 | 5 mins | 30 mins |
| 15 | 10 mins | 60 mins |
| 5 | 20 mins | 120 mins |

Not suitable for overhead applications.

Size Chart

| Stud Thread Size (mm) (d) | STUD OVERALL LENGTH (mm) (l) | | WASHER DIAMETER (mm) (w) | MAXIMUM FIXTURE THICKNESS (mm) (T _{fix}) | | HOLE DIAMETER IN CONCRETE (mm) (d _o) | HOLE DIAMETER IN FIXTURE (mm) (d _f) | STANDARD EMBEDMENT IN CONCRETE (mm) (h _e) | RECOMMENDED TORQUE (Nm) (T _{tor}) | STUD PRODUCT CODES | | APPROX No. OF HOLES PER 380ML CARTRIDGE |
|---------------------------|------------------------------|------|--------------------------|--|------|--|---|---|---|--------------------|------------------------------|---|
| | BEP | SLST | | BEP | SLST | | | | | ZINC PLATED | STAINLESS STEEL GRADE 303 A2 | |
| M8 | 110 | | 17 | 17 | 17 | 10 | 9 | 80 | 11 | 60-708 | 60-906 | 84 |
| M10 | 130 | | 21 | 28 | 28 | 12 | 11 | 90 | 22 | 60-710 | 60-911 | 61 |
| M12 | 160 | | 24 | 36 | 36 | 14 | 13 | 110 | 38 | 60-712 | 60-916 | 42 |
| M16 | 190 | | 30 | 42 | 42 | 18 | 17 | 125 | 95 | 60-716 | 60-921 | 28 |
| M20 | 260 | 240 | 37 | 90 | 70 | 24 | 22 | 145 | 150 | 60-720 | 60-926 | 7 |
| M24 | 295 | | 44 | 85 | 85 | 28 | 26 | 180 | 200 | 60-724 | 60-931 | 6 |

The specification of longer studs will allow greater fixture thicknesses than shown for the standard studs quoted, minimum embedment should be observed.

Hole depths in table are typical but due to the consistency of the product deeper embedment depths applications can be considered.

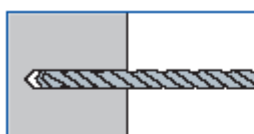
We recommend that for embedment above 500mm and 20mm in diameter, a power operated resin gun should be used. Please contact the Rawl Technical Advisory Service for further advice.

Specification Data

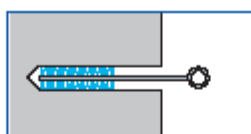
| Size | Concrete, $f_{ck, cube} = 30N/mm^2$ (C20/25) | | | | | | | | |
|------|--|--------------------------|----------------------------|--------------------------|-----------------------------|---------------------------|-----------------------------------|----------------------------|------------------------------------|
| | Characteristic Resistance (kN) | | Design Resistance (kN) | | Recommended Load (kN) | | Characteristic Edge Distance (mm) | | Characteristic Spacing (mm) |
| | Tension (N _{Rk}) | Shear (V _{Rk}) | Tension (N _{Rd}) | Shear (V _{Rd}) | Tension (N _{rec}) | Shear (V _{rec}) | Tension (C _{cr,N}) | Shear (C _{cr,V}) | Tension & Shear (S _{cr}) |
| M8 | 14.3 | 9.9 | 6.3 | 7.9 | 4.5 | 5.7 | 80 | 100 | 100 |
| M10 | 22.4 | 15.7 | 9.6 | 12.6 | 6.9 | 9.0 | 90 | 130 | 130 |
| M12 | 30.6 | 22.9 | 12.4 | 18.3 | 8.9 | 13.1 | 110 | 150 | 150 |
| M16 | 48.7 | 42.5 | 19.4 | 34.0 | 13.9 | 24.3 | 130 | 170 | 170 |
| M20 | 67.1 | 66.8 | 25.2 | 53.4 | 18.0 | 38.2 | 150 | 190 | 210 |
| M24 | 81.7 | 95.7 | 28.2 | 76.6 | 20.1 | 54.7 | 190 | 240 | 240 |

INSTALLATION

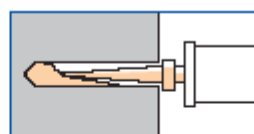
Solid substrates



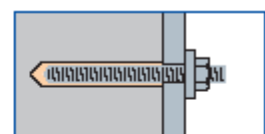
1. Drill hole to correct diameter and depth for stud size being used.



2. Thoroughly clean hole using brush or air,



3. Insert cartridge into cartridge gun and attach nozzle. Dispense to waste until an even colour and then pump into hole.



4. Insert stud or socket with a twisting action. Leave the anchor undisturbed until the resin has cured and then attach fixture.



Tremsil 300 is a one component gun grade moisture cured silicone sealant that cures rapidly to form a permanently flexible and extremely durable weathertight seal.

Typical Uses

Tremsil 300 can be used to seal all classical glazing joints including cap beads, shop windows, display cases, etc. It can be used in the installation of conservatories and greenhouses, door and window frames, cladding and curtain wall construction. Some other applications are during the manufacture of portable buildings, caravans and containers and fabrication of heating, ventilation and air conditioning (HVAC) ducting.



Tremsil 250 cures rapidly to form a permanently flexible and watertight seal where hygiene is a priority.

Typical Uses

Tremsil 250 is suitable for food preparation areas, refrigeration, foodstuff transport. It can be used in hygiene critical areas, hygienic cladding, potable water storage and delivery, cills and marine and automotive manufacture.



Tremsil 500 cures to produce a flexible low modulus elastomeric seal.

Typical Uses

Tremsil 500 is suitable for: Expansion joints & curtain walls Perimeter joints around windows or doors Panel joints between most common substrates Heel and toe beads Polycarbonate glazing



Webbseal LMA is a low to mid modulus acetoxy curing silicone sealant that cures rapidly to form a permanently flexible, weather tight rubber seal with good adhesion to glass and glazed surfaces as well as some metals and plastics.

Typical Uses

Webbseal LMA is suitable for low to moderate movement sealing applications such as standard and butt glazing of frames, panels, shop fronts, curtain walling and sealing and draught proofing of glass and metal assemblies and the perimeter sealing of door and window frames. White and translucent are suitable for use in kitchens and bathrooms.



Tremco 200 cures rapidly to form a permanently flexible and extremely durable watertight seal for multi-purpose glazing applications.

Typical Uses

Tremco 200 is suitable for all common glazing joints, windows, display cases, etc., as well as conservatories and greenhouses.

Tremco 600 cures rapidly to form a permanently flexible and extremely durable watertight seal for perimeter caulking applications.

Typical Uses

Tremco 600 is designed for sealing: Window and door perimeters. Display cases, shopfronts, etc. Conservatories and greenhouses General purpose sealing in building façades Sanitary applications It is compatible with polycarbonate.

Webbseal HMA cures rapidly on exposure to atmospheric humidity to form a permanently flexible and extremely durable weather tight high modulus seal. It should be used on low movement applications and will have good adhesion to a range of construction materials including glass and glazed surfaces as well as some metals and plastics. White and translucent contain a fungicide that is resistant to mould growth when used in kitchens and bathrooms.

Typical Uses

Webbseal HMA is suitable for low movement sealing applications such as standard and butt glazing of frames, panels, shop fronts, curtain walling and sealing and draught proofing of glass and metal assemblies. White and translucent colours contain a fungicide that makes the product resistant to mould / mildew growth.

Webbseal LMN is an economic low modulus, neutral curing silicone sealant that cures rapidly to form a permanently flexible, highly elastic, durable weatherseal. It is non-corrosive and bonds well to most construction materials without the need to prime.

Typical Uses

Webbseal LMN is suitable for use in many demanding sealing applications such as the perimeter sealing of PVCu window and door frames. White and translucent are suitable for use in kitchens and bathrooms. Being neutral cure, it is chemically compatible with most construction materials.

SIROFLEX Silicones and Mastics

SX GLAZING SILICONE

DESCRIPTION

A top quality acetoxycuring silicone developed specifically for glazing applications.

USES

For general purpose applications where adhesion to non-porous surfaces is required such as those in glazing. Tack free within minutes; 2mm cures within 24 hours to form a tough elastic rubber seal. Typical uses include: top sealing in glazing, sealing metal cladding and curtain walling, sealing in refrigeration stores, sealing around worktops. Temperature resistant between -50°C and +180°C. Accommodates movement of + or - 25%. Conforms to BS5889 (B) ISO 11.600 G20 LM Construction.

COLOUR AVAILABILITY

310ml cartridge Colours: White, Clear, Brown, Black, Grey and Bronze Packed



SX BATH & SANITARY SILICONE

DESCRIPTION

An acetoxycuring silicone containing anti-fungal compounds to prevent mould growth in areas subject to high humidity levels.

USES

For sealing around baths, showers, basins and all sanitary ware. Provides a long lasting, flexible watertight seal that is ideal for domestic or municipal applications. Adheres to many non-porous surfaces. Conforms to BS5889 (B) and ISO 11.600 G20 LM Construction.

COLOUR AVAILABILITY

310ml cartridge Colours: White and Clear

SX UNIVERSAL SILICONE

DESCRIPTION

A high modulus premium quality silicone that cures quickly to provide a permanently flexible rubber seal. Conforms to BS5889(B).

USES

For a wide range of building, glazing and household applications such as weather sealing around window and door frames, sealing around worktops and top sealing in glazing applications. Accommodates movement of + or - 25%

COLOUR AVAILABILITY

Standard cartridge Colours: White, Clear and Brown

SIROFLEX Silicones and Mastics

SX PAINTERS CAULK-IT

DESCRIPTION

A flexible water based filler and sealant that is easy to apply, dries quickly and can be overpainted after only 1-2 hours.

USES

For the sealing and filling of gaps and cracks where movement can occur, such as those between plasterwork and window frames, door frames, skirting boards and architraves. Use prior to painting or wall papering to fill cracks which will prevent them from developing later.

COLOUR AVAILABILITY

310ml cartridge Colour: White 400ml cartridge Colours: White and Brown



SX POLYSULPHIDE SEALANT

DESCRIPTION

A one part polysulphide sealant designed to seal joints subject to movement where a tough, flexible, watertight seal is required.

USES

Ideal for pointing and glazing. This product is easy to apply and has good adhesion to most building substrates. Has excellent durability and is paintable with alkydresin paints

COLOUR AVAILABILITY

400ml cartridge Colours: White, Brown, Black, Grey and Buff

SX ALL WEATHER SEALANT

DESCRIPTION

A universal co-polymer sealant that can be used for a wide range of sealing and weatherproofing applications around the home and in industry. Can be applied in wet weather.

USES

Provides a superior adhesion to most surfaces including difficult ones such as bitumen, asphalt, and zinc. Can be used in building, glazing, roofing and ductwork applications and for emergency repairs in wet weather. Over paintable with most paints and stains.

COLOUR AVAILABILITY

310ml cartridge Colours: White, Clear, Brown, Black and Grey

Webb Foams & Cleaners



WEBBCLEAN INDUSTRIAL GLASS CLEANER

Fast evaporating solvent solution removes dirt from glass surfaces leaving a sparkling finish.

PACKED IN: 1 litre bottles x 12 per

WEBBCLEAN PVCU CREAM CLEANER

Mildly abrasive cleaner for PVCu window and door frames laminates and other plastic surfaces. Removes heavy grime and light scratchmarks. Buffs to a smooth glossy finish.

PACKED IN: 1 litre bottles x 12 per box

WEBBCLEAN INDUSTRIAL SOLVENT CLEANER

Powerful solvent based remover for contact adhesives, mastics and other difficult to remove contaminants.

PACKED IN: 5 litre containers x 4 per box

WEBBFLEX PU FOAM GUN GRADE & NOZZLE GRADE

In-Situ Polyurethane Expanding Foam

Canister applied expanding PU gap filling and fixing foam. Excellent adhesion to most substrates with good thermal and acoustic properties. CFC Free.

CONFORMANCE: BBA Assured Data Sheet No. 017/99 DIN 4102 part 1, Class B3

PACKED IN: Nozzle Grade 500ml & 750ml cans x 12 per box Gun Grade 750ml cans x 12 per box

WEBBFLEX B1 GUN & NOZZLE GRADE

Fire Retardant Expanding Polyurethane Foam

Fire retardant version of Webbflex PU Foam. Prevents the transmission of smoke, seals around pipework and cables, insulates against noise, heat and cold. CFC Free.

CONFORMANCE: DIN 4102 part 1, Class B1 BS476 Part 20 (Report: TE201142)

PACKED IN: Gun & Nozzle Grade 750 ml cans x 12 per box



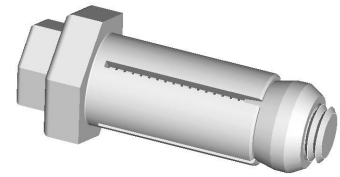
The BoxBolt fixing is a blind fixing solution for connecting to hollow section steelwork or where access is restricted to one side only. The BoxBolt fixing is suitable for use with rectangular, square and even circular hollow sections.

It has a hexagon head on the body which is suitable for installation with a standard spanner or where it is important to minimise the installation time the BoxSok can be used.

The M08,M10 and M12 have a one piece body and shoulder where the M16 and M20 has a rubber washer between the body and shoulder.

This acts as a secondary collapse mechanism to increase the clamping force and allow the BoxBolt to pull in small gaps between steelwork.

Both designs can be removed afterwards should this be required, although the bolt will need to be replaced with a new one.



Guaranteed Safe working load
5 to 1 Factor of safety

Lloyds Register approved

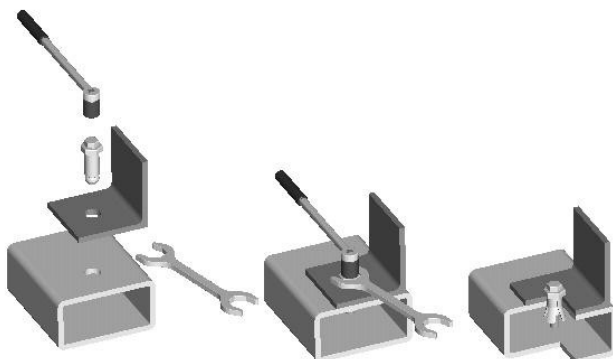
Hexagon Head for ease of installation

Optimisation of setscrew length to
provide large fixing range

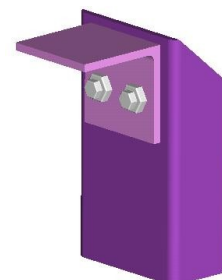
Installation with one tool only when
used with BoxSok

Specification Data

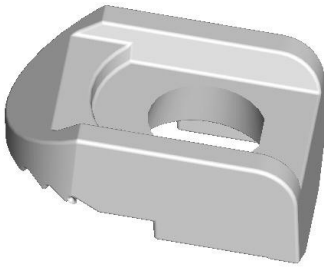
| BoxBolt | Product | Size | Setscrew | Fixing range | | Across Flats | Shoulder | Hole size | Bolt | Hollow | Safe Working Load | | Torque |
|---------|---------|------|----------|--------------|-----|--------------|-----------|-----------|------|-------------------------|-------------------|-------|--------|
| | code | | length | (dim x) | | of shoulder | thickness | (mm) | Dia. | section | (kN) | | (Nm) |
| | | | (mm) | Min | Max | (mm) | (mm) | *see note | | | Tensile | Shear | |
| M08 | BQ1Z08 | 1 | 50 | 3 | 26 | 22 | 6 | 15 | M08 | 120x120x5.0 | 2.7 | 7 | 25 |
| | BQ2Z08 | 2 | 70 | 12 | 46 | 22 | 6 | 15 | | 120x120x6.3, 8.0 | 4.5 | | |
| | BQ3Z08 | 3 | 90 | 24 | 66 | 22 | 6 | 15 | | 120x120x10.0, 12.5 | 6 | | |
| M10 | BQ1Z10 | 1 | 50 | 3 | 23 | 24 | 7 | 19 | M10 | 120x120x5.0 | 4.5 | 13 | 45 |
| | BQ2Z10 | 2 | 70 | 15 | 43 | 24 | 7 | 19 | | 120x120x6.3 | 8.4 | | |
| | BQ3Z10 | 3 | 90 | 30 | 63 | 24 | 7 | 19 | | 120x120x8.0, 10.0, 12.5 | 11.5 | | |
| M12 | BQ1Z12 | 1 | 55 | 3 | 25 | 26 | 8 | 21 | M12 | 120x120x5.0 | 4.5 | 15 | 80 |
| | BQ2Z12 | 2 | 80 | 18 | 50 | 26 | 8 | 21 | | 120x120x6.3 | 7.8 | | |
| | BQ3Z12 | 3 | 100 | 36 | 70 | 26 | 8 | 21 | | 120x120x8.0 | 13.1 | | |
| | | | | | | | | | | 120x120x10.0, 12.5 | 15.4 | | |
| M16 | BQ1Z16 | 1 | 75 | 3 | 35 | 36 | 9 | 28 | M16 | 150x150x5.0 | 6.4 | 35 | 190 |
| | BQ2Z16 | 2 | 100 | 24 | 60 | 36 | 9 | 28 | | 150x150x6.3 | 8.2 | | |
| | BQ3Z16 | 3 | 120 | 48 | 80 | 36 | 9 | 28 | | 150x150x8.0 | 13.9 | | |
| | | | | | | | | | | 150x150x10.0 | 23.7 | | |
| | | | | | | | | | | 150x150x12.5 | 31 | | |
| M20 | BQ1Z20 | 1 | 100 | 3 | 42 | 46 | 11 | 35 | M20 | 150x150x6.3 | 8 | 40 | 300 |
| | BQ2Z20 | 2 | 120 | 30 | 72 | 46 | 11 | 35 | | 150x150x8.0 | 15.3 | | |
| | BQ3Z20 | 3 | 150 | 60 | 102 | 46 | 11 | 35 | | 150x150x10.0 | 28.4 | | |
| | | | | | | | | | | 150x150x12.5 | 43.7 | | |



Installation



Type BA Beam Clamps - Recessed



- Manufactured from Ductile iron
- Hot Dip Galvanised as standard
- 5 to 1 Factor of Safety
- Lloyds Register approved

Specification Data

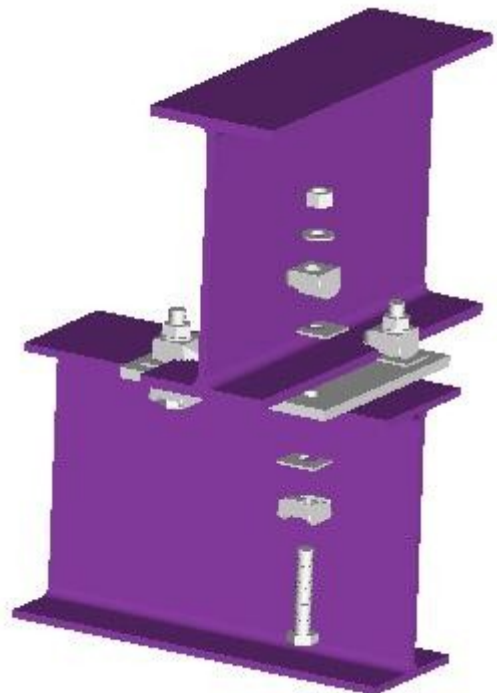
| Product code | A Bolt dia. (Grade 8.8) | B (mm) | C (mm) | D (mm) | E (mm) *See note | | | Width (mm) | Torque (Nm) | Tensile SWL (kN) per bolt (5:1 Factor of Safety) | Frictional SWL (kN) per four bolts (5:1 Factor of Safety) |
|--------------|-------------------------------|-----------|-----------|-----------|------------------------|----|------|---------------|----------------|--|---|
| | | | | | 1 | 2 | 3 | | | | |
| BA G08 | M08 | 9 | 16 | 5 | / | 4 | / | 20 | 6 | 1.25 | / |
| BA G10 | M10 | 12 | 20 | 6 | 4 | 5 | 7 | 26 | 20 | 2.5 | / |
| BA G12 | M12 | 15 | 25.5 | 7 | 4.5 | 6 | 9.5 | 28.5 | 70 | 5.75 | 1.3 |
| BA G16 | M16 | 17 | 31 | 9 | 5.5 | 8 | 11 | 36 | 150 | 9.87 | 3.9 |
| BA G20 | M20 | 21 | 35 | 11 | 7 | 10 | 12.5 | 44 | 290 | 16.47 | 11 |
| BA G24 | M24 | 26 | 49 | 13 | 9 | 12 | 16 | 53 | 490 | 21.1 | 18 |

The type BA is a recessed fixing designed to hold the head of a grade 8.8 hexagon bolt whilst the nut is tightened.

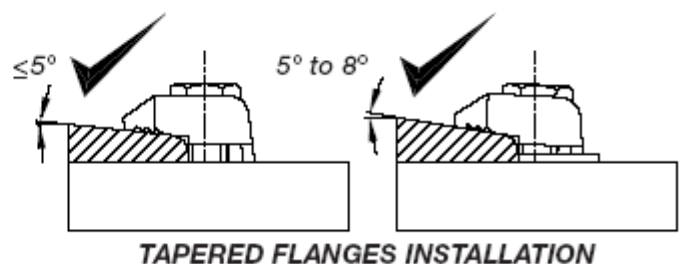
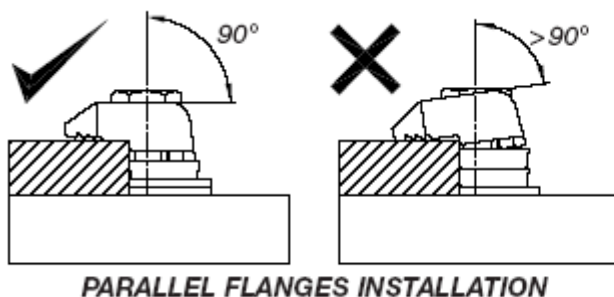
The fixing is available with three tail lengths per size (1, 2 and 3); the tail length (dim E) should be as near as possible or slightly below the thickness of the flange to which it is clamped.

Packing pieces are available to adjust the clamping thickness in combination with the tail lengths of the fixings to suit the steelwork flange.

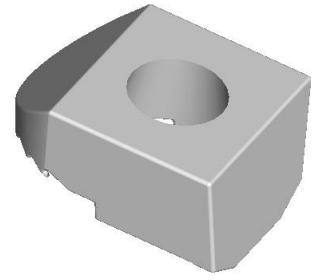
The packings suitable for this product are the BH1, BF1 and BG1. The BA is suitable for parallel flanges and tapered flanges with up to 8 degrees slope using with tapered steelwork.



Installation

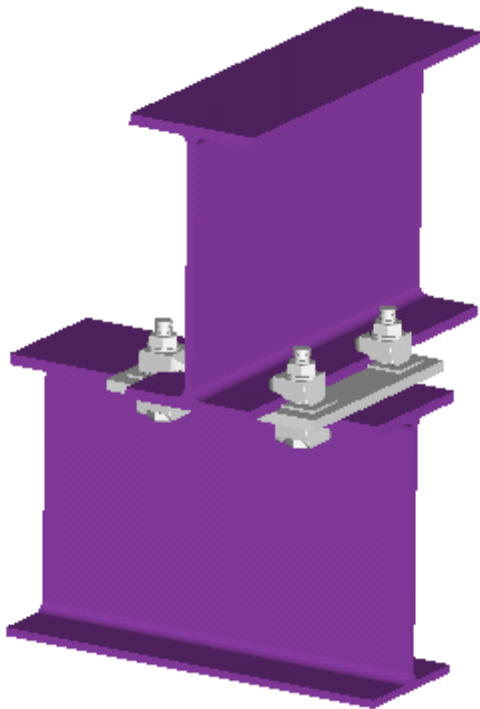


- Manufactured from Ductile iron
- Hot Dip Galvanised as standard
- 5 to 1 Factor of Safety
- Lloyds Register approved



Specification Data

| Product code | A Bolt dia. (Grade 8.8) | B (mm) | C (mm) | D (mm) | E (mm) *See note | | | Width (mm) | Torque (Nm) | Tensile SWL (kN) per bolt (5:1 Factor of Safety) | Frictional SWL (kN) per four bolts (5:1 Factor of Safety) |
|--------------|-------------------------------|-----------|-----------|-----------|------------------------|----|------|---------------|----------------|--|---|
| | | | | | 1 | 2 | 3 | | | | |
| BB G08 | M08 | 9 | 16 | 9 | / | 4 | / | 20 | 6 | 1.25 | / |
| BB G10 | M10 | 12 | 20 | 11 | 4 | 5 | 7 | 26 | 20 | 2.5 | / |
| BB G12 | M12 | 15 | 25.5 | 13 | 4.5 | 6 | 9.5 | 28.5 | 70 | 5.75 | 1.3 |
| BB G16 | M16 | 17 | 31 | 17 | 5.5 | 8 | 11 | 36 | 150 | 9.87 | 3.9 |
| BB G20 | M20 | 21 | 35 | 21 | 7 | 10 | 12.5 | 44 | 290 | 16.47 | 11 |
| BB G24 | M24 | 26 | 49 | 25 | 9 | 12 | 16 | 53 | 490 | 21.1 | 18 |



The type BB is designed with a flat top to allow a nut or bolt head to be tightened down onto it.

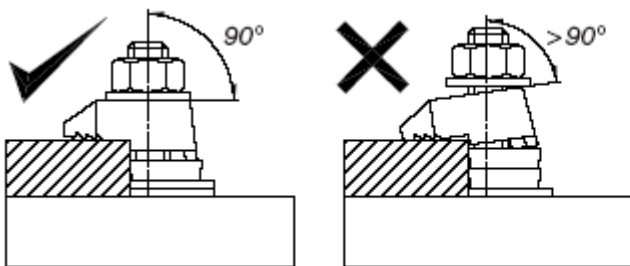
This makes the fixing suitable for use with studs, tie bars or any other threaded items.

The fixing is available with three tail lengths per size (1, 2 and 3); the tail length (dim E) should be as near as possible or slightly below the thickness of flange to which it is clamped.

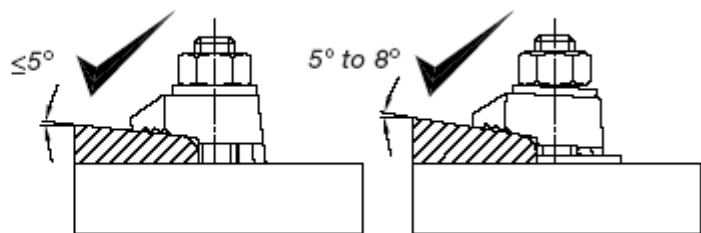
Packing pieces are available to adjust the clamping thickness in combination with the tail lengths of the fixings to suit the steelwork flange.

The packings suitable for this product are the BH1, BF1 and BG1. The type BB is suitable for parallel flanges and tapered flanges up to 8 degrees slope.

Installation

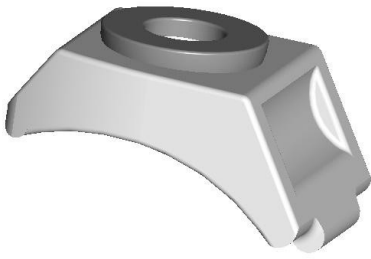


PARALLEL FLANGES INSTALLATION



TAPERED FLANGES INSTALLATION

Type BK1 Beam Clamps



- Manufactured from Ductile iron
- Hot Dip Galvanised as standard
- 5 to 1 Factor of Safety
- Lloyds Register approved

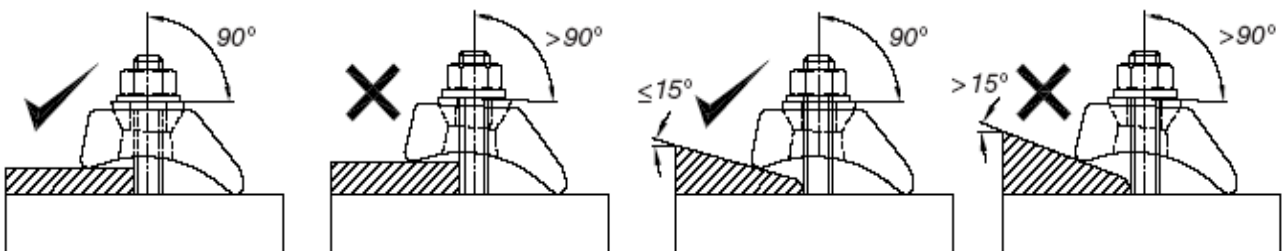
Specification Data

| Product code | A Bolt dia. (Grade 8.8) | B1 | B2 | C | Width | Torque (Nm) | Tensile SWL (kN) per bolt (5:1 Factor of Safety) | Frictional SWL (kN) per four bolts (5:1 Factor of Safety) |
|--------------|-------------------------------|---------|---------|-----|-------|----------------|--|---|
| BK1G08 | M08 | 3 to 12 | 3 to 9 | 37 | 41 | 6 | 1.25 | / |
| BK1G10 | M10 | 3 to 15 | 3 to 12 | 48 | 41 | 20 | 2.5 | / |
| BK1G12 | M12 | 3 to 18 | 3 to 15 | 59 | 42 | 70 | 4.12 | 1.3 |
| BK1G16 | M16 | 3 to 24 | N/A | 75 | 47 | 150 | 6.6 | 3.9 |
| BK1G20 | M20 | 3 to 30 | N/A | 92 | 61 | 290 | 9.57 | 11 |
| BK1G24 | M24 | 3 to 36 | N/A | 116 | 75 | 490 | 12.75 | 18 |

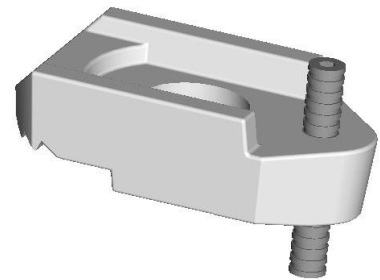
The type BK1 is a self-adjusting fixing consisting of two parts. The body has a spherical seat cast into it to allow a hemispherical washer to sit in and rotate. This allows the body to adjust to a specified clamping range and provide a flat surface for a nut or bolt to be tightened down onto. This fixing is excellent for applications where the flange thickness cannot easily be measured or where the flange thickness may vary throughout a project. Due to its clamping action, it is also suitable for clamping to tapered flanges and rails up to 15 degrees. Long packings (BF2 and BG2) can be used to increase the clamping range, All sizes of the BK1 have a wide back tail to allow them to bridge the gap of slotted holes and also connect to open ends of strut products. The M08, M10 and M12 have an additional cut out in the tail to provide a tab that fits inside the open end of strut products, this aids installation but also prevents them from rotating once installed.



