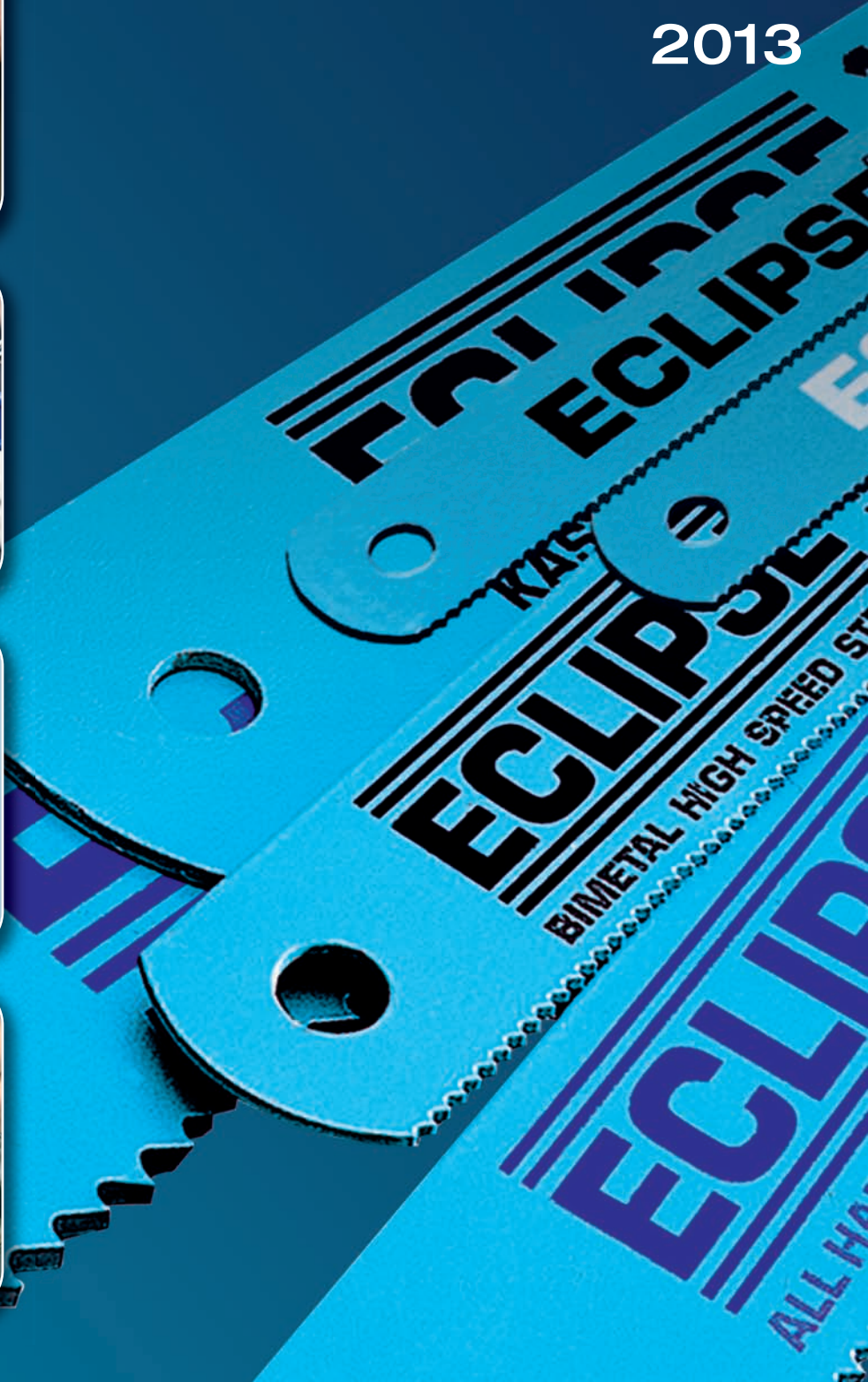


ECLIPSE

PROFESSIONAL TOOLS

Product Guide
2013



CONTENTS

Metal Cutting

Hand & Power Hacksaw Blades	3-6
Saw Frames & Small Saw Blades	7-9
Holesaws & Arbors	10-11
Cutting & Grinding Abrasive Discs	12-13
Bolt & Cable Cutters	14-15
Snips	16

Chisels

Cold Chisels	18
Wrecking Bars	18
Wood Chisels	19

Locking Jaw Pliers

Locking Jaw Pliers	21-23
C-Clamps	21-23
Locking Tools	23

Pliers

Pliers	25
Special Purpose Pliers	26-27

Professional Electricians' Tools

Premium Quality Safety Tools Introduction	29
VDE Cutters & Pliers	30-32
VDE Screwdrivers	33-34
Specialist Electricians' Hand tools	35-36
Electricians' Tool Case	37

Workholding Solutions

Vices	39-40
Clamps	41-43
Magnetic Welding Tools	44-45
Magnetic Chucks	46-47

Magnetic Lifters

Magnetic Lifters	49-50
------------------	-------

Gripping & Plumbing

Wrenches	52-54
Pipe Vices	54
Pipe Cutters	55
Hand Bender & Accessories	55

Heating System Filters

Boilermag	57-58
-----------	-------

Riveters & Threaded Insert Setting Tools

Riveters	60
Threaded Insert Setting Tools & Kits	61
Riveter Kits / Spares / Rivets / Deburring Tools	62

Torque Control Tools, Accessories & Multipliers

Torque Tool information	64-66
Recommended Maximum Torque Values	67
Torque Wrench Selection Guide	68-69
Torque Wrenches	70-73
Torque Handles (Female Fitting)	74-75
Automotive Torque Wrenches	74
Industrial Torque Wrenches	75
Professional Industrial Torque Wrenches	76
Ratchet Repair Kits	77
Socket Sets	77
Torque Screwdrivers	78
Multipliers	79-81

Engineers' Tools

Punches	83
Scrapers / Pin Vices / Chucks & Collets	84
Scribers / Jewellers Screwdrivers	85
Toolbits / Holders / Boring Bars	86
Cutting Off Tools / Lathe Tools / Holders	87
Tap Wrenches & Accessories	88

Drill Bits

Premium SDS Plus Hammer Drill Bits	90-91
Masonry Drill Bits	91
HSS Drill Bits	92
Hinge Boring Bits	92

General Hand Tools

Utility Knives & Blades	94
Tape Measures	94

Magnetic Solutions

Permanent Magnets - Magnetic Materials	96-97
Permanent Magnets - Pot Magnets	98-101
Electro Magnets	102-103
Magnetic Tools	104-105
Magnetic Bases	106

Sign & Display Magnets

Flexible Magnets	108
Office & Warehouse Magnets	109

Merchandising Options

Merchandising / Point of Sale	110
-------------------------------	-----



THE OFFICIAL MARK OF QUALITY

Dedication to quality has earned official accreditation of the BSEN ISO 9001:2008 Quality Assurance Certificate for the general manufacture of all our hand tools. This represents another important milestone in NEILL TOOLS history, since this is internationally recognised as a mark of quality.

In addition, we guarantee all our tools and products against defective workmanship and materials so you can be sure of first-class quality every time.

**HAND & POWER HACKSAW BLADES
SAW FRAMES & BLADES
HOLESAWS & ARBORS
CUTTING & GRINDING
ABRASIVES DISCS
BOLT & CABLE CUTTERS
SNIPS**

**SUPER
HARDENED**

Eclipse saw blade robot



**ECLIPSE - THE NUMBER ONE NAME
IN METAL CUTTING**

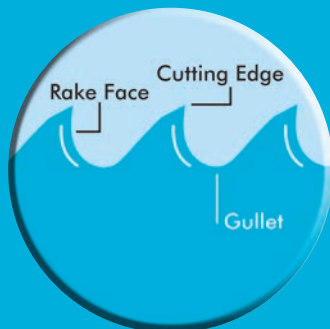
With a proud history of hacksaw blade manufacture stretching back nearly 100 years, Eclipse hacksaw blades have become synonymous with engineering excellence and continuous product development. As a result, Eclipse is now firmly established as the number one global metal cutting brand.

**ECLIPSE PLUS 30 – A
REVOLUTIONARY BLADE DESIGN**

Following many years of research into the most effective cutting profile possible, Neill Tools has developed an entirely new blade tooth shape that enables a 30 percent faster cut over conventional blades. The result of this is the Eclipse Plus 30 range.

Why are Eclipse Plus 30 blades faster?

- They are precision-ground to the finest tolerances, making them much sharper than conventional milled blades.



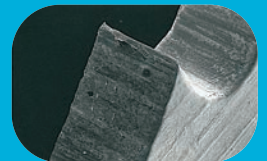
- Their tooth geometry has been designed to give a positive rake angle that is more aggressive and therefore faster than conventional milled blades. Our tests show a 30% faster cut, hence the name 'Plus 30'.

**ECLIPSE PLUS 30 – CONFIRMED BY
INDEPENDENT TESTING**

Independent testing by the University of Northumbria in Newcastle has verified the claims made about the Eclipse Plus 30 blade. Using both machine and hand testing, the Eclipse Plus 30 has been thoroughly tested and the improvement in cutting ability has been confirmed.

These two inset shots illustrate the difference between a ground and a milled blade under magnification.

MILLED TOOTH SHAPE - STANDARD



GROUND TOOTH SHAPE - PLUS 30



HAND HACKSAW BLADES

Plus 30 Flexible BiMetal HSS

Part No	Blade Size mm	Blade Size inches	Teeth per 25mm	PIN dia. mm	Pack Size	Pack Weight (kg)
AA3025G	250 x 12.5 x 0.63	10 x ½ x 0.025	18	4	100	1.63
AA3026E	250 x 12.5 x 0.63	10 x ½ x 0.025	24	4	100	1.63
AA3027V	250 x 12.5 x 0.63	10 x ½ x 0.025	32	4	100	1.63
AA3045E	300 x 12.5 x 0.63	12 x ½ x 0.025	18	4	100	1.90
AA3046V	300 x 12.5 x 0.63	12 x ½ x 0.025	24	4	100	1.90
AA3047R	300 x 12.5 x 0.63	12 x ½ x 0.025	32	4	100	1.90



A virtually unbreakable bimetal blade for superb cutting performance, wear resistance and safety.

The combination of an M2 High Speed ground cutting edge, electron-beam welded to a flexible alloy back gives a level of cutting power and flexibility that is far superior to edge hardened or conventional flexible blades.

The unique ground tooth profile of the Plus 30 blade produces a faster and more aggressive cutting action that requires less effort and is more efficient than a standard blade.

Cuts through all types of metals including alloy and stainless steels.

- 30% MORE CUTTING POWER
- SHARPER FIRST CUT
- LONGER LIFE

Plus 30 All Hard HSS

Part No	Blade Size mm	Blade Size inches	Teeth per 25mm	PIN dia. mm	Pack Size	Pack Weight (kg)
AE3025W	250 x 12.5 x 0.63	10 x ½ x 0.025	18	4	100	1.63
AE3026B	250 x 12.5 x 0.63	10 x ½ x 0.025	24	4	100	1.63
AE3044W	300 x 12.5 x 0.63	12 x ½ x 0.025	14	4	100	1.90
AE3045B	300 x 12.5 x 0.63	12 x ½ x 0.025	18	4	100	1.90
AE3046X	300 x 12.5 x 0.63	12 x ½ x 0.025	24	4	100	1.90
AE3047K	300 x 12.5 x 0.63	12 x ½ x 0.025	32	4	100	1.90



A rigid, All Hard ground blade for highly accurate cutting and long life.

The All Hard blade is manufactured entirely from top quality M2 High Speed Steel and each blade is precisely hardened throughout its entire width to give a strong, rigid back, thus ensuring a perfectly straight cut time after time.

For the best performance from All Hard blades, the workpiece should be securely held in a clamp or vice to prevent shattering of the blade and safety goggles should be worn.

The unique ground tooth profile of the Plus 30 blade produces a faster and more aggressive cutting action that requires less effort and is more efficient than a standard blade.

- 30% MORE CUTTING POWER
- SHARPER FIRST CUT
- LONGER LIFE

Flexible BiMetal HSS

Part No	Blade Size mm	Blade Size inches	Teeth per 25mm	PIN dia. mm	Pack Size	Pack Weight (kg)
AA45E	300 x 12.5 x 0.63	12 x ½ x 0.025	18	4	100	1.90
AA46V	300 x 12.5 x 0.63	12 x ½ x 0.025	24	4	100	1.90
AA47R	300 x 12.5 x 0.63	12 x ½ x 0.025	32	4	100	1.90



Cuts through all types of metals including alloys and stainless steels.

A virtually unbreakable bimetal blade for superb cutting performance, wear resistance and safety.

The combination of an M2 High Speed cutting edge and electron-beam welded to a flexible alloy back gives a level of cutting power and flexibility that is far superior to edge hardened or conventional flexible blades.

Cuts through all types of metals including alloy and stainless steels.

- HIGH PERFORMANCE
- SHATTERPROOF BLADE

All Hard HSS

Part No	Blade Size mm	Blade Size inches	Teeth per 25mm	PIN dia. mm	Pack Size	Pack Weight (kg)
AE44W	300x12.5x0.63	12 x ½ x 0.025	14	4	100	1.90
AE45B	300x12.5x0.63	12 x ½ x 0.025	18	4	100	1.90
AE46X	300x12.5x0.63	12 x ½ x 0.025	24	4	100	1.90
AE47K	300x12.5x0.63	12 x ½ x 0.025	32	4	100	1.90



A rigid, All Hard blade for highly accurate cutting and long life.

Manufactured entirely from top quality High Speed Steel, each blade is precisely hardened throughout its entire width to give a strong, rigid back, ensuring a perfectly straight cut time after time.

For the best performance from All Hard blades the workpiece should be securely held in a clamp or vice to prevent shattering of the blade and safety goggles should be worn.

Cuts through all types of metals including alloy and stainless steels.

- ACCURATE CUTTING
- LONG LIFE

Flexible Shatterproof HSS

Part No	Blade Size mm	Blade Size inches	Teeth per 25mm	PIN dia. mm	Pack Size	Pack Weight (kg)
AS45A	300x12.5x0.63	12x ½ x 0.025	18	4	100	1.80
AS46D	300x12.5x0.63	12x ½ x 0.025	24	4	100	1.80
AS47P	300x12.5x0.63	12x ½ x 0.025	32	4	100	1.80



A virtually unbreakable, edge hardened blade, which offers flexibility and safety but less wear resistance than an All Hard or bimetal blade.

- EDGE HARDENED
- SHATTERPROOF BLADE
- LONGER LIFE

Flexible Silicon Shatterproof

Part No	Blade Size mm	Blade Size inches	Teeth per 25mm	PIN dia. mm	Pack Size	Pack Weight (kg)
AM25L	250x12.5x0.63	10 x ½ x 0.025	18	4	100	1.60
AM26W	250x12.5x0.63	10 x ½ x 0.025	24	4	100	1.60
AM44L	300x12.5x0.63	12 x ½ x 0.025	14	4	100	1.80
AM45W	300x12.5x0.63	12 x ½ x 0.025	18	4	100	1.80
AM46B	300x12.5x0.63	12 x ½ x 0.025	24	4	100	1.80
AM47X	300x12.5x0.63	12 x ½ x 0.025	32	4	100	1.80



A virtually unbreakable blade suitable for DIY use.

Manufactured from low alloy silicon steel, this blade is ideal for general purpose sawing of mild steel, brass, aluminium, copper and other soft metals.

- GENERAL PURPOSE
- SHATTERPROOF BLADE



PACKAGING OPTIONS

Plastic boxes prefix part no. with "PB"

Tubes of 10 blades see page 9

HAND HACKSAW BLADES

HAND BLADE TOOTH PITCH SELECTION

To select the hacksaw blade with the correct number of teeth for the task, consider the following elements:

- **How thick is the material to be cut?**
For thin sections, the highest number of teeth should be used and vice versa for thicker sections.
- **What type of material is to be cut?**
The table opposite is a guide to tooth pitch selection for different materials and various thicknesses.



WORKPIECE MATERIAL	WORKPIECE THICKNESS				
	mm inch	3 1/8	6 1/4	10 3/8	13 1/2
Magnesium	32				
Aluminium		24			
Free Machining		18			
Low Carbon Steels				14	
Brass, Copper, Carbon Steels, Low and Medium Carbon	32				
Structural Steels			24		
				18	
				14	
High Carbon Steels, Bronze, Tool Steels, Die Steel, Alloy Steels, Stainless Steels, Copper Alloys	32				
Malleable Cast Iron, Titanium Alloys, High Temperature Alloys (Inconel, Nimonic, Hastelloy, Incolony), Nickol Alloys (Monel, Duranickel)					18

POWER HACKSAW BLADES

The comprehensive range of **ECLIPSE** Power Hacksaw Blades will suit virtually all popular sawing machines including the Kasto range. The continuous development of our range has improved the long-term sharpness of the blades. To reflect this advance the blades are now known as 'Super Hardened'. There is a choice of All Hard HSS or Bimetal HSS blades with a wide range of sizes and tooth pitch to cater for all varieties of materials and thicknesses.

ALL HARD HSS

- Manufactured entirely from top quality M2 High Speed Steel and hardened throughout, these blades are capable of cutting even the most difficult materials with great accuracy and combine consistent high performance with long life. This range also includes light power blades of 16mm (5/8") width.

BI METAL HSS

- Manufactured from M2 High Speed Steel, electron beam welded to a spring steel back, these bimetal blades are able to withstand heavy feed pressures, giving economical, high cutting rates. Because these blades are virtually unbreakable in normal use, they are particularly safe and therefore suitable for use by unskilled operators or on older machines. They will cut through most types of material including alloy and stainless steels.

TOOTH FORM

- All **Eclipse** power blades feature a regular tooth form with a full, round and smooth gullet which is ideal for use on all ferrous metals and for general purpose cutting.

TOOTH SET

- All **Eclipse** power blades are either raker set or wavy set dependent on tooth size and blade thickness. Wavy set helps eliminate tooth stripping when sawing thin sections such as tubing and pipe, whilst raker set is ideal for the majority of other sawing tasks.

APPROVALS AND SPECIFICATION

- All **Eclipse** power blades are manufactured to BSEN ISO 9001: 2008 quality assurance standard.

POWER BLADE TOOTH PITCH SELECTION

- The table on the right is a guide to tooth pitch selection for different materials and various thicknesses. Also included are suggested running speeds and strokes per minute. For thinner workpieces select the faster blade speed and for thicker pieces select the slower speed.

WORKPIECE MATERIAL	SPEED STROKES/Min	WORKPIECE THICKNESS						
		mm inch	13 ½	25 1	50 2	75 3	100 4	125 5
Magnesium	140-160	14						
Aluminium	100-160		10					
Free Machining Low Carbon Steels	140-160			6				4
Brass	120-150	14						
Copper	90-120		10					
Mild Steel	110-150			6				
Carbon Steels Low & Medium Carbon 90-160 Structural Steels 100-125					6			4
High Carbon Steels	50-100		14					
Bronze	100-120			10				
Tool Steels	60-80				6			
Die Steels	50-75					4		
Alloy Steels	45-95							
Copper Alloys	70-120							
Malleable Cast Irons	50-90							
Titanium Alloys	50-70							
Grey Cast Irons	70-100							
High Temperature 35-75 Alloys (Inconel, Nimonic, Hastelloy, Incoloy, Waspaloy)			10					
Nickel Alloys (Monel, Duranickel)	30-60			6				
								4

POWER HACKSAW BLADES

**SUPER
HARDENED**

ALL HARD HSS

Manufactured entirely from top quality M2 High Speed Steel and hardened throughout, these blades are capable of cutting even the most difficult metals with great accuracy and combine consistent high performance with long life. This range also includes light power blades of 16mm (5/8") width.

Part No	Blade Size mm	Blade Size inches	Teeth per 25mm	PIN dia. mm	Pack Size	Pack Weight (kg)
AE144N	300 x 16 x 0.80	12 x 5/8 x 0.032	14	5	50	1.60
AE145L	300 x 16 x 0.80	12 x 5/8 x 0.032	18	5	50	1.60
AE146W	300 x 16 x 0.80	12 x 5/8 x 0.032	24	5	50	1.60
AE203V	300 x 25 x 1.25	12 x 1 x 0.050	10	8.2	10	0.79
AE204R	300 x 25 x 1.25	12 x 1 x 0.050	14	8.2	10	0.79
AE222B	350 x 25 x 1.25	14 x 1 x 0.050	6	8.2	10	0.94
AE223R	350 x 25 x 1.25	14 x 1 x 0.050	10	8.2	10	0.94
AE224H	350 x 25 x 1.25	14 x 1 x 0.050	14	8.2	10	0.94
AE342E	350 x 32 x 1.60	14 x 1 1/4 x 0.062	6	8.2	10	1.50
AE343V	350 x 32 x 1.60	14 x 1 1/4 x 0.062	10	8.2	10	1.50
AE344R	350 x 32 x 1.60	14 x 1 1/4 x 0.062	14	8.2	10	1.50
AE452W	350 x 38 x 2.00	14 x 1 1/2 x 0.075	6	8.2	10	1.06
AE243H	400 x 25 x 1.25	16 x 1 x 0.050	10	8.2	10	1.06
AE244M	400 x 25 x 1.25	16 x 1 x 0.050	14	8.2	10	1.06
AE352X	400 x 32 x 1.60	16 x 1 1/4 x 0.062	6	8.2	10	1.72
AE353K	400 x 32 x 1.60	16 x 1 1/4 x 0.062	10	8.2	10	1.72
AE354C	400 x 32 x 1.60	16 x 1 1/4 x 0.062	14	8.2	10	1.72
AE462G	400 x 38 x 2.00	16 x 1 1/2 x 0.075	6	8.2	10	2.50
AE263M	425 x 25 x 1.25	17 x 1 x 0.050	10	8.2	10	1.12
AE362V	425 x 32 x 1.60	17 x 1 1/4 x 0.062	6	8.2	10	1.80
AE363R	425 x 32 x 1.60	17 x 1 1/4 x 0.062	10	8.2	10	1.80
AE372K	450 x 32 x 1.60	18 x 1 1/4 x 0.062	6	10.2	10	1.88
AE373C	450 x 32 x 1.60	18 x 1 1/4 x 0.062	10	10.2	10	1.88
AE471W	450 x 38 x 2.00	18 x 1 1/2 x 0.075	4	10.2	10	2.68
AE472B	450 x 38 x 2.00	18 x 1 1/2 x 0.075	6	10.2	10	2.68
AE512M	450 x 45 x 2.25	18 x 1 3/4 x 0.088	6	10.2	10	3.90
AE522A	475 x 45 x 2.25	19 x 1 3/4 x 0.088	6	10.2	10	3.95
AE482E	500 x 38 x 2.00	20 x 1 1/2 x 0.075	6	10.2	10	3.00
AE492X	525 x 38 x 2.00	21 x 1 1/2 x 0.075	6	10.2	10	3.30
AE493K	525 x 38 x 2.00	21 x 1 1/2 x 0.075	10	10.2	10	3.30
AE541A	525 x 45 x 2.25	21 x 1 3/4 x 0.088	4	10.2	10	4.30
AE542D	525 x 45 x 2.25	21 x 1 3/4 x 0.088	6	10.2	10	4.30
AE622C	550 x 50 x 2.50	22 x 2 x 0.100	6	12.5	10	5.60
AE631R	575 x 50 x 2.50	23 x 2 x 0.100	4	12.5	10	5.93
AE632H	575 x 50 x 2.50	23 x 2 x 0.100	6	12.5	10	5.93
AE562P	600 x 45 x 2.25	24 x 1 1/2 x 0.088	6	12.5	10	4.90
AE641C	600 x 50 x 2.50	24 x 2 x 0.100	4	12.5	10	6.40
AE642J	600 x 50 x 2.50	24 x 2 x 0.100	6	12.5	10	6.40
AE651H	650 x 50 x 2.50	26 x 2 x 0.100	4	12.5	10	6.96
AE652M	650 x 50 x 2.50	26 x 2 x 0.100	6	12.5	10	6.96
AE662A	700 x 50 x 2.50	28 x 2 x 0.100	6	12.5	10	7.35
AE691F	750 x 63 x 2.50	30 x 2 1/2 x 0.100	4	12.5	10	10.08

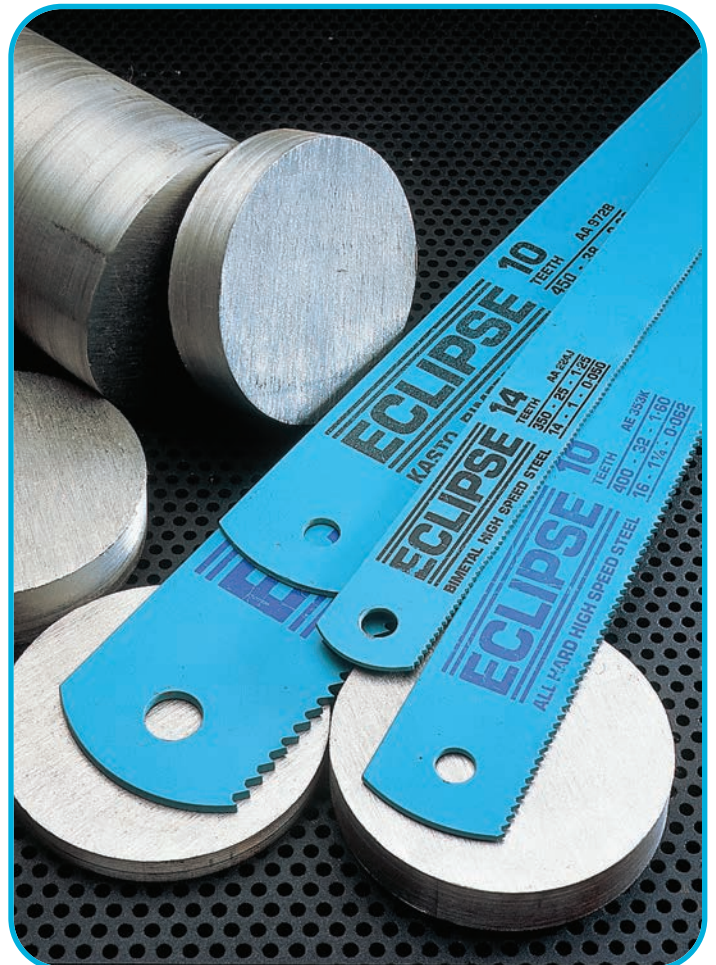
SUITABLE FOR USE WITH KASTO HACKSAWING MACHINES

AE972G	450 x 38 x 2.00	18 x 1 1/2 x 0.075	10	8.5	10	2.80
AE982B	575 x 50 x 2.50	23 x 2 x 0.100	4	10.5	10	5.96
AE983X	575 x 50 x 2.50	23 x 2 x 0.100	6	10.5	10	5.96

BiMetal High Speed Steel

Manufactured from High Speed Steel, electron beam welded to a spring steel back, these bimetal blades are able to withstand heavy feed pressures, giving economical, high cutting rates. Because these blades are virtually unbreakable in normal use, they are particularly safe and therefore suitable for use by unskilled operators or on older machines. They will cut through most types of metals including alloy and stainless steels.

Part No	Blade Size mm	Blade Size inches	Teeth per 25mm	PIN dia. mm	Pack Size	Pack Weight (kg)
AA203K	300 x 25 x 1.25	12 x 1 x 0.050	10	8.2	10	1.03
AA204C	300 x 25 x 1.25	12 x 1 x 0.050	14	8.2	10	1.03
AA223C	350 x 25 x 1.25	14 x 1 x 0.050	10	8.2	10	1.16
AA224J	350 x 25 x 1.25	14 x 1 x 0.050	14	8.2	10	1.16
AA342X	350 x 32 x 1.60	14 x 1 1/4 x 0.062	6	8.2	10	1.56
AA343K	350 x 32 x 1.60	14 x 1 1/4 x 0.062	10	8.2	10	1.56
AA352V	400 x 32 x 1.60	16 x 1 1/4 x 0.062	6	8.2	10	1.78
AA353R	400 x 32 x 1.60	16 x 1 1/4 x 0.062	10	8.2	10	1.78
AA462B	400 x 38 x 2.00	16 x 1 1/2 x 0.075	6	8.2	10	2.68
AA463X	400 x 38 x 2.00	16 x 1 1/2 x 0.075	10	8.2	10	2.68
AA372R	450 x 32 x 1.60	18 x 1 1/4 x 0.062	6	10.2	10	1.96
AA373H	450 x 32 x 1.60	18 x 1 1/4 x 0.062	10	10.2	10	1.96
AA472E	450 x 38 x 2.00	18 x 1 1/2 x 0.075	6	10.2	10	3.02
AA473V	450 x 38 x 2.00	18 x 1 1/2 x 0.075	10	10.2	10	3.02
AA482X	500 x 38 x 2.00	20 x 1 1/2 x 0.075	6	10.2	10	3.35
AA492V	525 x 38 x 2.00	21 x 1 1/2 x 0.075	6	10.2	10	3.52