Installation



- Manufactured from Ductile iron
- Hot Dip Galvanised as standard
- 5 to 1 Factor of Safety
- Lloyds Register approved



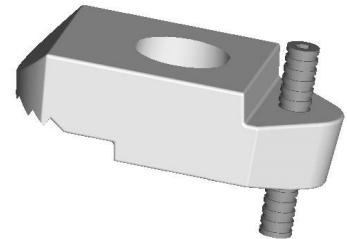
The type BE1 is a recessed fixing similar to the BA. However, it has the additional feature of a fully threaded grade 12.9 socket screw at the back to allow adjustment to suit the flange thickness without the need for packings. This product is normally used when it is difficult to determine the actual thickness of the steelwork flange. It is suitable for parallel flanges and tapered flanges up to 5 degrees. Packing pieces can be used with this fixing to increase the clamping range, if required. The packings suitable for this product are the BF2 and BG2

Specification Data

| Product code | A Bolt dia. (Grade 8.8) | B (mm) | C (mm) | D (mm) | E (mm) | F (dia) | Width (mm) | Tensile SWL (kN) per bolt (5:1 Factor of Safety) | Frictional SWL (kN) per four bolts (5:1 Factor of Safety) |
|--------------|-------------------------------|-----------|-----------|-----------|-----------|------------|---------------|--|---|
| BE1G10 | M10 | 20 | 20 | 6 | 3 to 20 | M06 | 26 | 2.5 | / |
| BE1G12 | M12 | 26 | 25.5 | 7 | 4 to 22 | M06 | 28.5 | 3.72 | 1.3 |
| BE1G16 | M16 | 30 | 31 | 9 | 4 to 23 | M08 | 36 | 8.25 | 3.9 |
| BE1G20 | M20 | 35 | 34 | 11 | 5 to 24 | M10 | 44 | 16.12 | 11 |
| BE1G24 | M24 | 49 | 49 | 13 | 6 to 30 | M12 | 53 | 21.1 | 18 |

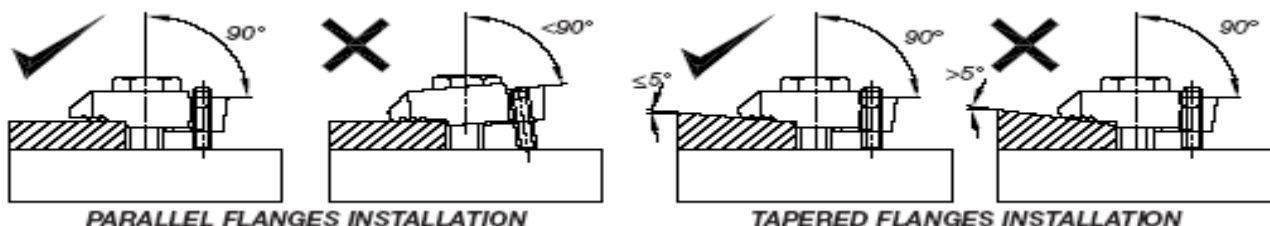
BE2 Flat Top Adjustable

The type BE2 is a flat top fixing similar to the BB, however, it has the additional feature of a grade 12.9 socket screw at the back to allow adjustment to suit the flange thickness without the need for packings. This product is normally used when it is difficult to determine the actual thickness of the steelwork flange. It is suitable for parallel flanges and tapered flanges up to 5 degrees. Packing pieces can be used with this fixing to increase the clamping range, if required. The packings suitable for this product are the BF2 and BG2

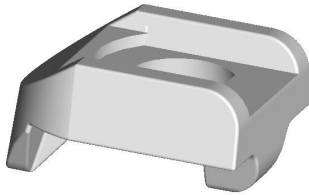


Specification Data

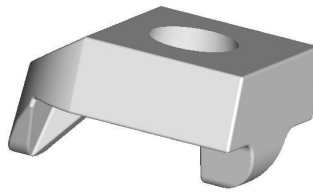
| Product code | A Bolt dia. (Grade 8.8) | B (mm) | C (mm) | D (mm) | E (mm) | F (mm) | Width (mm) | Tensile SWL (kN) per bolt (5:1 Factor of Safety) | Frictional SWL (kN) per four bolts (5:1 Factor of Safety) |
|--------------|-------------------------------|-----------|-----------|-----------|-----------|-----------|---------------|--|---|
| BE2G12 | M12 | 26 | 25.5 | 13 | 4 to 22 | M06 | 28.5 | 3.72 | 1.3 |
| BE2G16 | M16 | 30 | 31 | 17 | 4 to 23 | M08 | 36 | 8.25 | 3.9 |



Type BC1 & BD1 Beam Clamps



BC1



BD1

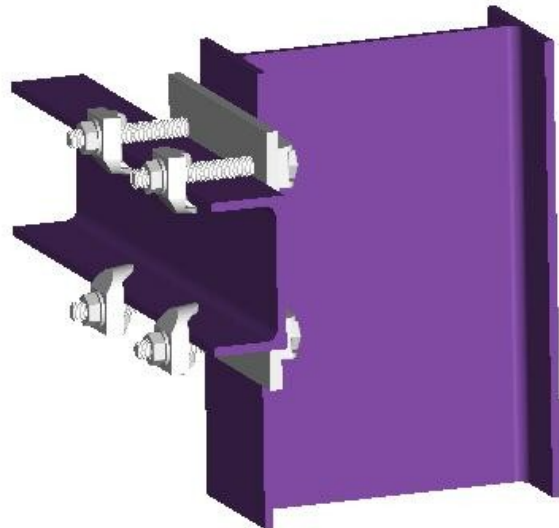
- Manufactured from Ductile iron
- Hot Dip Galvanised as standard
- 5 to 1 Factor of Safety
- Lloyds Register approved

The types BC1 and BD1 are designed for hooking onto the flanges of angles and channels to make steelwork connections.

The BC1 has a recessed top to hold the head of a hexagon bolt in position whilst the nut is tightened.

The type BD1 is used for the same application but has a flat top to allow a nut to be tightened down onto it, making it suitable for use with studding, tie rods and other threaded items.

This product is not recommended for frictional applications.



Specification Data

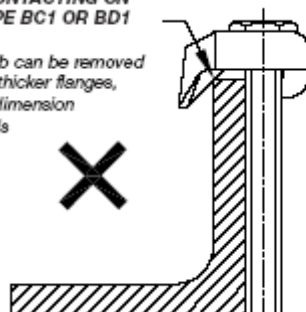
| Product code | Product code | A Bolt dia. (Grade 8.8) | B (mm) | C1 (mm) | C2 (mm) | D (mm) | E1 (mm) | E2 (mm) | Width (mm) | Torque (Nm) | Tensile SWL (kN) per bolt (5:1 Factor of Safety) |
|--------------|--------------|-------------------------------|-----------|------------|------------|-----------|------------|------------|---------------|----------------|--|
| BC1 | BD1 | | | | | | | | | | |
| BC1G08 | BD1G08 | M08 | 9 | 5 | 7.5 | 6 | 5 | 9 | 22 | 3 | 1.25 |
| BC1G10 | BD1G10 | M10 | 12 | 4 | 9.5 | 7.5 | 6 | 11 | 29 | 10 | 2.5 |
| BC1G12 | BD1G12 | M12 | 15 | 6.5 | 13 | 9.5 | 7 | 12 | 31.5 | 35 | 4.32 |
| BC1G16 | BD1G16 | M16 | 17 | 8 | 13 | 11.5 | 9 | 17 | 41 | 75 | 7.5 |
| BC1G20 | BD1G20 | M20 | 21 | 9 | 14 | 13.5 | 11 | 21 | 49.5 | 145 | 11 |
| BC1G24 | BD1G24 | M24 | 26 | 13 | 18 | 17 | 13 | 25 | 60 | 245 | 17.17 |

Installation

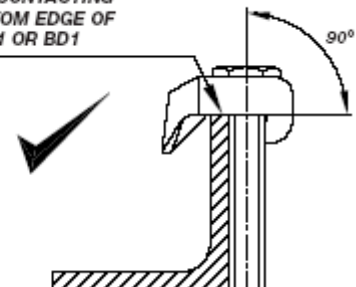


FLANGE CONTACTING ON RIB OF TYPE BC1 OR BD1

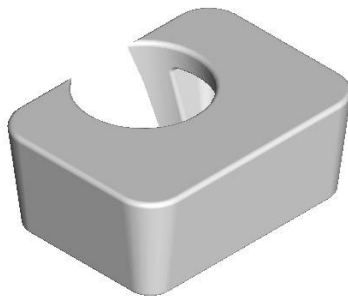
Note: The rib can be removed to allow for thicker flanges, please see dimension C2 for details



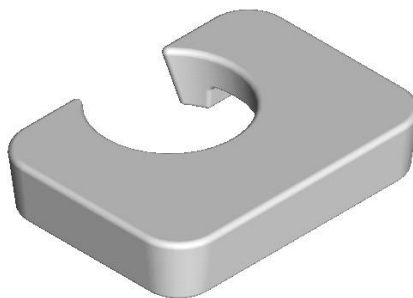
FLANGE CONTACTING ON BOTTOM EDGE OF TYPE BC1 OR BD1



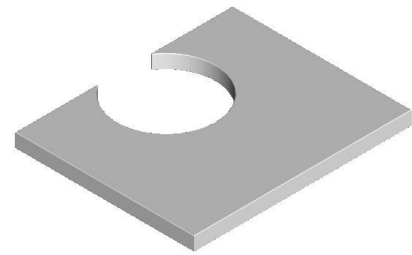
Type BF1, BG1 & BH1 Spacers



BG1



BF1



BH1

These products are used to provide support to the underside of the types BE1, BE2 and BK1, where required to ensure the fixing fits correctly onto the flange.

These are similar to the BH1, BF1 and BF2 but are longer back to front, providing support for the products which reach further back onto the location plate.

The BF2 is the thinnest with the BG2 being twice its thickness; these can both be used together in any combination.

Both packers fit onto the bolt shank between the bottom of the fixing and the top of the location plate.

See table below for dimensions of these products.

BG1

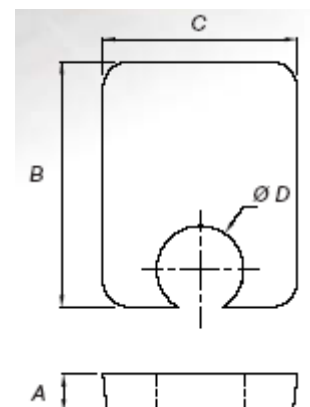
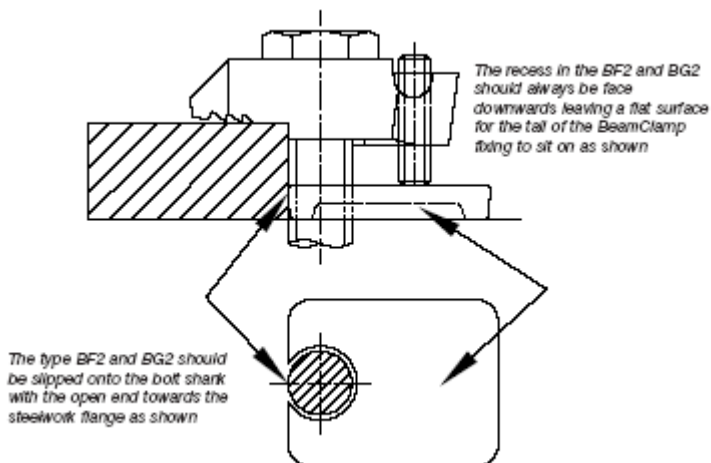
| Product code | Bolt dia. | A (mm) | B (mm) | C (mm) | D dia. |
|--------------|-----------|--------|--------|--------|--------|
| BG1G08 | M08 | 8 | 14 | 22 | 10 |
| BG1G10 | M10 | 10 | 18 | 28 | 12 |
| BG1G12 | M12 | 12 | 22 | 30 | 14 |
| BG1G16 | M16 | 16 | 29 | 35 | 18 |
| BG1G20 | M20 | 20 | 33 | 43 | 21 |
| BG1G24 | M24 | 24 | 45 | 55 | 26 |

BF1

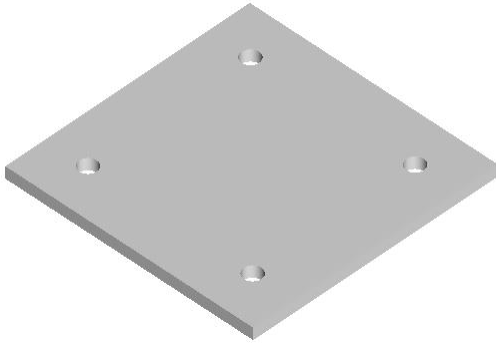
| Product code | Bolt dia. | A (mm) | B (mm) | C (mm) | D dia. |
|--------------|-----------|--------|--------|--------|--------|
| BF1G08 | M08 | 4 | 14 | 22 | 10 |
| BF1G10 | M10 | 5 | 18 | 28 | 12 |
| BF1G12 | M12 | 6 | 22 | 30 | 14 |
| BF1G16 | M16 | 8 | 29 | 35 | 18 |
| BF1G20 | M20 | 10 | 33 | 43 | 21 |
| BF1G24 | M24 | 12 | 45 | 55 | 26 |

BH1

| Product code | Bolt dia. | A (mm) | B (mm) | C (mm) | D dia. |
|--------------|-----------|--------|--------|--------|--------|
| BH1Z08 | M08 | 2 | 15 | 22 | 10 |
| BH1Z10 | M10 | 2 | 20 | 28 | 12 |
| BH1Z12 | M12 | 2.5 | 24 | 31 | 14 |
| BH1Z16 | M16 | 3 | 29 | 38 | 18 |
| BH1Z20 | M20 | 4 | 33 | 44 | 21 |
| BH1Z24 | M24 | 4 | 45 | 55 | 26 |



Location Plates



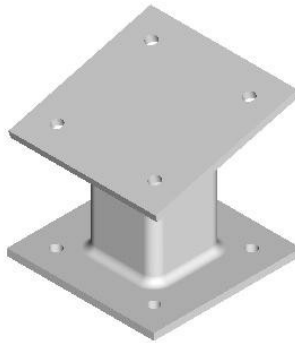
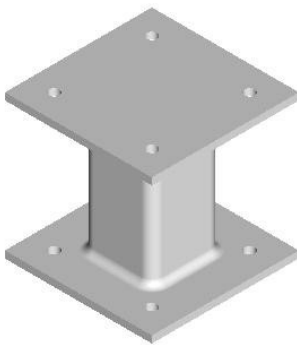
Manufactured from Mild steel grade S275

Hot Dip Galvanised as standard

5 to 1 Factor of Safety

The location plate is an essential part of a BeamClamp assembly. It provides support for the fixings to react against and clamp onto the steelwork flange. The hole centres of the location plate are designed to suit the application and ensure that the fixings are correctly positioned onto the flange. BeamClamp division will design the location plate to suit your application and guarantee the load of the assembly. Each plate manufactured by BeamClamp division will be stamped to identify it. The fixings can be used with location plates not manufactured by BeamClamp division, however, in this case, we can only guarantee the fixings and not the plate. Please contact RSR BeamClamp division to discuss your application ,

Location Spacers

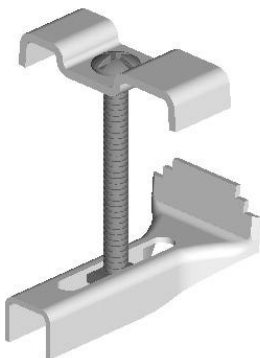


Location spacers are two location plates joined together with a gap to allow for spaces between steelwork.

The plates can be welded at different angles to allow for sloping steelwork, such as, roof rafters.

Other variations can be manufactured to suit special applications.

Grating Clip



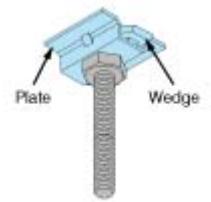
- Installation from one side only
- Fits 30mm to 41mm load bar centres
- Fits upto 50mm deep load bars as standard
- Slotted body for adjustment towards steelwork
- Cost effective

The Grating clip is a cost effective method of fixing down open floor grating to steelwork without the need to drill or weld. It can be installed with a flat head screw driver from the top side of the grating without access to the underneath required. It can be easily removed to allow the grating to be taken up for maintenance or re-positioning. The standard clip can accommodate between 30mm to 41mm load bar centres and to a depth of 50mm

Please contact RSR BeamClamp division if your application is not within the above specifications, we can modify the clip to suit most variations. The pressed steel body has a slot down its length to allow the body to be adjusted towards the steelwork should the transverse bars fall in an awkward position in relation to the steelwork flange. This ensures that the body of the clip always provides a good clamping surface underneath the steelwork to improve the clamping force and provide a good connection.

The Alpha Wedge is designed to lock quickly and securely into the re-entrant channel of Alphalok or Ribdeck AL decking to enable the suspension of all types of building services using threaded rod.

The product consists of two parts, a wedge and a plate. The wedge can be tapped to accommodate threaded rod sizes M6, M8 or M10, whilst the plate fits over the wedge to lock the assembly securely into the decking.

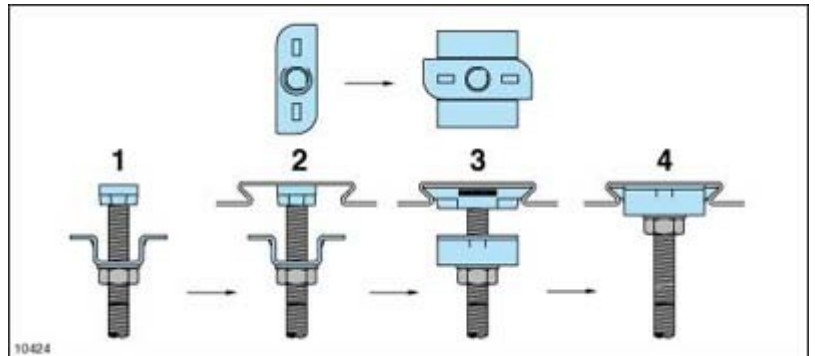


1 Pre-assemble the alpha wedge onto the threaded rod as shown in diagram 1.

Step 2 Insert the wedge into the re-entrant channel of the decking, flat surface uppermost and rotate until the chamfered cams engage in the sides of the channel, holding the wedge firmly in place.

Step 3 Slide the plate up the threaded rod, over the wedge, to lock it in position in the channel

Step 4 Tighten the locknut beneath the plate to hold the assembly in position.



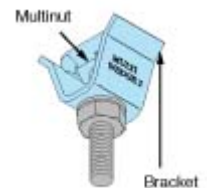
Multiwedge 2

Multiwedge 2 enables quick and easy suspension of building services from Ward Building Components' Multideck 60 composite steel/concrete floor decking.

Designed to work in harmony with the deck profile, MW2 eliminates the need for shot firing or drilling and hence preserves the strength of the floor decking by avoiding any potential damage.

No skilled labour is needed for installation, nor is any special tooling. Once the fixing has been inserted into the re-entrant channel of the decking it can be laterally adjusted before final tightening.

The 'Multi-Nut' can be tapped to accommodate threaded rod size M6, M8 or M10.

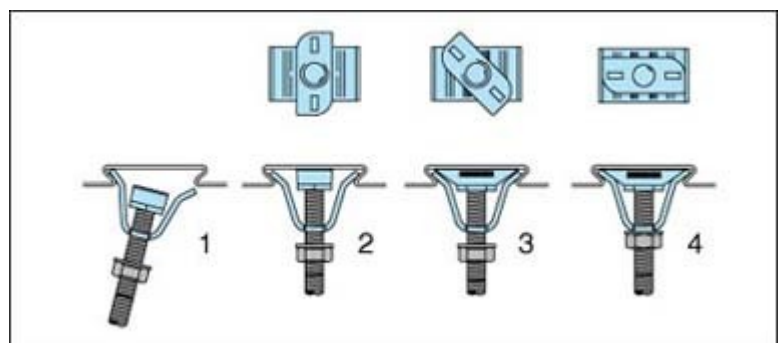


Step 1 Position Multi-nut and bracket on threaded rod as shown and insert one leg of bracket into re-entrant channel of decking. Snap other leg of bracket into channel, using a hammer blow if required.

Step 2 Slide assembly to desired position along length of re-entrant channel.

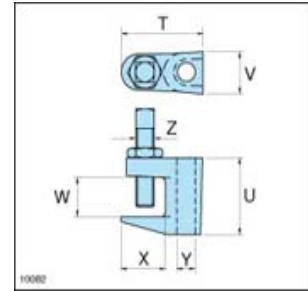
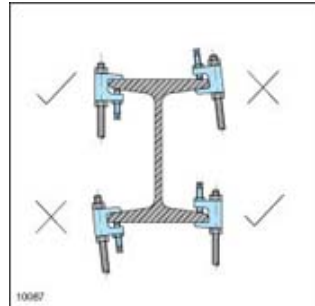
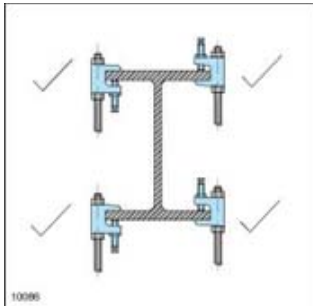
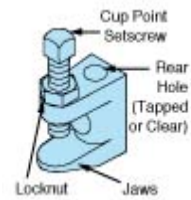
Step 3 Push and turn the multi-nut clockwise until it locks into the channel walls.

Step 4 Tighten the hexagon nut beneath the assembly to a torque of 10Nm.



Flange Clamps **lindapter**® **Engineered with Innovation**

The Lindapter FL Series of flange clamps is the simplest, quickest and most cost-effective method of suspending building services from steel beams. Suitable for use with parallel or tapered flange beams, the FL can be supplied with the back hole drilled to accept a plain rod or tapped to accept a threaded rod. Four different sizes are available to suit various applications - if in doubt which size to use, please contact Lindapter. The FL uses a grade 8.8 cup point setscrew to provide maximum bite into steelwork and maximum load performance.



| Product Code | Drop Rod | Loads (kN) | Setscrew Torque (Nm) | Locknut Torque (Nm) | T | U | V | W | X | Y | Z |
|--------------|----------|------------|----------------------|---------------------|----|----|----|----|----|----|----|
| FL16 | M6 | 1.1 | 8 | 11 | 36 | 35 | 19 | 17 | 20 | 7 | 8 |
| FL18 | M8 | 1.1 | 8 | 11 | 36 | 35 | 19 | 17 | 20 | 9 | 8 |
| FL210 | M10 | 2.4 | 8 | 22 | 45 | 40 | 22 | 19 | 22 | 11 | 10 |
| FL312 | M12 | 3.1 | 8 | 22 | 50 | 46 | 25 | 23 | 28 | 13 | 10 |
| FL412 | M12 | 3.1 | 8 | 22 | 53 | 51 | 26 | 28 | 27 | 13 | 10 |

Step 1 Slide FL onto beam flange and tighten setscrew to recommended torque. To avoid over tightening, a rough guide to achieve the correct torque is to tighten the setscrew with thumb and forefinger and then apply a further quarter turn (90°) with a spanner.

Step 2 Tighten the locknut to the recommended torque.

Wedge Nuts (Vee Nut)

The Lindapter V Nut fits into the slots of 'V' profile composite floor decking, such as HoloRib, and is available with a threaded hole tapped M4, M5, M6, M8 or M10. The VN is suitable for decking with a 15° tapered slot.



Step 1
Screw VN onto threaded rod.



Step 2
Insert VN and rod into re-entrant channel of decking.



Step 3
Rotate both rod and V Nut through 90° so that tapered sides engage the sides of the channel.



Suitable for wood and chipboard screws. Locking lugs prevent rotating in the drill hole. No rim for through fixing. Expansion pressure at the bottom of the drill-hole, not at the neck of the fixing (no splitting of render and tiles). Direction of expansion can be selected (important for fixings close to the edge). High load characteristics in solid bricks, perforated bricks and hollow blocks.

Type S Plugs



| Description | Dia mm | Length mm | Drill Dia mm | Min Hole Depth mm | Use with wood screw size mm |
|-------------|--------|-----------|--------------|-------------------|-----------------------------|
| S6 | 6 | 30 | 6 | 40 | 4-5mm |
| S7 | 7 | 30 | 7 | 40 | 4-5.5mm |
| S8 | 8 | 40 | 8 | 55 | 4.5-6mm |
| S10 | 10 | 50 | 10 | 70 | 6-8mm |
| S12 | 12 | 60 | 12 | 80 | 8-10mm |
| S14 | 14 | 75 | 14 | 90 | 10-12mm |

Expansion part is based on the construction of the fischer S-plug which has proven itself millions of times. Suitable for interior and exterior use (facade, roof). Comprehensive product range with a variety of safety screws, pre-assembled. Also available without screws. Building-inspectorate approval in Germany, France and Sweden. Optimum screw control and corrosion protection. Integrated setting lock prevents pre-expansion of the fixing. In the case of fixing sets (= pre-assembled) screw and fixing are perfectly matched.

Type S-RT Frame Fixings



Suitable for:

concrete, lightweight concrete, sand-lime solid bricks, solid red bricks, clinker bricks, solid pumice, perforated pumice, gypsum plasterboards, natural stone etc.

For fixing:

Timber battens, wooden laths, facade and roof substructures metal and plastic, window and door frames, metal profiles, insulants, fireproof doors, panels, cladding etc.

The fischer hammerfix is simply tapped in with a hammer - DONE! Screwdrivers or electric screwdrivers are thus superfluous. This saves time and effort. The fixing was developed for push-through assembly as proven in practice and is supplied with pre-assembled nail screw - optionally with zinc plated, stainless steel or plastic nails. The crossdrive recess Z enables loosening of the fixing for subsequent adjustment.

N-Z Hammerfix



To fix thin profiles and sheets, we recommend fischer nail fixings with flat collars, in order to avoid damage or puncturing.

The fixings are manufactured from the same high-grade and quality-monitored polyamide (nylon) which is also used for the frame fixings with general building inspectorate approval. The material is temperature-resistant from -40° to +80°C. As a result of the neat internal and external geometry in conjunction with the high-grade material and the special nail geometry, the fischer hammerfix guarantees constantly good pull out loads and installation results. Even in the case of assemblies through damp timber battens, the fixing will not expand prematurely.

For fixing:

All kinds of timber including laths, frames, wall connection- or render profiles, perforated profiles, wall angles, cable ducts, cable and pipe clips, sheets etc.

Undercut anchor for prior insertion (FZA bolt version and internally threaded anchor FZA-I) and push-through installation (FZA-D bolt version). A cylindrical conical hole with an undercut is produced with the Drill bit FZUB in one work process. When setting the anchor, the anchor sleeve is driven over the cone with a hammer (or setting tool) and fills the undercut hole with a positive fit.



Approved for:

Cracked and non-cracked concrete B25 to B55 resp. C20/25 to C50/60.

Also suitable for:

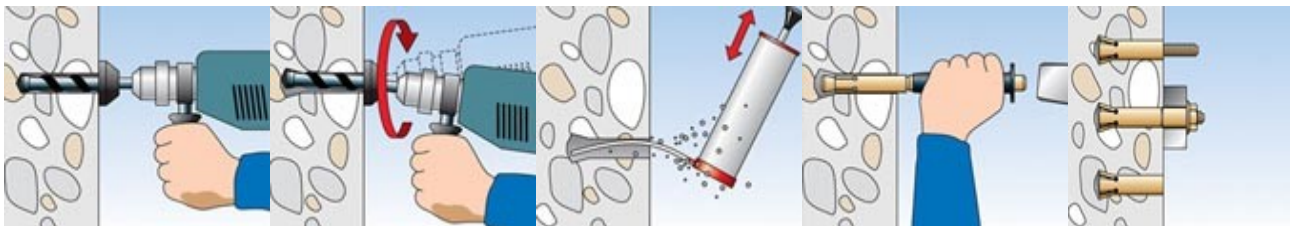
Concrete B15, natural stone with dense structure, solid brick, sand-lime solid brick.

For fixing of:

Steel constructions, railings, consoles, ladders, cable trays, machines, staircases, gates, facades, window elements.

Advantages/benefits

- Suitable for cracked and non-cracked concrete.
- Positive fit in the undercut gives additional security.
- Virtually expansion-free operation allows cost-efficient fixing with very small edge and axial spacing.
- Single-step drilling process simultaneously produces the undercut, saving installation time.
- Immediate load-bearing capability avoids installation interruptions (no interruption for resin curing times, unlike chemical anchors)
- Simple visual inspection of the green ring mark ensures 100% function.



Type of installation

- Prior insertion (FZA and FZA-I) and push-through installation (FZA-D).

Installation tips

- Use the A4 stainless steel FZA outdoors and in damp rooms, and the highly corrosion resistant C-steel (material no. 1.4529) in aggressive atmospheres.

FZA 10 x 40 M 6/10
FZA 12 x 40 M 8/15
FZA 12 x 50 M 8/15
FZA 14 x 40 M10/25
FZA 14 x 60 M10/25
FZA 18 x 80 M12/25
FZA 22 x 100 M16/60 FZA
22 x 125 M16/60 FZA 10 x
40 M 6/10 A4 FZA 10 x 40
M 6/35 A4 FZA 12 x 40 M
8/15 A4 FZA 12 x 50 M
8/15 A4 FZA 12 x 50 M
8/50 A4 FZA 14 x 40
M10/25 A4 FZA 14 x 60
M10/25 A4 FZA 14 x 60
M10/50 A4 FZA 18 x 80
M12/25 A4 FZA 18 x 80
M12/55 A4 FZA 22 x 100
M16/60 A4 FZA 22 x 125
M16/60 A4

Accessories FZE Setting



Accessories FZUB Drill Bit



Accessories FZUE



Pipe Rings & Back Plates

Malleable Iron Single Pipe Rings



Size availability:

1/4", 3/8", 1/2", 3/4", 1", 1.1/4", 1.1/2", 2", 2.1/2", 3", 4", 5", 6"

Threads:

1/4" to 2" Tapped M10
2,1/2" to 6" Tapped M12

Finishes:

Iron, Galvanised

Malleable Iron Double Pipe Rings



Size availability:

1/4", 3/8", 1/2", 3/4", 1", 1.1/4", 1.1/2", 2", 2.1/2", 3", 4", 5", 6"

Threads:

1/4" to 2" Tapped M10
2,1/2" to 6" Tapped M12

Finishes:

Iron, Galvanised

Female Back Plate



Threads:

1/8" BSP, 1/4" BSP, 3/8" BSP, 1/2" BSP, M10, M12

Finishes:

Iron, Galvanised

Cast Brass Single Rings



Size availability:

12mm, 15mm, 22mm, 28mm, 35mm, 42mm, 54mm, 67mm, 76.1mm, 108mm, 133mm, 159mm

Threads:

Tapped M10

Finishes:

Bright Finish, Chrome

Cast Brass Double Rings



Size availability:

12mm, 15mm, 22mm, 28mm, 35mm, 42mm, 54mm, 67mm, 76.1mm, 108mm, 133mm, 159mm

Threads:

Tapped M10

Finishes:

Bright Finish, Chrome

Round Brass Female Boss Back Plate



Threads:

1/8" BSP, 1/4" BSP, 3/8" BSP, 1/2" BSP, M10

Finishes:

Bright Finish, Chrome

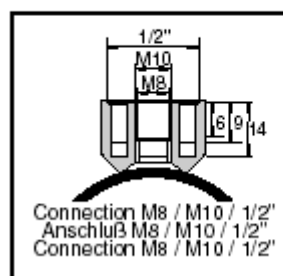
Lined Pipe Clamps M8/M10 dual boss

UNISTRUT

| Part No | Size mm | Size in |
|-------------|-----------|---------|
| 08881191813 | 15-20mm | 3/8" |
| 08881192213 | 21-25mm | 1/2" |
| 08881192813 | 26-31mm | 3/4" |
| 08881193513 | 32-36mm | 1" |
| 08881194213 | 42-46mm | 1.1/4" |
| 08881194813 | 46-50mm | 1.1/2" |
| 08881195413 | 50-54mm | |
| 08881196013 | 56-60mm | 2" |
| 08881190638 | 63-68mm | |
| 08881190688 | 68-73mm | |
| 08881190758 | 75-80mm | 2.1/2" |
| 08881190848 | 84-89mm | |
| 08881190888 | 88-92mm | 3" |
| 08881190978 | 97-102mm | |
| 08881191068 | 106-111mm | |
| 08881191098 | 109-114mm | |
| 08881191138 | 113-119mm | 4" |
| 08881191228 | 122-127mm | |
| 08881191318 | 131-136mm | |
| 08881191378 | 137-142mm | 5" |
| 08881191598 | 159-168mm | 6" |



Sound insulation value on average 22 dB (A)
Schallschutzreduzierung im Mittel 22 dB (A)
Reduction isophonique moyen 22 dB (A)



Pipe Clamps M8/M10 dual boss

UNISTRUT

| Part No | Size mm | Size in |
|-------------|-----------|---------|
| 08881280185 | 18-20mm | 3/8" |
| 08881280225 | 21-25mm | 1/2" |
| 08881280285 | 27-32mm | 3/4" |
| 08881280355 | 33-38mm | 1" |
| 08881280405 | 39-43mm | |
| 08881280425 | 42-46mm | 1.1/4" |
| 08881280485 | 48-55mm | 1.1/2" |
| 08881280605 | 60-65mm | 2" |
| 08881280686 | 68-73mm | |
| 08881280726 | 73-77mm | 2.1/2" |
| 08881280866 | 84-90mm | 3" |
| 08881280976 | 97-103mm | |
| 08881281066 | 106-111mm | |
| 08881281106 | 109-114mm | 4" |
| 08881281256 | 125-130mm | |
| 08881281396 | 139-145mm | 5" |
| 08881281686 | 160-168mm | 6" |



Full Unistrut catalogue available on request

Heavy Duty Pipe Clamps Zinc Plated



| Size id | Material |
|---------|------------|
| 65mm | 40mm x 3mm |
| 76mm | |
| 83mm | |
| 89mm | |
| 95mm | |
| 102mm | |
| 108mm | |
| 114mm | |
| 121mm | |
| 127mm | |
| 133mm | 40mm x 5mm |
| 140mm | |
| 146mm | |
| 152mm | |
| 155mm | |
| 159mm | |
| 168mm | |
| 173mm | |
| 178mm | |
| 186mm | |
| 193mm | 50mm x 6mm |
| 199mm | |
| 208mm | |
| 216mm | |
| 220mm | |
| 225mm | |
| 232mm | |
| 244mm | |
| 252mm | |
| 259mm | |
| 268mm | |
| 273mm | |
| 283mm | |
| 290mm | |
| 298mm | |
| 308mm | |
| 323mm | |

Heavy Duty Pipe Saddles Zinc Plated



| Saddle ID | Saddle ID |
|-----------|-----------|
| 27mm | 133mm |
| 34mm | 139mm |
| 42mm | 146mm |
| 45mm | 152mm |
| 48mm | 159mm |
| 54mm | 168mm |
| 60mm | 173mm |
| 65mm | 178mm |
| 70mm | 186mm |
| 76mm | 193mm |
| 83mm | 199mm |
| 89mm | 208mm |
| 95mm | 216mm |
| 102mm | 225mm |
| 108mm | 232mm |
| 114mm | 244mm |
| 121mm | 252mm |
| 127mm | |

Hard Wood Blocks

Suitable for use on low temperature hot water (0°C - 82°C) on both copper and steel pipework.

This timber supplied is being produced in accordance with the ITTO guidelines for sustainable management of Natural Tropical Forests prepared national guidelines based on the ITTO principles and are firmly committed to the concept of sustainability, outlined at the 10th session of ITTO held in Ecuador in the year 2000.

Also available foil covered.



Steel Pipe

| NB Inch | NB MM | O/D MM |
|---------|-------|--------|
| 1/2" | 15 | 21 |
| 3/4 | 20 | 27 |
| 1" | 25 | 34 |
| 1.1/4" | 32 | 42 |
| 1.1/2" | 40 | 48 |
| 2" | 50 | 60 |
| 2.1/2" | 65 | 76 |
| 3" | 80 | 89 |
| 4" | 100 | 114 |
| 5" | 125 | 140 |
| 6" | 150 | 168 |
| 8" | 200 | 220 |
| 10" | 250 | 273 |
| 12" | 300 | 324 |
| 14" | 350 | 356 |

Copper Pipe

| NB MM | O/D MM |
|-------|--------|
| 15 | 15 |
| 22 | 22 |
| 28 | 28 |
| 35 | 35 |
| 42 | 42 |
| 54 | 54 |
| 67 | 67 |
| 76 | 76 |
| 108 | 108 |
| 133 | 133 |
| 159 | 159 |

Phenolic Blocks

Koolphen is a CFC-free rigid phenolic insulation which is manufactured in (block) form. The closed cell composition gives the product excellent thermal properties. It is the most efficient thermal insulation material commonly available. Being based on a phenolic resin, it has outstanding fire characteristics and extremely low smoke emission when exposed to a flame source. Koolphen K is a light-weight and easily fabricated on site when required.

Available insulation thickness 15mm, 20mm, 25mm, 30mm, 40mm, 50mm 63mm, 75mm & 100mm



Steel Pipe

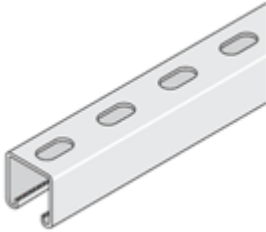
| NB Inch | NB MM | O/D MM |
|---------|-------|--------|
| 1/2" | 15 | 21 |
| 3/4 | 20 | 27 |
| 1" | 25 | 34 |
| 1.1/4" | 32 | 42 |
| 1.1/2" | 40 | 48 |
| 2" | 50 | 60 |
| 2.1/2" | 65 | 76 |
| 3" | 80 | 89 |
| 4" | 100 | 114 |
| 5" | 125 | 140 |
| 6" | 150 | 168 |
| 8" | 200 | 220 |
| 10" | 250 | 273 |
| 12" | 300 | 324 |
| 14" | 350 | 356 |

Copper Pipe

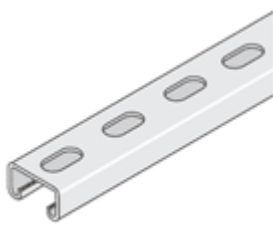
| NB MM | O/D MM |
|-------|--------|
| 15 | 15 |
| 22 | 22 |
| 28 | 28 |
| 35 | 35 |
| 42 | 42 |
| 54 | 54 |
| 67 | 67 |
| 76 | 76 |
| 108 | 108 |
| 133 | 133 |
| 159 | 159 |

Unistrut Channel & Spring Nuts

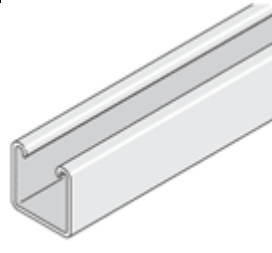
2.5mm Gauge pre-galv
41mm x 41mm
P1000T 3 metre
P1000T 6 metre



2.5mm Gauge pre-galv
21mm x 41mm
P3300T 3 metre
P3300T 6 metre



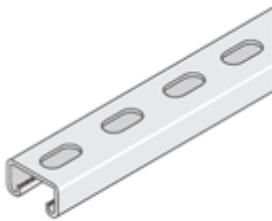
2.5mm Gauge pre-galv
41mm x 41mm
P1000 3 metre
P1000 6 metre



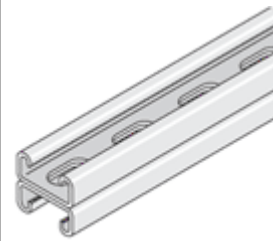
2.5mm Gauge pre-galv
21mm x 41mm
P3300 3 metre
P3300 6 metre



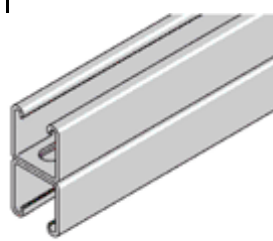
1.5mm Gauge pre-galv
21mm x 41mm
P4000T 3 metre
P4000T 6 metre



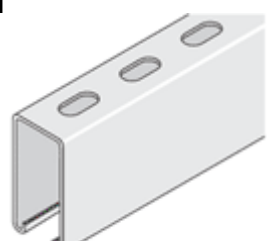
2.5mm Gauge pre-galv
41mm x 41mm
P3301T 3 metre
P3301T 6 metre



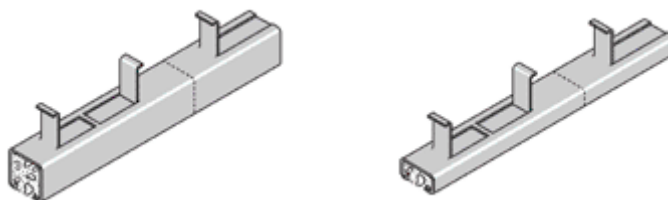
2.5mm Gauge pre-galv
83mm x 41mm
P1001T 3 metre
P1001T 6 metre



2.5mm Gauge pre-galv
83mm x 41mm
P5000T 3 metre
P5000T 6 metre



P3270 Concrete cast in Channel deep
P3370 Concrete cast in Channel Shallow



Plain Channel Nuts



| Size | Part Number |
|------|-------------|
| M6 | 0770m06 |
| M8 | 0770m08 |
| M10 | 0770m10 |
| M12 | 0770m12 |

Short Spring Channel Nuts



| Size | Part Number |
|------|-------------|
| M6 | 0770m06s |
| M8 | 0770m08s |
| M10 | 0770m10s |
| M12 | 0770m12s |

Long Spring Channel Nuts



| Size | Part Number |
|------|-------------|
| M6 | 0770m06l |
| M8 | 0770m08l |
| M10 | 0770m10l |
| M12 | 0770m12l |

KWIKSTRUT

UNISTRUT

Pre-assemble onto threaded rod to simplify drop rod install

Saves Time

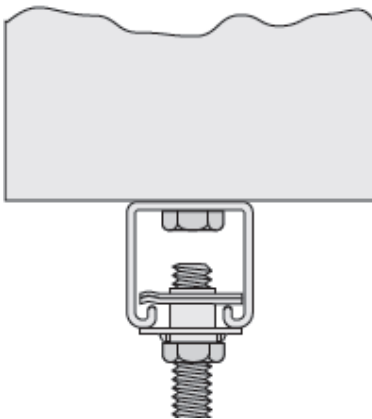
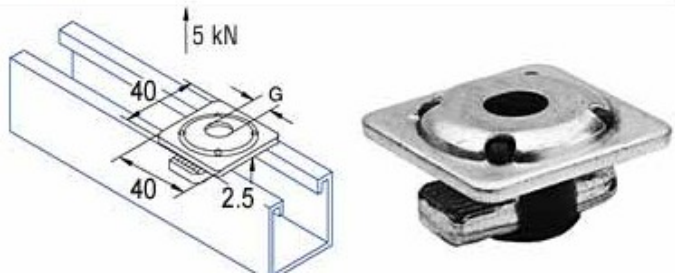
No Loose Parts

Use where you would normally use a channel nut & washer

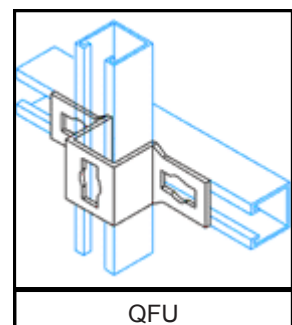
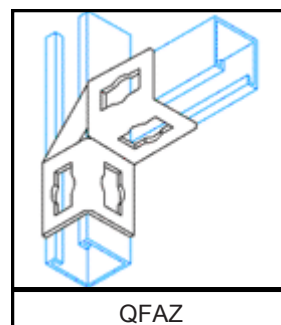
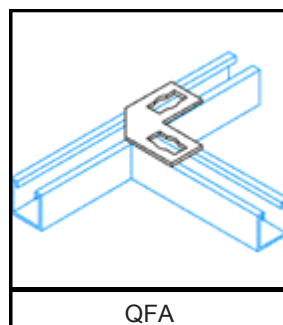
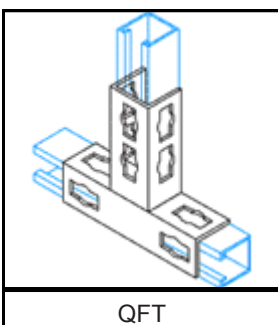
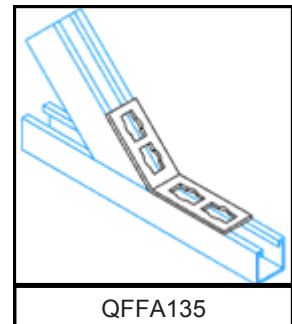
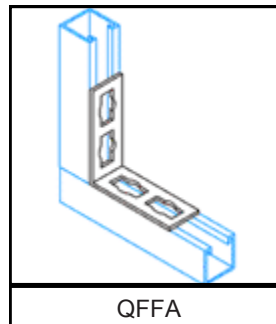
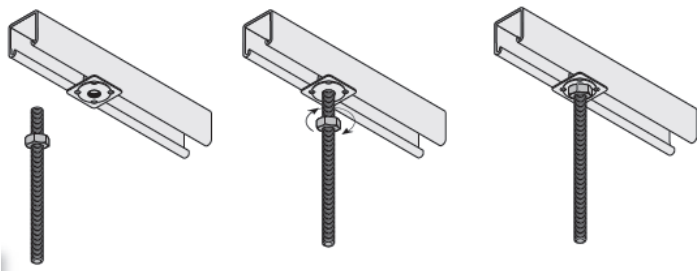
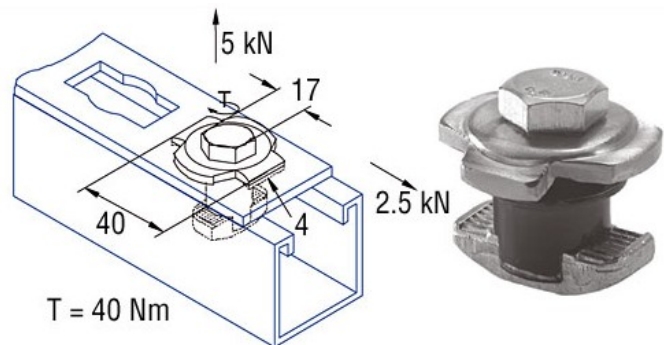
Reduces three parts to just one

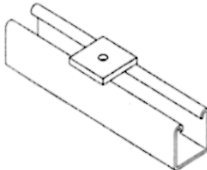
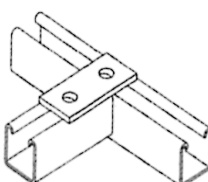
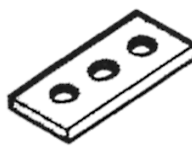

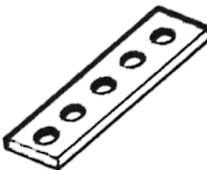
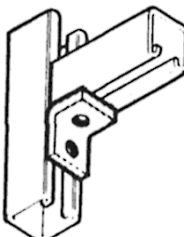
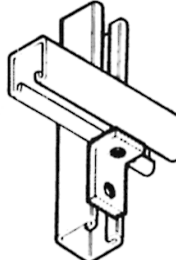
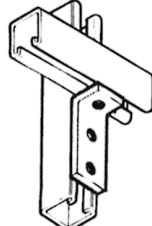
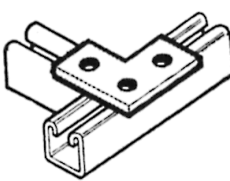
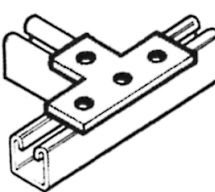
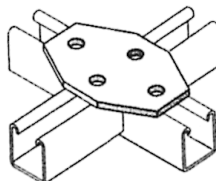
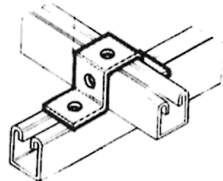
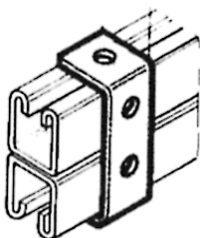
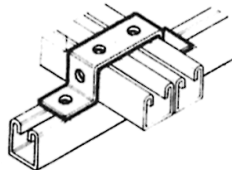
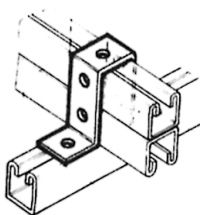
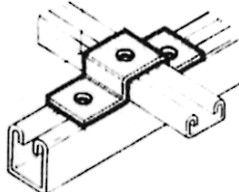
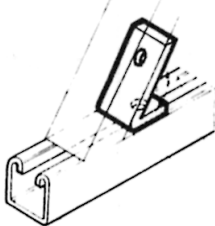
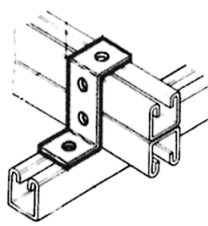
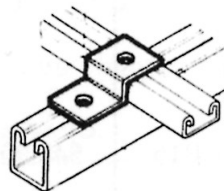
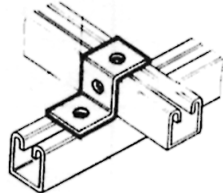
Makes possible one-handed installation

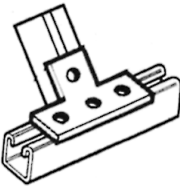
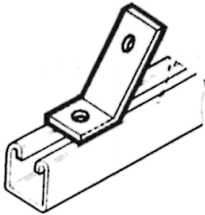
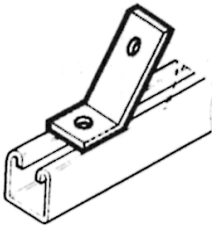
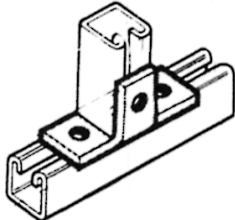
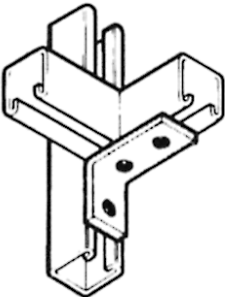
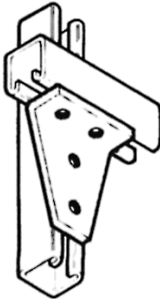
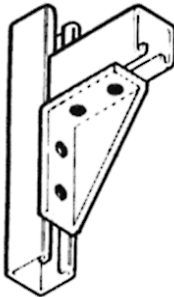
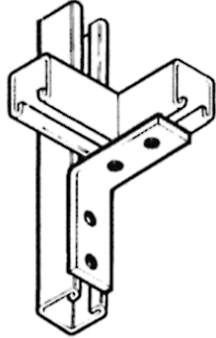
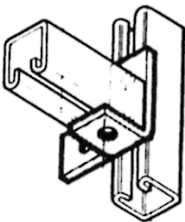
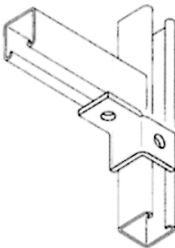
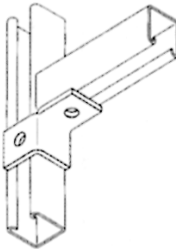
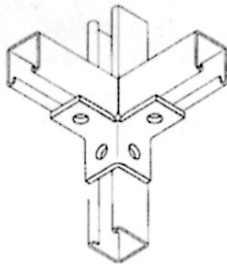
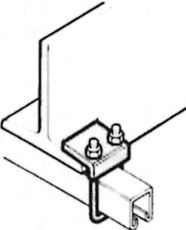
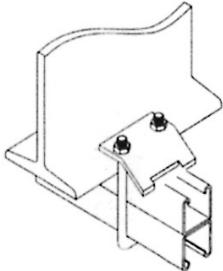
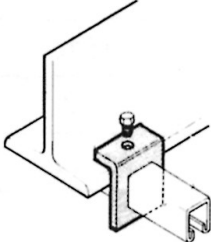
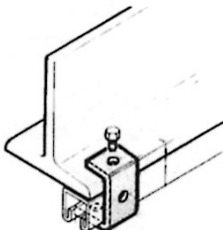
Unistrut QRN Kwikstrut Channel Nuts - M8, M10 & M12

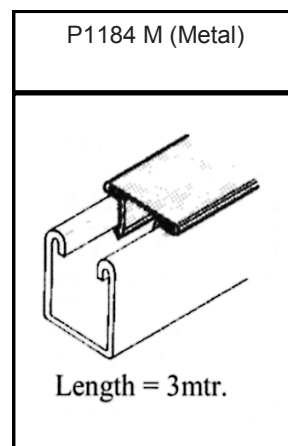
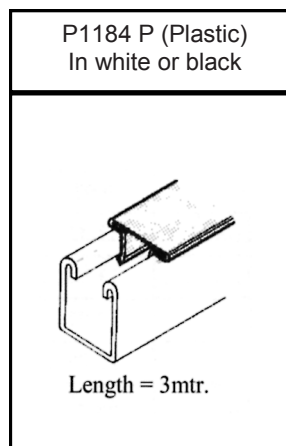
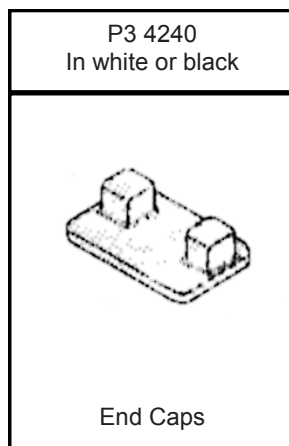
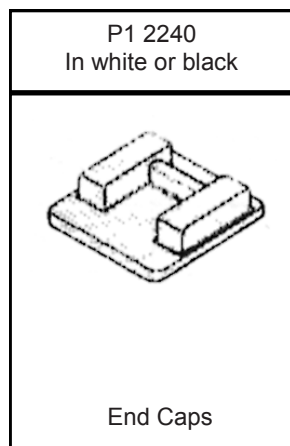
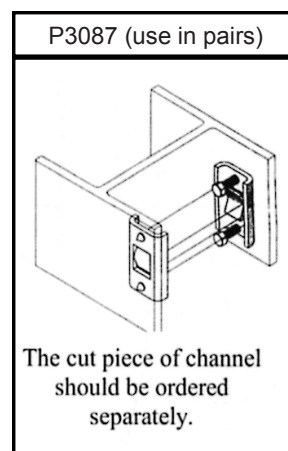
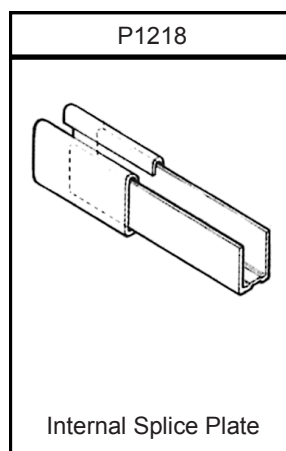
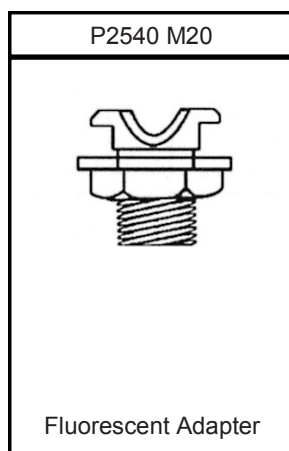
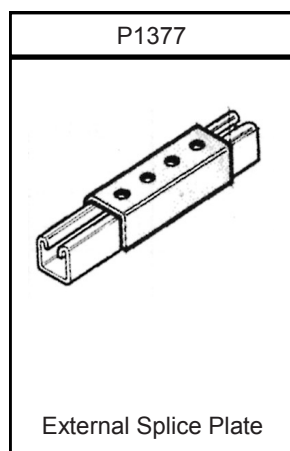
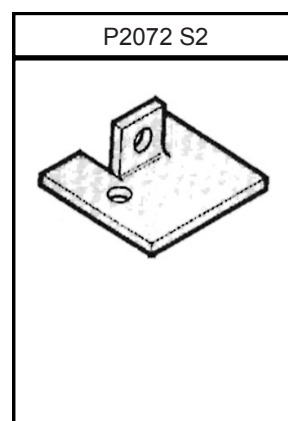
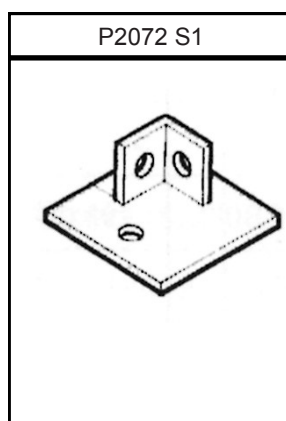
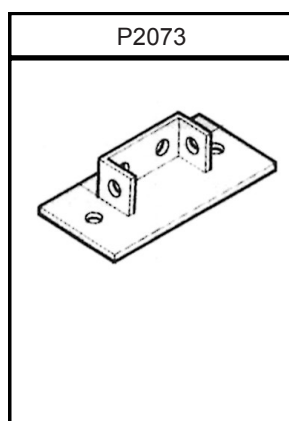
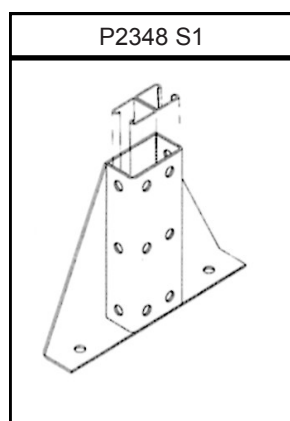
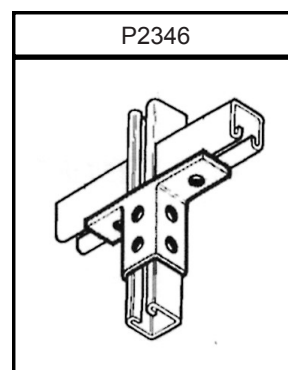
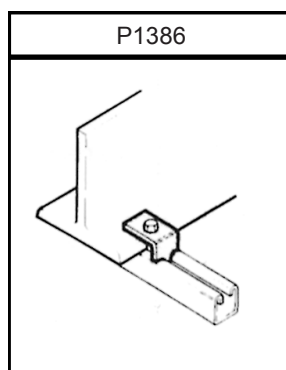
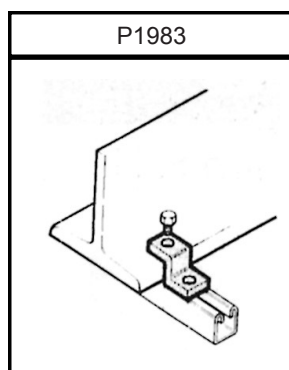
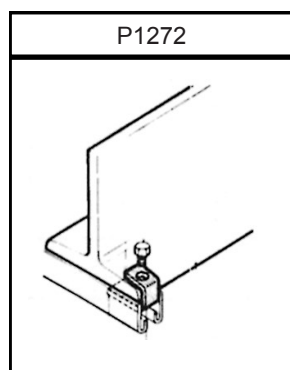