SAW FRAMES

70-22TR

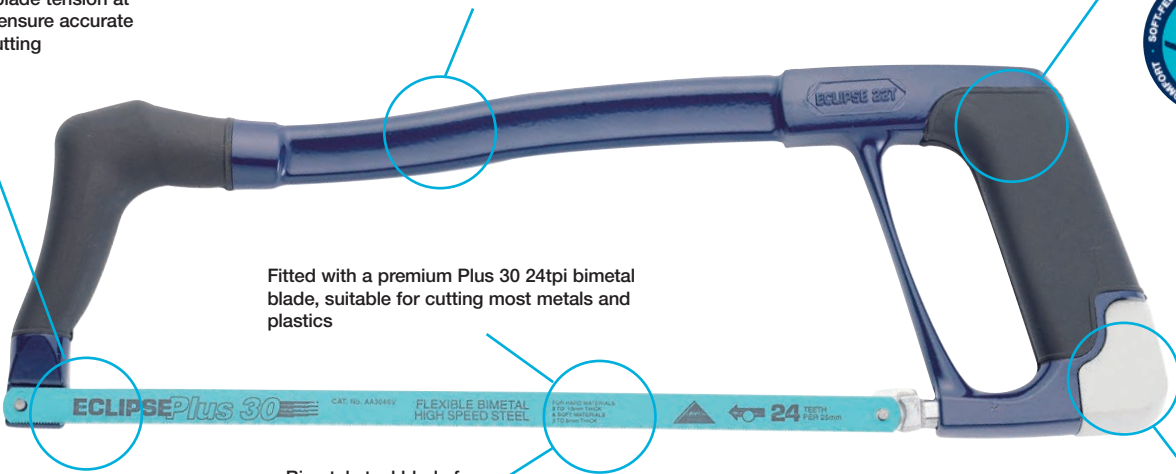
Can maintain blade tension at over 80kgs to ensure accurate and straight cutting performance

Strong, light frame for greater comfort and control when sawing

Soft-feel handle for comfort



Fitted with a premium Plus 30 24tpi bimetal blade, suitable for cutting most metals and plastics



Bimetal steel blade for a fast and accurate cut

Fast blade tensioning - 3 turns for 45kg tension 6 turns for 85kgs tension

SAW FRAMES

70-22TR

Code	Description	Length	Height	Packs per outer	Box Weight (Kg)
70-22TR	Hacksaw SF	400mm(16")	132mm(5.1")	5	3.6

70-20TR/20TND

Code	Description	Length	Height	Packs per outer	Box Weight (Kg)
70-20TR	Prof. Hacksaw	465mm(18 1/2")	130mm(5")	5	3.85
20TND*	Prof. Hacksaw	465mm(18 1/2")	130mm(5")	20	14.75

70-20TSF

Code	Description	Length	Height	Packs per outer	Box Weight (Kg)
70-20TSF	Professional SF	460mm(18 1/8")	127mm(5")	5	2.5



The new 22T has soft-feel handle, Epoxy coated moulded section steel frame and comes complete with an **ECLIPSE** +30 bimetal blade

The world famous, best selling hacksaw featuring a die cast handle, tubular frame complete with an **ECLIPSE** bimetal blade. The 20T has set the standard for all other makes - but the best is still the original 20T from **ECLIPSE**

The world famous, best selling hacksaw featuring a die cast handle, tubular frame complete with an **ECLIPSE** +30 bimetal blade, but with the added comfort of a soft-feel handle

* Hacksaws without Plus 30 blades are only available in selected non U.K. markets

18TND

Code	Description	Length	Height	Packs per outer	Box Weight (Kg)
18TND*	Hacksaw	443mm(17 1/2")	132mm(5 1/4")	10	4.4

16TND

Code	Description	Length	Height	Packs per outer	Box Weight (Kg)
16TND*	Hacksaw	430mm (16 1/4")	132mm(5 1/4")	10	4.4

40PG30/40PG

Code	Description	Length	Height	Packs per outer	Box Weight (Kg)
40PG30	Pistol Grip	485mm(19")	120mm(4 3/4")	5	3.50
40PG	Pistol Grip	485mm(19")	120mm(4 3/4")	5	3.50



Tremendous value for money without compromising on the strength and lightness synonymous with the **ECLIPSE** brand. Comes complete with an **ECLIPSE** bimetal blade

A lightweight, economical hacksaw with a strong, box section tubular steel frame and a comfortable and durable cast aluminium handle. In addition, the extra long location pin gives increased security of the tensioning bit. Comes complete with an **ECLIPSE** bimetal blade

A traditional pistol grip hacksaw with diecast handle, solid frame and an **ECLIPSE** bimetal blade
40PG30 Includes a Plus30 blade
40PG Includes a Standard blade

* Hacksaws without Plus 30 blades are only available in selected non U.K. markets

* Hacksaws without Plus 30 blades are only available in selected non U.K. markets

STATEMENT OF CONFORMITY

Hacksaw Frames - in general compliance with British Standard BS 7398 : 1991 - Specification for hand hacksaw frames.

SAW FRAMES

70-400R/400ND

Code	Description	Length	Height	Packs per outer	Box Weight (Kg)
70-400R	Handyman	400mm(15 ⁷ / ₁₆ "	130mm(5 ¹ / ₄ "	5	2.5
400ND*	Handyman	400mm(15 ⁷ / ₁₆ "	130mm(5 ¹ / ₄ "	20	9.20



A budget hacksaw with tubular steel frame and plastic handle supplied with an **ECLIPSE** flexible silicon steel blade

* Hacksaws without Plus 30 blades are only available in selected non U.K. markets

70-675R

Code	Description	Length	Height	Packs per outer	Box Weight (Kg)
70-675R	Mini Saw	250mm(10 ¹ / ₈ "	100mm(4 ¹ / ₈ "	5	1.00



A more substantial version of the Junior hacksaw with plastic moulded pistol grip handle, steel frame and **ECLIPSE** blade. Blade tensioning device incorporated in the handle

70-14JR

Code	Description	Length	Height	Packs per outer	Box Weight (Kg)
70-14JR	Junior	260mm(10 ¹ / ₈ "	67mm(2 ⁵ / ₁₆ "	5	0.70



The best selling Junior Hacksaw with an epoxy coated steel frame and **ECLIPSE** metal cutting blade

70-130R

Code	Description	Length	Height	Packs per outer	Box Weight (Kg)
70-130R	Pad Saw	276mm(10 ⁷ / ₁₆ "	-	5	1.40



Padsaw for sawing in confined places, e.g. when cutting out keyholes or letter boxes. Diecast handle supplied with 2 blades, one for wood cutting and one for metal. The handle can hold the blade in one of two positions for maximum flexibility in use



72-66XR

Code	Description	Length	Height	Packs per outer	Box Weight (Kg)
72-66XR	General Purpose	465mm(18 ³ / ₁₆ "	-	5	2.70



General purpose saw for cutting through wood, plastics and soft metals (such as nails). Polyester coated blade and diecast 9 position handle to enable cutting in difficult positions

70-CP1R

Code	Description	Length	Height	Packs per outer	Box Weight (Kg)
70-CP1R	Coping	315mm(12 ³ / ₁₆ "	130mm(5 ¹ / ₄ "	5	1.50



Coping saw for cutting and shaping in wood. Comfortable wooden handle and steel frame. Blades can be positioned at any angle to the frame

PS51

Code	Description	Length	Height	Packs per outer	Box Weight (Kg)
PS51	Piercing Saw	292mm(11 ¹ / ₂ "	95mm(3 ³ / ₄ "	5	0.90



Piercing saw for use in fine metal work such as jewellery and dentistry. Comfortable wooden handle and steel frame. Includes 32tpi blade

70-FS1R

Code	Description	Length	Height	Packs per outer	Box Weight (Kg)
70-FS1R	Fret	270mm(10 ⁵ / ₁₆ "	300mm(11 ⁷ / ₁₆ "	5	2.05



Fretsaw for fine cutting work in thin materials such as wood, bone, plastics, etc - ideal for model makers. Comfortable wooden handle and steel frame

70-CP1RSF - Soft feel handle

Code	Description	Length	Height	Packs per outer	Box Weight (Kg)
70-CP1RSF	Coping Saw SF	317mm(12 ³ / ₁₆ "	130mm(5 ¹ / ₄ "	5	1.50



Coping saw for cutting and shaping in wood, with a soft-feel handle for extra comfort and steel frame. Blades can be positioned at any angle to the frame



70-FS1RSF - Soft feel handle

Code	Description	Length	Height	Packs per outer	Box Weight (Kg)
70-FS1R	Fret	270mm(10 ⁵ / ₁₆ "	300mm(11 ⁷ / ₁₆ "	5	2.05



Fretsaw for fine cutting work in thin materials such as wood, bone, plastics, etc - ideal for model makers. Comfortable soft feel handle and steel frame

STATEMENT OF CONFORMITY

Hacksaw Frames - in general compliance with British Standard BS 7398 : 1991 - Specification for hand hacksaw frames.

SMALL SAW BLADES

Part No	Description	Length	Teeth per 25mm	No. of blades in pack	Pack Size	Box Weight (kg)
71-418R	Bimetal blades	300mm (12")	18	2	10	-
71-424R	Bimetal blades	300mm (12")	24	2	10	-
71-432R	Bimetal blades	300mm (12")	32	2	10	-
1 71-624R	Triple pack of Hacksaw Blades				10	0.9
	- Bimetal blades	300mm (12")	18	1	-	-
	- Bimetal blades	300mm (12")	24	1	-	-
	- Bimetal blades	300mm (12")	32	1	-	-
71-224R	Silicon blades	300mm (12")	24	5	10	-
2 71-132R	Junior blades	150mm (6")	32	10	10	-
71-114R	Junior-wood	150mm (6")	14	10	10	-
71-230R	Padsaw blades					
	- wood	254mm (10")	10	1	10	-
	- metal	203mm (8")	24	1	10	-
71-CP7R	Coping Saw blades	165mm (6½")	14	10	10	-
71-CP24R	Coping Saw blades	165mm (6½")	24	10	10	-
71-FS5R	Fretsaw blades	125mm (5")	18	10	10	-
73-66SR	GP saw spare blade	375mm (15¼")	10	1	10	-
FS32	Fretsaw Blades	125mm (5")	32	100	1	0.30
FS22	Fretsaw Blades	125mm (5")	22	100	1	0.30
FS18	Fretsaw Blades	125mm (5")	18	100	1	0.30
FS16	Fretsaw Blades	125mm (5")	16	100	1	0.30
PS80	Piercing Saw Blades	125mm (5")	80	100	1	0.20
PS60	Piercing Saw Blades	125mm (5")	60	100	1	0.20
PS52	Piercing Saw Blades	125mm (5")	52	100	1	0.20
PS44	Piercing Saw Blades	125mm (5")	44	100	1	0.20
PS32	Piercing Saw Blades	125mm (5")	32	100	1	0.20

Plus30 Blades - Tubes of 10

Part No mm	Blade Size inches	Blade Size per 25mm	Teeth dia. mm	PIN Size	Pack Weight (kg)	Pack Size
+30BM18TUBE	300 x 12.5 x 0.63	12 x ½ x 0.025	18	4	1.63	100
3 +30BM24TUBE	300 x 12.5 x 0.63	12 x ½ x 0.025	24	4	1.63	100
+30BM32TUBE	300 x 12.5 x 0.63	12 x ½ x 0.025	32	4	1.63	100

Teeth per inch guide

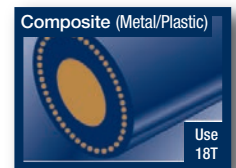
1



2



3



HOLESAWS

ECLIPSE bi-metal holesaws are constructed from hardened, heat and abrasive resisting M3 high speed steel teeth electron-beam welded to a tough alloy body and cap. This gives them exceptional strength, durability, shatter resistance and safety. Due to the superior and robust construction, the **Eclipse** holesaws have the capability of cutting through virtually any machineable material, including cast iron, stainless steel, brass, bronze, aluminium, plastics and wood. Available in variable 4/6 pitch teeth for all purpose application or constant 6 pitch teeth ideal for thin sheet metal application. Full range of sizes from 14mm - 152mm in vari pitch and up to 76mm in constant pitch.



- **A SHARPER, MORE ACCURATE CUT**
- **CUTS FASTER**
- **STAYS SHARPER FOR LONGER**

Available in boxed singles or 16mm - 105mm on Retail Hanging Tabs.



Recommended Cutting Speeds

Product Code BOXED	Product Code RETAIL	Diameter	Mild Steel	Tool & Stainless Steel	Cast Iron	Brass	Aluminium	Wood
EBV30-14		14mm (5/8")	550	330	400	790	900	3000
EBV30-16	EBV30-16-RET	16mm (5/8")	530	275	365	730	825	3000
EBV30-17	EBV30-17-RET	17mm (5/8")	500	250	330	665	750	3000
EBV30-19	EBV30-19-RET	19mm (3/4")	460	230	300	600	690	3000
EBV30-20	EBV30-20-RET	20mm (3/4")	460	230	300	600	690	3000
EBV30-21	EBV30-21-RET	21mm (3/4")	425	210	280	560	630	3000
EBV30-22	EBV30-22-RET	22mm (3/4")	390	195	260	520	585	3000
EBV30-24	EBV30-24-RET	24mm (3/4")	370	185	245	495	555	3000
EBV30-25	EBV30-25-RET	25mm (1")	350	175	235	470	525	2700
EBV30-27	EBV30-27-RET	27mm (1")	325	160	215	435	480	2700
EBV30-29	EBV30-29-RET	29mm (1 1/8")	300	150	200	400	450	2700
EBV30-30	EBV30-30-RET	30mm (1 1/8")	285	145	190	380	425	2400
EBV30-32	EBV30-32-RET	32mm (1 1/4")	275	140	180	360	410	2400
EBV30-33	EBV30-33-RET	33mm (1 1/4")	260	135	175	345	390	2400
EBV30-35	EBV30-35-RET	35mm (1 3/8")	250	125	165	330	375	2400
EBV30-37	EBV30-37-RET	37mm (1 3/8")	240	120	160	315	360	2400
EBV30-38	EBV30-38-RET	38mm (1 3/8")	230	115	150	300	345	2400
EBV30-40	EBV30-40-RET	40mm (1 5/8")	220	110	145	290	330	2100
EBV30-41	EBV30-41-RET	41mm (1 5/8")	210	105	140	280	315	2100
EBV30-43	EBV30-43-RET	43mm (1 7/8")	205	100	135	270	305	2100
EBV30-44	EBV30-44-RET	44mm (1 7/8")	195	95	130	260	295	2100
EBV30-46	EBV30-46-RET	46mm (1 7/8")	190	95	125	250	285	2100
EBV30-48	EBV30-48-RET	48mm (1 7/8")	180	90	120	240	270	2100
EBV30-51	EBV30-51-RET	51mm (2")	170	85	115	230	255	2000
EBV30-52	EBV30-52-RET	52mm (2")	165	80	110	220	245	2000
EBV30-54	EBV30-54-RET	54mm (2 1/8")	160	80	105	210	240	2000
EBV30-55	EBV30-55-RET	55mm (2 1/8")	150	75	100	200	230	2000
EBV30-57	EBV30-57-RET	57mm (2 1/4")	150	75	100	200	230	2000
EBV30-59	EBV30-59-RET	59mm (2 3/8")	145	75	100	195	225	2000
EBV30-60	EBV30-60-RET	60mm (2 3/8")	140	70	95	190	220	2000
EBV30-64	EBV30-64-RET	64mm (2 5/8")	135	70	90	180	205	1800
EBV30-65	EBV30-65-RET	65mm (2 5/8")	130	65	85	175	200	1800
EBV30-67	EBV30-67-RET	67mm (2 5/8")	130	65	85	170	195	1800
EBV30-68	EBV30-68-RET	68mm (2 5/8")	130	65	85	165	190	1800
EBV30-70	EBV30-70-RET	70mm (2 3/4")	125	60	80	160	185	1800
EBV30-73	EBV30-73-RET	73mm (2 3/4")	120	60	80	160	180	1800
EBV30-76	EBV30-76-RET	76mm (3")	115	55	75	150	170	1500
EBV30-79	EBV30-79-RET	79mm (3 1/8")	110	55	70	145	165	1500
EBV30-83	EBV30-83-RET	83mm (3 1/4")	105	50	70	140	155	1500
EBV30-86	EBV30-86-RET	86mm (3 3/8")	100	50	65	130	150	1200
EBV30-89	EBV30-89-RET	89mm (3 5/8")	95	45	65	125	145	1200
EBV30-92	EBV30-92-RET	92mm (3 5/8")	95	45	60	120	140	1200
EBV30-95	EBV30-95-RET	95mm (3 7/8")	90	45	60	120	135	1200
EBV30-98	EBV30-98-RET	98mm (3 7/8")	90	45	60	115	130	1200
EBV30-102	EBV30-102-RE	102mm (4")	85	40	55	115	125	1000
EBV30-105	EBV30-105-RE	105mm (4 1/8")	85	40	55	110	120	1000
EBV30-108		108mm (4 1/4")	80	40	55	110	115	900
EBV30-111		111mm (4 3/8")	80	40	50	100	110	900
EBV30-114		114mm (4 1/2")	75	35	50	100	105	900
EBV30-121		121mm (4 3/4")	70	35	45	90	95	900
EBV30-127		127mm (5")	65	30	40	85	90	900
EBV30-140		140mm (5 1/2")	60	30	35	80	85	800
EBV30-152		152mm (6")	55	25	35	75	80	800