Unistrut QFNH Kwikstrut Channel Nuts - M10

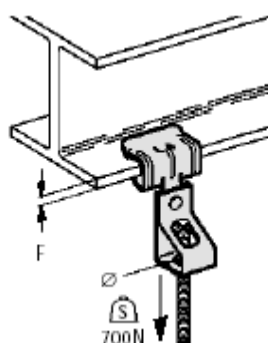


| | | | |
|---|--|---|--|
| M6 - M12 Sqr Washers  | P1065  | P1066  | P1067  |
| P1941  | P1026  | P1068  | P1326  |
| P1036  | P1031  | P1580  | P1047  |
| P1044  | P1043  | P1737  | P4047  |
| P1186 45 deg  | P1453  | P4045  | P1045  |

| | | | |
|--|---|--|--|
| <p>P1032</p>  | <p>P1546 45 deg</p>  | <p>P2097 60 deg</p>  | <p>P1033</p>  |
| <p>P1458</p>  | <p>P1359</p>  | <p>P2484</p>  | <p>P1325</p>  |
| <p>P1037</p>  | <p>P2341 L</p>  | <p>P2341 R</p>  | <p>P2223</p>  |
| <p>P2785</p>  | <p>P2786</p>  | <p>P1796</p>  | <p>P1271</p>  |

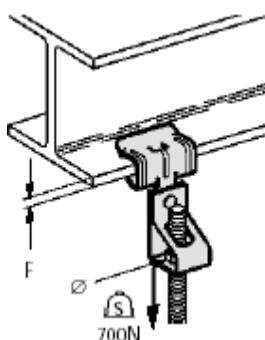


Spring Steel Clips



| B-LINE NO. | F mm | Ø | UPC NO. 781011 | M-ZINC |
|------------|------|---|----------------|--------|
|------------|------|---|----------------|--------|

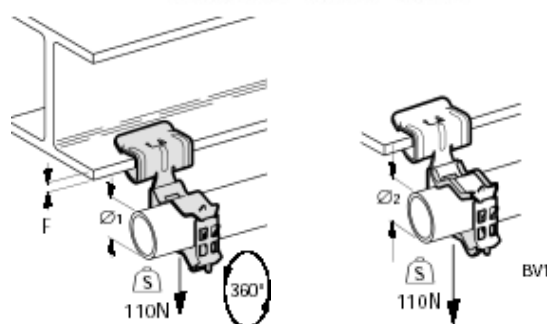
| | | | | |
|--------------|---------|-----|-------|-----|
| BH4-E-1-2 | 2 - 3 | M6 | 04099 | 100 |
| BH4-E-2-4 | 3 - 8 | M6 | 03683 | 100 |
| BH4-E-5-8 | 8 - 14 | M6 | 03684 | 100 |
| BH4-E-9-12 | 14 - 20 | M6 | 03685 | 100 |
| BMH8-E-1-2 | 2 - 3 | M8 | 04102 | 100 |
| BMH8-E-2-4 | 3 - 8 | M8 | 03687 | 100 |
| BMH8-E-5-8 | 8 - 14 | M8 | 03688 | 100 |
| BMH8-E-9-12 | 14 - 20 | M8 | 03689 | 100 |
| BMH10-E-1-2 | 2 - 3 | M10 | 04103 | 100 |
| BMH10-E-2-4 | 3 - 8 | M10 | 03690 | 100 |
| BMH10-E-5-8 | 8 - 14 | M10 | 03691 | 100 |
| BMH10-E-9-12 | 14 - 20 | M10 | 03692 | 100 |



| B-LINE NO. | F mm | Ø mm | UPC NO. 781011 | M-ZINC |
|------------|------|------|----------------|--------|
|------------|------|------|----------------|--------|

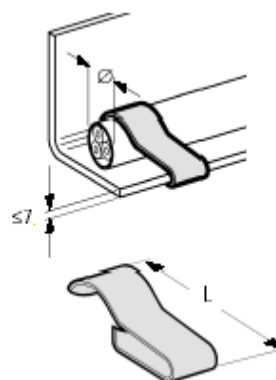
| | | | | |
|-------------|---------|----|-------|-----|
| BH5-E-1-2 | 2 - 3 | 11 | 04101 | 100 |
| BH5-E-2-4 | 3 - 8 | 11 | 03693 | 100 |
| BH5-E-5-8 | 8 - 14 | 11 | 03694 | 100 |
| BH5-E-9-12 | 14 - 20 | 11 | 03695 | 100 |
| BH13-E-1-2 | 2 - 3 | 13 | 04142 | 100 |
| BH13-E-2-4 | 3 - 8 | 13 | 03696 | 100 |
| BH13-E-5-8 | 8 - 14 | 13 | 03697 | 100 |
| BH13-E-9-12 | 14 - 20 | 13 | 03698 | 100 |

COOPER B-Line



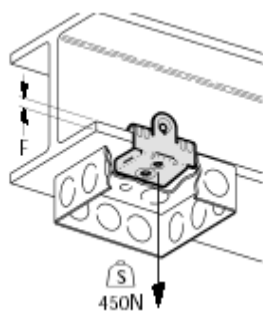
| B-LINE NO. | F mm | Ø1 mm | Ø2 mm | UPC NO. 781011 | M-ZINC |
|------------|------|-------|-------|----------------|--------|
|------------|------|-------|-------|----------------|--------|

| | | | | | |
|----------------|-------|-------|-------|-------|-----|
| BG-6-E-1-2 | 2-3 | 14-18 | 8-12 | 04146 | 100 |
| BG-6-E-2-4 | 3-8 | 14-18 | 8-12 | 03919 | 100 |
| BG-6-E-5-8 | 8-14 | 14-18 | 8-12 | 03921 | 100 |
| BG-6-E-9-12 | 14-20 | 14-18 | 8-12 | 03922 | 100 |
| BG-8-12-E-1-2 | 2-3 | 18-27 | 12-21 | 04097 | 100 |
| BG-8-12-E-2-4 | 3-8 | 18-27 | 12-21 | 03923 | 100 |
| BG-8-12-E-5-8 | 8-14 | 18-27 | 12-21 | 03924 | 100 |
| BG-8-12-E-9-12 | 14-20 | 18-27 | 12-21 | 03925 | 100 |
| BG-16-E-1-2 | 2-3 | 27-35 | 21-29 | 04098 | 100 |
| BG-16-E-2-4 | 3-8 | 27-35 | 21-29 | 03926 | 100 |
| BG-16-E-5-8 | 8-14 | 27-35 | 21-29 | 03927 | 100 |
| BG-16-E-9-12 | 14-20 | 27-35 | 21-29 | 03928 | 50 |
| BG-20-E-1-2 | 2-3 | 35-42 | 29-36 | 04147 | 100 |
| BG-20-E-2-4 | 3-8 | 35-42 | 29-36 | 03929 | 100 |
| BG-20-E-5-8 | 8-14 | 35-42 | 29-36 | 03930 | 100 |
| BG-20-E-9-12 | 14-20 | 35-42 | 29-36 | 03931 | 100 |
| BG-24-E-1-2 | 2-3 | 42-50 | 36-44 | 04137 | 50 |
| BG-24-E-2-4 | 3-8 | 42-50 | 36-44 | 03932 | 50 |
| BG-24-E-5-8 | 8-14 | 42-50 | 36-44 | 03933 | 50 |
| BG-24-E-9-12 | 14-20 | 42-50 | 36-44 | 03934 | 50 |

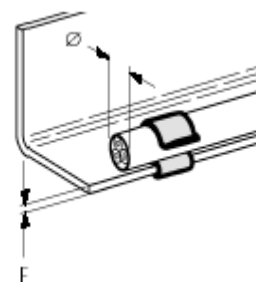


| B-LINE NO. | Ø mm | L mm | UPC NO. 781011 | M-ZINC |
|------------|------|------|----------------|--------|
|------------|------|------|----------------|--------|

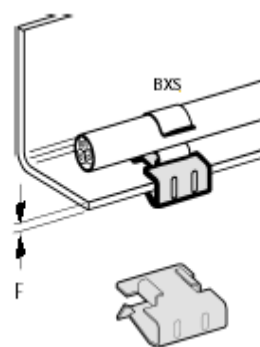
| | | | | |
|-------|----|----|-------|-----|
| BX-16 | 16 | 41 | 19966 | 100 |
| BX-20 | 20 | 48 | 19967 | 100 |



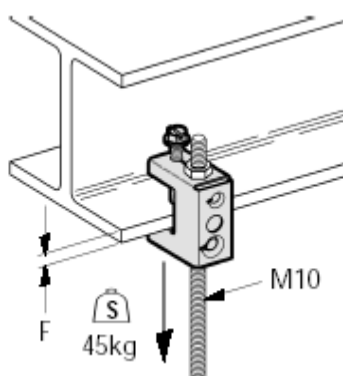
| B-LINE NO. | F mm | UPC NO. 781011 | M-ZINC |
|------------|---------|----------------|--------|
| BU-2-4 | 3 - 8 | 03938 | 100 |
| BU-5-8 | 8 - 14 | 03939 | 100 |
| BU-9-12 | 14 - 20 | 03940 | 100 |



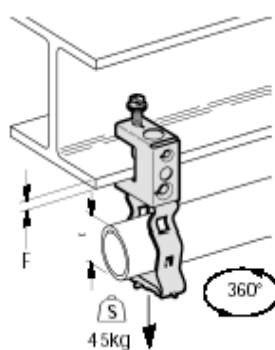
| B-LINE NO. | F mm | Ø mm | UPC NO. 781011 | E-ZINC |
|------------|--------|---------|----------------|--------|
| BXS-67 | 2 - 4 | 6 - 7 | 19973 | 100 |
| BXS-89 | 2 - 4 | 7 - 9 | 19974 | 100 |
| BXS-1011 | 2 - 4 | 10 - 11 | 19975 | 100 |
| BXS-1214 | 2 - 4 | 12 - 14 | 19976 | 100 |
| BXS-1519 | 2 - 4 | 15 - 19 | 19977 | 100 |
| BXS-2024 | 2 - 4 | 20 - 24 | 19978 | 100 |
| BXS-2530 | 2 - 4 | 25 - 30 | 19979 | 100 |
| BXM-67 | 4 - 7 | 6 - 7 | 19980 | 100 |
| BXM-89 | 4 - 7 | 7 - 9 | 19981 | 100 |
| BXM-1011 | 4 - 7 | 10 - 11 | 19982 | 100 |
| BXM-1214 | 4 - 7 | 12 - 14 | 19983 | 100 |
| BXM-1519 | 4 - 7 | 15 - 19 | 19984 | 100 |
| BXM-2024 | 4 - 7 | 20 - 24 | 19985 | 100 |
| BXM-2530 | 4 - 7 | 25 - 30 | 19986 | 100 |
| BXL-67 | 8 - 12 | 6 - 7 | 19987 | 100 |
| BXL-89 | 8 - 12 | 7 - 9 | 19988 | 100 |
| BXL-1011 | 8 - 12 | 10 - 11 | 19989 | 100 |
| BXL-1214 | 8 - 12 | 12 - 14 | 19990 | 100 |
| BXL-1519 | 8 - 12 | 15 - 19 | 19991 | 100 |
| BXL-2024 | 8 - 12 | 20 - 24 | 19992 | 100 |
| BXL-2530 | 8 - 12 | 25 - 30 | 19993 | 100 |



| B-LINE NO. | F mm | UPC NO. 781011 | E-ZINC |
|------------|---------|----------------|--------|
| BFA-1215 | 12 - 15 | 19955 | 100 |
| BFA-1520 | 15 - 20 | 19956 | 100 |



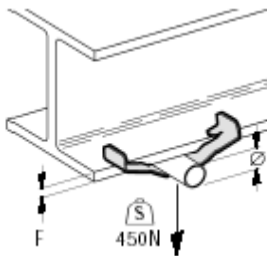
| B-LINE NO. | F mm | UPC NO. 781011 | M-ZINC |
|------------|------|----------------|--------|
| BC1 | ≤18 | 03640 | 100 |



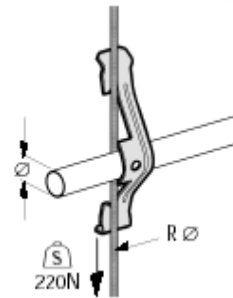
| B-LINE NO. | F mm | W mm | UPC NO. 781011 | M-ZINC |
|------------|------|---------|----------------|--------|
| BG-8-12-C2 | ≤18 | 18 - 27 | 03641 | 100 |
| BG-16-C2 | ≤18 | 27 - 35 | 03642 | 100 |
| BG-20-C2 | ≤18 | 35 - 42 | 03643 | 100 |
| BG-24-C2 | ≤18 | 42 - 50 | 03644 | 50 |
| BG-32-C2 | ≤18 | 50 - 63 | 03645 | 50 |

Spring Steel Clips

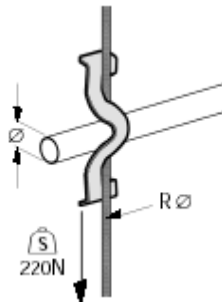
COOPER B-Line



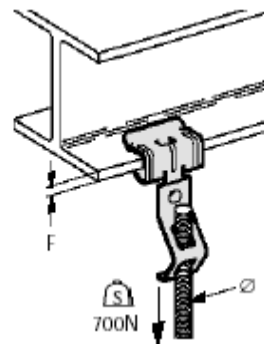
| B-LINE NO. | F mm | ∅ mm | UPC NO. 781011 | M-ZINC |
|------------|---------|---------|----------------|--------|
| BW-8 | 4 - 7 | 16 - 19 | 03751 | 100 |
| BW-12 | 4 - 7 | 19 - 22 | 03752 | 100 |
| BW-12 | 8 - 10 | 16 - 20 | 03752 | 100 |
| BW-12 | 11 - 13 | 13 - 18 | 03752 | 100 |
| BW-16 | 4 - 7 | 25 - 32 | 03753 | 100 |
| BW-16 | 8 - 10 | 22 - 28 | 03753 | 100 |
| BW-16 | 11 - 13 | 19 - 24 | 03753 | 100 |
| BW-20 | 4 - 7 | 32 - 40 | 03754 | 100 |
| BW-20 | 8 - 10 | 28 - 36 | 03754 | 100 |
| BW-20 | 11 - 13 | 25 - 32 | 03754 | 100 |



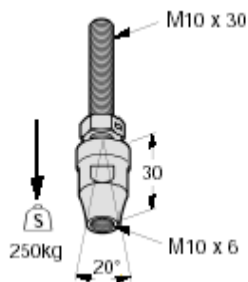
| B-LINE NO. | R ∅ | ∅ mm | UPC NO. 781011 | M-ZINC |
|------------|----------|---------|----------------|--------|
| BW-16 | 4 - 6 mm | 27 - 30 | 03753 | 100 |
| BW-16 | M10 | 20 - 25 | 03753 | 100 |
| BW-20 | 4 - 6 mm | 32 - 40 | 03754 | 100 |
| BW-20 | M10 | 27 - 38 | 03754 | 100 |



| B-LINE NO. | R ∅ | ∅ mm | UPC NO. 781011 | M-ZINC |
|------------|----------|---------|----------------|--------|
| BW-8 | 4 - 6 mm | 16 - 19 | 03751 | 100 |
| BW-12 | 4 - 6 mm | 19 - 23 | 03752 | 100 |
| BW-12 | M10 | 16 - 20 | 03752 | 100 |

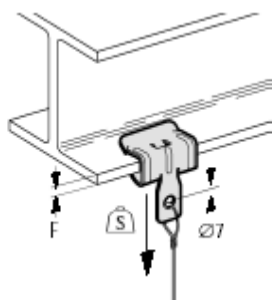


| B-LINE NO. | F mm | ∅ mm | UPC NO. 781011 | M-ZINC |
|-------------|---------|------|----------------|--------|
| BH14-E-1-2 | 2 - 3 | 8 | 04193 | 100 |
| BH14-E-2-4 | 3 - 8 | 8 | 03675 | 100 |
| BH14-E-5-8 | 8 - 14 | 8 | 03676 | 100 |
| BH14-E-9-12 | 14 - 20 | 8 | 03677 | 100 |
| BH2-E-1-2 | 2 - 3 | 10 | 04192 | 100 |
| BH2-E-2-4 | 3 - 8 | 10 | 03679 | 100 |
| BH2-E-5-8 | 8 - 14 | 10 | 03680 | 100 |
| BH2-E-9-12 | 14 - 20 | 10 | 03681 | 100 |

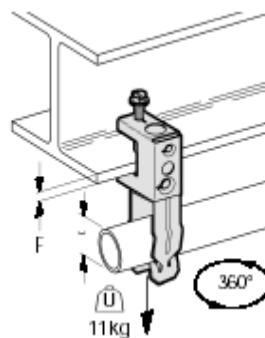


| B-LINE NO. | UPC NO. 781011 | E-ZINC |
|------------|----------------|--------|
| BSC-10 | 04445 | 50 |

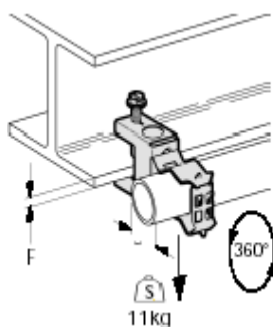
Full Cooper B-Line catalogue available on request



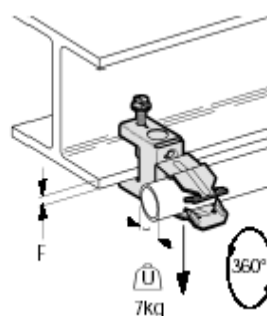
| B-LINE NO. | F mm | S N | UPC NO. 781011 | M-ZINC |
|------------|---------|-----|----------------|--------|
| BE-1-2 | 2 - 3 | 700 | 03897 | 100 |
| BE-2-4 | 3 - 8 | 900 | 03898 | 100 |
| BE-5-8 | 8 - 14 | 900 | 03899 | 100 |
| BE-9-12 | 14 - 20 | 900 | 03901 | 100 |



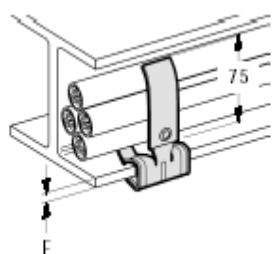
| B-LINE NO. | F mm | mm | UPC NO. 781011 | M-ZINC |
|------------|------|---------|----------------|--------|
| BP-8-C2 | ≤18 | 18 - 22 | 03652 | 100 |
| BP-12-C2 | ≤18 | 22 - 30 | 03653 | 100 |
| BP-16-C2 | ≤18 | 30 - 35 | 03655 | 100 |



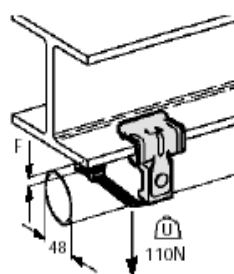
| B-LINE NO. | F mm | mm | UPC NO. 781011 | M-ZINC |
|------------|------|-------|----------------|--------|
| BG-8-12-C1 | ≤18 | 18-27 | 03646 | 100 |
| BG-16-C1 | ≤18 | 27-35 | 03647 | 100 |
| BG-20-C1 | ≤18 | 35-42 | 03648 | 100 |
| BG-24-C1 | ≤18 | 42-50 | 03649 | 50 |
| BG-32-C1 | ≤18 | 50-63 | 03651 | 50 |



| B-LINE NO. | F mm | mm | UPC NO. 781011 | M-ZINC |
|------------|------|---------|----------------|--------|
| BP-8-C1 | ≤18 | 18 - 22 | 03656 | 100 |
| BP-12-C1 | ≤18 | 22 - 30 | 03657 | 100 |
| BP-16-C1 | ≤18 | 30 - 35 | 03659 | 100 |



| B-LINE NO. | F mm | UPC NO. 781011 | M-ZINC |
|-------------|---------|----------------|--------|
| BE-1-2-F62 | 2 - 3 | 03779 | 100 |
| BE-2-4-F62 | 3 - 8 | 03780 | 100 |
| BE-5-8-F62 | 8 - 14 | 03781 | 100 |
| BE-9-12-F62 | 14 - 20 | 03782 | 100 |



| B-LINE NO. | F mm | UPC NO. 781011 | M-ZINC |
|---------------|---------|----------------|--------|
| BE-2-4-CT2-R | 3 - 8 | 03774 | 100 |
| BE-5-8-CT2-R | 8 - 14 | 03775 | 100 |
| BE-9-12-CT2-R | 14 - 20 | 03776 | 100 |

Blind Rivets Alu/Steel Standard (Dome Head)

| Rivet | Hole Dia | Rivet Body D x L mm | Grip Range mm | Box Qty |
|--------|----------|------------------------|------------------|---------|
| 2.4 mm | 2.5mm | 2.4 x 4 | 0.5 - 1.5 | 1000 |
| | | 2.4 x 6 | 1.5 - 3.5 | 1000 |
| | | 2.4 x 8 | 3.5 - 5.0 | 1000 |
| 3.2 mm | 3.3mm | 3.2 x 4 | 0.5 - 1.5 | 500 |
| | | 3.2 x 6 | 1.5 - 3.5 | 500 |
| | | 3.2 x 8 | 3.5 - 5.0 | 500 |
| | | 3.2 x 10 | 5.0 - 7.0 | 500 |
| | | 3.2 x 12 | 7.0 - 9.0 | 500 |
| | | 3.2 x 14 | 9.0 - 11.0 | 500 |
| | | 3.2 x 16 | 11.0 - 13.0 | 500 |
| | | 3.2 x 18 | 13.0 - 15.0 | 500 |
| | | 3.2 x 20 | 15.0 - 17.0 | 500 |
| | | 3.2 x 25 | 17.0 - 22.0 | 500 |
| 4.0 mm | 4.1mm | 4 x 5 | 0.5 - 1.5 | 500 |
| | | 4 x 6 | 1.5 - 3.0 | 500 |
| | | 4 x 7 | 3.0 - 4.0 | 500 |
| | | 4 x 8 | 4.0 - 5.0 | 500 |
| | | 4 x 10 | 5.0 - 6.5 | 500 |
| | | 4 x 12 | 6.5 - 8.5 | 500 |
| | | 4 x 14 | 8.5 - 10.5 | 500 |
| | | 4 x 16 | 10.5 - 12.5 | 500 |
| | | 4 x 18 | 12.5 - 14.5 | 500 |
| | | 4 x 20 | 14.5 - 16.5 | 500 |
| | | 4 x 25 | 16.5 - 21.5 | 500 |
| | | 4 x 30 | 21.5 - 26.0 | 250 |
| | | 4 x 35 | 26.0 x 30.0 | 250 |
| | | 4 x 40 | 30.0 - 35.0 | 250 |
| 4.8 mm | 4.9mm | 4.8 x 6 | 2.0 - 2.5 | 500 |
| | | 4.8 x 8 | 2.5 - 4.5 | 500 |
| | | 4.8 x 10 | 4.5 - 6.0 | 500 |
| | | 4.8 x 12 | 6.0 - 8.0 | 500 |
| | | 4.8 x 14 | 8.0 - 10.0 | 500 |
| | | 4.8 x 16 | 10.0 - 12.0 | 500 |
| | | 4.8 x 18 | 12.0 - 14.0 | 500 |
| | | 4.8 x 20 | 14.0 - 15.0 | 250 |
| | | 4.8 x 25 | 15.0 - 20.0 | 250 |
| 6.0 mm | 6.1mm | 6 x 8 | 2.0 - 3.0 | 250 |
| | | 6 x 10 | 3.0 - 5.0 | 250 |
| | | 6 x 12 | 5.0 - 7.0 | 250 |
| | | 6 x 16 | 7.0 - 11.0 | 250 |
| | | 6 x 18 | 11.0 - 13.0 | 250 |
| | | 6 x 20 | 13.0 - 15.0 | 250 |
| | | 6 x 25 | 15.0 - 20.0 | 250 |
| | | 6 x 30 | 20.0 - 24.0 | 250 |
| | | 6 x 35 | 24.0 - 29.0 | 100 |
| | | 6 x 40 | 29.0 - 34.0 | 100 |
| | | 6 x 45 | 34.0 - 39.0 | 100 |
| | | 6 x 50 | 34.0 - 44.0 | 100 |



Rivet Body: AlMg 3
Mandrel: Steel Zinc Plated

| Rivet Dia mm | Shear Strength N | Tensile Strength N | Mandril dia mm | Max Head dia mm |
|-----------------|---------------------|-----------------------|-------------------|--------------------|
| 2.4 | 350 | 450 | 1.5 | 5.0 |
| 3.2 | 800 | 950 | 1.95 | 6.5 |
| 4 x 5 to 12 | 1.400 | 2.000 | 2.1 | 8.0 |
| 4 x 14 to 40 | 850 | 1.000 | 2.1 | 8.0 |
| 4.8 | 2.000 | 2.700 | 2.7 | 9.5 |
| 6 | 3.100 | 4.000 | 3.2 | 12.0 |

Blind Rivets Alu/Steel Countersunk

| Rivet | Hole Dia | Rivet Body D x L mm | Grip Range mm | Box Qty |
|--------|----------|------------------------|------------------|---------|
| 3.2 mm | 3.3mm | 3.2 x 6 | 1.5 - 3.5 | 500 |
| | | 3.2 x 8 | 3.5 - 5.5 | 500 |
| | | 3.2 x 10 | 5.5 - 7.0 | 500 |
| | | 3.2 x 12 | 7.0 - 9.0 | 500 |
| | | 3.2 x 14 | 9.0 - 11.0 | 500 |
| | | 3.2 x 16 | 11.0 - 13.0 | 500 |
| 4.0 mm | 4.1mm | 4 x 6 | 0.5 - 3.0 | 500 |
| | | 4 x 8 | 3.0 - 5.0 | 500 |
| | | 4 x 10 | 5.0 - 6.5 | 500 |
| | | 4 x 12 | 6.5 - 8.5 | 500 |
| | | 4 x 16 | 8.5 - 12.5 | 500 |
| | | 4 x 18 | 12.5 - 14.5 | 500 |
| | | 4 x 20 | 14.5 - 16.5 | 500 |
| | | 4 x 25 | 16.5 - 21.5 | 500 |
| 4.8 mm | 4.9mm | 4.8 x 6 | 0.5 - 3.0 | 500 |
| | | 4.8 x 8 | 3.5 - 4.5 | 500 |
| | | 4.8 x 10 | 4.5 - 6.0 | 500 |
| | | 4.8 x 12 | 6.0 - 8.0 | 500 |
| | | 4.8 x 14 | 8.0 - 10.0 | 500 |
| | | 4.8 x 16 | 10.0 - 12.0 | 500 |
| | | 4.8 x 18 | 12.0 - 14.0 | 500 |
| | | 4.8 x 20 | 14.0 - 16.0 | 250 |
| | | 4.8 x 25 | 16.0 - 21.0 | 250 |
| | | 4.8 x 30 | 21.0 - 25.0 | 100 |



Rivet Body: AlMg 3
Mandrel: Steel Zinc Plated

Blind Rivets Alu/Steel Large Flange

| Rivet | Hole Dia | Rivet Body D x L mm | Grip Range mm | Box Qty |
|--------|----------|------------------------|------------------|---------|
| 3.2 mm | 3.3mm | 3.2 x 6 | 1.5 - 3.5 | 500 |
| | | 3.2 x 8 | 3.5 - 5.0 | 500 |
| | | 3.2 x 10 | 5.0 - 7.0 | 500 |
| | | 3.2 x 12 | 7.0 - 9.0 | 500 |
| | | 3.2 x 16 | 9.0 - 13.0 | 500 |
| 4.0 mm | 4.1mm | 4 x 6 | 1.5 - 3.0 | 500 |
| | | 4 x 8 | 3.0 - 5.0 | 500 |
| | | 4 x 10 | 5.0 - 6.5 | 500 |
| | | 4 x 12 | 6.5 - 8.5 | 500 |
| | | 4 x 16 | 8.5 - 12.5 | 500 |
| | | 4 x 20 | 12.5 - 16.5 | 500 |
| 4.8 mm | 4.9mm | 4.8 x 8 | 2.5 - 4.5 | 500 |
| | | 4.8 x 10 | 4.5 - 6.0 | 500 |
| | | 4.8 x 12 | 6.0 - 8.0 | 500 |
| | | 4.8 x 14 | 8.0 - 10.0 | 500 |
| | | 4.8 x 16 | 8.0 - 12.0 | 500 |
| | | 4.8 x 20 | 12.0 - 15.0 | 250 |
| | | 4.8 x 25 | 15.0 - 20.0 | 250 |



Rivet Body: AlMg 3
Mandrel: Steel Zinc Plated

| Rivet Dia mm | Shear Strength N | Tensile Strength N | Mandril dia mm | Max Head dia mm |
|-----------------|---------------------|-----------------------|-------------------|--------------------|
| 3.2 | 720 | 950 | 1.95 | 9.5 |
| 4.0 | 1.400 | 2.000 | 2.1 | 12.0 |
| 4.8 | 1.800 | 2.700 | 2.7 | 16.0 |

Blind Rivets Alu/Stainless Steel Standard Dome Head

| Rivet | Hole Dia | Rivet Body D x L mm | Grip Range mm | Box Qty |
|--------|----------|------------------------|------------------|---------|
| 3.0 mm | 3.1mm | 3 x 4 | 0.5 - 1.5 | 1000 |
| | | 3 x 6 | 1.5 - 3.5 | 1000 |
| | | 3 x 8 | 3.5 - 5.0 | 1000 |
| | | 3 x 10 | 5.0 - 7.0 | 500 |
| | | 3 x 12 | 5.0 - 9.0 | 500 |
| | | 3 x 16 | 9.0 - 13.0 | 500 |
| | | 3 x 18 | 13.0 - 15.0 | 250 |
| | | 3 x 20 | 15.0 - 17.0 | 250 |
| 4.0 mm | 4.1mm | 4 x 6 | 1.5 - 3.0 | 500 |
| | | 4 x 8 | 3.0 - 5.0 | 500 |
| | | 4 x 10 | 5.0 - 6.5 | 500 |
| | | 4 x 12 | 6.5 - 8.5 | 500 |
| | | 4 x 14 | 8.5 - 10.5 | 500 |
| | | 4 x 16 | 10.5 - 12.5 | 500 |
| | | 4 x 18 | 12.5 - 14.5 | 500 |
| | | 4 x 20 | 14.5 - 16.5 | 500 |
| 5.0 mm | 5.1mm | 4 x 25 | 16.5 - 21.5 | 500 |
| | | 5 x 6 | 0.5 - 3.0 | 500 |
| | | 5 x 8 | 3.0 - 4.5 | 500 |
| | | 5 x 10 | 4.5 - 6.0 | 500 |
| | | 5 x 12 | 6.0 - 8.0 | 500 |
| | | 5 x 14 | 8.0 - 10.0 | 500 |
| | | 5 x 16 | 10.0 - 12.0 | 500 |
| | | 5 x 18 | 12.0 - 14.0 | 500 |
| | | 5 x 20 | 14.0 - 16.0 | 250 |
| | | 5 x 25 | 16.0 - 21.0 | 250 |
| | | 5 x 30 | 21.0 - 25.0 | 100 |
| | | 5 x 35 | 25.0 - 30.0 | 100 |
| | | 5 x 40 | 30.0 - 35.0 | 100 |
| | | 5 x 45 | 35.0 - 40.0 | 100 |
| | | 5 x 55 | 40.0 - 48.0 | 100 |



Rivet Body: Alu AlMg 3
Mandrel: A2 Stainless Steel

Blind Rivets Alu / Alu Standard Dome Head

| Rivet | Hole Dia | Rivet Body D x L mm | Grip Range mm | Box Qty |
|--------|----------|------------------------|------------------|---------|
| 3.2 mm | 3.3mm | 3.2 x 6.1 | 0.8 - 3.2 | 500 |
| | | 3.2 x 7.6 | 3.2 - 4.8 | 500 |
| | | 3.2 x 9.2 | 4.8 - 6.4 | 500 |
| | | 3.2 x 12.3 | 6.4 - 9.5 | 500 |
| | | 3.2 x 15.5 | 9.5 - 12.7 | 500 |
| 4.0 mm | 4.1mm | 4 x 6.6 | 1.5 - 3.2 | 500 |
| | | 4 x 9.8 | 3.2 - 6.4 | 500 |
| | | 4 x 12.9 | 6.4 - 9.5 | 500 |
| | | 4 x 16.1 | 9.5 - 12.7 | 500 |
| 4.8 mm | 4.9mm | 4.8 x 7.2 | 1.5 - 3.2 | 500 |
| | | 4.8 x 10.3 | 3.2 - 6.4 | 500 |
| | | 4.8 x 13.5 | 6.4 - 9.5 | 500 |
| | | 4.8 x 16.7 | 9.5 - 12.7 | 500 |
| | | 4.8 x 19.9 | 12.7 - 15.9 | 500 |
| | | 4.8 x 23.0 | 15.9 - 19.0 | 250 |



Rivet Body: Alu AlMg 2.5
Mandrel: Alu AlMg 5

Blind Rivets Steel / Steel Standard Dome Head

| Rivet | Hole Dia | Rivet Body D x L mm | Grip Range mm | Box Qty |
|--------|----------|------------------------|------------------|---------|
| 3.2 mm | 3.3mm | 3.2 x 6 | 2.0 - 3.0 | 500 |
| | | 3.2 x 8 | 3.0 - 5.0 | 500 |
| | | 3.2 x 10 | 5.0 - 6.5 | 500 |
| | | 3.2 x 12 | 6.5 x 8.5 | 500 |
| | | 3.2 x 16 | 8.5 - 12.5 | 500 |
| | | 3.2 x 18 | 12.5 - 14.5 | 500 |
| | | 3.2 x 20 | 14.5 - 16.5 | 500 |
| 4.0 mm | 4.1mm | 4 x 6 | 0.5 - 2.5 | 500 |
| | | 4 x 8 | 2.5 - 4.5 | 500 |
| | | 4 x 10 | 4.5 - 6.5 | 500 |
| | | 4 x 12 | 6.5 - 8.5 | 500 |
| | | 4 x 16 | 8.5 - 12.0 | 500 |
| | | 4 x 18 | 12.0 x 14.0 | 500 |
| | | 4 x 20 | 14.0 x 16.0 | 500 |
| | | 4 x 25 | 16.0 x 21.0 | 500 |
| 4.8 mm | 4.9mm | 4.8 x 6 | 0.5 x 1.5 | 500 |
| | | 4.8 x 8 | 2.0 x 4.0 | 500 |
| | | 4.8 x 10 | 4.0 x 6.0 | 500 |
| | | 4.8 x 12 | 6.0 x 8.0 | 500 |
| | | 4.8 x 16 | 8.0 x 11.0 | 500 |
| | | 4.8 x 20 | 11.0 x 15.0 | 250 |
| | | 4.8 x 25 | 15.0 x 20.0 | 250 |
| 6.0 mm | 6.1mm | 6 x 10 | 2.5 x 4.5 | 250 |
| | | 6 x 12 | 4.5 - 6.5 | 250 |
| | | 6 x 14 | 6.5 x 8.5 | 250 |
| | | 6 x 16 | 8.5 x 10.5 | 250 |
| | | 6 x 20 | 10.5 x 14.5 | 250 |
| | | 6 x 25 | 14.5 x 19.5 | 250 |



Rivet Body: Steel Zinc Plated
Mandrel: Steel Zinc Plated and yellow Chromated

Blind Rivets Steel / Steel Countersunk 120 deg

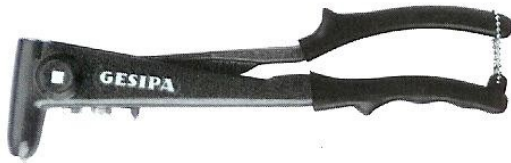
| Rivet | Hole Dia | Rivet Body D x L mm | Grip Range mm | Box Qty |
|--------|----------|------------------------|------------------|---------|
| 3.2 mm | 3.3mm | 3.2 x 6 | 0.5 - 3.0 | 500 |
| | | 3.2 x 8 | 3.0 x 5.0 | 500 |
| | | 3.2 x 10 | 5.0 - 7.0 | 500 |
| | | 3.2 x 12 | 7.0 x 9.0 | 500 |
| 4.0 mm | 4.1mm | 4 x 6 | 0.5 x 2.5 | 500 |
| | | 4 x 8 | 2.5 x 4.5 | 500 |
| | | 4 x 10 | 4.5 x 6.5 | 500 |
| | | 4 x 12 | 6.5 x 8.5 | 500 |
| | | 4 x 16 | 8.5 x 12.0 | 500 |
| | | 4 x 20 | 12.0 x 16.0 | 500 |
| 4.8 mm | 4.9mm | 4.8 x 8 | 1.5 - 4.0 | 500 |
| | | 4.8 x 10 | 4.0 x 6.0 | 500 |
| | | 4.8 x 12 | 6.0 x 8.0 | 500 |
| | | 4.8 x 16 | 9.5 x 11.0 | 500 |
| | | 4.8 x 20 | 11.0 x 15.0 | 250 |
| | | 4.8 x 25 | 15.0 x 20.0 | 250 |



Rivet Body: Steel Zinc Plated
Mandrel: Steel Zinc Plated and yellow Chromated

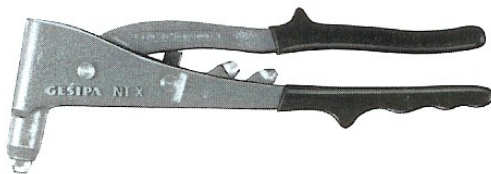
Rivet Guns

Gesipa NTS (with self opening Spring)



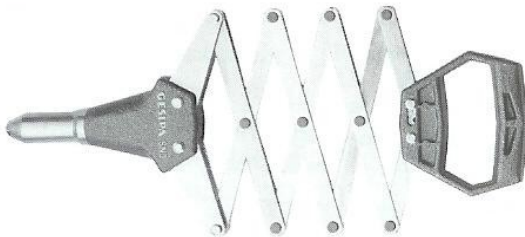
Working Range up to 5mm alu and 4mm Steel

Gesipa NTX



Working Range up to 5mm alu and 4mm Steel

Gesipa SN2 Lazy Tong Riveting Tool



Working Range up to 6.4mm all materials

Gesipa Accubird Rechargeable 12 Volt Battery Riveting Tool



Working Range up to 5mm all materials.

Weight 2.2kg with Battery

Stroke 20mm

Operating Voltage 12V

Traction Power 8.500N

Ordering Options

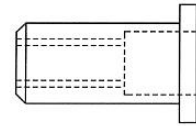
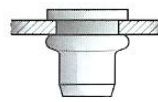
Accubird and one 12V battery and quick charger in steel case
part no 725 0037

Accubird and one 12V battery and quick charger in cardboard box
part no 725 0029

Accubird and one 12V battery in cardboard box
part no 725 0010

Blind Rivet Nuts Alu Standard Dome Head

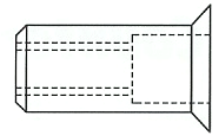
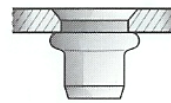
| Rivet | Hole Dia | Rivet Body D x L mm | Grip Range mm | Box Qty |
|-------|----------|------------------------|------------------|---------|
| M4 | 6.1mm | 6 x 11.0 | 0.25 - 3.0 | 500 |
| | | 6 x 13.0 | 2.5 - 4.5 | 500 |
| M5 | 7.1mm | 7 x 11.5 | 0.25 - 3.0 | 500 |
| | | 7 x 13.5 | 2.5 - 5.0 | 500 |
| M6 | 9.1mm | 9 x 15.5 | 0.25 - 3.5 | 250 |
| | | 9 x 18.0 | 3.0 - 5.5 | 250 |
| M8 | 11.1mm | 11 x 17.0 | 0.25 - 3.5 | 100 |
| | | 11 x 20.0 | 3.0 - 6.0 | 100 |
| M10 | 12.1mm | 12 x 17.5 | 0.25 - 3.5 | 100 |
| | | 12 x 20.5 | 3.0 - 6.0 | 100 |



Material: Alu AlMg 3

Blind Rivet Nuts Alu Countersunk 90 deg

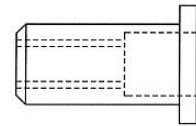
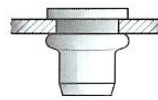
| Rivet | Hole Dia | Rivet Body D x L mm | Grip Range mm | Box Qty |
|-------|----------|------------------------|------------------|---------|
| M4 | 6.1mm | 6 x 12.0 | 1.5 - 3.5 | 500 |
| | | 6 x 13.5 | 3.0 - 5.0 | 500 |
| M5 | 7.1mm | 7 x 13.5 | 1.5 - 4.0 | 500 |
| | | 7 x 15.5 | 3.5 - 6.0 | 500 |
| M6 | 9.1mm | 9 x 17.0 | 1.5 - 4.5 | 250 |
| | | 9 x 19.0 | 4.0 - 6.5 | 250 |
| M8 | 11.1mm | 11 x 18.5 | 1.5 - 4.5 | 100 |
| | | 11 x 20.5 | 4.0 - 6.5 | 100 |
| M10 | 12.1mm | 12 x 19.0 | 1.5 - 4.5 | 100 |
| | | 12 x 21.0 | 4.0 - 6.5 | 100 |



Material: Alu AlMg 3

Blind Rivet Nuts Steel Standard Dome Head

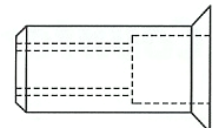
| Rivet | Hole Dia | Rivet Body D x L mm | Grip Range mm | Box Qty |
|-------|----------|------------------------|------------------|---------|
| M4 | 6.1mm | 6 x 11.0 | 0.25 - 3.0 | 500 |
| | | 6 x 13.0 | 2.5 - 4.5 | 500 |
| M5 | 7.1mm | 7 x 11.5 | 0.25 - 3.0 | 500 |
| | | 7 x 13.5 | 2.5 - 5.0 | 500 |
| M6 | 9.1mm | 9 x 15.5 | 0.25 - 3.5 | 250 |
| | | 9 x 18.0 | 3.0 - 5.5 | 250 |
| M8 | 11.1mm | 11 x 17.0 | 0.25 - 3.5 | 100 |
| | | 11 x 20.0 | 3.0 - 6.0 | 100 |
| M10 | 12.1mm | 12 x 17.5 | 0.25 - 3.5 | 100 |
| | | 12 x 20.5 | 3.0 - 6.0 | 100 |



Material: Steel, Zinc Plated & Yellow Chromated

Blind Rivet Nuts Steel Countersunk 90 deg

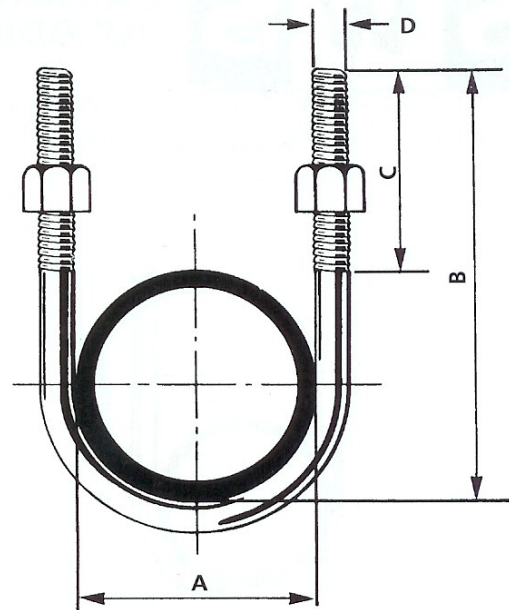
| Rivet | Hole Dia | Rivet Body D x L mm | Grip Range mm | Box Qty |
|-------|----------|------------------------|------------------|---------|
| M4 | 6.1mm | 6 x 12.0 | 1.5 - 3.5 | 500 |
| | | 6 x 13.5 | 3.0 - 5.0 | 500 |
| M5 | 7.1mm | 7 x 13.5 | 1.5 - 4.0 | 500 |
| | | 7 x 15.5 | 3.5 - 6.0 | 500 |
| M6 | 9.1mm | 9 x 17.0 | 1.5 - 4.5 | 250 |
| | | 9 x 19.0 | 4.0 - 6.5 | 250 |
| M8 | 11.1mm | 11 x 18.5 | 1.5 - 4.5 | 100 |
| | | 11 x 20.5 | 4.0 - 6.5 | 100 |
| M10 | 12.1mm | 12 x 19.0 | 1.5 - 4.5 | 100 |
| | | 12 x 21.0 | 4.0 - 6.5 | 100 |



Material: Steel, Zinc Plated & Yellow Chromated

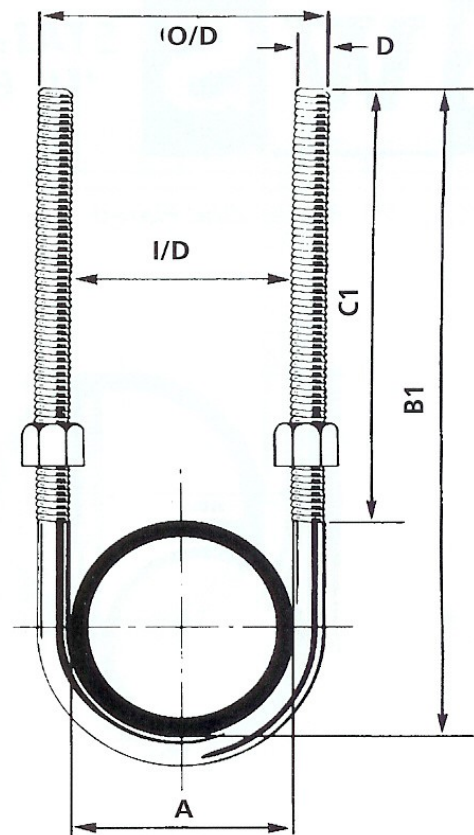
U-Bolts Standard Bright Zinc Plated

| Pipe Nominal Bore | | Dimen- sions mm | | | | |
|-------------------------|--------|--------------------|-----|----|----|--------|
| Imperial | Metric | A | B | C | D | Thread |
| 1.2" | 15mm | 21 | 48 | 30 | 6 | M6 |
| 3/4" | 20mm | 27 | 53 | 30 | 6 | M6 |
| 1" | 25mm | 34 | 60 | 30 | 6 | M6 |
| 1.1/4" | 32mm | 45 | 70 | 40 | 10 | M10 |
| 1.1/2" | 40mm | 51 | 75 | 40 | 10 | M10 |
| 2" | 50mm | 60 | 85 | 40 | 10 | M10 |
| 2.1/2" | 65mm | 76 | 100 | 40 | 10 | M10 |
| 3" | 80mm | 90 | 115 | 40 | 12 | M12 |
| 4" | 100mm | 114 | 140 | 40 | 12 | M12 |
| 5" | 125mm | 140 | 165 | 40 | 12 | M12 |
| 6" | 150mm | 170 | 200 | 50 | 12 | M12 |
| 8" | 200mm | 225 | 244 | 50 | 16 | M16 |
| 10" | 250mm | 277 | 315 | 50 | 16 | M16 |
| 12" | 300mm | 324 | 360 | 50 | 16 | M16 |
| 14" | 350mm | 365 | 435 | 50 | 16 | M16 |
| 16" | 400mm | 415 | 495 | 85 | 16 | M16 |
| 18" | 450mm | 465 | 535 | 85 | 16 | M16 |
| 20" | 500mm | 520 | 595 | 85 | 16 | M16 |
| 22" | 550mm | 570 | 645 | 90 | 20 | M20 |
| 24" | 600mm | 620 | 695 | 90 | 20 | M20 |



U-Bolts Extended Leg Bright Zinc Plated

| Pipe Nominal Bore | | Dimen- sions mm | | | | |
|-------------------------|--------|--------------------|-----|-----|----|--------|
| Imperial | Metric | A | B1 | C1 | D | Thread |
| 1.2" | 15mm | 21 | 97 | 75 | 6 | M6 |
| 3/4" | 20mm | 27 | 103 | 75 | 6 | M6 |
| 1" | 25mm | 34 | 111 | 75 | 6 | M6 |
| 1.1/4" | 32mm | 45 | 122 | 85 | 10 | M10 |
| 1.1/2" | 40mm | 51 | 127 | 85 | 10 | M10 |
| 2" | 50mm | 60 | 140 | 85 | 10 | M10 |
| 2.1/2" | 65mm | 76 | 152 | 85 | 10 | M10 |
| 3" | 80mm | 90 | 168 | 90 | 12 | M12 |
| 4" | 100mm | 114 | 193 | 90 | 12 | M12 |
| 5" | 125mm | 140 | 213 | 90 | 12 | M12 |
| 6" | 150mm | 170 | 240 | 90 | 12 | M12 |
| 8" | 200mm | 225 | 244 | 298 | 95 | M16 |
| 10" | 250mm | 277 | 315 | 349 | 95 | M16 |
| 12" | 300mm | 324 | 360 | 387 | 95 | M16 |



Folded Eyebolts Zinc Plated Screwed 100mm

Thread x Overall Length

| | | |
|------------|------------|-------------|
| M6 x 80mm | M8 x 80mm | M10 x 80mm |
| M6 x 100mm | M8 x 100mm | M10 x 100mm |
| M6 x 150mm | M8 x 150mm | M10 x 150mm |
| M6 x 200mm | M8 x 200mm | M10 x 200mm |
| M6 x 250mm | M8 x 250mm | M10 x 250mm |
| M6 x 300mm | M8 x 300mm | M10 x 300mm |

Also available in stainless steel

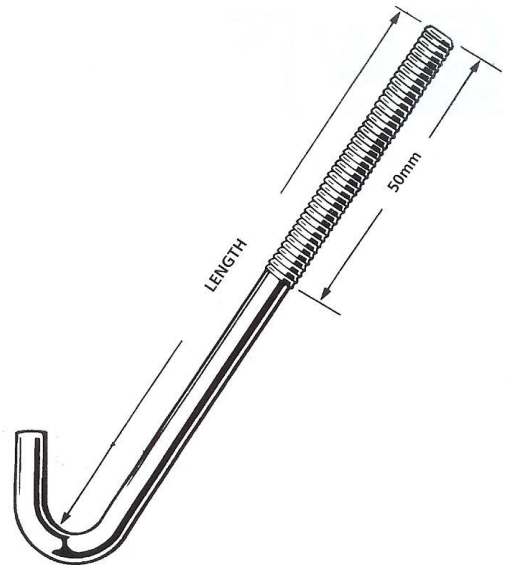


Hook Bolts Zinc Plated Screwed 50mm

Thread x Overall Length

| | | |
|------------|------------|-------------|
| M6 x 40mm | M8 x 40mm | M10 x 40mm |
| M6 x 50mm | M8 x 50mm | M10 x 50mm |
| M6 x 60mm | M8 x 60mm | M10 x 60mm |
| M6 x 70mm | M8 x 70mm | M10 x 70mm |
| M6 x 80mm | M8 x 80mm | M10 x 80mm |
| M6 x 100mm | M8 x 100mm | M10 x 100mm |
| M6 x 120mm | M8 x 120mm | M10 x 120mm |
| M6 x 130mm | M8 x 130mm | M10 x 130mm |
| M6 x 150mm | M8 x 150mm | M10 x 150mm |
| M6 x 180mm | M8 x 180mm | M10 x 180mm |
| M6 x 200mm | M8 x 200mm | M10 x 200mm |
| M6 x 230mm | M8 x 230mm | M10 x 230mm |
| M6 x 250mm | M8 x 250mm | M10 x 250mm |
| M6 x 270mm | M8 x 270mm | M10 x 270mm |
| M6 x 300mm | M8 x 300mm | M10 x 300mm |

Also available in stainless steel

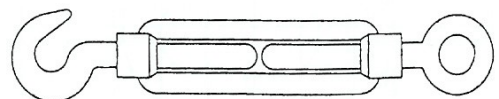


Open Body Turn Buckles Bright Zinc Plated

6mm
8mm
10mm
12mm
16mm
20mm

Variants

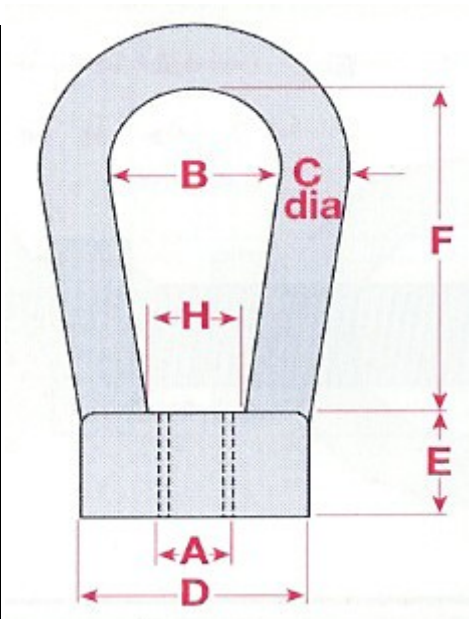
Hook & Eye
Hook & Hook
Eye & Eye



Also available in stainless steel

Bow Nuts to BS3974 Part 1

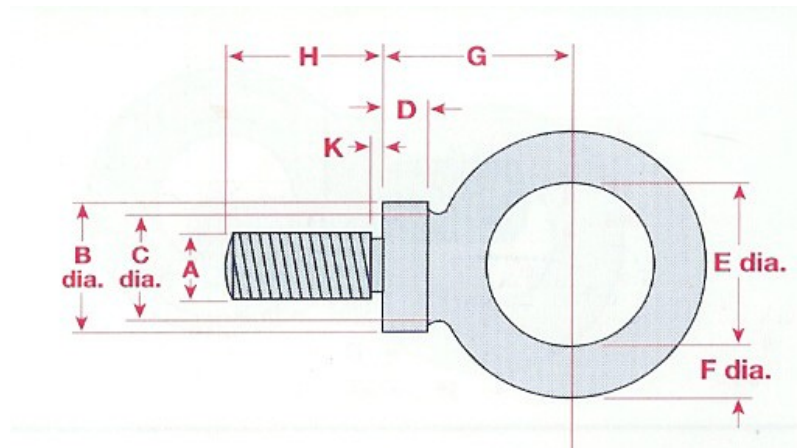
| SWL Tonnes | Dimensions | | | | | | |
|------------|------------|-----|----|----|----|-----|----|
| | A | B | C | D | E | F | H |
| 0.23 | M6 | 25 | 10 | 32 | 16 | 38 | 18 |
| 0.23 | M8 | 25 | 10 | 32 | 16 | 38 | 18 |
| 0.36 | M10 | 25 | 10 | 32 | 16 | 38 | 18 |
| 0.53 | M12 | 30 | 12 | 38 | 18 | 43 | 20 |
| 1.01 | M16 | 30 | 12 | 38 | 18 | 43 | 20 |
| 1.58 | M20 | 40 | 14 | 45 | 25 | 63 | 25 |
| 1.93 | M22 | 50 | 17 | 50 | 28 | 79 | 30 |
| 2.28 | M24 | 50 | 17 | 50 | 28 | 79 | 30 |
| 3.65 | M30 | 75 | 26 | 70 | 38 | 82 | 46 |
| 4.49 | M33 | 75 | 26 | 70 | 38 | 82 | 46 |
| 5.34 | M36 | 75 | 26 | 70 | 38 | 82 | 46 |
| 7.40 | M42 | 100 | 30 | 80 | 45 | 105 | 59 |



Available Untested or Tested and Certified

Dynamo Eyebolts to BSS4278 Tbl 3 1984

Tested and Certified



| | Dimen- sions | | | | | | | | |
|------------|-----------------|----|----|----|----|----|----|----|---|
| SWL Tonnes | A | B | C | D | E | F | G | H | K |
| 0.23 | M10 | 17 | 14 | 5 | 22 | 9 | 27 | 18 | 3 |
| 0.23 | M12 | 17 | 14 | 5 | 22 | 9 | 27 | 18 | 3 |
| 0.63 | M16 | 23 | 18 | 6 | 29 | 11 | 34 | 23 | 3 |
| 1.25 | M20 | 32 | 25 | 9 | 40 | 15 | 47 | 32 | 5 |
| 2.00 | M24 | 40 | 32 | 12 | 51 | 19 | 60 | 40 | 6 |

Permabond®

Engineering Adhesives

| | |
|-------------------------------------|---------------|
| Permabond A1042 Threadlock - 50ml | 0957a104250ml |
| Permabond A1046 Bearing/High | 0957a104650ml |
| Permabond A118 Retainer 50ml Bottle | 0957a11850ml |
| Permabond A126 50ml Bottle | 0957a12650ml |
| Permabond A131 Pipe Sealant 50ml | 0957a13150ml |
| Permabond A136 Ready Gasket 50ml | 0957a13650ml |
| Permabond A145 50ml tube (single) | 0957a14550mls |
| Permabond A905 Activator 200ml | 0957a905190g |

| | |
|------------------------------------|--------------|
| C2010 x 20g Cyanoacrylate Plus | 0957c201020g |
| Permabond C2 Super Glue 3g Tubes | 0957c203g |
| Permabond C2 Super Glue 50g Bottle | 0957c250g |
| Permabond C791 x 20g | 0957c79120g |
| Permabond C792 x 20g | 0957c79220g |

| | |
|--------------------------|-----------------|
| Contact Adhesive 1 Litre | 0957contact01l |
| Contact Adhesive 5 Litre | 0957contact05l |
| Contact Adhesive 500ml | 0957contact50ml |

| | |
|-----------------------------------|------------------|
| Permabond E01 25ml Syringe | 0957db025 |
| Permabond ESP110 320ml | 0957esp110320ml |
| Permabond F241 Toughened Acrylic | 0957f241320ml |
| Permabond F246 Toughened Acrylic | 0957f24650ml |
| Permabond King Solvent for QB5002 | 0957f5002solvent |
| Permabond FE Rapid 400ml | 0957ferapid400ml |
| Permabond Initiator No1 35ml | 0957init0135ml |
| Permabond Initiator No5 35ml | 0957init0535ml |

| | |
|-------------------------------------|---------------|
| Loctite Superflex White Sealant 80g | 0957loc13732 |
| Loctite Detach Glue Remover | 0957locdetach |

| | |
|------------------------------|-------------------|
| Nozzels for 5002 | 0957noz5002 |
| Permabond II General Purpose | 0957permabond400 |
| Polyflex Mastic 310ml | 0957polyflex310ml |
| PVA Wood Glue - 5 litre | 0957pva05l |
| PVA Wood Glue 1 Litre | 0957pva1l |
| 250ml Waterproof Resin W | 0957pvaresinW |

| | |
|-----------------------------------|-----------------|
| Permabond QB5002 Quickbond- 380ml | 0957qb5002380ml |
| Permabond QB5002 Quickbond - 50ml | 0957qb500250ml |



Adhesives



- Eliminates press fits
- Stops corrosion
- Mounts bearings
- Restores correct fit



- Locks bolts
- Prevents tampering
- Stops corrosion
- Seals welds



- Replaces conventional gaskets
- Reduces inventory
- Fills gaps up to 0.025"
- Easy disassembly



- Seals threaded pipe
- Seals nicked threads
- Disassembles easily
- Certified by NSF & UL listed

Site Equipment



2ft Fluorescent

IP65 Rated 2 x 36W
2 x 16amp Outlet
5M Cable with Fitted Plug

RSR Part No.0972e708670



2ft & 4ft Uplights

Self righting light that can take a knock.
5m Cable with Fitted Plug
16amp Power Take Off

2ft RSR Part No.0972e712140
4ft RSR Part No.0972e712050



500w Fixed Leg Tripod

500w Halogen Fitting
Tough Oval Design
5m Cable with Fitted Plug

RSR Part No.0972e702510



2ft Fluorescent Tripod

IP65 Rated 2 x 36W
2 x 16amp Outlets
5M Cable with Fitted Plug

RSR Part No.0972e708625



Festoon Kit

10 x 60W Bulb
22m Cable
Inc. Cages and bulbs

RSR Part No.0972bc89820



Gripper Hand Lamp

60w Bulb
5M Cable with Fitted Plug

RSR Part No.0972e89785



4-Way Spider Box

4 x 16amp Outlets
5M Cable with Fitted Plug

RSR Part No.0972e13104



4-Way Spider Ball

4 x 16amp Outlets
Tough GRP Case
5M Cable with Fitted Plug

RSR Part No.0972



3.3KVA Transformers

2 x 16amp Outlets
5M Cable with Fitted Plug
1500VA Continuous Rating

RSR Part No.0972e203012

Site Equipment



Site Store

1400mm x 800mm x 1240mm
2.5mm Sheet Steel
2 x 5 Lever Dead Locks
Weight 173kg

RSR Part No.0972s10010



Van Vault 4

1234mm x 700mm x 690mm
2mm Sheet Steel
2 x 70mm Disc Lock
Weight 60kg

RSR Part No.0972s10014



Van Vault 2

920 x 555 x 490mm
2mm Sheet Steel
70mm Disc Lock
Weight 46kg

RSR Part No.0972s10100



16amp Plugs

110v RSR Part No.0972e881825
230v RSR Part No.0970e881826

16amp Socket

110v RSR Pt No.0972e883141
230v RSR Pt No.0972e883143



25M Site Cable Reels

25M 1.5mm Cable
2 x Outlets

110v RSR Part No.0972e86210
230v RSR Part No.0970e86205



14M Extension Leads

Arctic Grade Cable
Fitted Plug & Socket

110v 1.5mm RSR Part No.0972e85111
110v 2.5mm RSR Part No.0972e85121

230v 1.5mm RSR Part No.0970e85222
230v 1.5mm RSR Part No.0970e85222



Air Raid 800

860W Motor
Variable Speed
14,000—18,000 M
Sqr Per Hour

110v RSR Part No
0972h1r800/110

230v RSR Part No
0970h1r800/240



Rhino 3 Infra Red Heater

2 x 1400w Infra-red Elements
2 Heat Settings
Wheels for easy mobility
5M Cable & Fitted Plug
14.3 Kg
110v or 230v

110v RSR Part No.0972h029100
230v RSR Part No.0972h029110

Wheel Barrows & Contractors Tools

Contractor Integral 85ltr

The revolutionary contractor barrow with the integral registered design, the toughest budget barrow.