VARI-PITCH - All purpose Holesaws 4/6 pitch teeth

Part No	Diameter	Part No	Diameter	Part No	Diameter
EBV30-14	14mm (5/8")	EBV30-16	16mm (5/8")	EBV30-17	17mm (5/8")
EBV30-19	19mm (3/4")	EBV30-20	20mm (3/4")	EBV30-21	21mm (3/4")
EBV30-22	22mm (3/4")	EBV30-24	24mm (3/4")	EBV30-25	25mm (1")
EBV30-27	27mm (1 1/8")	EBV30-29	29mm (1 1/8")	EBV30-30	30mm (1 1/8")
EBV30-32	32mm (1 1/4")	EBV30-33	33mm (1 1/4")	EBV30-35	35mm (1 3/8")
EBV30-37	37mm (1 3/8")	EBV30-38	38mm (1 3/8")	EBV30-40	40mm (1 5/8")
EBV30-41	41mm (1 5/8")	EBV30-43	43mm (1 7/8")	EBV30-44	44mm (1 7/8")
EBV30-46	46mm (1 7/8")	EBV30-48	48mm (1 7/8")	EBV30-51	51mm (2")
EBV30-52	52mm (2")	EBV30-54	54mm (2 1/8")	EBV30-55	55mm (2 1/8")
EBV30-57	57mm (2 1/4")	EBV30-59	59mm (2 3/8")	EBV30-60	60mm (2 3/8")
EBV30-64	64mm (2 5/8")	EBV30-65	65mm (2 5/8")	EBV30-67	67mm (2 5/8")
EBV30-68	68mm (2 5/8")	EBV30-70	70mm (2 3/4")	EBV30-73	73mm (2 3/4")
EBV30-76	76mm (3")	EBV30-79	79mm (3 1/8")	EBV30-83	83mm (3 1/4")
EBV30-86	86mm (3 3/8")	EBV30-89	89mm (3 5/8")	EBV30-92	92mm (3 5/8")
EBV30-95	95mm (3 7/8")	EBV30-98	98mm (3 7/8")	EBV30-102	102mm (4")
EBV30-105	105mm (4 1/8")	EBV30-108	108mm (4 1/4")	EBV30-111	111mm (4 3/8")
EBV30-114	114mm (4 1/2")	EBV30-121	121mm (4 3/4")	EBV30-127	127mm (5")
EBV30-140	140mm (5 1/2")	EBV30-152	152mm (6")		

CONSTANT PITCH - Thin sheet metal Holesaws constant pitch teeth

Part No	Diameter	Part No	Diameter	Part No	Diameter
EBC-16	16mm (5/8")	EBC-27	27mm (1 1/8")	EBC-60	60mm (2 3/8")
EBC-19	19mm (3/4")	EBC-32	32mm (1 1/4")	EBC-64	64mm (2 5/8")
EBC-20	20mm (3/4")	EBC-35	35mm (1 3/8")	EBC-76	76mm (3")
EBC-22	22mm (3/4")	EBC-38	38mm (1 3/8")		
EBC-25	25mm (1")	EBC-51	51mm (2")		

All packed in single units.



Holesaw Kits on page 11

HOLESAW KITS

HOLESAW KITS

Part No	Diameter	ELECTRICIANS KIT EE30-K	GENERAL PURPOSE KIT EGP30-K	ELECTRICIANS & PLUMBERS KIT EEP30-K
HOLESAWS				
EBV30-16	16mm (5/8")	*	-	-
EBV30-20	20mm (3/4")	*	-	*
EBV30-22	22mm (7/8")	-	*	*
EBV30-25	25mm (1")	*	-	-
EBV30-29	29mm (1 1/4")	-	*	*
EBV30-32	32mm (1 1/2")	*	-	-
EBV30-35	35mm (1 3/8")	-	*	*
EBV30-38	38mm (1 1/2")	*	-	*
EBV30-44	44mm (1 3/4")	-	*	*
EBV30-51	51mm (2")	*	*	*
EBV30-57	57mm (2 1/4")	-	-	*
EBV30-64	64mm (2 1/2")	-	*	*

ARBORS

Part No	Size	ELECTRICIANS KIT EE30-K	GENERAL PURPOSE KIT EGP30-K	ELECTRICIANS & PLUMBERS KIT EEP30-K
E4	14-30mm	*	*	*
E2	32-152mm	*	*	*
E11	14-30mm	-	-	*
HEXKEY4	4mm Hex Key	-	-	*

EXTENSION BAR

Part No	Size	ELECTRICIANS KIT EE30-K	GENERAL PURPOSE KIT EGP30-K	ELECTRICIANS & PLUMBERS KIT EEP30-K
EE12	300mm (12")	-	-	*

* Kits packed in single units

ARBORS



EE30-K



EGP30-K



EEP30-K

ACCESSORIES

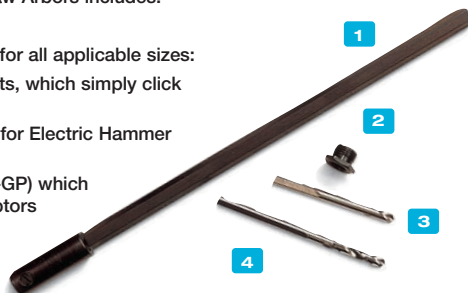
Part No	Description	Size	Pack Size
1 EE12	Arbor Extension	300mm (12")	1
2 EN1	Arbor Adaptor	-	10
3 ED1	Pilot Drill	70mm (2 3/4")	10
4 ED2	Pilot Drill	114mm (4 1/2")	10

Drive plates are available for use with other holesaws which may not feature 'solid cap' construction, to improve stability in use.

Also available: Arbor extension rod and adaptor to reduce screw thread size and spare pilot drills.

The range of Eclipse Holesaw Arbors includes:

- Standard arbors suitable for all applicable sizes:
- Quick release (QR) variants, which simply click the pins into place.
- SDS plus arbors suitable for Electric Hammer drills.
- A general purpose set (E-GP) which includes a variety of adaptors to fit all sizes.



ARBOR SELECTION GUIDE

Arbor	Holesaw Diameter	Screw Thread	Shank Type	Drill Chuck
5 E4	14mm-30mm (5/8"-1 3/8")	1/2"-20	6mm (1/4") Round	6mm (1/4")
6 E1	14mm-30mm (5/8"-1 3/8")	1/2"-20	10mm (3/8") HEX	10mm (3/8")
7 E11	14mm-30mm (5/8"-1 3/8")	1/2"-20	11mm (7/16") HEX	13mm (1/2")
8 E6	32mm-152mm (1 1/4"-6")	5/8"-18	11mm (7/16") HEX	13mm (1/2")
9 E2	32mm-152mm (1 1/4"-6")	5/8"-18	11mm (7/16") HEX	13mm (1/2")
10 E2QR	32mm-152mm (1 1/4"-6")	5/8"-18	11mm (7/16") HEX	13mm (1/2")
11 E-GP	14mm-152mm (5/8"-6")	1/2"-20	11mm (7/16") HEX	13mm (1/2")



STATEMENT OF CONFORMITY

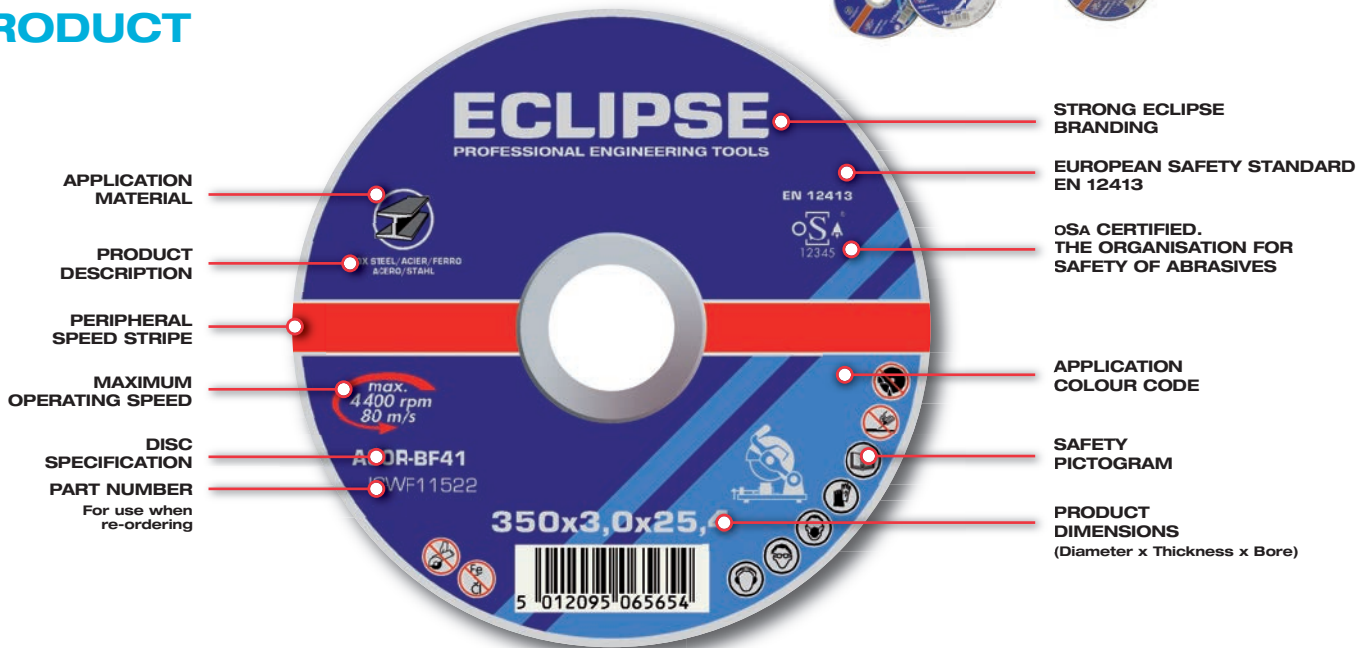
Holesaw Arbors - in general compliance with British Standard BS 8416 : 2002 - Specification for holesaws.

CUTTING & GRINDING WHEELS

The **ECLIPSE** range of cutting and grinding wheels for portable and fixed machines provide superior performance in the most strict working environment. The product range includes solutions for cutting-off, grinding, and surface finishing operations on materials related to all industrial markets.



UNDERSTANDING THE PRODUCT



SAFETY PICTOGRAM



WEAR GLOVES



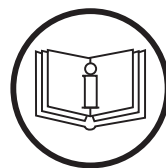
WEAR EAR PROTECTION



WEAR EYE PROTECTION



WEAR A DUST MASK



READ THE INSTRUCTION



NOT PERMITTED FOR FACE GRINDING, CUTTING ONLY



DO NOT USE A DAMAGED WHEEL

USER SAFETY

■ Diamond tools and bonded abrasives must rotate at high speeds for efficient operation. The risk of product failure is increased with low quality products not designed and manufactured to conform to the respective standards and regulations in place. Such non conforming products may not withstand mechanical loads and heat generated during use.

Standards for diamond tools

■ EN13236:-

In January 2001 the European standard EN13236 was introduced to govern the safety requirements for super abrasive (diamond) products. Eclipse diamond discs conform to EN13236.

Standards for thin wheel bonded abrasives (cutting & grinding discs)

■ EN12413:-

This standard highlights that these types of cutting and grinding discs have a use by date. This "use by" date is permanently marked into the central rim of every Eclipse disc.

oSa:-

In the year 2000 the oSa (Organisation for Safety of Abrasives) was founded to raise standards to a higher level. All members of the oSa have to adhere to strict manufacturing, safety and quality standards that comply with the requirements of EN13236 and EN12413 and are regularly audited to ensure conformity. The oSa symbol on an abrasive or diamond disc product is a further guarantee to the user of product safety and quality.

All Eclipse discs carry the oSa symbol.