20 gauge steel, Powder Coated Black Finish

RSR Part No: 0994 wheelbcontractors1



Yard Galvanised 110ltr

Heavy duty deep draw galvanised pan for heavy duty concrete/ yard/ garden work

16 gauge steel, Galvanised Pan

RSR Part No: 0994 wheelbyardgalv



Budget Contractors No2 Shovel

The budget No2 square shovel with a PYD handle.

RSR Part No: 0994 spec02ey



7lbs Sledge Hammer

7lbs Double faced bright sledge hammer 30" hickory handle.

RSR Part No: 0994 sp07df30



14lbs Sledge Hammer

14lbs Double faced bright sledge hammer 36" hickory handle.

RSR Part No: 0994 sp14df36





D21721K 701 Watts Percussion Drill

Chuck Capacity 1.5-13 mm Power Input 650
Max Torque 30/12 Nm No Load Speed 0-1100 / 0-2600 rpm Blows
per Minute 0-19000 / 0-44200 bpm
Max. Drilling Capacity [Wood] 40/25 mm
Max. Drilling Capacity [Steel] 13 mm
Max. Drilling Capacity [Concrete]
16 mm Spindle Thread 1/2" x20 U.N.F.
Weight 2.1 kg Length 330 mm Height 199 mm



DW21810KS 650 Watt single speed Percussion

Chuck Capacity 1.5-13 mm Power Input 770 Watts
Max Torque 40/20 Nm No Load Speed 0-1100 / 0-2700 rpm Blows
per Minute 0-18700 / 0-45900 bpm
Max. Drilling Capacity [Wood] 35 mm
Max. Drilling Capacity [Steel] 13 mm
Max. Drilling Capacity [Concrete] 20 mm
Spindle Thread 1/2" X 20 U.N.F.
Weight 2.3 kg Length 352 mm Height 199 mm



D25002K SDS Hammer Drill

Power Input 600 Watts Power Output 380 Watts
No Load Speed 0-1100 rpm Blows per Minute 0-4000 bpm
Impact Energy 0-2.4 J Tool Holder SDS-Plus
Max. Drilling Capacity [Wood] 30 mm
Max. Drilling Capacity [Metal] 13 mm
Max. Drilling Capacity [Concrete] 22 mm
Max. Drilling Capacity [Core bit] 65 mm
Weight 2.3 kg Length 360 mm



DW25404k Heavy Duty SDS Hammer Drill

Power Input 900 Watts Power Output 550 Watts
No Load Speed 0-730 rpm Blows per Minute 0-4100 bpm
Impact Energy 0-4.8 J Tool Holder SDS-Plus
Max. Drilling Capacity [Wood] 40 mm
Max. Drilling Capacity [Metal] 16 mm
Max. Drilling Capacity [Concrete] 6-32 mm
Max. Drilling Capacity [Core bit] 90 mm
Weight 4.8 kg



DW25940k 10kg Demolition Hammer

Power Input 1600 Watts
Power Output 790 Watts
Hand/Arm Vibration 11.8 m/s² Blows per Minute
1620 bpm Impact Energy 30.6 J
Tool Holder (Hex) 19mm
Weight 12.85 kg
Length 720 mm
Height 250 mm





DC980KA 12 Volt Drill / Driver

Voltage 12 V Battery NiCd 2.4 Chuck Capacity 1.5-13 mm
Power Output 300 Watts
No Load Speed 0-450 / 0-1400 / 0-1800 rpm
Max. Torque 45 in-lbs Max.
Drilling Capacity [Wood] 38 mm Max.
Drilling Capacity [Metal] 13 mm
Spindle Thread
Weight 2.2 kg Length 254 mm Height 241 mm



DC940KB 12 Volt Mid-Handle Drill / Driver

Voltage 12 V Battery NiMH 2.6 Ah
Chuck Capacity 1.5-13 mm
Power Output 310 Watts No Load Speed 0-450 / 0-1450 / 0-1800 rpm Max. Torque 48 in-lbs Max.
Drilling Capacity [Wood] 38 mm Max.
Drilling Capacity [Metal] 13 mm
Spindle Thread
Weight 2.3 kg Length 261 mm Height 245 mm



DC987KA 18.0 Volt Mid Handle Drill / Driver

Voltage 18 V Battery NiCd 2.4
Chuck Capacity 1.5-13 mm
Power Output 420 Watts
No Load Speed 0-450 / 0-1450 / 0-2000 rpm Max.
Torque 52 in-lbs Max.
Drilling Capacity [Wood] 50 mm Max.
Drilling Capacity [Metal] 13 mm
Spindle Thread
Weight 2.6 kg Length 254 mm Height 241 mm



DC925KB 18.0 Volt Heavy Duty Hammer

Voltage 18 V Battery Capacity NiMH 2.6 Ah
Chuck Capacity 1.5-13 mm
Power Output 470 Watts
No Load Speed 0-450 / 0-1500 / 0-2000 rpm Beats per Minute 0-7650 / 0-25500 / 0-34000 bpm
Max Torque 56 Nm Max.
Drilling Capacity [Wood] 50 mm Max.
Drilling Capacity [Metal] 13 mm Max.
Drilling Capacity [Masonry] 16 mm
Weight 2.8 kg Length 270 mm Height 245 mm



DC222KA 24.0 Volt Heavy Duty SDS-Plus Hammer

Voltage 24V V Battery Capacity NiCd 2.0 Ah
Power Output 300 Watts
No Load Speed 1100 rpm Impact Energy 2.1 J
Blows per Minute 4200 bpm
Tool Holder SDS-Plus
Max. Drilling Capacity [Wood] 30 mm Max.
Drilling Capacity [Metal] 13 mm Max.
Drilling Capacity [Concrete] 22 mm
Weight 3.8 kg Length 290 mm Height 240 mm





DW303k Reciprocating Saw

Power Input 701 Watts
Power Output 350 Watts
No Load Stroke Rate 0-2400 spm
Stroke Length 29 mm
Max. Cutting Capacity [Wood] 280 mm
Max. Cutting Capacity [Steel Sections & Pipes] 100 mm
Max. Cutting Capacity [PVC] 130 mm
Weight 5.6 kg Length 425 mm Height 178 mm



D23550 55mm Depth of Cut Heavy Duty Saw

Power Input 1050 Watts
Power Output 570 Watts No Load Speed 5000 rpm
Blade Diameter 165 mm
Blade Bore 20 mm Bevel Capacity 45 °
Max. Depth of Cut at 90° 55 mm
Max. Depth of Cut at 90°[with guide rails] 51 mm
Max. Depth of Cut at 45° 41 mm
Max. Depth of Cut at 45°[with guide rails] 37 mm
Weight 3.3 kg Length 270 mm Height 215 mm



D23620K 65 mm Depth of Cut Circular Saw

Power Input 1150 Watts
Power Output 570 Watts
No Load Speed 5000 rpm
Blade Diameter 184 mm Blade Bore 16 mm
Bevel Capacity 50 °
Max. Depth of Cut at 90° 65 mm
Max. Depth of Cut at 90°[with guide rails] N/A mm
Max. Depth of Cut at 45° 45 mm
Max. Depth of Cut at 45°[with guide rails] N/A mm
Weight 5.1 kg Length 315 mm Height 250 mm



DW333K Heavy Duty Body Grip Jigsaw

Power Input 701 Watts
Power Output 445 Watts No Load Stroke Rate 800-3100 spm
Stroke Length 26 mm
Bevel Capacity 45 °
Max. Cutting Capacity [Wood] 135 mm
Max. Cutting Capacity [Steel] 12 mm
Max. Cutting Capacity [Non Ferrous Metal] 30 mm
Weight 2.8 kg Length 265 mm Height 210 mm



DW331K Heavy Duty Top Handle Jigsaw

Power Input 701 Watts Power Output 445 Watts
No Load Stroke Rate 0-3100 spm
Stroke Length 26 mm
Bevel Capacity 45 °
Max. Cutting Capacity [Wood] 135 mm
Max. Cutting Capacity [Steel] 12 mm
Max. Cutting Capacity [Non Ferrous Metal] 30 mm
Weight 2.8 kg Length 250 mm Height 210 mm





DW871 355mm Abrasive Chop Saw

| | |
|--|------------|
| Power Input | 2200 Watts |
| Power Output | 1350 Watts |
| No Load Speed | 3800 rpm |
| Wheel Diameter | 355x2.5 mm |
| Max. Cutting Capacity at 90° [Square Profile] | 120x120 mm |
| Max. Cutting Capacity at 90° [Rectangular Profile] | 74x230 mm |
| Max. Cutting Capacity at 90° [L-Shape Profile] | 140x140 mm |
| Max. Cutting Capacity at 90° [Rounded Profile] | 131 mm |
| Max. Cutting Capacity at 45° [Square Profile] | 105x105 mm |
| Max. Cutting Capacity at 45° [Rectangular Profile] | 55x137 mm |
| Max. Cutting Capacity at 45° [L-Shape Profile] | 93x93 mm |
| Max. Cutting Capacity at 45° [Rounded Profile] | 115 mm |



DW872 14" Tungsten Carbide Metal Cutting Saw

| | |
|--|------------|
| Power Input | 2200 Watts |
| Power Output | 1350 Watts |
| No Load Speed | 1300 rpm |
| Wheel Diameter | 355 mm |
| Max. Cutting Capacity at 90° [Square Profile] | 100x100 mm |
| Max. Cutting Capacity at 90° [Rectangular Profile] | 75x130 mm |
| Max. Cutting Capacity at 90° [L-Shape Profile] | 92x92 mm |
| Max. Cutting Capacity at 90° [Rounded Profile] | 130 mm |
| Max. Cutting Capacity at 45° [Square Profile] | 79x79 mm |
| Max. Cutting Capacity at 45° [Rectangular Profile] | 79x123 mm |
| Max. Cutting Capacity at 45° [L-Shape Profile] | 56x56 mm |
| Max. Cutting Capacity at 45° [Rounded Profile] | 79 mm |



D28113 115mm Medium Angle Grinder

| | |
|--------------------|-----------|
| Power Input | 900 Watts |
| No Load Speed | 10000 rpm |
| Max. Disc Diameter | 115 mm |
| Spindle Thread | M14 |
| Weight | 2.1 kg |
| Length | 285 mm |
| Height | 80 mm |



DW28490 230mm Heavy Duty Angle Grinder

| | |
|--------------------|------------|
| Power Input | 2000 Watts |
| Power Output | 1054 Watts |
| No Load Speed | 6500 rpm |
| Max. Disc Diameter | 230 mm |
| Spindle Thread | M14 |
| Weight | 5.5 kg |
| Length | 490 mm |
| Height | 151 mm |



DW702 Heavy Duty Mitre saw

| | | | |
|-------------------------------------|------------|-----------------------------|----------------------|
| Power Input | 1600 Watts | Power Output | Blade Speed 5000 rpm |
| Blade Diameter | 250 mm | Blade Bore | 30 mm |
| Bevel Capacity | - ° | Mitre Capacity [right/left] | 50/50 ° |
| Cutting Capacity at 90°/90° (W x H) | 95x89 mm | | |
| Cutting Capacity at 90°/90° (W x H) | 162x41 mm | | |
| Cutting Capacity at 45°/90° (W x H) | 67x89 mm | | |
| Cutting Capacity at 45°/90° (W x H) | 114x41 mm | | |
| Depth of Cut [Saws] | 89 mm | | |
| Weight | 14.8 kg | Depth | 620 mm |
| | | Length | 510 mm |
| | | Height | 570 mm |





GBH 2-26DFR Variable Speed Rotary Hammer

Rated power input: 800 W
 Impact energy: 0 – 3 J
 Impact rate at rated speed: 0 – 4.000 rpm
 Rated speed: 0 – 900 rpm
 Rated torque: 28 Nm
 Weight: 2,7 kg
 Toolholder: SDS-plus



GBH 4 DFE Variable Speed Rotary Hammer

Impact/Rotation Stop
 Quick Change Chuck, Carrying Case
 Power Input 750W
 No Load Speed 0-650 rev/min
 Impact Rate/Force 0-3900/min 3.5J, Tool Holder SDS plus
 Weight 3.9kg
 Drilling Capacity Concrete 30mm
 Masonry 80mm



GBH 4 DSC SDS Plus Combi-hammer

Rated power input: 750 W
 Impact energy: 1 – 3,5 J
 Power output: 440 W
 Impact rate at rated speed: 1.650 – 3.900 rpm
 Rated speed: 280 – 650 rpm
 Rated torque: 20 Nm
 Weight: 5,9 kg
 Number of needles: 19
 Usable needle length: 60 mm
 Toolholder: SDS-plus



GSR 14-2 14V Drill/Driver

Torque, max. (hard screwdriving applications): 30 Nm
 No-load speed, 1st gear: 0 – 400 rpm
 No-load speed, 2nd gear: 0 – 1.400 rpm
 Torque, max. (soft screwdriving applications): 11 Nm
 Battery type: NiCd
 Chuck jaw width, min./max.: 1 / 10 mm
 Battery voltage: 14,4 V
 Battery capacity: 1,5 Ah
 Charging time, approx.: 60 min



GSB 14.4VE-2 14.4V Combination Cordless Drill

Torque, max. (hard screwdriving applications): 65 Nm
 Torque, max. (soft screwdriving applications): 28 Nm
 Impact rate, max.: 29.000 rpm
 Chuck jaw width, min./max.: 1,5 / 13 mm
 Drill spindle thread: 1/2" Torque settings: 25+1
 Battery voltage: 14,4 V
 Weight including battery, approx.: 2,80 kg
 Quick change chucks: 13 mm Charging time, approx.: 30 min
 Max. drilling diameter in wood: 40 mm
 Max. drilling diameter in steel: 13 mm
 Max. drilling diameter in masonry: 14 mm



Invented for life



BOSCH

GBH 24V 24V Cordless Rotary Hammer

No Load Speed 0-1000 rev/min
Drilling Performance Concrete 4-20mm; Wood 20mm; Steel 10mm
Spindle Collar 42mm
Tool Holder SDS-plus
Battery Capacity 2.0Ah
Weight (inc battery pack) 3.8kg
Comes complete with 1-hour charger,
2 x 2.0Ah battery pack, auxiliary handle, depth stop,
Electric Motor Brake, Reverse
Carrying Case, Variable Speed



GSB24 VE-2 Heavy Duty Cordless Drill \ Driver

Drilling Performance Concrete 16mm; Wood 38mm; Steel 16mm
Max Screw Diameter 12mm
Quick change chuck 13mm
Battery Capacity 2.0Ah
Weight (inc battery pack) 3.2kg
Comes complete with 1-hour charger,
15 Torque Settings
Electric Motor Brake, Reverse
Variable Speed



GST 75 BE Heavy Duty Jigsaw

Rated power input: 650 W
No-load stroke rate: 500 – 3.100 rpm
Power output: 360 W Weight: 2,3 kg
Cable length: 2,5 M
Stroke height: 23 mm
Cutting depth in wood: 90 mm
Cutting depth in aluminium: 20 mm
Cutting depth in unalloyed steel: 10 mm



GSA 800PE Sabre Saw

Rated power input: 800 W
No-load stroke rate: 500 – 2.600 rpm
Weight: 3,4 kg
Saw, stroke length: 28 mm
Cutting depth
Cutting depth in wood: 220 mm
Cutting depth in metal profiles and metal pipes: 20 mm



GEX 150 Turbo 150mm Random Orbital Sander

Sanding plate diameter: 150 mm
No-load speed: 3.100 – 6.650 rpm
Orbital stroke rate: 6.200 – 13.300 rpm
Sanding plate speed: 290 – 620 rpm
Eccentricity: 2,25 mm
Sanding sheet / disc attachment: Velcro-type fastening
Rated power input: 600 W
Weight: 2,4 kg
Oscillating circuit diameter: 4,5 mm



Invented for life



BOSCH

GSR 6-25 TE Professional

Rated power input: 701 W
Torque, max. (soft screwdriving applications): 20 Nm
Power output: 355 W
No-load speed: 0 – 2.500 rpm
Weight: 1,45 kg
Rated torque: 2,3 Nm
Screwdriving
Drilling screws diameter: 6,0 mm



BL 2L Laser Level

Laser diode: 635 nm, < 1 mW
Operating temperature: -20 – 50 °C
Storage temperature: -20 – 70 °C
Laser class: 2
Working range: 10 M
Levelling accuracy: $\pm 0,3$ mm/m Self-levelling range: $\pm 4^\circ$
Dust and splash guard: IP 54
Power supply: 3 \times 1.5 V LR6 (AA)
Operating duration, approx.: 12 H
Tripod connection: 1/4"
Length: 118 mm Width: 57 mm



GBS 75 AE Set

Belt speed: 200 – 330 m/min
Grinding surface, width: 75 mm
Belt, length: 533 mm
Belt, width: 75 mm
Rated power input: 750 W
Power output: 410 W
Weight: 3,4 kg



GWS 8-115 4 1/2" Mini Grinder

Rated power input: 800 W
No-load speed: 11.000 rpm
Power output: 500 W
Grinding spindle thread: M 14
Disc diameter: 115 mm
Rubber sanding plate, diameter: 115 mm
Wire cup brush, diameter: 70 mm
Length: 286 mm Height: 106 mm
Weight: 1,5 kg



GWS 20-230 9" Angle Grinder

Rated power input: 2.000 W
No-load speed: 6.500 rpm
Grinding spindle thread: M 14
Main handle: Shaft
Disc diameter: 230 mm
Weight: 4,2 kg



Cable Ties & Bases

Cable Tie Bases

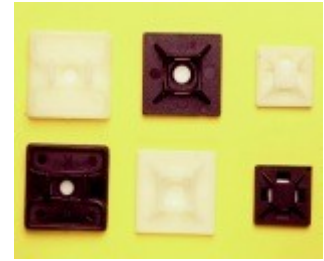
Self-adhesive Nylon 6.6 cable tie bases.

Entry from four sides to facilitate error-free mounting.

To ensure complete security where excessive stress or vibration is likely to occur, a screw mounting hole is provided on the HFC 2/4.

Available in either natural or black colour.

Packed in 100's



HFC 1/4 20 x 20mm 4 way Max Cable Tie Width 4.0mm

HFC 2/4 28 x 28mm 4 way Max Cable Tie Width 5.0mm.

Partex Cable Ties

One-piece molded nylon 6.6 non-releasable cable ties.

Bent finger grip and low threading force for quick installation.

Smooth rounded edges.

Available colours: natural or black.

Also available in Stainless Steel



| Length | Diameter | Minimum Tensile Strength Kg |
|--------|----------|-----------------------------|
| 80mm | 2.4 | 8 |
| 100mm | 2.5 | 8 |
| 120mm | 4.8 | 22 |
| 140mm | 3.6 | 13 |
| 160mm | 2.5 | 8 |
| 160mm | 4.8 | 22 |
| 200mm | 2.5 | 8 |
| 200mm | 3.6 | 13 |
| 200mm | 4.8 | 22 |
| 250mm | 4.8 | 22 |
| 300mm | 3.6 | 13 |
| 300mm | 4.8 | 22 |
| 370mm | 4.8 | 22 |
| 430mm | 4.8 | 22 |
| 150mm | 7.6 | 55 |
| 240mm | 7.6 | 55 |
| 300mm | 7.9 | 55 |
| 370mm | 7.6 | 55 |
| 430mm | 9 | 75 |
| 530mm | 9 | 75 |
| 710mm | 9 | 75 |
| 580mm | 12.7 | 113 |
| 1030mm | 12.7 | 113 |

TT 1 Cable Tie Tool

Automatic cable tie tensioner and cutter.

For cable ties from 2.2mm to 4.8mm wide.

This tool is very durable due to its quality construction and metal body.

Suitable for continuous use.

Length 160mm

Weight 0.30kgs



SSTG Cable Tie Tool

Automatic cable tie tensioner and cutter for Partex stainless steel cable ties.

The SSTG tool can be used with any of the Partex stainless steel ties including the coated range.

High quality construction for a long service life.

Length 178mm

Weight 0.56kgs

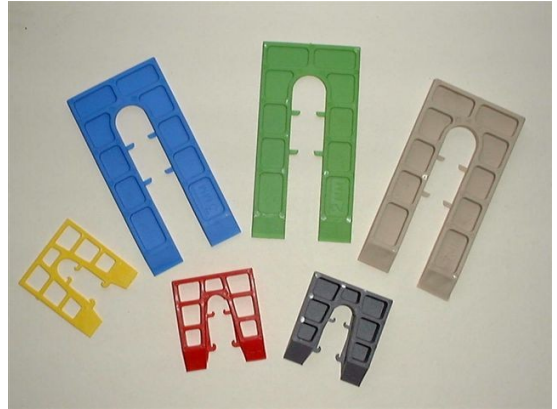


Plastic Packers

Horse Shoe Plastic Packers 40 x 45mm

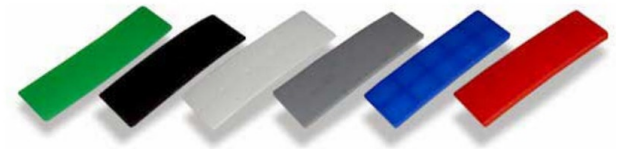
| | | |
|-------|--------|-------------------|
| 1mm | Yellow | 0528mm45055yellow |
| 1.5mm | White | 0528mm45055white |
| 2mm | Green | 0528mm45055green |
| 3mm | Blue | 0528mm45055blue |
| 4mm | Red | 0528mm45055red |
| 6mm | Black | 0528mm45055black |
| 10mm | Grey | 0528mm45055grey |

Also available in a bag of 1000 assorted packers



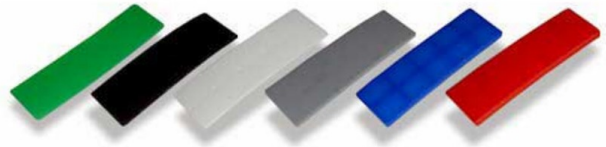
Flatpackers 100mm x 24mm

| | | |
|-----|-------|------------|
| 1mm | Green | 0528fl24gr |
| 2mm | Black | 0528fl24bl |
| 3mm | White | 0528fl24wh |
| 4mm | Grey | 0528fl24gr |
| 5mm | Blue | 0528fl24bl |
| 6mm | Red | 0528fl24re |



Flatpackers 100mm x 28mm

| | | |
|-----|-------|------------|
| 1mm | Green | 0528fl28gr |
| 2mm | Black | 0528fl28bl |
| 3mm | White | 0528fl28wh |
| 4mm | Grey | 0528fl28gr |
| 5mm | Blue | 0528fl28bl |
| 6mm | Red | 0528fl28re |



Starrett HSS Hacksaw Blades



Ideal when the blade is not subject to bending and twisting stresses.

Uniformly hardened blade holds the edge when cutting hard-to-machine alloys, maintaining the straightness of the cut.

Length x Width x Thickness
(mm / inches)

| | |
|---------------------|--------|
| 12" x 1/2" x 0.025" | 18 TPI |
| 12" x 1/2" x 0.025" | 24 TPI |
| 12" x 1/2" x 0.025" | 32 TPI |

Junior Hacksaw Blades (Pack of 10)

Tapes

Electrical Tape



Electrical Insulating Tape (Sparks Brand) is a top quality plasticised PVC film particularly suitable for all general purpose electrical work, such as insulation and component construction.

It is available in a wide range of colours which makes it a must for colour coding and identification purposes. The competitive price also enables its use in low cost operations such as bundling, aerial rigging, loom harnessing etc.

Also known as electricians tape, insulating tape, pvc tape. 19mm x 33Mtr rolls

Colours Black, Red, Green, Blue, White, Regal, Orange & Grey

Gaffer Tape (Duct Tape)



Performance Brand Economy Gaffer Tape, ideal for securely laying cables to Stage, Studios, Exhibition Centres, Bundling poles and tubes. Repairing canvas and trailer tops. Sealing plaster-boards seams.

Min Order Qty: 1

Dimension: 25mm x 50M

Colours Black, Silver & White

Warning Tape



Red and White diagonals

Ideal for marking out the location of all fire-fighting equipment including: Fire alarms, extinguishers, buckets, hydrants, hose-reels, valves and pumps. Buttons, handles, wires, etc.,

Dimension: 50mm x 33M
Colour: Red/White



Black with Yellow diagonals

can be used on containers for radio-active substances. Inside equipment casing or machinery guards where danger exists, in such a way as to indicate when the enclosure is not complete. To highlight low headroom due to structures, pipes etc. Obstructions which must be avoided. Changes in floor levels and other similar tripping hazards. Mobile equipment which may cause a hazard.

Dimension: 25mm x 33M
Colour: Black/Yellow

Masking Tape



This masking tape, Topper Brand, is one of our Best Sellers. It is a multi-purpose 'economy grade' which will satisfy all general purpose requirements such as: stencilling for sand blasting, non production painting or spraying of woodwork, metal, glass, plastic etc.

Dimension: 36mm x 50M

Health & Safety, Site Equipment

First Aid



| Description | Part No |
|--------------------------------|------------------|
| Eye Wash Solution 20ml Bottles | 0967eyesolution |
| Eye Wash Solution Boxed 25 | 096725eyewash |
| Eye Wash Solution 500ml Bottle | 0967eyewash500ml |
| Eye Wash Station | 0967eyewash |
| Plasters Box of | 0967plasters |
| First-Aid Kit (1-10 Persons) | 09491-10 |
| First-Aid Kit (50 Persons) | 094950 |

Stanley Chalk lines



| Description | Part No |
|--------------------------|----------------------|
| Chalk Line Stanley 100ft | 0952100ft |
| Chalk Line - 30 metres | 0952chalkline |
| Replacement Line | 0952replaceline |
| Blue Chalk Dust Refill | 0952refilblue115gm |
| Red Chalk Dust Refill | 0952refilblue115gm |
| White Chalk Dust Refill | 0952whiterefil115gm |
| Yellow Chalk Dust Refill | 0952refilyellow115gm |

Site Clothing

| Description | Part No |
|------------------------------------|---------------------|
| Boiler Suit Bottle Green Large | 0990boillerbottle |
| Boiler Suit Poly Cotton Royal Navy | 0967boilersuitbluel |
| Rain Suit Large | 0990eskirainsuitl |
| Rain Suit Medium | 0990eskirainsuitm |
| Waistcoat Fluorescent Yellow | 0990flrwctxlsglbn |
| Waistcoat Fluorescent Orange | 0990flrwaistcoats |

Gloves Perfect Fit



| Description | Part No |
|----------------------------------|---------------------|
| Gloves Box of 100 Low Allergy | 0948lowallergy |
| Gloves Canadian Riggers | 0948rigger |
| Gloves Cotton Drill - Mens Size | 0948cottondrill |
| Gloves Grip EN388 - Large | 0948griplove |
| Gloves Latex Disp. - Large.(100) | 0948latexdisplge |
| Gloves Orange Gripper | 0948orangegripper |
| Gloves Perfect Fit | 0968perfectfitblack |
| Gloves PVC Knit Wirst Handpro | 0968pvcknitwrist |
| GlovesYellow Rubber | 0948rubber |
| GlovesYellow Split Rigger | 0948riggerysplit |

Brooms



| Description | Part No |
|-----------------------------|----------------|
| 12" Soft Broom with Handle | 099512soft |
| 18" Hard Brooms with Handle | 099518hard2 |
| 18" Soft Brooms with Handle | 099518soft |
| 24" Soft Brooms with Handle | 099524soft |
| 24" Hard Brooms with Handle | 099524stiff |
| 36" Platform Broom Handle | 099536platform |

Helmets & Goggles

| Description | Part No |
|---------------------------------|-----------------|
| Goggles - BSEN166.1.B | 0967safety1 |
| Goggles - Safety Specs EN166.1F | 0967safety2 |
| Helmets Executive White | 0990helmetexec |
| Helmets White Safety | 0990whitehelmet |

Site Equipment

Padlocks



A full range of quality brass padlocks, they offer reliable security from 19mm to 60mm body width.

All internal components are manufactured from corrosion free materials.

3/4" Brass Padlocks
1" Brass Padlocks
1.1/2" Brass Padlocks
2" Brass Padlocks
2.1/2" Brass Padlocks

1.1/2" Extended Leg Padlocks

2" High Security Padlocks

Ropes, Sheeting & Bags



Builders Bags 22" x 35" x 600g HD 09442235600

Bin Liners White Plastic Pack 100 0944binlinerw
Bin Liners Black Plastic Refuse Bags 0944blackplastic

Poly Sheeting 4Mtr x 1000g x 25Mtr 0944M41000M25

Pallet Shrink Wrap Roll 0967shrink

Rope 6mm x 220M Polypropylene 0967rope06mm220m

Tarpaulin 5M x 3.96M Heavy Duty 0967tarpM5M3.96

Misc



Description

Part Number

| | |
|-----------------------------------|----------------------|
| Bin 94 Litre Black Plastic | 0967bin80l |
| Bleach 5 litres | 0967bleach |
| Canteen Bench | 0967canteenbench |
| Cloths Box of 10 antistatic | 0967antistaticcloths |
| Polystyrene Foam Cups (1000) | 0967polycups |
| Cream Cleaner 500ml | 0967cleaner500ml |
| Detergent 5 Litre | 0967detergent5l |
| Disinfectant 5 litre | 0967disinfectant |
| Dust Sheet 12 x 9 Large Cotton | 0967dustsheet |
| Eski Shift Multi Purpose Cleaner | 0967eskishift1ltr |
| Hand Cream | 0967eskihandcream |
| J Cloth Packed 50s | 0967Jcloth |
| Jeyes Fluid 5 Litre | 0967jeyes |
| Kettle 240 Volt Site | 0967kettle |
| Liquid Soap Carex | 0967doveliquidsoa |
| Liquid Soap Dispenser | 0967soapdispenser |
| Mop Bucket Plastic | 0967mopbucket |
| Mop Handle | 0967mop/handle |
| Mop Head | 0967mophead |
| Paper Hand Towels 156183 | 0967paper156183 |
| Paper Towel Holder Dispenser | 0967paperdisp |
| Paper Towels Pack of 2880 | 0967paper2880 |
| Paper Towels Small Pack | 0967paperpack |
| Rags Box of Mixed | 0967rags |
| Roll of 2 Ply Paper Towels 19767X | 0967paper2ply |
| Roll of Mutton Cloth | 0967mutton |
| Soap 5 Litre Liquid | 09675ltrliquisoap |
| Soap 5 Litre Liquid | 0967liquidsoap5lt |
| Soap Bar of | 0967soapbar |
| Soap Box of 72 Bars | 0967soapbox |
| Sugar Tate & Lyle 2kg Bags | 0967sugar |
| Tea Mugs | 0967teamugs |
| Tea Spoons St St | 0967teaspoons |
| Tea Towels | 0967teatowels |
| Tissue Paper | 0967tissuepaper |
| Toilet Brush | 0967toiletbrush |
| Toilet Cleaner 1 Litre | 0967eskiloo1ltr |
| Toilet Rolls Case of 36 | 0967toiletrolls |
| Urinal Cubes Box of 36 | 0967urinalcubes |
| Washing Up Liquid 1 Litre | 09671ltrwashup |
| Yellow Dusters | 0967duster |

Ladders & Access Equipment

Glass Fibre Swingback Stepladders

Certified to BSEN131
Non-slip treads & rubber feet
Non-Conductive
Light weight and easy to carry
Plastic tool tray

| Treads | Open Height | Closed Height | Weight |
|--------|-------------|---------------|---------|
| 3 | 0.58m | 0.66m | 3.25kg |
| 4 | 0.81m | 0.89m | 4.25kg |
| 5 | 1.03m | 1.14m | 4.75kg |
| 6 | 1.26m | 1.38m | 5.50kg |
| 8 | 1.70m | 1.86m | 7.50kg |
| 10 | 2.10m | 2.17m | 9.00kg |
| 12 | 2.34m | 2.57m | 10.50kg |



Folding Tower System

Base can be used alone, or increased by a further 3 lifts which can give an extra 7 platform heights (using extra components)
Tested and certified to BS1139 (Part 3) 1994 and HD1004 *
Fits easily into most small vans or estate cars
Quick and easy to erect – saving time on each job
Narrow tower width – compact & easy storage
Quick release pull rings with stainless steel pin on all bracings for easy assembly
Smooth & ribbed texture on braces for quick identification
Please remember - a thorough risk assessment must be carried out prior to any work being undertaken at height

125mm Locking castors
1.5m base unit (inc 1 x 1.8m Hatch Deck)
Platform Heights 0.6m, 1.6m, 2.1m, 3.1m, 3.6m, 4.6m, 5.1m, 6.1m



Podium Steps

Meets all the requirements of the new Working at Heights Regulations - this item provides an excellent alternative to step ladders.

The work platform offers massive safety: 1000mm all round lockable guardrail system with non-slip platform surface - even in the rain.
'Locking' 360° rotating wheels, for added safety & stability.

Offers flexibility for working in all locations - folds up in seconds & fits through a standard door way back of vans or on a roof rack.
It is self contained in one piece & can easily be handled by one person.

Manufactured from aluminium is a lightweight product, durable and will provide an exceptional work tool for all users.

Offers 4 platform levels: 460mm, 710mm, 960mm and 1210mm.

Height 1 1200mm 1830mm 650mm
Height 2 1200mm 2210mm 650mm 41kg (with expansion pack)



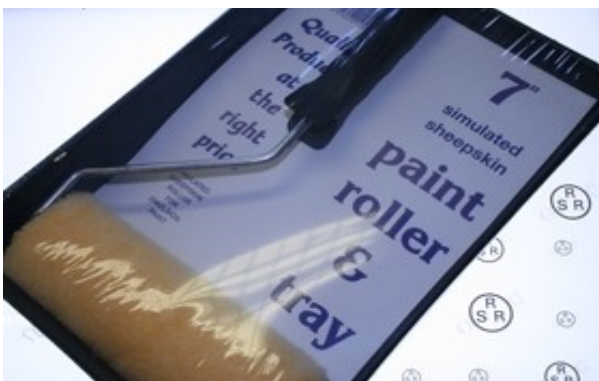
Paints and Accessories

Paint Brushes



| Description | Part No |
|----------------------|----------|
| Paint Brushes 1" | 0947in16 |
| Paint Brushes 1.1/2" | 0947in24 |
| Paint Brushes 1/2 " | 0947in08 |
| Paint Brushes 2" | 0947in32 |
| Paint Brushes 2.1/2" | 0947in40 |
| Paint Brushes 3" | 0947in48 |
| Paint Brushes 4" | 0947in64 |
| Paint Brushes 6" | 0947in06 |

Paint Rollers



| Description | Part No |
|-----------------------|--------------------|
| Roller 7" & Tray Kit | 0947rollerkit7 |
| Roller 9" & Tray Kit | 0947rollerkit |
| Radiator Roller Kit | 0947roller |
| Roller 7" Spare | 0947spare7roller |
| Roller 9" Spare | 0947spare9roller |
| Roller Radiator Spare | 0947spareradroller |
| Spare 7" Roller Tray | 0947spare7tray |
| Spare 9" Roller Tray | 0947spare9tray |

Line Marking Paint 750ml

| Description | Part No |
|--------------------|-----------------|
| Spray 750ml Blue | 0968blue750ml |
| Spray 750ml Orange | 0968orange750ml |
| Spray 750ml Red | 0968red750ml |
| Spray 750ml White | 0968white750ml |
| Spray 750ml Yellow | 0968yellow750ml |

Galvafruid

Provides a galvanic protection on iron and steel. It can be used as a self-finish or as a durable rust inhibiting primer beneath selected top coats.

It is recommended for the protection of structural steel-work, agricultural and construction plant and machinery, gates, railings, iron pipework and guttering, and the rust prevention of in-situ welding work.

Drying times at 20°C —
touch dry: 2 hours
hard dry: 24 hours
recoating time: 24 hours minimum



| Description | Part No |
|----------------------|-------------------|
| Galvafruid 400ml | 0968galvafruid400 |
| Galvafruid 800ml | 0968galvafruid800 |
| Galvafruid 1.9 Litre | 0968galvafruid1.9 |

Primers

| Description | Part No |
|-------------------------------|-------------------|
| Grey Oxide Primer - 5 Ltr | 0968grey05l |
| Red Oxide Primer - 5 Ltr | 0968red05l |
| Pipeline Paint Yellow - 5 Ltr | 0968yellowpipe05l |
| Galvanising Spray 400ml | 0968rocolcldgv300 |

Spray Paint 500ml

| Description | Part No |
|--------------------|-----------------|
| Spray Paint Black | 0968blackspray |
| Spray Paint Blue | 0968bluespray |
| Spray Paint Green | 0968greenspray |
| Spray Paint Red | 0968redspray |
| Spray Paint White | 0968whitespray |
| Spray Paint Yellow | 0968yellowspray |

Hand Cleaners



| Description | Part No |
|--------------------------------|-------------------------|
| 5ltr Green Hand Cleaner | 0955grenhandcleaner |
| 5ltr Red Gel Grit Hand Cleaner | 0955redgelgritha |
| 1ltr Green Hand Cleaner | 0955grenhandcleaner1ltr |
| 1ltr Red Gel Grit Hand Cleaner | 0955redgelgrit1ltr |
| 1kg Swarfega Hand Cleaner | 0955swarf01 |
| 25kg Tufanega with polygrains | 0955tufanega25jg |



Strong - due to modern vacuum hardening
Durable - specially constructed tungsten carbide tips

SDS Drills Bits

SDS+ Masonry Drills



SDS+ Drill Bit Availability

Diameter

| | 4mm | 5mm | 5.5mm | 6mm | 6.5mm | 7mm | 8mm | 10mm | 11mm | 12mm | 13mm | 14mm | 15mm | 16mm | 18mm | 19mm | 20mm | 22mm | 24mm | 25mm | 26mm |
|------|-----|-----|-------|-----|-------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 110 | • | • | • | • | • | • | • | | | | | | | | | | | | | | |
| 160 | • | • | • | • | • | • | • | • | • | • | • | • | • | • | | | | | | | |
| 210 | | • | • | • | • | • | • | • | | • | | • | • | • | • | • | • | | | | |
| 260 | | | | • | • | • | • | • | • | • | • | • | • | • | • | | • | • | • | • | • |
| 310 | | | | • | | | • | • | | • | • | • | | • | • | • | • | • | • | • | • |
| 450 | | | | | | | • | • | | • | • | • | • | • | • | • | • | | • | • | • |
| 600 | | | | | | | | • | | • | | • | | • | • | | • | | • | | |
| 800 | | | | | | | | | | • | | | | • | | | • | | | | |
| 1000 | | | | | | | | | | • | | | | • | • | | • | | | | |

SDS- Max Hammer Drills



SDS+ Drill Bit Availability

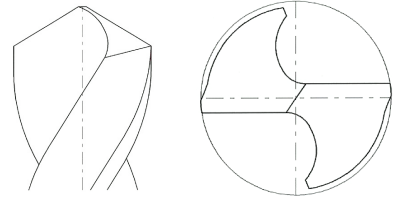
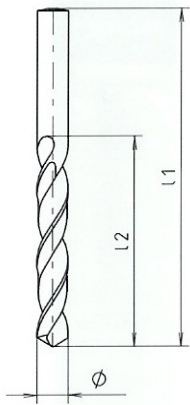
| | 12mm | 14mm | 15mm | 16mm | 18mm | 20mm | 22m | 24mm | 25mm | 28mm | 30mm | 32mm | 35mm | 38mm | 40mm |
|-------|------|------|------|------|------|------|-----|------|------|------|------|------|------|------|------|
| 320mm | | | | | | • | • | • | • | | | | | | |
| 340mm | • | • | • | • | • | | | | | | | | | | |
| 370mm | | | | | | | | | | • | • | • | • | • | • |

SDS- Max Points & Chisels

| | Point | Flat | Spade | Gouge | Wide |
|-------|-------|------|-------|-------|------|
| 280mm | • | • | | | |
| 300mm | | | | • | • |
| 350mm | | | | | • |
| 400mm | • | • | • | | • |
| 600mm | • | • | | | |



HSS Drill Bits DIN338RN



Relieved cone, 118 degree universal point-shape for a lot of drilling applications in steel and iron, non ferrous metals, plastics and other materials.

Faster - More aggressive cutting geometry
Stronger - Quality forged drill

| Dia mm | Dia in | L1 mm | L2 mm |
|--------|--------|-------|-------|
| 0.40 | 1/64 | 20 | 5 |
| 0.80 | 1/32 | 30 | 10 |
| 1.00 | | 34 | 12 |
| 1.10 | | 36 | 14 |
| 1.19 | 3/64 | 38 | 16 |
| 1.20 | | 38 | 16 |
| 1.25 | | 38 | 16 |
| 1.30 | | 38 | 16 |
| 1.40 | | 40 | 18 |
| 1.50 | | 40 | 18 |
| 1.59 | 1/16 | 43 | 20 |
| 1.60 | | 43 | 20 |
| 1.70 | | 43 | 20 |
| 1.75 | | 46 | 22 |
| 1.80 | | 46 | 22 |
| 1.90 | | 49 | 24 |
| 1.98 | 5/64 | 49 | 24 |
| 2.00 | | 49 | 24 |
| 2.10 | | 49 | 24 |
| 2.20 | | 53 | 27 |
| 2.25 | | 53 | 27 |
| 2.30 | | 53 | 27 |
| 2.38 | 3/32 | 57 | 30 |
| 2.40 | | 57 | 30 |
| 2.50 | | 57 | 30 |
| 2.60 | | 57 | 30 |
| 2.70 | | 61 | 33 |
| 2.75 | | 61 | 33 |
| 2.78 | 7/64 | 61 | 33 |
| 2.80 | | 61 | 33 |
| 2.90 | | 61 | 33 |
| 3.00 | | 61 | 33 |
| 3.10 | | 65 | 36 |

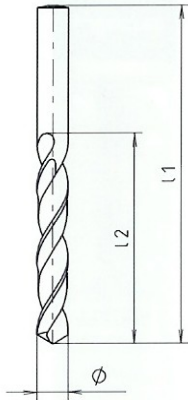
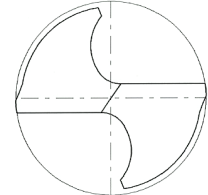
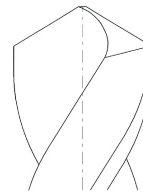
| Dia mm | Dia in | L1 mm | L2 mm |
|--------|--------|-------|-------|
| 3.18 | 1/8 | 65 | 36 |
| 3.20 | | 65 | 36 |
| 3.25 | | 65 | 36 |
| 3.30 | | 65 | 36 |
| 3.40 | | 70 | 39 |
| 3.50 | | 70 | 39 |
| 3.27 | 9/64 | 70 | 39 |
| 3.60 | | 70 | 39 |
| 3.70 | | 70 | 39 |
| 3.75 | | 70 | 39 |
| 3.80 | | 75 | 43 |
| 3.90 | | 75 | 43 |
| 3.97 | 5/32 | 75 | 43 |
| 4.00 | | 75 | 43 |
| 4.10 | | 75 | 43 |
| 4.20 | | 80 | 43 |
| 4.25 | | 80 | 43 |
| 4.30 | | 80 | 47 |
| 4.37 | 11/64 | 80 | 47 |
| 4.40 | | 80 | 47 |
| 4.50 | | 80 | 47 |
| 4.60 | | 80 | 47 |
| 4.70 | | 80 | 47 |
| 4.75 | | 80 | 47 |
| 4.76 | 3/16 | 86 | 47 |
| 4.80 | | 86 | 52 |
| 4.90 | | 86 | 52 |
| 5.00 | | 86 | 52 |
| 5.10 | | 86 | 52 |
| 5.16 | 13/64 | 86 | 52 |
| 5.20 | | 86 | 52 |
| 5.25 | | 86 | 52 |
| 5.30 | | 86 | 52 |

| Dia mm | Dia in | L1 mm | L2 mm |
|--------|--------|-------|-------|
| 5.40 | | 93 | 57 |
| 5.50 | | 93 | 57 |
| 5.56 | 7/32 | 93 | 57 |
| 5.60 | | 93 | 57 |
| 5.70 | | 93 | 57 |
| 5.75 | | 93 | 57 |
| 5.80 | | 93 | 57 |
| 5.90 | | 93 | 57 |
| 5.95 | 15/64 | 93 | 57 |
| 6.00 | | 93 | 57 |
| 6.10 | | 101 | 63 |
| 6.20 | | 101 | 63 |
| 6.25 | | 101 | 63 |
| 6.30 | | 101 | 63 |
| 6.35 | 1/4 | 101 | 63 |
| 6.40 | | 101 | 63 |
| 6.50 | | 101 | 63 |
| 6.60 | | 101 | 63 |
| 6.70 | | 101 | 63 |
| 6.75 | 17/64 | 109 | 69 |
| 6.80 | | 109 | 69 |
| 6.90 | | 109 | 69 |
| 7.00 | | 109 | 69 |
| 7.10 | | 109 | 69 |
| 7.14 | | 109 | 69 |
| 7.20 | | 109 | 69 |
| 7.25 | | 109 | 69 |
| 7.30 | | 109 | 69 |
| 7.40 | | 109 | 69 |
| 7.50 | | 109 | 69 |
| 7.54 | 19/64 | 117 | 75 |
| 7.60 | | 117 | 75 |
| 7.70 | | 117 | 75 |

| Dia mm | Dia in | L1 mm | L2 mm |
|--------|--------|-------|-------|
| 7.75 | | 117 | 75 |
| 7.80 | | 117 | 75 |
| 7.90 | | 117 | 75 |
| 7.94 | 5/16 | 117 | 75 |
| 8.00 | | 117 | 75 |
| 8.10 | | 117 | 75 |
| 8.20 | | 117 | 75 |
| 8.25 | | 117 | 75 |
| 8.30 | | 117 | 75 |
| 8.33 | 21/64 | 117 | 75 |
| 8.40 | | 117 | 75 |
| 8.50 | | 117 | 75 |
| 8.60 | | 125 | 81 |
| 8.70 | | 125 | 81 |
| 8.73 | 11/32 | 125 | 81 |
| 8.75 | | 125 | 81 |
| 8.80 | | 125 | 81 |
| 8.90 | | 125 | 81 |
| 9.00 | | 125 | 81 |
| 9.10 | | 125 | 81 |
| 9.13 | 23/64 | 125 | 81 |
| 9.20 | | 125 | 81 |
| 9.25 | | 125 | 81 |
| 9.30 | | 125 | 81 |
| 9.40 | | 125 | 81 |
| 9.50 | | 125 | 81 |
| 9.53 | 3/8 | 125 | 81 |
| 9.60 | | 133 | 87 |
| 9.70 | | 133 | 87 |
| 9.75 | | 133 | 87 |
| 9.80 | | 133 | 87 |
| 9.90 | | 133 | 87 |
| 9.92 | 25/64 | 133 | 87 |

| Dia mm | Dia in | L1 mm | L2 mm |
|--------|--------|-------|-------|
| 10.00 | | 133 | 87 |
| 10.20 | | 133 | 87 |
| 10.25 | | 133 | 87 |
| 10.32 | 13/32 | 133 | 87 |
| 10.50 | | 133 | 87 |
| 10.72 | 27/64 | 142 | 94 |
| 10.75 | | 142 | 94 |
| 11.00 | | 142 | 94 |
| 11.11 | 7/16 | 142 | 94 |
| 11.25 | | 142 | 94 |
| 11.50 | | 142 | 94 |
| 11.51 | 29/64 | 142 | 94 |
| 11.75 | | 142 | 94 |
| 11.91 | 15/32 | 151 | 101 |
| 12.00 | | 151 | 101 |
| 12.25 | | 151 | 101 |
| 12.30 | 31/64 | 151 | 101 |
| 12.50 | | 151 | 101 |
| 12.70 | 1/2 | 151 | 101 |
| 12.75 | | 151 | 101 |
| 13.00 | | 151 | 101 |
| 13.50 | | 160 | 108 |
| 14.00 | | 160 | 108 |
| 14.28 | 9/16 | 169 | 114 |
| 14.50 | | 169 | 114 |
| 15.00 | | 169 | 114 |
| 15.87 | 5/8 | 178 | 120 |
| 16.00 | | 178 | 120 |

Cobalt Drill Bits DIN338RN



5% cobalt alloyed jobber drills with high heat resistance for drilling steels with high tensile strength over 800 N/mm.

Specially suitable for high alloyed steels, bearing steels, hot/cold-rolled steel, particularly stainless steel.

| Dia mm | Dia in | L1 mm | L2 mm |
|--------|--------|-------|-------|
| 0.40 | 1/64 | 20 | 5 |
| 0.80 | 1/32 | 30 | 10 |
| 1.00 | | 34 | 12 |
| 1.10 | | 36 | 14 |
| 1.19 | 3/64 | 38 | 16 |
| 1.20 | | 38 | 16 |
| 1.25 | | 38 | 16 |
| 1.30 | | 38 | 16 |
| 1.40 | | 40 | 18 |
| 1.50 | | 40 | 18 |
| 1.59 | 1/16 | 43 | 20 |
| 1.60 | | 43 | 20 |
| 1.70 | | 43 | 20 |
| 1.75 | | 46 | 22 |
| 1.80 | | 46 | 22 |
| 1.90 | | 49 | 24 |
| 1.98 | 5/64 | 49 | 24 |
| 2.00 | | 49 | 24 |
| 2.10 | | 49 | 24 |
| 2.20 | | 53 | 27 |
| 2.25 | | 53 | 27 |
| 2.30 | | 53 | 27 |
| 2.38 | 3/32 | 57 | 30 |
| 2.40 | | 57 | 30 |
| 2.50 | | 57 | 30 |
| 2.60 | | 57 | 30 |
| 2.70 | | 61 | 33 |
| 2.75 | | 61 | 33 |
| 2.78 | 7/64 | 61 | 33 |
| 2.80 | | 61 | 33 |
| 2.90 | | 61 | 33 |
| 3.00 | | 61 | 33 |
| 3.10 | | 65 | 36 |

| Dia mm | Dia in | L1 mm | L2 mm |
|--------|--------|-------|-------|
| 3.18 | 1/8 | 65 | 36 |
| 3.20 | | 65 | 36 |
| 3.25 | | 65 | 36 |
| 3.30 | | 65 | 36 |
| 3.40 | | 70 | 39 |
| 3.50 | | 70 | 39 |
| 3.27 | 9/64 | 70 | 39 |
| 3.60 | | 70 | 39 |
| 3.70 | | 70 | 39 |
| 3.75 | | 70 | 39 |
| 3.80 | | 75 | 43 |
| 3.90 | | 75 | 43 |
| 3.97 | 5/32 | 75 | 43 |
| 4.00 | | 75 | 43 |
| 4.10 | | 75 | 43 |
| 4.20 | | 80 | 43 |
| 4.25 | | 80 | 43 |
| 4.30 | | 80 | 47 |
| 4.37 | 11/64 | 80 | 47 |
| 4.40 | | 80 | 47 |
| 4.50 | | 80 | 47 |
| 4.60 | | 80 | 47 |
| 4.70 | | 80 | 47 |
| 4.75 | | 80 | 47 |
| 4.76 | 3/16 | 86 | 47 |
| 4.80 | | 86 | 52 |
| 4.90 | | 86 | 52 |
| 5.00 | | 86 | 52 |
| 5.10 | | 86 | 52 |
| 5.16 | 13/64 | 86 | 52 |
| 5.20 | | 86 | 52 |
| 5.25 | | 86 | 52 |
| 5.30 | | 86 | 52 |

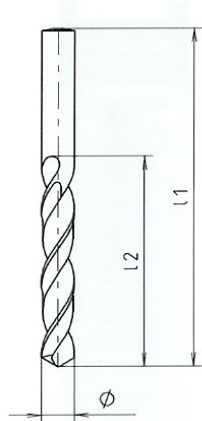
| Dia mm | Dia in | L1 mm | L2 mm |
|--------|--------|-------|-------|
| 5.40 | | 93 | 57 |
| 5.50 | | 93 | 57 |
| 5.56 | 7/32 | 93 | 57 |
| 5.60 | | 93 | 57 |
| 5.70 | | 93 | 57 |
| 5.75 | | 93 | 57 |
| 5.80 | | 93 | 57 |
| 5.90 | | 93 | 57 |
| 5.95 | 15/64 | 93 | 57 |
| 6.00 | | 93 | 57 |
| 6.10 | | 101 | 63 |
| 6.20 | | 101 | 63 |
| 6.25 | | 101 | 63 |
| 6.30 | | 101 | 63 |
| 6.35 | 1/4 | 101 | 63 |
| 6.40 | | 101 | 63 |
| 6.50 | | 101 | 63 |
| 6.60 | | 101 | 63 |
| 6.70 | | 101 | 63 |
| 6.75 | 17/64 | 109 | 69 |
| 6.80 | | 109 | 69 |
| 6.90 | | 109 | 69 |
| 7.00 | | 109 | 69 |
| 7.10 | | 109 | 69 |
| 7.14 | | 109 | 69 |
| 7.20 | | 109 | 69 |
| 7.25 | | 109 | 69 |
| 7.30 | | 109 | 69 |
| 7.40 | | 109 | 69 |
| 7.50 | | 109 | 69 |
| 7.54 | 19/64 | 117 | 75 |
| 7.60 | | 117 | 75 |
| 7.70 | | 117 | 75 |

| Dia mm | Dia in | L1 mm | L2 mm |
|--------|--------|-------|-------|
| 7.75 | | 117 | 75 |
| 7.80 | | 117 | 75 |
| 7.90 | | 117 | 75 |
| 7.94 | 5/16 | 117 | 75 |
| 8.00 | | 117 | 75 |
| 8.10 | | 117 | 75 |
| 8.20 | | 117 | 75 |
| 8.25 | | 117 | 75 |
| 8.30 | | 117 | 75 |
| 8.33 | 21/64 | 117 | 75 |
| 8.40 | | 117 | 75 |
| 8.50 | | 117 | 75 |
| 8.60 | | 125 | 81 |
| 8.70 | | 125 | 81 |
| 8.73 | 11/32 | 125 | 81 |
| 8.75 | | 125 | 81 |
| 8.80 | | 125 | 81 |
| 8.90 | | 125 | 81 |
| 9.00 | | 125 | 81 |
| 9.10 | | 125 | 81 |
| 9.13 | 23/64 | 125 | 81 |
| 9.20 | | 125 | 81 |
| 9.25 | | 125 | 81 |
| 9.30 | | 125 | 81 |
| 9.40 | | 125 | 81 |
| 9.50 | | 125 | 81 |
| 9.53 | 3/8 | 125 | 81 |
| 9.60 | | 133 | 87 |
| 9.70 | | 133 | 87 |
| 9.75 | | 133 | 87 |
| 9.80 | | 133 | 87 |
| 9.90 | | 133 | 87 |
| 9.92 | 25/64 | 133 | 87 |

| Dia mm | Dia in | L1 mm | L2 mm |
|--------|--------|-------|-------|
| 10.00 | | 133 | 87 |
| 10.20 | | 133 | 87 |
| 10.25 | | 133 | 87 |
| 10.32 | 13/32 | 133 | 87 |
| 10.50 | | 133 | 87 |
| 10.72 | 27/64 | 142 | 94 |
| 10.75 | | 142 | 94 |
| 11.00 | | 142 | 94 |
| 11.11 | 7/16 | 142 | 94 |
| 11.25 | | 142 | 94 |
| 11.50 | | 142 | 94 |
| 11.51 | 29/64 | 142 | 94 |
| 11.75 | | 142 | 94 |
| 11.91 | 15/32 | 151 | 101 |
| 12.00 | | 151 | 101 |
| 12.25 | | 151 | 101 |
| 12.30 | 31/64 | 151 | 101 |
| 12.50 | | 151 | 101 |
| 12.70 | 1/2 | 151 | 101 |
| 12.75 | | 151 | 101 |
| 13.00 | | 151 | 101 |
| 13.50 | | 160 | 108 |
| 14.00 | | 160 | 108 |
| 14.28 | 9/16 | 169 | 114 |
| 14.50 | | 169 | 114 |
| 15.00 | | 169 | 114 |
| 15.87 | 5/8 | 178 | 120 |
| 16.00 | | 178 | 120 |

Other types of Drill Bits

HSS Long Series Drills DIN340RN

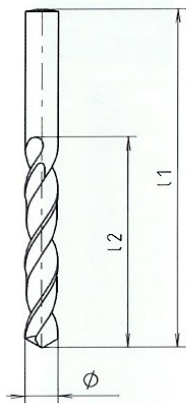


| Dia | L1 mm | L2 mm |
|-------|-------|-------|
| 1.00 | 56 | 33 |
| 1.50 | 70 | 45 |
| 2.00 | 85 | 56 |
| 2.50 | 95 | 62 |
| 3.00 | 100 | 66 |
| 3.50 | 112 | 73 |
| 4.00 | 119 | 78 |
| 4.50 | 126 | 82 |
| 5.00 | 132 | 87 |
| 5.50 | 139 | 91 |
| 6.00 | 139 | 91 |
| 6.50 | 148 | 97 |
| 7.00 | 156 | 102 |
| 7.50 | 156 | 102 |
| 8.00 | 165 | 109 |
| 9.00 | 175 | 115 |
| 10.00 | 184 | 121 |

Twist drill, ground from solid. Toughness combined with good cutting efficiency.