CUTTING & GRINDING WHEELS

Abrasive Discs for Cutting & Grinding

High performance range of cutting and grinding discs for steel and ferrous metals

Flat Cutting

Description	Part Ref	Dia. Inch	Dia. Metric	Thick-ness	Bore	Box Quantity
Flat *Petrol Hand Held	CSMP30020*	12	300	3.5	20	10

Cutting - Chopsaws

Description	Part Ref	Dia. Inch	Dia. Metric	Thick-ness	Bore	Box Quantity
Cutting	CSMC30025	12	300	2.6	25.4	10

Abrasive Discs for Stainless Steel

Abrasive discs for cutting and grinding stainless steel

High performance range of cutting and grinding discs suitable for contamination free cutting and grinding of stainless steels

Flat Cutting

Description	Part Ref	Dia. Inch	Dia. Metric	Thick-ness	Bore	Box Quantity
Flat	ICWF11522	4.5	115	2.5	22.2	25
Flat	ICWF18022	7	180	2.5	22.2	25
Flat	ICWF23022	9	230	2.5	22.2	25
Flat	CSIC35025	14	350	3	25.4	25

Super Thin Wheels - Flat Cutting

Description	Part Ref	Dia. Inch	Dia. Metric	Thick-ness	Bore	Box Quantity
Flat	ICWF115122	4.5	115	1	22.2	25
Flat	ICWF2301.922	9	230	1.9	22.2	25

Depressed Centre - Cutting

Description	Part Ref	Dia. Inch	Dia. Metric	Thick-ness	Bore	Box Quantity
Depressed Centre	ICWD11522	4.5	115	6	22.2	10
Depressed Centre	ICWD18022	7	180	6	22.2	10
Depressed Centre	ICWD23022	9	230	6	22.2	10

Depressed Centre - Grinding

Description	Part Ref	Dia. Inch	Dia. Metric	Thick-ness	Bore	Box Quantity
Depressed Centre	IGWD11522	4.5	115	6	22.2	10
Depressed Centre	IGWD18022	7	180	6	22.2	10
Depressed Centre	IGWD23022	9	230	6	22.2	10

Flap Discs

Conical fibreglass backed flap discs suitable for surface grinding, cleaning and de-burring of cast iron, steel and stainless steel

Zirconia - Stainless Steel Grinding

Description	Part Ref	Dia. Inch	Dia. Metric	Grit	Bore	Box Quantity
Flap	IGFC1152240	4.5	115	40	22.2	10
Flap	IGFC1152260	4.5	115	60	22.2	10
Flap	IGFC1152280	4.5	115	80	22.2	10

Dry Diamond Wheels

Comprehensive range of general purpose dry diamond blades with high diamond content sintered segments

Diamond Wheel - General Purpose/Dry Stone Cutting

Description	Part Ref	Dia. Inch	Dia. Metric	Bore	Box Quantity
Flat	DW11522	4.5	115	22.2	1
Flat	DW18022	7	180	22.2	1
Flat	DW23022	9	230	22.2	1
Flat	DW30020	12	300	20	1
Flat	DW35025	14	350	25.4	1

Diamond Wheel - Continuous Rim (for cutting tiles including ceramic tiles)

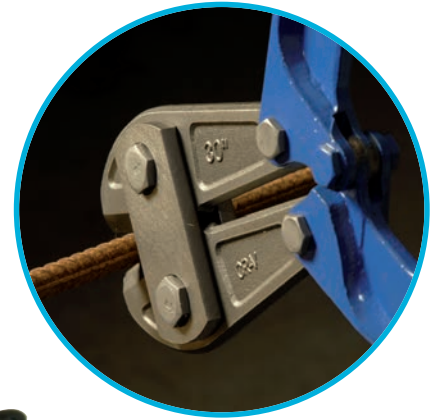
Description	Part Ref	Dia. Inch	Dia. Metric	Bore	Box Quantity
Flat	DWC11522	4.5	115	22.2	1
Flat	DWC18022	7	180	22.2	1
Flat	DWC23022	9	230	22.2	1



BOLT CUTTERS

Bolt Cutters - High Tensile, Tubular Handles

Part No	Total Length	Max. Cutting Capacity	Pack Qty
ETBC14	14" (355mm)	3/16" / 5.0mm	20
ETBC18	18" (460mm)	1/4" / 6.4mm	10
ETBC24	24" (610mm)	5/16" / 7.9mm	8
ETBC30	30" (762mm)	3/8" / 9.5mm	5
ETBC36	36" (915mm)	7/16" / 11.1mm	4



High tensile - for cutting hard materials up to 50HRC. Centre cut, strap adjusted bolt cutters with lightweight tubular handles that do not compromise strength - every pound of force applied is amplified to produce 80lbs (36kg) of force between the jaws. To maximise safety the built in stops will yield rather than break, whilst the drop forged jaws are machined to precise specifications for a resilient body and rigid cutting edge

Part No

- ETBC14-RH2
- ETBC18-RH2
- ETBC24-RH2
- ETBC30-RH2
- ETBC36-RH2

Spares For Boltcutters - Tubular Handles

- Replacement Jaws & Strap Set 14" (355mm)
- Replacement Jaws & Strap Set 18" (460mm)
- Replacement Jaws & Strap Set 24" (610mm)
- Replacement Jaws & Strap Set 30" (762mm)
- Replacement Jaws & Strap Set 36" (915mm)

Bolt Cutters - High Tensile, Forged Handles

Part No	Total Length	Max. Cutting Capacity	Pack Qty
EFBC14	14" (355mm)	3/16" / 5.0mm	12
EFBC18	18" (460mm)	1/4" / 6.4mm	12
EFBC24	24" (610mm)	5/16" / 7.9mm	12
EFBC30	30" (762mm)	3/8" / 9.5mm	2
EFBC36	36" (915mm)	7/16" / 11.1mm	6
EFBC42	42" (1070mm)	1/2" / 13mm	4



High tensile - for cutting hard materials up to 50HRC. Centre cut, arm adjusted bolt cutters with solid forged handles for maximum strength - every pound of force applied is amplified to produce 80lbs (36kg) of force between the jaws. To maximise safety the built in stops will yield rather than break, whilst the drop forged jaws are machined to precise specifications for a resilient body and rigid cutting edge

Part No

- EFBC14-RH
- EFBC18-RH
- EFBC24-RH
- EFBC30-RH
- EFBC36-RH
- EFBC42-RH

Spares For Boltcutters - Forged Handles

- Replacement Head - 14" (355mm)
- Replacement Head - 18" (460mm)
- Replacement Head - 24" (610mm)
- Replacement Head - 30" (762mm)
- Replacement Head - 36" (915mm)
- Replacement Head - 42" (1070mm)

END CUT BOLT, CABLE & WIRE CUTTERS

End Cut Bolt Cutter - 24"/600mm

Part No	Total Length	Max. Cutting Capacity	Pack Qty
EBC-EC24	24" (600mm)	5/16" / 7.9mm	1



Pincer movement makes the bolt cutter ideal for cutting in restricted areas or where a side cut is difficult, eg when cutting off bolt heads. Jaws are drop forged and machined to precise specifications for a resilient body and rigid cutting edge. Handles are solid forged and incorporate safety stops that will yield rather than break

Cable Cutters - 24"/600mm

Part No	Total Length	Max. Cutting Capacity	Pack Qty
ECC16	24" (600mm)	16mm wire rope, and up to 21mm armoured cable	1



For cutting 16mm wire rope and up to 21mm armoured cable. The lightweight tubular steel handles reduce user fatigue during prolonged use, whilst the rubber hand grips reduce the risk of slippage. The jaws have hardened cutting edges for easy cutting

Wire & Rope Cutter - 8"/200mm

Part No	Total Length	Pack Qty
EWC8	8" (200mm)	6

Material	Recommended Capacity
Mild steel strand	6.5mm
High tensile steel rope (180kg/mm ²)	5.0mm
Soft steel wire (34kg/mm ²)	5.0mm
Copper aluminium rod	5.0mm
Steel rod (66kg/mm ²)	4.0mm
Spring wire (hardened & tempered) (180kg/mm ²)	2.5mm
Electric cable (not armoured)	6.5mm



Suitable for a multitude of agricultural, garden, automotive and marine cutting tasks. Angled and hardened blades ensure a clean cut, whilst the spring loaded head gives a fast, smooth cutting action. Includes non-slip rubber handles

GENERAL PURPOSE, JEWELLERS' & AVIATION SNIPS

General Purpose Snips

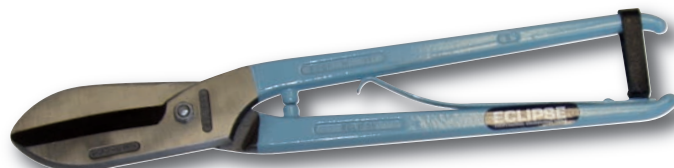


For cutting sheet metal. The precision hollow ground blades reduce friction for an easy cutting action and, since they are also induction hardened and tempered, they can be easily re-sharpened. The spring loaded nut allows for easy adjustment to increase the working life, whilst the high quality steel drop forged handles offer maximum strength

Part No	Total Length	Cutting Capacity (mild steel up to 18g)	Cutting Capacity (stainless steel up to 23g)	Pack Qty
ESGP-8	8" (200mm)	0.8mm	0.46mm	6
ESGP-10	10" (250mm)	1.0mm	0.46mm	6
ESGP-12	12" (300mm)	1.2mm	0.46mm	6
ESGP-14	14" (355mm)	1.4mm*	1.2mm**	6

* up to 16g ** up to 18g

General Purpose Snips with Spring



For cutting sheet metal. Spring handle for ease of use during repetitive cutting. The precision hollow ground blades reduce friction for an easy cutting action and, since they are also induction hardened and tempered, they can be easily re-sharpened. The leather strap ensures safe storage

Part No	Total Length	Cutting Capacity (mild steel up to 18g)	Cutting Capacity (stainless steel up to 23g)	Pack Qty
ESGPS-8	8" (200mm)	0.8mm	0.46mm	6
ESGPS-10	10" (250mm)	1.0mm	0.46mm	6
ESGPS-12	12" (300mm)	1.2mm	0.46mm	6
ESGPS-14	14" (355mm)	1.4mm*	1.2mm**	6

* up to 16g ** up to 18g

Jewellers' Snips



For cutting copper, silver and gold. The precision hollow ground blades reduce friction for an easy cutting action and, since they are also induction hardened and tempered, they can be easily re-sharpened. Integrated stops prevent trapped fingers without compromising the jaw capacity

Part No	Size	Cutting Capacity (mild steel up to 18g)	Cutting Capacity (stainless steel up to 23g)	Pack Qty
ESJ-7S	7" / 180mm (straight blade)	0.8mm	0.46mm	10
ESJ-7C	7" / 180mm (curved blade)	0.8mm	0.46mm	10



Aviation Snips



Cuts up to 1.2mm cold rolled steel and 0.7mm stainless steel. Drop forged alloy steel blades give a longer cutting life, whilst the spring loaded handles ensure a fast, smooth cutting action

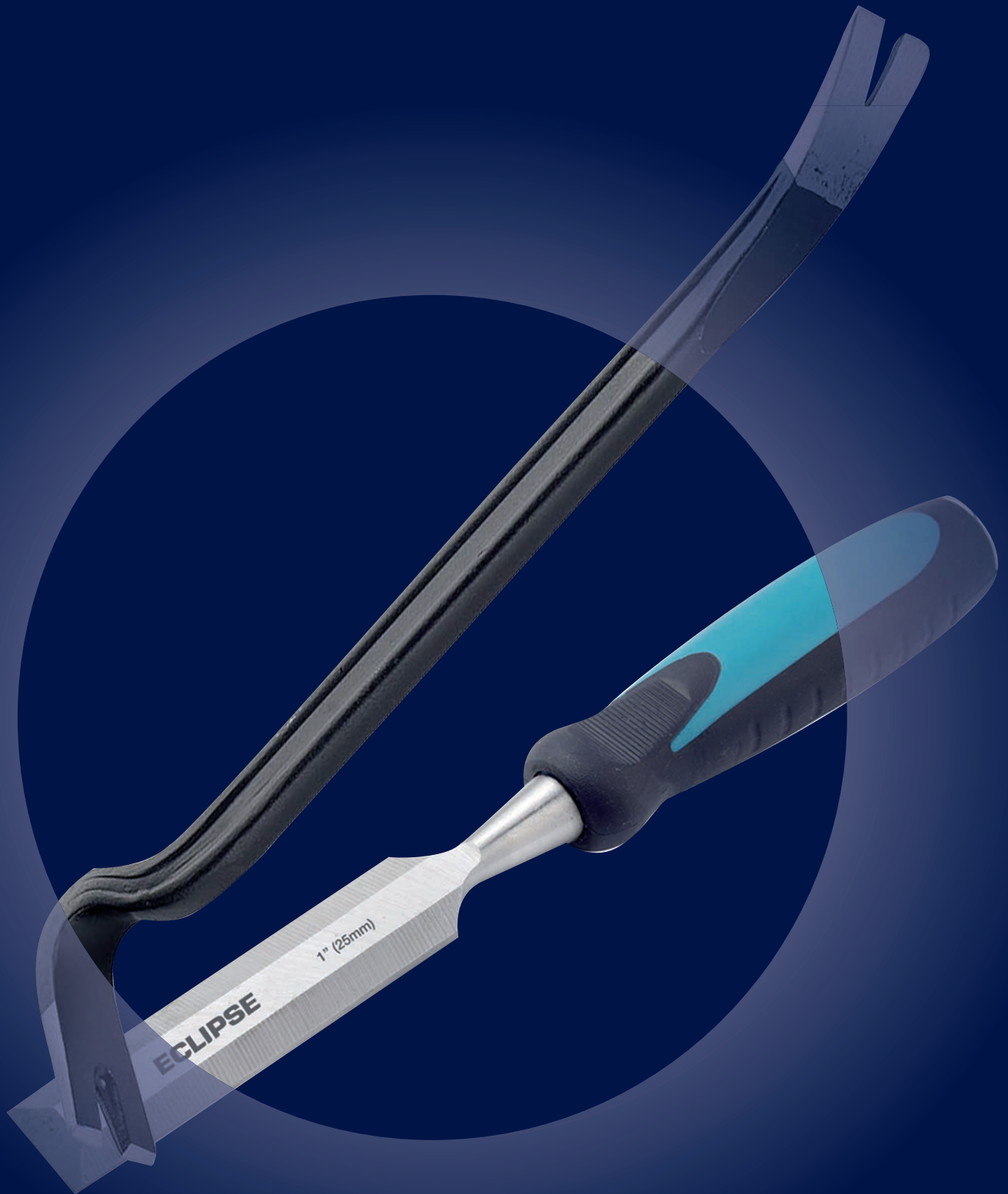
PACKAGING

- Half sized transparent case allows the user to handle the snips and test the cutting action
- Small packaging size minimizes space wastage and the security tie limits the risk of theft
- Durability of the case prevents damage to the blades and provides an ideal storage facility for the snips



Part No	Description	Cutting Capacity (cold rolled steel)	Cutting Capacity (stainless steel)	Pack Qty
EAS-S	Straight and Wide Curves	1.22mm	0.7mm	6
EAS-R	Right and Straight Cut	1.22mm	0.7mm	6
EAS-L	Left and Straight Cut	1.22mm	0.7mm	6
EAS-SL	Long Cut / Straight Cut & Wide Curves	1.22mm	0.7mm	6

**COLD CHISELS
WRECKING BARS
WOOD CHISELS**



COLD CHISELS

Cold chisels and bolsters upgraded to chrome vanadium. This is both better quality and harder wearing, so needs re-sharpening less often, and is also even more resistant to mushrooming after prolonged use (Selected lines are available with hand guards in our Spear & Jackson range)

Flat Chisels

For general cutting and chipping of metals, and for shaping, facing and cutting of stonework



Part No	Length	Blade Width	Octagon Dia.	Pack Qty
CB24A	100mm (4")	6.35mm (1/4")	6.35mm (1/4")	10
CB28G	150mm (6")	6.35mm (1/4")	6.35mm (1/4")	10
CB46T	125mm (5")	9.5mm (3/8")	9.5mm (3/8")	10
CB48E	150mm (6")	9.5mm (3/8")	9.5mm (3/8")	10
CB68V	150mm (6")	12.7mm (1/2")	12.7mm (1/2")	10
CB70H	205mm (8")	12.7mm (1/2")	12.7mm (1/2")	10
CB72F	250mm (10")	12.7mm (1/2")	12.7mm (1/2")	10
CB73N	300mm (12")	12.7mm (1/2")	12.7mm (1/2")	10
CB88R	150mm (6")	15.9mm (5/8")	12.7mm (1/2")	10
CB89H	180mm (7")	15.9mm (5/8")	12.7mm (1/2")	10
CB90M	205mm (8")	15.9mm (5/8")	12.7mm (1/2")	10
CB92N	250mm (10")	15.9mm (5/8")	12.7mm (1/2")	10
CB108D	150mm (6")	19mm (3/4")	15.9mm (5/8")	10
CB110T	205mm (8")	19mm (3/4")	15.9mm (5/8")	10
CB111G	230mm (9")	19mm (3/4")	15.9mm (5/8")	10
CB112E	250mm (10")	19mm (3/4")	15.9mm (5/8")	10
CB113V	300mm (12")	19mm (3/4")	15.9mm (5/8")	10
CB116M	450mm (18")	19mm (3/4")	15.9mm (5/8")	5
CB150E	205mm (8")	25.4mm (1")	22.2mm (7/8")	5
CB151V	230mm (9")	25.4mm (1")	22.2mm (7/8")	5
CB152R	250mm (10")	25.4mm (1")	22.2mm (7/8")	5
CB153H	300mm (12")	25.4mm (1")	22.2mm (7/8")	5
CB156N	450mm (18")	25.4mm (1")	22.2mm (7/8")	5

Crosscut Chisels

For cutting slots in keyways



Part No	Length	Blade Width	Octagon Dia.	Pack Qty
CB534A	150mm (6")	6.35mm (1/4")	12.7mm (1/2")	10

Plugging Chisel

For cutting out mortar from between bricks



Part No	Length	Blade Width	Octagon Dia.	Pack Qty
CB827V	250mm (10")	6.35mm (1/4")	15.9mm (5/8")	5

Brick Bolsters

For cutting bricks



Part No	Length	Blade Width	Octagon Dia.	Pack Qty
CB730K	230mm (9")	75mm (3")	19mm (3/4")	5
CB740K	230mm (9")	100mm (4")	25mm (1")	5
100V with rubber grip	230mm (9")	100mm (4")	25mm (1")	5

Concrete Point Chisels

For breaking up concrete



Part No	Length	Blade Width	Octagon Dia.	Pack Qty
CB292R	250mm (10")	4mm (5/32")	15.9mm (5/8")	10
CB313P	300mm (12")	4.8mm (3/16")	19mm (3/4")	10
CB353G	300mm (12")	6.35mm (1/4")	25mm (1")	5

Floorboard Chisel

For cutting floorboard tongues before lifting



Part No	Length	Blade Width	Octagon Dia.	Pack Qty
CB770K	230mm (9")	56mm (2 1/4")	17.5mm (2/3")	5

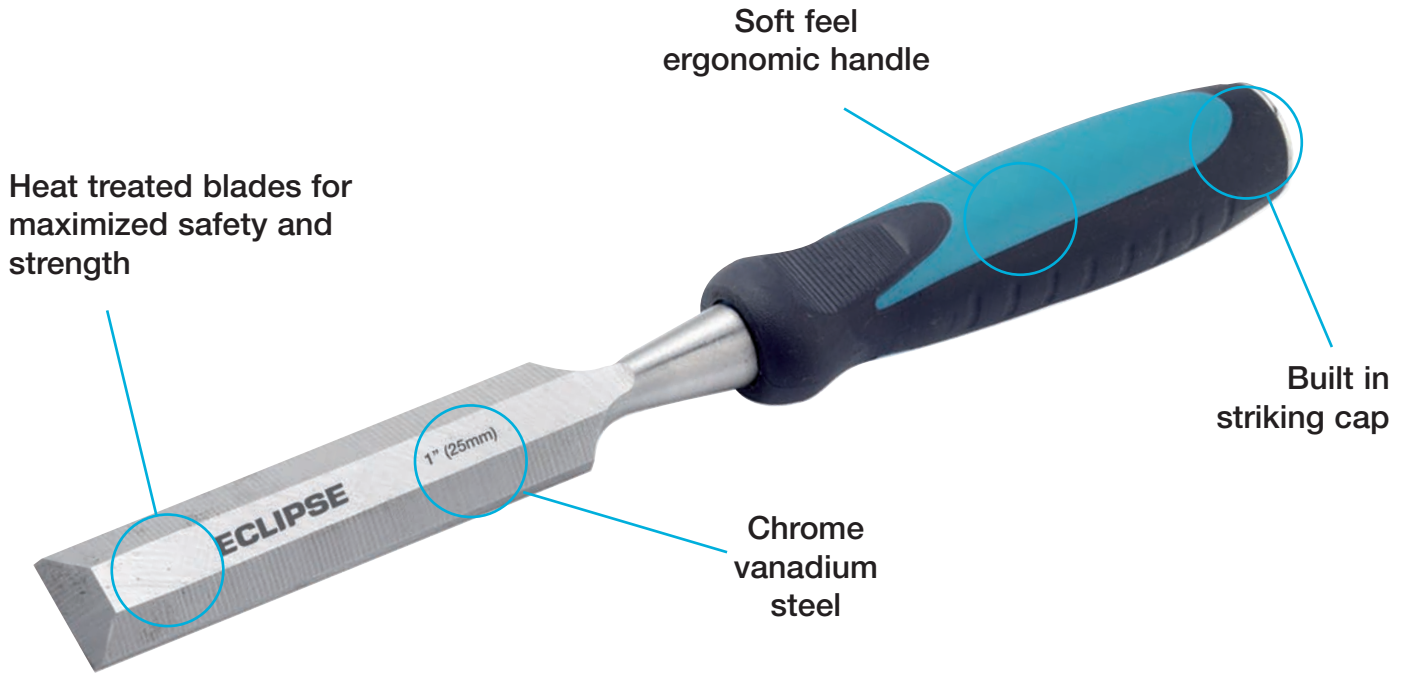
WRECKING BARS

Made from heat treated, solid forged steel for maximum strength. 30" and 36" are for demolishing large timber structures and dismantling concrete and metal constructions. 18" and 24" size are ideal for demolishing plasterboard, dismantling timber frames and pulling up floorboards. The light duty 14" is designed to pull large nails and prise or dismantle tough objects

Part No	Size	Pack Qty
RIPPA14	350mm (14")	1
RIPPA18	450mm (18")	1
RIPPA24	600mm (24")	1
RIPPA30	750mm (30")	1
RIPPA36	900mm (36")	1
RIPPA3PS	Boxed set contains: 14" 24" 36" Wrecking bars	1



WOOD CHISELS



Wood Chisels

Part No	Length	Pack Qty
BEWC3/8E	3/8" (9mm) Bevel Edge	5
BEWC1/4E	1/4" (6mm) Bevel Edge	5
BEWC5/8E	5/8" (15mm) Bevel Edge	5
BEWC3/4E	3/4" (19mm) Bevel Edge	5
BEWC1/2E	1/2" (12mm) Bevel Edge	5
BEWC1E	1" (25mm) Bevel Edge	5
BEWC11/4E	1.1/4" (32mm) Bevel Edge	5
BEWC11/2E	1.1/2" (38mm) Bevel Edge	5
BEWC2E	2" (50mm) Bevel Edge	5
BEWC3BCE	3pc Set: 1/2", 3/4", 1" - blister packed	5
BEWC4BCE	4pc Set: 1/4", 1/2", 3/4", 1" - blister packed	5
BEWC6BCE	6pc Set: 1/4", 3/8", 1/2", 3/4", 1", 1.1/4" - blister packed	5
BEWC3PSE	3pc Set: 1/2", 3/4", 1" - wallet	5
BEWC6PSE	6pc Set: 1/4", 3/8", 1/2", 3/4", 1", 1.1/4" - boxed	5



Blister Packs



Wallet

Box



LOCKING PLIERS
LOCKING C-CLAMPS



A range of top quality locking pliers and locking C-Clamps for the professional user

Heat treated, wear resistant serrated and hardened jaws provide a firm grip from any angle

Screw adjusts to fit the work piece and exerts a pressure that is maintained even after repetitive use

Guarded release trigger protects against accidental release whilst also enabling the tool to be quickly unlocked when required



Body and jaws on all locking pliers made from high grade chrome molybdenum steel to withstand heavy duty working conditions, such as welding and hammer strikes

Retail Packaging



Locking Pliers - Typical Applications

Part No.	HVAC	Welding	Plumbing	Automotive	Electrical	Woodworking
E7R E10R	Clamping, crimping	Clamping flat, square & hex surfaces	Non slip pipe wrench, portable vice, twisting wire	Clamping, removing bolts	Portable vice, twisting wire	Portable vice, pulling out nails
E10CR	Clamping, crimping	Clamping round surfaces	Non slip pipe wrench, portable vice, twisting wire	Clamping, removing bolts	Portable vice, screwdriver lever	Portable vice, pulling out nails
E5WR E7WR E10WR	Clamping, crimping, wire cutting	Clamping round surfaces	Non slip pipe wrench, portable vice, cutting & twisting wire	Clamping, removing bolts	Portable vice, screwdriver lever, cutting & twisting wire	Portable vice, pulling out nails, cutting wire
E6LN	Clamping, crimping, wire cutting	Clamping in difficult-to-reach spaces	Repairing faucets	Removing brake springs & clips, general clamping	Bending & cutting wire	Pulling nails & staples
E6SP E11SP	Clamping welding supports	Clamping welding supports	Temporary pipe hanger	Sheet metal repair work	-	Clamping long reach, delicate woodworking work pieces
E6R E11R	Clamping welding supports	Clamping welding supports	Temporary pipe hanger	Sheet metal repair work	-	Clamping long reach woodworking work pieces
ERR	Isolating a piece of equipment by pinching off copper tubing	-	-	-	-	-
E8R	-	Holding sheet metal during bending, forming & crimping	-	-	-	-
E9R	-	Accurately aligning round & square shaped tubing	-	-	-	-
E20R	Removing components, holding awkward shapes	Removing components, holding awkward shapes	Holding awkward shapes	Removing components, holding awkward shapes	-	-

LOCKING JAW PLIERS & LOCKING C-CLAMPS

STRAIGHT JAW

Part No.	Size	Maximum Jaw Capacity	Box Qty
E7R	175mm (7")	34mm (1 3/8")	5
E10R	250mm (10")	45mm (1 3/4")	5



Straight jaws are ideal for use with flat, square and hex workpieces



CURVED JAW

Part No.	Size	Maximum Jaw Capacity	Box Qty
E10CR	250mm (10")	45mm (1 3/4")	5



Designed for gripping and clamping round surfaces

CURVED JAW with wire cutter

Part No.	Size	Maximum Jaw Capacity	Box Qty
E5WR	125mm (5")	32mm (1 1/4")	5
E7WR	175mm (7")	34mm (1 1/2")	5
E10WR	250mm (10")	34mm (1 1/4")	5



Designed for gripping and clamping round surfaces. Incorporates a wire cutter



LONG NOSE with wire cutter

Part No.	Size	Maximum Jaw Capacity	Box Qty
E6LN	150mm (6")	51mm (2")	5



Particularly suited for clamping and tightening bolts in confined spaces. Also ideal for precision work. Incorporates a wire cutter



LOCKING C-CLAMPS with regular tips

Part No.	Size	Maximum Jaw Capacity	Box Qty
E6R	150mm (6")	44mm (1 3/4")	5
E11R	275mm (11")	80mm (3 1/4")	5



The wide opening jaws are designed to reach around and grip awkward shapes. Provide a deep reach

LOCKING C-CLAMPS with swivel pads

Part No.	Size	Maximum Jaw Capacity	Box Qty
E6SP	150mm (6")	44mm (1 3/4")	5
E11SP	275mm (11")	80mm (3 1/4")	5



The wide opening jaws are designed to reach around and grip awkward shapes whilst the swivel pad protect delicate workpieces from damage. Provide a deep reach



LOCKING JAW PLIERS & LOCKING C-CLAMPS

LOCKING PINCH OFF PLIERS

Part No.	Size	Maximum Jaw Capacity	Box Qty
ERR	175mm (7")	6mm (1/4")	5



Provides a temporary, hands free seal on tubing

LOCKING SHEET METAL TOOL

Part No.	Maximum Jaw Capacity	Box Qty
E8R	78mm (3 1/4")	6



Grips and locks on to sheet metal when bending, forming, and crimping

LOCKING WELDING CLAMP

Part No.	Maximum Jaw Capacity	Box Qty
E9R	44mm (1 3/4")	6



U-shaped jaws accurately align round and square shaped tubing when welding

LOCKING CHAIN CLAMP

Part No.	Chain Size	Box Qty
E20R	455mm (18")	5



Grips and holds awkward shapes up to 18"/455mm in diameter. Ideal for working with pipes in confined spaces, eg. up against a wall



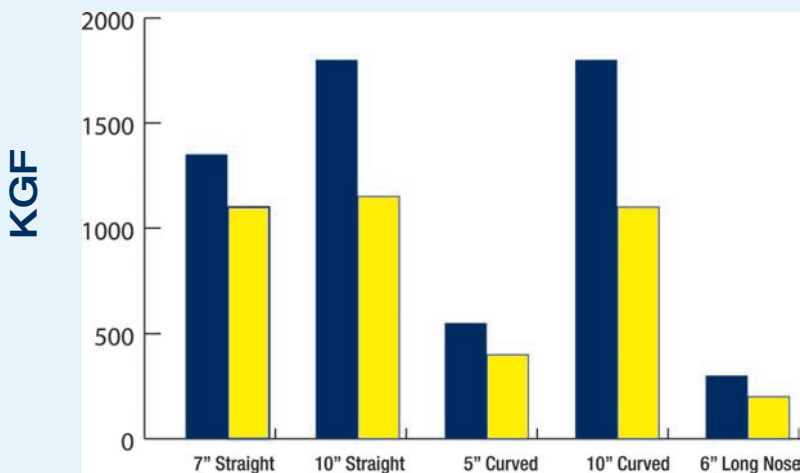
Rockwell Hardness Testing



Torsion Testing

LOAD TEST RESULTS

ECLIPSE
ASME Specification
The American Society of Mechanical Engineers



Tensile Compress Testing



ECLIPSE PLIERS SPECIAL PURPOSE PLIERS



Pliers cutting key

Symbol	Type of Wire	Example	Tensile strength ca. N/mm ²
	Soft wire	Copper, Aluminium	220 - 250
	Medium hard wire	Iron wire	750 - 800
	Hard wire	Steel wire	1700 - 1800
	Piano wire	Hardened spring steel	2200 - 2300

ECLIPSE PLIERS

Engineers' Pliers

Part No	Size	Soft	Med Hard	Hard	Piano	Pack Qty
PW21696/11	160mm (6")	4.0	2.8	1.8	1.4	5
PW21697/11	180mm (7")	4.0	3.0	2.0	1.6	5
PW21698/11	200mm (8")	4.0	3.0	2.0	1.6	5
PW216910/11	250mm (10")	6.0	4.0	2.8	2.4	5