HSS Stub Drills for rivets



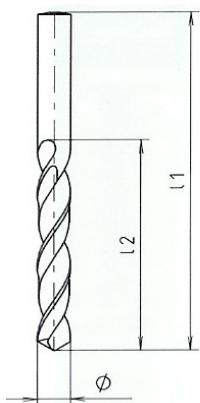
| Dia mm | Dia in | L1 mm | L2 mm |
|--------|--------|-------|-------|
| 2.38 | 3/32 | 43 | 10 |
| 2.78 | 7/64 | 46 | 11 |
| 3.10 | | 49 | 11 |
| 3.18 | 1/8 | 49 | 11 |
| 3.20 | | 49 | 11 |
| 3.25 | | 49 | 11 |
| 3.30 | | 49 | 11 |
| 3.57 | 9/64 | 52 | 14 |
| 3.97 | 5/32 | 55 | 14 |
| 4.10 | | 55 | 14 |
| 4.20 | | 55 | 14 |
| 4.37 | 11/64 | 58 | 17 |
| 4.76 | 3/16 | 62 | 17 |
| 4.90 | | 62 | 17 |
| 5.00 | | 62 | 17 |
| 5.10 | | 62 | 17 |
| 5.16 | 13/64 | 62 | 17 |
| 5.20 | | 62 | 17 |
| 5.56 | 7/32 | 66 | 28 |
| 6.35 | 1/4 | 70 | 31 |

Drill with extremely sturdy construction, particularly suitable for drilling thin materials.

Used in portable-hand tools, mainly in body panel shops, car repairs shops etc.



HSS Extra Long Series Drills DIN 1869 R1, R2, R3 RN



| Dia mm | L1 mm | L2 mm |
|--------|-------|-------|
| 2.50 | 140 | 95 |
| 3.00 | 150 | 100 |
| 3.00 | 190 | 130 |
| 3.50 | 165 | 115 |
| 3.50 | 265 | 180 |
| 4.00 | 220 | 150 |
| 4.00 | 280 | 190 |
| 5.00 | 195 | 135 |
| 5.00 | 315 | 210 |
| 6.00 | 205 | 140 |
| 6.00 | 330 | 225 |
| 6.50 | 215 | 150 |
| 6.50 | 350 | 235 |

| Dia mm | L1 mm | L2 mm |
|--------|-------|-------|
| 7.00 | 225 | 155 |
| 7.00 | 370 | 250 |
| 8.00 | 240 | 165 |
| 8.00 | 305 | 210 |
| 8.00 | 390 | 265 |
| 9.00 | 250 | 175 |
| 9.00 | 410 | 280 |
| 10.00 | 340 | 235 |
| 10.00 | 430 | 295 |
| 11.00 | 280 | 195 |
| 11.00 | 455 | 310 |
| 12.00 | 295 | 205 |
| 12.00 | 480 | 330 |

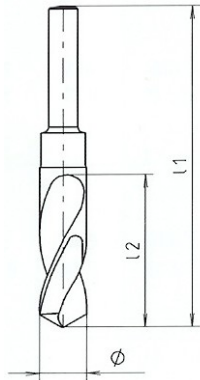


Premium Quality twist drill for drilling of steel and steel castings, alloy and plain carbon, grey iron castings, copper alloys, nickel-silver, graphite and similar materials.



Other types of Drill Bits

HSS Blacksmiths Drills WN 734



| Dia mm | Dia in | L1 mm | L2 mm | Shank in |
|--------|--------|-------|-------|----------|
| 14.28 | 9/16 | 156 | 79 | 1/2" |
| 15.87 | 5/8 | 157 | 79 | 1/2" |
| 17.46 | 11/16 | 157 | 79 | 1/2" |
| 19.00 | 3/4 | 157 | 79 | 1/2" |
| 20.64 | 13/16 | 158 | 76 | 1/2" |
| 22.22 | 7/8 | 158 | 76 | 1/2" |
| 23.81 | 15/16 | 159 | 76 | 1/2" |
| 25.40 | 1 | 159 | 76 | 1/2" |
| 31.75 | 1.1/4 | 162 | 90 | 1/2" |



1/2" reduced shank large diameter HSS drills



Flat Wood Bits

Diameter
6.5mm
8mm
10mm
13mm
14mm
16mm
18mm
20mm

Diameter
22mm
25mm
28mm
32mm

300mm Extension Sleeve

Designed for use with rotary action power drills. For rapid drilling of large diameter holes in softwoods, chipboard etc.

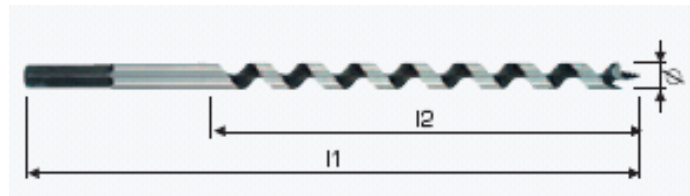


Auger Wood Bits

Diameter
6.5mm
8mm
10mm
11mm
13mm

Diameter
16mm
20mm
22mm
25mm
32mm

Precision drilling of deep holes in all types of wood.



1. Hardened, tempered carbon steel retains sharpness and edge
2. Self feeding screw pulls bit into wood for precise drilling.
3. Open throat & double twist design for rapid chip clearance

Brad Point Wood Drills

Diameter
3mm
4mm
5mm
6mm
10mm
13mm



Precision drilling of deep holes in all types of wood.

All purpose wood bit for professional drilling in wood, laminate and plasterboard.

Central point makes bit easy to position for accurate drilling. Gives fast cutting action and clean sharp holes.



Rotabroach Cutters



These feature a highly advanced double edged tooth geometry which creates a true double positive cutting action at the hole and slug diameters.

During each revolution, 4 to 16 cutting edges are at work (depending on cutter size), removing metal which is swept away and upward from the cutting edges and exits via the ground spiral fluting.

Also, with a very low chip load per tooth, Rotabroach cutters have an extremely smooth cutting action, while heat generation and wear are kept to a minimum.

So, in comparison with twist drill methods, Rotabroach has distinct advantages. The ability to cut holes in a single pass. The versatility to cut chain holes, slots and holes in radiused surfaces. All with valuable savings in time and manpower. Compare these drilling times

The use of Rotabroach cutters has led to dramatic savings in hole cutting times in construction, fabrication and general engineering applications. In a typical application, the time taken to drill a 34mm diameter hole through 25mm material by conventional twist drill methods was 225 seconds. using a Rotabroach cutter, the same operation was completed in just 45 seconds.

The speed and efficiency of the Rotabroach System is the result of a unique cutter design representing a major advance on twist drill hole cutting methods.

Unlike a twist drill, which removes all the material from the hole in the form of swarf, the Rotabroach cutter has a peripheral cutting action and removes a narrow annulus of material, leaving a slug to be ejected at the end of the cut.

| | Short x 25mm | Long x 50mm |
|------|--------------|-------------|
| 12mm | ● | ● |
| 13mm | ● | ● |
| 14mm | ● | ● |
| 15mm | ● | ● |
| 16mm | ● | ● |
| 17mm | ● | ● |
| 18mm | ● | ● |
| 19mm | ● | ● |
| 20mm | ● | ● |
| 21mm | ● | ● |
| 22mm | ● | ● |
| 23mm | ● | ● |
| 24mm | ● | ● |
| 25mm | ● | ● |
| 26mm | ● | ● |
| 27mm | ● | ● |
| 28mm | ● | ● |
| 29mm | ● | ● |
| 30mm | ● | ● |
| 31mm | ● | ● |
| 32mm | ● | ● |
| 33mm | ● | ● |
| 34mm | ● | ● |
| 35mm | ● | ● |
| 36mm | ● | ● |

| | Short x 25mm | Long x 50mm |
|------|--------------|-------------|
| 37mm | ● | ● |
| 38mm | ● | ● |
| 39mm | ● | ● |
| 40mm | ● | ● |
| 41mm | ● | ● |
| 42mm | ● | ● |
| 43mm | ● | ● |
| 44mm | ● | ● |
| 45mm | ● | ● |
| 46mm | ● | ● |
| 47mm | ● | ● |
| 48mm | ● | ● |
| 49mm | ● | ● |
| 50mm | ● | ● |
| 51mm | ● | ● |
| 52mm | ● | ● |
| 53mm | | ● |
| 54mm | | ● |
| 55mm | | ● |
| 56mm | | ● |
| 57mm | | ● |
| 58mm | | ● |
| 59mm | | ● |
| 60mm | | ● |

Rotabroach

ALWAYS AT THE CUTTING EDGE

Electro-magnetic Drilling

The Panther



Lightweight - ideal for use on site or in a workshop Cuts holes up to 40mm diameter x 50mm deep 1100 watt motor Feed capstan may be reversed for easy positioning in tight areas Variable speed - the right speed for the right diameter Automatic coolant bottle Supplied with secure carrying case

Motor specification 110v full load 11amps 1100w
230w full load 5amps 1100w No load rpm 350 to 600 rpm Max hole cutting capacity 40mm dia x 50mm deep
Overall dimensions Height 510mm max
Width 180mm Exc. bottle
Length 265mm
Net weight 14.6 kgs
Spindle bore 19.05 (3/4")
Magnetic adhesion 750 kgs
Safety features Clutch and electronic overload

The Cobra



Drill on site or in a workshop Cuts holes up to 65mm diameter x 50mm deep 1400 watt motor Feed capstan may be reversed for easy positioning in tight areas Controls mounted at the rear for better access 1200 kgs magnetic adhesion Variable speed - the right speed for the right diameter Automatic coolant bottle Supplied with secure carrying case

Motor specification 110v full load 14amps 1400w
230w full load 6.0amps 1400w No load rpm 160 to 640 rpm
Max hole cutting capacity 65mm dia x 50mm deep
Overall dimensions
Height 570mm max
Width 190mm Exc. bottle
Length 300mm Net weight 19.8 kgs Spindle bore 19.05 (3/4")
Magnetic adhesion 1200 kgs
Safety features Clutch and electronic overload

The Puma



Lightweight - ideal for use on site or in a workshop Cuts holes up to 30mm diameter x 25mm deep 800 watt motor Feed capstan may be reversed for easy positioning in tight areas Controls mounted at the rear for better access 750kgs magnetic adhesion Complete with 1/2" drill chuck Supplied with secure carrying case

Motor specification 110v full load 7.8amps 800w
230w full load 4amps 800w No load rpm 600rpm Max hole cutting capacity 30mm dia x 25mm deep
Overall dimensions Height 420mm max
Width 170mm
Length 250mm
Net weight 12.2 kgs
Spindle bore 19.05 (3/4")
Magnetic adhesion 750 kgs
Safety features Electronic overload

Grinding & Cutting Discs



Flat Metal Cutting Discs

100mm x 3mm x 16mm
115mm x 3mm x 22mm
125mm x 3mm x 22mm
180mm x 3mm x 22mm
230mm x 3mm x 22mm
300mm x 3mm x 20mm
300mm x 3mm x 22mm
350mm x 3mm x 25.4mm



DPC Metal Cutting Disc

100mm x 3mm x 16mm
115mm x 3mm x 22mm
125mm x 3mm x 22mm
180mm x 3mm x 22mm
230mm x 3mm x 22mm



DPC Metal Grinding Disc

100mm x 6mm x 16mm
115mm x 6mm x 22mm
125mm x 6mm x 22mm
180mm x 6mm x 22mm
230mm x 6mm x 22mm



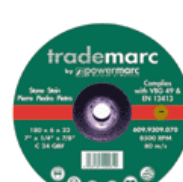
Flat Stone Cutting Discs

100mm x 3mm x 16mm
115mm x 3mm x 22mm
125mm x 3mm x 22mm
180mm x 3mm x 22mm
230mm x 3mm x 22mm
300mm x 3mm x 20mm
300mm x 3mm x 22mm



DPC Stone Cutting Disc

100mm x 3mm x 16mm
115mm x 3mm x 22mm
125mm x 3mm x 22mm
180mm x 3mm x 22mm
230mm x 3mm x 22mm



DPC Stone Grinding Disc

100mm x 6mm x 16mm
115mm x 6mm x 22mm
125mm x 6mm x 22mm
180mm x 6mm x 22mm
230mm x 6mm x 22mm



DPC Metal Cutting Discs for Stainless Steel

100mm x 3mm x 16mm
115mm x 3mm x 22mm
125mm x 3mm x 22mm
180mm x 3mm x 22mm
230mm x 3mm x 22mm



DPC Metal Grinding Discs for Stainless Steel

100mm x 6mm x 16mm
115mm x 6mm x 22mm
125mm x 6mm x 22mm
180mm x 6mm x 22mm
230mm x 6mm x 22mm



Ultra Thin Metal Cutting Discs for Stainless Steel

115mm x 1mm x 22mm
125mm x 2mm x 22mm
180mm x 2mm x 22mm
230mm x 2mm x 22mm





Dry Diamond Core Bits with SST



DCS range of dry diamond core drills feature SST diamond technology and can be used with any 2kg machine with 600w and 700 rpm. This SST technology is so special that Marcrst have several international patents pending. SST technology uses a new segment matrix that allows the use of 2kg drilling machine with more than 600w and 700 rpm to diamond drill.

| Part Number | Description |
|----------------|-------------------------------------|
| 249.000.0022 : | DCS850 Core 22 x 400mm 1/2" BSP(F) |
| 249.000.0028 : | DCS850 Core 28 x 400mm 1/2" BSP(F) |
| 249.000.0032 : | DCS850 Core 32 x 400mm 1/2" BSP(F) |
| 249.000.0038 : | DCS850 Core 38 x 165mm 1/2" BSP(F) |
| 249.000.0048 : | DCS850 Core 48 x 165mm 1/2" BSP(F) |
| 249.000.0052 : | DCS850 Core 52 x 165mm 1/2" BSP(F) |
| 249.000.0060 : | DCS850 Core 60 x 165mm 1/2" BSP(F) |
| 249.000.0065 : | DCS850 Core 65 x 165mm 1/2" BSP(F) |
| 249.000.0072 : | DCS850 Core 72 x 165mm 1/2" BSP(F) |
| 249.000.0078 : | DCS850 Core 78 x 165mm 1/2" BSP(F) |
| 249.000.0082 : | DCS850 Core 82 x 165mm 1/2" BSP(F) |
| 249.000.0091 : | DCS850 Core 91 x 165mm 1/2" BSP(F) |
| 249.000.0107 : | DCS850 Core 107 x 165mm 1/2" BSP(F) |
| 249.000.0117 : | DCS850 Core 117 x 165mm 1/2" BSP(F) |
| 249.000.0127 : | DCS850 Core 127 x 165mm 1/2" BSP(F) |
| 249.000.0132 : | DCS850 Core 132 x 165mm 1/2" BSP(F) |
| 249.000.0152 : | DCS850 Core 152 x 165mm 1/2" BSP(F) |
| 249.000.0162 : | DCS850 Core 162 x 165mm 1/2" BSP(F) |

BM300 Economy Dry Diamond Cutting Discs



The BM300 is one of the most competitive quality blades on the market and will return on average 67 cuts per blade

Dry diamond cutting disc are suitable for concrete, reinforced concrete, natural stone, roof tiles, bricks and blocks, paving slabs, concrete products, clay pipes, terazzo.

| Part Number | Description |
|----------------|------------------------------|
| 1130.0115.22 : | BM300 Dry Blade 115 x 22.2mm |
| 1130.0125.22 : | BM300 Dry Blade 125 x 22.2mm |
| 1130.0135.22 : | BM300 Dry Blade 135 x 22.2mm |
| 1130.0140.22 : | BM300 Dry Blade 140 x 22.2mm |
| 1130.0150.22 : | BM300 Dry Blade 150 x 22.2mm |
| 1130.0180.22 : | BM300 Dry Blade 180 x 22.2mm |
| 1130.0230.22 : | BM300 Dry Blade 230 x 22.2mm |
| 1130.0300.20 : | BM300 Dry Blade 300 x 20.0mm |
| 1130.0300.22 : | BM300 Dry Blade 300 x 22.2mm |
| 1130.0300.25 : | BM300 Dry Blade 300 x 25.4mm |
| 1130.0300.30 : | BM300 Dry Blade 300 x 30.0mm |
| 1130.0350.20 : | BM300 Dry Blade 350 x 20mm |
| 1130.0350.22 : | BM300 Dry Blade 350 x 22.2mm |
| 1130.0350.25 : | BM300 Dry Blade 350 x 25.4mm |
| 1130.0350.30 : | BM300 Dry Blade 350 x 30.0mm |

BM700 Professional Dry Diamond Cutting Discs



700 Series: The best diamond tools with excellent life, cutting speed and the cheapest cost per cut and will return on average 303 cuts per blade life

Dry diamond cutting disc are suitable for concrete, reinforced concrete, natural stone, roof tiles, bricks and blocks, paving slabs, concrete products, clay pipes, terazzo.

| Part Number | Description |
|----------------|------------------------------|
| 1100.0115.22 : | BM700 Dry Blade 115 x 22.2mm |
| 1100.0125.22 : | BM700 Dry Blade 125 x 22.2mm |
| 1100.0135.22 : | BM700 DRY Blade 135 x22.2mm |
| 1100.0135.30 : | BM700 Dry Blade 135 x 30mm |
| 1100.0140.22 : | BM700 Dry Blade 140 x 22.2mm |
| 1100.0140.30 : | BM700 Dry Blade 140 x 30mm |
| 1100.0150.22 : | BM700 Dry Blade 150 x 22.2mm |
| 1100.0180.22 : | BM700 Dry Blade 180 x 22.2mm |
| 1100.0230.22 : | BM700 Dry Blade 230 x 22.2mm |
| 1100.0250.22 : | BM700 Dry Blade 250 x 22.2mm |
| 1100.0250.30 : | BM700 Dry Blade 250 x 30mm |
| 1100.0300.20 : | BM700 Dry Blade 300 x 20mm |
| 1100.0300.22 : | BM700 Dry Blade 300 x 22.2mm |
| 1100.0300.25 : | BM700 Dry Blade 300 x 25.4mm |
| 1100.0300.30 : | BM700 Dry Blade 300 x 30mm |
| 1100.0350.20 : | BM700 Dry Blade 350 x 20mm |
| 1100.0350.22 : | BM700 Dry Blade 350 x 22.2mm |
| 1100.0350.25 : | BM700 Dry Blade 350 x 25.4mm |
| 1100.0350.30 : | BM700 Dry Blade 350 x 30mm |
| 1100.0400.25 : | BM700 Dry Blade 400 x 25.4mm |
| 1100.0400.30 : | BM700 Dry Blade 400 x 30mm |
| 1100.0450.25 : | BM700 Dry Blade 450 x 25.4mm |
| 1100.0450.30 : | BM700 Dry Blade 450 x 30mm |
| 1100.0500.25 : | BM700 Dry Blade 500 x 25.4mm |
| 1100.0500.30 : | BM700 Dry Blade 500 x 30mm |
| 1100.0600.25 : | BM700 Dry Blade 600 x 25.4mm |

Hole Saws



General purpose cutting of thinner gauge materials.

The constant pitch ensures smoother cuts and less bite or snag on contact with regular surfaces.

Arbours

| | |
|-----|--|
| A1 | To suit 14-30mm hole saws 3/8" chuck size |
| A2 | To suit 32-210mm hole saws 1/2" chuck size |
| A4 | To suit 14-30mm hole saws 1/4" chuck size |
| A6 | To suit 32-38mm hole saws 1/2" chuck size |
| A10 | To suit 32-152mm hole saws 3/8" chuck size |
| A11 | To suit 14-30mm hole saws 1/2" chuck size |

Accessories

| | |
|----------|---|
| A014C | Pilot drill to suit all arbours except A4 |
| A5 Extn | 300mm extension bar to suit A2 arbour |
| A15 Extn | 300mm extension bar to suit A1 arbour |

Step Drills & Cone Cuts



Step Drills

4-12mm Step Drill
4-20mm Step Drill
4-30mm Step Drill

Cone Cuts

CC1 6-60mm
CC2 16.5-30mm
CC3 25-40mm

Starrett®
Precision Tools & Saws

| | |
|--------------------|--------------------------|
| 14mm Starrett Ref | H0096 To suit A1 Arbour |
| 16mm Starrett Ref | H0058 To suit A1 Arbour |
| 17mm Starrett Ref | H1016 To suit A1 Arbour |
| 19mm Starrett Ref | H0034 To suit A1 Arbour |
| 20mm Starrett Ref | H2532 To suit A1 Arbour |
| 21mm Starrett Ref | H1036 To suit A1 Arbour |
| 22mm Starrett Ref | H0078 To suit A1 Arbour |
| 24mm Starrett Ref | H1056 To suit A1 Arbour |
| 25mm Starrett Ref | H0100 To suit A1 Arbour |
| 27mm Starrett Ref | H0116 To suit A1 Arbour |
| 29mm Starrett Ref | H0118 To suit A1 Arbour |
| 30mm Starrett Ref | H0136 To suit A1 Arbour |
| 32mm Starrett Ref | H0114 To suit A2 Arbour |
| 33mm Starrett Ref | H0156 To suit A2 Arbour |
| 35mm Starrett Ref | H0138 To suit A2 Arbour |
| 37mm Starrett Ref | H0176 To suit A2 Arbour |
| 38mm Starrett Ref | H0112 To suit A2 Arbour |
| 40mm Starrett Ref | H0196 To suit A2 Arbour |
| 41mm Starrett Ref | H0158 To suit A2 Arbour |
| 43mm Starrett Ref | H116 To suit A2 Arbour |
| 44mm Starrett Ref | H0134 To suit A2 Arbour |
| 46mm Starrett Ref | H1136 To suit A2 Arbour |
| 48mm Starrett Ref | H0178 To suit A2 Arbour |
| 51mm Starrett Ref | H0200 To suit A2 Arbour |
| 52mm Starrett Ref | H0216 To suit A2 Arbour |
| 54mm Starrett Ref | H0218 To suit A2 Arbour |
| 56mm Starrett Ref | H56MM To suit A2 Arbour |
| 57mm Starrett Ref | H0214 To suit A2 Arbour |
| 59mm Starrett Ref | H0256 To suit A2 Arbour |
| 60mm Starrett Ref | H0238 To suit A2 Arbour |
| 64mm Starrett Ref | H0212 To suit A2 Arbour |
| 65mm Starrett Ref | H0296 To suit A2 Arbour |
| 67mm Starrett Ref | H0258 To suit A2 Arbour |
| 68mm Starrett Ref | H68MM To suit A2 Arbour |
| 70mm Starrett Ref | H0234 To suit A2 Arbour |
| 73mm Starrett Ref | H0278 To suit A2 Arbour |
| 76mm Starrett Ref | H0300 To suit A2 Arbour |
| 79mm Starrett Ref | H0318 To suit A2 Arbour |
| 83mm Starrett Ref | H0314 To suit A2 Arbour |
| 86mm Starrett Ref | H0338 To suit A2 Arbour |
| 89mm Starrett Ref | H0312 To suit A2 Arbour |
| 92mm Starrett Ref | H0358 To suit A2 Arbour |
| 95mm Starrett Ref | H0334 To suit A2 Arbour |
| 98mm Starrett Ref | H0378 To suit A2 Arbour |
| 102mm Starrett Ref | H0400 To suit A2 Arbour |
| 105mm Starrett Ref | H0418 To suit A2 Arbour |
| 108mm Starrett Ref | H0414 To suit A2 Arbour |
| 111mm Starrett Ref | H0438 To suit A2 Arbour |
| 114mm Starrett Ref | H0412 To suit A2 Arbour |
| 121mm Starrett Ref | H0434 To suit A2 Arbour |
| 127mm Starrett Ref | H0500 To suit A2 Arbour |
| 133mm Starrett Ref | H0514 To suit A2 Arbour |
| 140mm Starrett Ref | H0512 To suit A2 Arbour |
| 152mm Starrett Ref | H0600 To suit A2 Arbour |
| 160mm Starrett Ref | H160MM To suit A2 Arbour |
| 168mm Starrett Ref | H168MM To suit A2 Arbour |
| 177mm Starrett Ref | H177MM To suit A2 Arbour |
| 210mm Starrett Ref | H210MM To suit A2 Arbour |

Taps & Cutting Oils

Hand Taps & Wrenches



| Description | Part Number |
|----------------------------------|-------------|
| Tap Wrench TW2 (3mm-12mm) | 0905holder2 |
| Tap Wrench TW1 (2mm-12mm) | 0905tw1.5 |
| M3 HSGT Hand Taps - Plug Cut | 0905m03p |
| M3 HSGT Hand Taps - Second Cut | 0905m03s |
| M3 HSGT Hand Taps - Taper Cut | 0905m03t |
| M3.5 HSGT Hand Taps - Plug Cut | 0905m03.5p |
| M3.5 HSGT Hand Taps - Second Cut | 0905m03.5s |
| M3.5 HSGT Hand Taps - Taper Cut | 0905m03.5t |
| M4 HSGT Hand Taps - Plug Cut | 0905m04p |
| M4 HSGT Hand Taps - Second Cut | 0905m04s |
| M4 HSGT Hand Taps - Taper Cut | 0905m04t |
| M5 HSGT Hand Taps - Plug Cut | 0905m05p |
| M5 HSGT Hand Taps - Second Cut | 0905m05s |
| M5 HSGT Hand Taps - Taper Cut | 0905m05t |
| M6 HSGT Hand Taps - Plug Cut | 0905m06p |
| M6 HSGT Hand Taps - Second Cut | 0905m06s |
| M6 HSGT Hand Taps - Taper Cut | 0905m06t |
| M8 HSGT Hand Taps - Plug Cut | 0905m08p |
| M8 HSGT Hand Taps - Second Cut | 0905m08s |
| M8 HSGT Hand Taps - Taper Cut | 0905m08t |
| M10 HSGT Hand Taps - Plug Cut | 0905m10p |
| M10 HSGT Hand Taps - Second Cut | 0905m10s |
| M10 HSGT Hand Taps - Taper Cut | 0905m10t |
| M12 HSGT Hand Taps - Plug Cut | 0905m12p |
| M12 HSGT Hand Taps - Second Cut | 0905m12s |
| M12 HSGT Hand Taps - Taper Cut | 0905m12t |
| M16 HSGT Hand Taps - Plug Cut | 0905m16p |
| M16 HSGT Hand Taps - Second Cut | 0905m16s |
| M16 HSGT Hand Taps - Taper Cut | 0905m16t |
| M20 HSGT Hand Taps - Plug Cut | 0905m20p |
| M20 HSGT Hand Taps - Second Cut | 0905m20s |
| M20 HSGT Hand Taps - Taper Cut | 0905m20t |

Cutting Liquid & Compounds



| | |
|-------------------------------------|---------------------|
| Rocol J166 Anti Seize Compound | 0958rocolj166500g |
| 400g Rocol RTD Metal Cutting Liquid | 0958rtdmetalcut400g |
| 500ml Rocol RTD Cutting Compound | 0958trefolex500ml |
| White Jointing Compound 400g Tin | 0958white400g |

Tallow



Used as a lubricant for threading, pulling electric cables through conduit etc. Hard white tallow.

WD40 Lubricant



| | |
|------------|---------------|
| 400ml WD40 | 0958wd40ml400 |
|------------|---------------|