Multi-purpose pliers for cutting, gripping and twisting. Induction hardened cutting edges for cutting medium hard wire. Pipe grip for gripping pipes, rods and other components. Serrated jaw for gripping nuts, bolts, studs and similar objects. Joint cutter for cleanly cropping soft wire. Ergonomic soft feel handles

Long Nose Pliers

Part No	Size	Soft	Med Hard	Hard	Piano	Pack Qty
PW5835/11	140mm (5½")	3.0	2.5	1.6	1.2	5
PW5836/11	160mm (6")	4.0	2.8	1.8	1.4	5
PW10638/11	200mm (8")	4.0	3.0	2.0	1.6	5



Long tapering jaws for gripping in confined spaces and side cutter for cutting medium hard wire. Fine jaw ends for gripping and manoeuvring small objects. Serrated jaws for extra grip. Induction hardened cutting edges for cutting medium hard wire. Ergonomic soft feel handles

Snipe Nose Pliers

Part No	Size	Pack Qty
PA15436/11	160mm (6")	5
PA15438/11	200mm (8")	5



Long tapering jaws for gripping in confined spaces. Fine serrated jaws for gripping components. Fine jaw ends capable of gripping and manoeuvring small objects. Long tapering jaws for accessing confined places. Ergonomic soft feel handles

Round Nose Pliers

Part No	Size	Pack Qty
PA14736/11	160mm (6")	5



For internal gripping of hollow items and for looping wire or thin strips of material. Smooth conical jaws for forming loops. Tapering jaws allow for loops of different sizes. Ergonomic soft feel handles

Diagonal Cutting Nippers

Part No	Size	Soft	Med Hard	Hard	Piano	Pack Qty
PW7735/11	125mm (5")	3.0	2.5	1.6	1.2	5
PW7736/11	160mm (6")	4.0	3.0	2.0	1.6	5
PW7737/11	180mm (7")	4.0	3.0	2.0	1.6	5



For cutting medium to hard wire. Tapering head shape to access confined spaces. Induction hardened cutting edges. Design of cutter face allows wire to be cut close to surface. Rounded jaw ends provide strength in area where majority of cutting takes place. Ergonomic soft feel handles

Diagonal Cutting Nippers - heavy duty

Part No	Size	Soft	Med Hard	Hard	Piano	Pack Qty
PW7738/11	200mm (8")	5.0	3.5	2.4	2.0	5



Ideally suited for cutting hard wire. Tapering head shape to access confined spaces. Induction hardened cutting edges. Design of cutter face allows wire to be cut close to surface. Rounded jaw ends provide strength in area where majority of cutting takes place. Ergonomic soft feel handles

Diagonal Cutting Nipper - high leverage

Part No	Size	Soft	Med Hard	Hard	Piano	Pack Qty
PW14537/11	180mm (7")	4.0	3.0	2.0	1.6	5



Heavy duty nipper for cutting hard wire. High leverage design means less effort is required in cutting process. Induction hardened cutting edges for hard wire. Lay joint for added strength. Ergonomic soft feel handles

End Cutting Nipper

Part No	Size	Soft	Med Hard	Hard	Piano	Pack Qty
PW9637/11	165mm (6½")	4.0	3.0	2.0	1.6	5



Heavy duty end cutting nippers for cutting hard wire. For cutting wire flush to a surface. Induction hardened cutting edges. Specially designed for cutting wire not accessible from the side allows knuckle clearance. Ergonomic soft feel handles

End Wire Stripper

Part No	Size	Dia mm	Dia mm ²	Pack Qty
PA19536/11	160mm (6")	2.0	1.6	5



Removes insulation from cable without damaging the core. Suitable for a variety of cable sizes. Adjustable stop screw allows setting of required wire stripping diameter. Knurled screw head allows one hand adjustments. Spring return for automatic handle opening. Ergonomic soft feel handles

ECLIPSE SPECIAL PURPOSE PLIERS

Carpenters' Pincers

Part No	Size	Pack Qty
PB807/11	180mm (7")	5
PB808/11	200mm (8")	5



For gripping and extracting nails and tacks. Bevelled jaw edges for gripping nails without cutting them. Curved jaw to enable rocking of tool to lever nails and tacks. PVC dip handles

Cable Croppers

Part No	Size	Dia mm	Dia mm ²	Pack Qty
PA196810/11	250mm (10")	2.0	1.6	5



Specially designed cutting edges ensure ends of cable do not fray. For soft cables only (not to be used on cable with a hard core / outer eg. steel). PVC dip handles

Waterpump Pliers - slip joint

Part No	Size	Capacity mm	Pack Qty
PA4069/11	250mm (10")	0-42	5



Adjustable pliers for gripping pipes, nuts and bolts. Sliding pivot gives a wide range of jaw openings. Joint protector ensures handles cannot close together and trap fingers. Offset jaws to provide more accurate gripping when jaw grip is applied. PVC dip handles

Waterpump Pliers - groove joint

Part No	Size	Capacity mm	Pack Qty
PA45410/11	250mm (10")	0-42	5



Adjustable pliers for gripping pipes, nuts and bolts. Sliding pivot gives a wide range of jaw openings. Joint protector ensures handles cannot close together and trap fingers. Offset jaws to provide more accurate gripping when jaw grip is applied. PVC dip handles

Waterpump Pliers - box joint

Part No	Size	Capacity mm	Pack Qty
PA55510/11	250mm (10")	0-36	5



Adjustable pliers for gripping pipes, nuts and bolts. Sliding pivot gives a wide range of jaw openings. Joint protector ensures handles cannot close together and trap fingers. Offset jaws to provide more accurate gripping when jaw grip is applied. PVC dip handles



ECLIPSE SPECIAL PURPOSE PLIERS

Glass Pliers

Part No	Size	Pack Qty
PA10148/11	200mm (8")	5



For holding and shaping glass. Painted handles stop splinters of glass from embedding in handles. Jaws do not meet immediately in front of pivot to ensure glass can be gripped up to cut line. Used to snap off a narrow strip of scored glass or nibble back to a line or around a curve. Painted handles

Gas Pliers

Part No	Size	Pack Qty
PA788/11	200mm (8")	5



Designed to grip pipework of different sizes. Multi-purpose tool which includes a joint cutter. Two curved serrated sections to grip pipes of varying sizes. 'V' notch in front of each jaw to grip wire. Wire cropper located near pivot. Handles shaped to form a pipe reamer and turn screw respectively. Unsleeved handles

Wire Stripper Crimper - heavy duty

Part No	Size	Stripping Capacity	Pack Qty
PA18518HD/11	200mm (8")	0.13-8.00 sq mm	5



Designed to cut the cable sheath and crimp the wire. Alloy steel jaws capable of stripping all types of wire. Unique, fully automatic design makes wire stripping easy. Multi-purpose tool combining stripping, crimping and cutting. Sleeved handles

Wire Stripper Crimper

Part No	Size	Stripping Capacity	Pack Qty
PA18518/11	200mm (8")	0.13-6.00 sq mm	5



Designed to cut the cable sheath and crimp the wire. Alloy steel jaws capable of stripping all types of wire. Unique, fully automatic design makes wire stripping easy. Multi-purpose tool combining stripping, crimping and cutting. Sleeved handles

Engineers' Pliers - unsleeved

Part No	Size	Soft	Med Hard	Hard	Plano	Pack Qty
PW2166/11	160mm (6")	4.0	2.8	1.8	1.4	5
PW21610/11	250mm (10")	6.0	4.0	2.8	2.4	5



For use in environments where bare metal handles are appropriate. The handles are impervious to swarf, glass chippings and heat melting. Multi-purpose pliers for cutting, gripping and twisting. Induction hardened cutting edges for cutting medium hard wire. Pipe grip for gripping pipes, rods and other components. Serrated jaw for gripping nuts, bolts, studs and similar objects. Joint cutter for cleanly cropping soft wire. Unsleeved handles



VDE CUTTERS & PLIERS
VDE SCREWDRIVERS
SPECIALIST ELECTRICIANS HAND TOOLS
TOOLS STORAGE



PREMIUM QUALITY SAFETY TOOLS

What is VDE?

The VDE Testing and Certification Institute (Verband der Elektrotechnik) is an internationally accredited independent organisation working to ensure the safety of electrical tools and machines

What products are VDE certified?

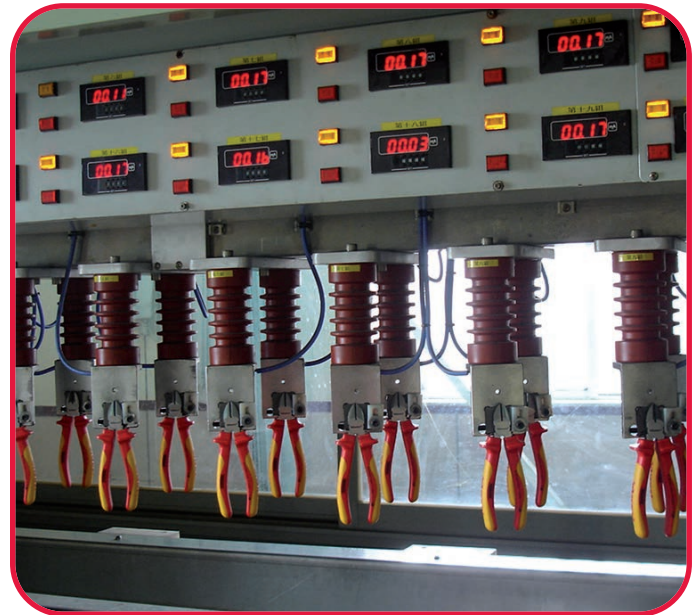
Only those that have been tested to strict criteria in the VDE Institute's Frankfurt-based laboratories can be issued with the VDE Certification Mark

How are VDE Tools Tested?

Each tool is individually tested to 10,000V for complete assurance of safety when working on live equipment up to 1,000V AC



Why choose VDE tools?

They are designed specifically to reduce the risk of injury, as well as minimise the likelihood of damage to electrical circuitry



How do I recognise VDE tools?

Look out for the following marks:

		<p>IEC 60900:2004</p>
<p>This shows compliance with VDE regulations concerning safety requirements. Confirms safety with regards to electrical, mechanical, thermal, toxicological, radiological and other hazards</p>	<p>The double triangle and voltage show that the tool is suitable for working on energised parts at the stated voltage</p>	<p>An international standard that includes detailed requirements for the design of insulated tools, eg the thickness of the protective insulation and the testing programme required on this material</p>

Are Insulated tools VDE approved?

'Insulated' only means that a tool is coated with a material that is not a conductor of electricity. Only VDE marked tools have passed the rigorous tests set by the VDE Testing and Certification Institution. Also beware of tools that claim to be VDE purely on the basis of their compliance with IEC 60900; this does not carry the assurance of safety through independent product testing and production auditing.

Caring for VDE Tools

Always visually inspect VDE tools before use. If the insulation is damaged or marked in any way, the tool should not be used near live electrical circuits. To ensure satisfaction from this product, it should be kept clean and carefully stored in a contaminant free, dry environment.

VDE CUTTERS & PLIERS

A comprehensive range of high quality VDE approved cutters and pliers for the professional electrician. Each tool is VDE approved, meaning that it is individually tested to 10,000V for complete assurance of safety when working on live equipment up to 1,000V AC.

Integrated hand stop increases safety by reducing the risk of contact with the metal head

Manufactured from hardened and tempered drop forged steel for maximum strength and durability

Induction hardened and precision ground edges for maximum durability and performance

Handle is ergonomically designed to offer the optimum balance between grip and comfort



AC 1000V
IEC60900:2004



VDE Side Cutters

VDE Side Cutters with wire strippers

VDE Side Cutters heavy duty

Part No	Size	WIRE CUTTING CAPACITIES				Pack Qty
		Soft	Med Hard	Hard	Piano	
PWSF7746/11	165mm (6½")	4.0	3.0	2.0	1.6	5
PWSF7747/11	185mm (7½")	4.0	3.0	2.0	1.6	5

Part No	Size	WIRE CUTTING CAPACITIES				Pack Qty
		Soft	Med Hard	Hard	Piano	
PWSF9956/11	165mm (6½")	4.0	3.0	2.0	1.6	5
PWSF9957/11	185mm (7½")	4.0	3.0	2.0	1.6	5

Part No	Size	WIRE CUTTING CAPACITIES				Pack Qty
		Soft	Med Hard	Hard	Piano	
PWSF8856/11	165mm (6½")	4.0	3.0	2.0	1.6	5
PWSF8858/11	200mm (8")	5.0	3.5	2.4	2.0	5

Stripping Capacity mm²	Stripping Capacity AWG
1.5 + 2.5	15 + 13



For cutting wires or groups of wires that need to be shortened or separated

- For cutting medium to hard wire
- Tapered head shaped to access confined spaces
- Induction hardened cutting edges
- Design of the cutter face allows wire to be cut close to the surface
- Rounded jaw ends provide strength in the area where the majority of cutting takes place
- Ergonomic soft feel handles

For cutting and stripping 1.5mm² and 2.5mm² medium to hard wire

- Induction hardened cutting edges
- Tapered head shaped to access confined spaces
- The head includes wire stripping notches for fast, easy and damage free stripping of 1.5mm² and 2.5mm² wire
- The design of the cutter face allows wire to be cut close to surface
- Rounded jaw ends provide strength in the area where the majority of cutting takes place
- Ergonomic soft feel handles

For cutting and stripping cables and wires. Particularly suited to hard wire

- For cutting medium to hard wire
- Tapered head shaped to access confined spaces
- Induction hardened cutting edges
- Design of the cutter face allows wire to be cut close to the surface
- Rounded jaw ends provide strength in the area where the majority of cutting takes place
- Ergonomic soft feel handles

VDE Combination Pliers

Part No	Size	WIRE CUTTING CAPACITIES				Pack Qty
		Soft	Med Hard	Hard	Piano	
PWSF21647/11	180mm (7")	4.0	3.0	2.0	1.6	5
PWSF21648/11	200mm (8")	4.0	3.0	2.0	1.6	5



Multi-purpose pliers for gripping, twisting and cutting

- Induction hardened cutting edges
- Pipe grip for pipes, rods and round components
- Serrated jaws for gripping nuts, bolts, studs and similar objects
- Joint cutter for cleanly cropping wire
- Ergonomic soft feel handles

VDE Long Nose Pliers

Part No	Size	WIRE CUTTING CAPACITIES				Pack Qty
		Soft	Med Hard	Hard	Piano	
PWSF10648/11	200mm (8")	4.0	3.0	2.0	1.6	5



Designed to remove wires or pry electrical parts out of confined spaces. Includes cutting edges for cutting medium to hard wire

- Long tapered jaws for gripping in confined spaces
- Side cutter for cutting medium hard wire
- Fine jaw ends for gripping and manoeuvring small objects
- Serrated jaws for extra grip
- Induction hardened cutting edges
- Ergonomic soft feel handles

VDE Bent Long Nose Pliers

Part No	Size	WIRE CUTTING CAPACITIES				Pack Qty
		Soft	Med Hard	Hard	Piano	
PWSF10748/11	200mm (8")	4.0	3.0	2.0	1.6	5



Ideal for adjusting relay contacts. Includes cutting edges for cutting medium to hard wire

- Bent nose with angled jaws for increased access
- Long tapered jaws for gripping in confined spaces
- Side cutter for cutting medium hard wire
- Fine jaw ends for gripping and manoeuvring small objects
- Serrated jaws for extra grip
- Induction hardened cutting edges
- Ergonomic soft feel handles

VDE End Wire Strippers

Part No	Size	Dia mm	Dia mm ²	Pack Qty
PWSF19546/11	160mm (6")	2.0	1.6	5



Removes insulation from cables without damaging the core

- Suitable for a variety of cable sizes – the adjustable stop screw allows setting of the required wire stripping diameter
- Knurled screw head allows one handed adjustment
- Spring return for automatic handle opening
- Ergonomic soft feel handles

VDE Cable Cutters

Part No	Size	Dia mm	Dia mm ²	Pack Qty
PWSF1978/11	210mm (8 1/4")	38.0	11.5	5



A compact, one handed cable cutter for use on copper and aluminium wire (not suited to steel wire)

- Made from drop forged steel for maximum strength and durability
- Cutting edges are induction hardened for a high cutting performance
- The shearing action cuts through cables cleanly and effortlessly
- Ergonomic soft feel handles

VDE 3pc Plier Set

Part No	Description	Pack Qty
EVDE3P	Contains: 6 1/2" Side Cutters 7" Combination Pliers 8" Long Nose Pliers	1



DISPLAY SOLUTIONS

VDE Cutters & Pliers Core Range

Part No	Description	Size	Suggested Qty
PWSF7746/11	Side Cutters	165mm (6½")	5
PWSF9956/11	Side Cutters & Wire Strippers	165mm (6½")	4
PWSF7747/11	Side Cutters	185mm (7½")	4
PWSF21647/11	Combination Pliers	180mm (7")	3
PWSF10648/11	Long Nose Pliers	200mm (8")	4
PWSF8858/11	Heavy Duty Side Cutter	200mm (8")	3
VDEBC-C	Pegboard Backing / Restocking Card	-	1



VDE Cutters & Pliers Full Range

Part No	Description	Size	Suggested Qty
PWSF7746/11	Side Cutters	165mm (6½")	5
PWSF7747/11	Side Cutters	185mm (7½")	4
PWSF8856/11	Heavy Duty Side Cutters	185mm (7½")	3
PWSF8858/11	Heavy Duty Side Cutters	200mm (8")	3
PWSF9956/11	Side Cutters & Wire Strippers	165mm (6½")	3
PWSF9957/11	Side Cutters & Wire Strippers	185mm (7½")	3
PWSF21647/11	Combination Pliers	180mm (7")	3
PWSF21648/11	Combination Pliers	200mm (8")	3
PWSF10648/11	Long Nose Pliers	200mm (8")	3
PWSF10748/11	Bent Long Nose Pliers	200mm (8")	3
PWSF19546/11	End Wire Stripper Pliers	160mm (6")	3
PWSF1978/11	Cable Cutter	210mm (8½")	3
VDEBC-C	Pegboard Backing / Restocking Card	-	1

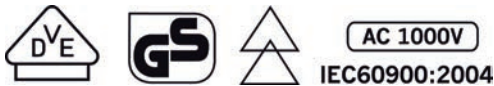


VDE SCREWDRIVERS

The unique handle design of the Eclipse VDE screwdriver range has been developed following extensive research amongst professional electricians. These research forums confirmed that not only do electricians require VDE approved screwdrivers, that they also consider comfort in use to be essential for such a tool, given that it is in constant use. Our handle has therefore been designed with this in mind; its contours and grip are shaped to fit snugly into the hand without compromising either torque or fingertip control.

Moreover, each tool is VDE approved, meaning that it is individually tested to 10,000V for complete assurance of safety when working on live equipment up to 1,000V AC.

Suitable for a wide range of electrical screwdriving tasks, such as the removal of breaker panel covers and the attachment of individual electrical wires to circuit breaker terminals



VDE Safety Mark



Barcode



Includes a hanging hole for convenient display and storage

Ergonomically designed, two component handle fits snugly into the hand whilst enabling a fast, fingertip controlled screwdriving action

Hexagonal base on the handle gives anti-roll protection

Shaft made from high quality chrome vanadium steel (and incased in a tough insulated sleeve) for maximum strength and durability

Tip type marked on the top of each handle for ease of identification

A precision machined tip to ensure an exact fit to the screw

A hardened black oxidised tip for added durability



VDE SCREWDRIVERS

VDE Slotted Parallel

Part No	Tip Size mm	Blade Length mm	Pack Qty
EV25X75	2.5	75	12
EV30X100	3.0	100	12
EV35X100	3.5	100	12
EV40X100	4.0	100	12
EV55X125	5.5	125	12
EV65X150	6.5	150	12



VDE Pozidriv

Part No	Tip Size mm	Blade Length mm	Pack Qty
EVPZ0X60	PZ0	60	12
EVPZ1X80	PZ1	80	12
EVPZ2X100	PZ2	100	12
EVPZ2X200	PZ2	200	12



VDE Phillips

Part No	Tip Size mm	Blade Length mm	Pack Qty
EVPH0X60	PH0	60	12
EVPH1X80	PH1	80	12
EVPH2X100	PH2	100	12



VDE Modulo

Part No	Size	Blade Length mm	Pack Qty
EVMOD2	No.2 (65mm)	100	12



For special terminal screws with slotted / recessed heads. Ideal for use on plugs, terminals and circuit breakers

VDE 6 Piece Set

Part No	Description	Pack Qty
EV6PC	6 pce VDE Screwdriver Set	1



Contains: Slotted - 3 x 100mm, 4 x 100mm, 5.5 x 125mm, Pozidriv - PZ1, PZ2, Modulo 2

VDE 3 Piece Set

Part No	Description	Pack Qty
EV3PC	3 pce VDE Screwdriver Set	1



Contains: 3 x Slotted - 4 x 100mm

DISPLAY SOLUTION

VDE Screwdriver Merchandiser

Part No	Tip / Type Size mm	Blade Length mm	Suggested Qty
EV25X75	2.5	75	7
EV30X100	3.0	100	7
EV35X100	3.5	100	7
EV40X100	4.0	100	7
EV55X125	5.5	125	4
EV65X150	6.5	150	4
EVPH0X60	PH0	60	4
EVPH1X80	PH1	80	4
EVPH2X100	PH2	100	7
EVPZ0X60	PZ0	60	4
EVPZ1X80	PZ1	80	4
EVPZ2X100	PZ2	100	7
EVPZ2X200	PZ1	200	4
EVMOD2	No.2 (65mm)	100	4



SPECIALIST ELECTRICIANS' HAND TOOLS

VDE Cable Knife

Part No	Description	Pack Qty
ECKS-VDE	Cable Knife - Straight Blade	5



For scoring and stripping cables

- 50mm hardened steel blade for increased durability
- Anti-slip guard and protective detachable cap to maximise safety
- Ergonomically shaped handle for increased comfort in use
- Certified and approved by the world renowned VDE (Verband der Elektrotechnik) institute of Germany
- Each tool is tested to 10,000V for complete assurance of safety when working on live equipment up to 1,000V AC

Ratchet Crimping Pliers

Part No	Description	mm ²	AWG	Pack Qty
ECT-RBY	Ratchet Crimping Pliers (red, blue, yellow)	0.5-1.0, 1.5-2.5, 4-6	22-18, 16-14, 12-10	5



For crimping open cable insulated terminals

- The head has colour coded recesses of red, blue and yellow for different insulated terminals
- Made from high quality carbon steel with a hardened black oxide finish to ensure maximum strength and durability
- A high compression pressure and an adjustment mechanism enable fast and effective crimping
- Soft feel handles offer comfort and a secure grip

Automatic Wire Strippers

Part No	Function	Description	Pack Qty
EAWS6	Stripping	0.2 - 6.0mm ² copper and aluminium wire, solid or stranded	10
	Wire Cutting	HRC 40-50	
	Crimping	1.5, 2.5, 6.0mm insulated and non-insulated terminals	



A multi-purpose tool for use on both T&E flat cable and round flex cable. Combines stripping, crimping and cutting

- Strips wire with no need for adjustment
- Crimping jaws can be use on both insulated and non-insulated terminals
- The steel blades of the jaws are designed to cut wire and are hardened to ensure a longer working life. The micro-adjustment mechanism allows for the stripping of wire less than 0.2mm²

Voltage Sensor

Part No	Range	Sensitivity	Power Requirements	Operating Temperature	Pack Qty
EVS1000	80-1000v	Can pick up a 5 volt signal & detect 240v through an air gap of 4mm	2 x AAA batteries	-20° to +55°C	5





For safely checking the presence of voltage in cables, wall sockets, fuses, circuit breakers and junction boxes

- When the tip is placed closed to AC voltage it lights up in red and a detection buzzer sounds
- Pocket clip enables convenient storage
- Over-voltage CAT III and compliance with IEC 1010

SPECIALIST ELECTRICIANS' HAND TOOLS

Mains Tester

Part No			Type	Pack Qty
3210R	105mm	5mm	220-250 volts: 50Hz	6
3200R	75mm (3")	3mm (1/8")	220-250 volts: 50Hz	10



For detecting the presence of electric voltage

- Bright chrome vanadium steel bars for strength and rust protection
- Packed individually on printed skin packed cards

Universal Cabinet Key

Part No	Comprises	Pack Qty
EUSK	<ul style="list-style-type: none"> • 6mm & 8mm square, 9mm triangular and 5 double pin • tooling adaptor for 1/4" screwdriver bit • double ended 1/4" screwdriver bit • 7mm slotted x phillips No2 	10



Multi-purpose key that fits gas and electric cupboards, as well as ventilation system and stop valves

- Fits square, 3-square and double pin
- Manufactured from die cast zinc for durability
- Slotted and Phillips screwdriver bits included

Impact Punch Down Tools

Part No	Terminal Block	Pack Qty
EPDT	KRONE	10



Quickly and securely seats data wires into terminal blocks and neatly cuts off wire ends

- For use on KRONE terminal blocks
- Includes a wire extractor, hook and spudger tool in the handle



PROFESSIONAL ELECTRICIANS' TOOL CASE

Professional Tools Case

Part No	Description	Material	Overall Size (mm)	Pack Qty
TECHCASE	Technician's Toolcase	600D x 600D	440 x 200 x 330	4

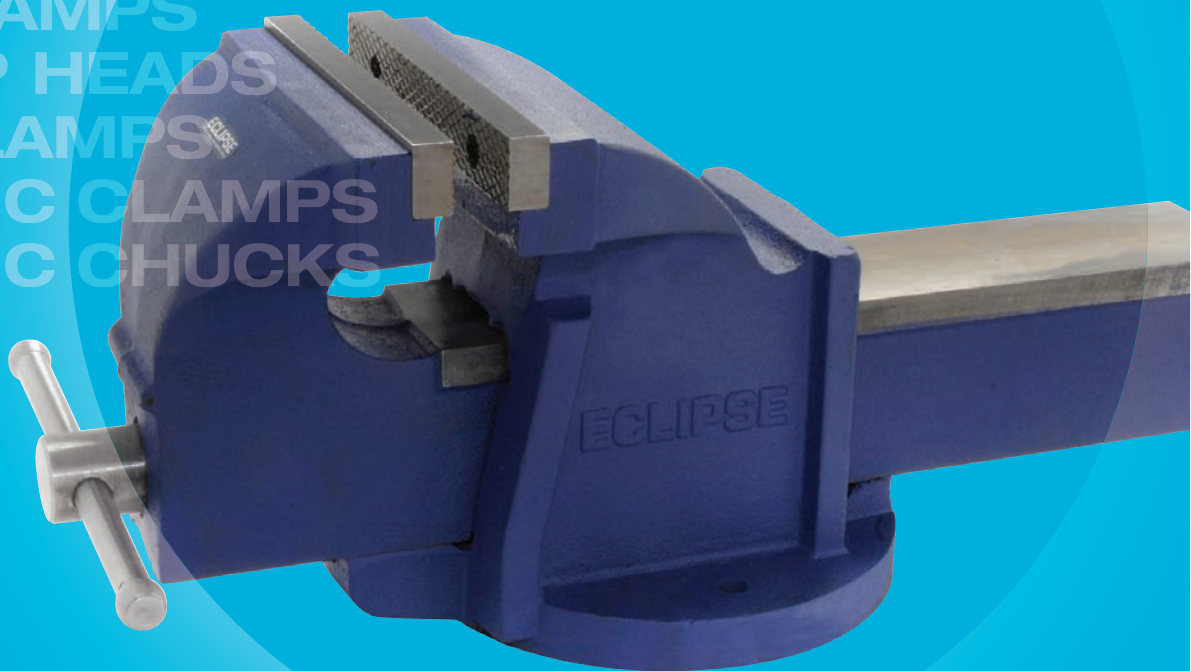
Heavy duty tool case that is ideal for service engineers, electricians, technicians and general tradesmen

- Designed to carry both tools and technical equipment
- Made from 600 denier polyester for maximum strength and durability
- The padded laptop compartment is designed to protect sensitive equipment
- The 24 internal compartments and 29 internal loops are designed to carry tools, power tool accessories, documents and technical equipment
- The internal document pocket is ideal for carrying A4 sized documents
- The industrial grade metal hook on the strap adds strength when carrying heavy loads
- 6 protective rubberised feet on the bottom of the bag



(tools not included)

**MECHANICS' VICES, SPARES &
ACCESSORIES
WOODWORKING VICES
G-CLAMPS
ONE HANDED BAR CLAMPS &
SPREADERS
SCREW CLAMPS
SASH CLAMPS
& CLAMP HEADS
T-BAR CLAMPS
MAGNETIC CLAMPS
MAGNETIC CHUCKS**



Workholding Range - Average Clamping Forces

Range	Average Clamping Force	Main Tasks
VICES		
Mechanics' Vices	4,500lbs - 10,100lbs (2,040kg - 4,580kg)	General metalworking applications
Quick Release Woodworking Vices	1,900lbs (860kg)	Holding large pieces of wood for cutting and gluing
Plain Screw Woodworking Vices	1,900lbs (860kg)	Holding large pieces of wood for cutting and gluing
CLAMPS		
T-Bar Clamps	2,200lbs (1,000kg)	Clamping heavy pieces of furniture when gluing
Sash Clamps	1,100lbs (500kg)	Clamping heavy pieces of furniture when gluing
Clamp Heads	Light Duty (depends on timber used)	Low cost alternative to sash clamps
G Clamps (Extra heavy duty)	Frame Proof Loads 3,300lbs - 4,500lbs (1500kg - 2050kg)	Heavy duty fabrication and engineering tasks
G Clamps (Heavy duty)	Frame Proof Loads 660lbs - 1,700lbs (300kg - 770kg)	Multi-purpose - generally woodworking & metalworking
Screw Clamps (Mid range)	660lbs (300kg)	Lightweight wood/metal clamping
One Handed Bar Clamp & Spreaders	150kg	A 'third hand'

VICES

For general metalworking applications

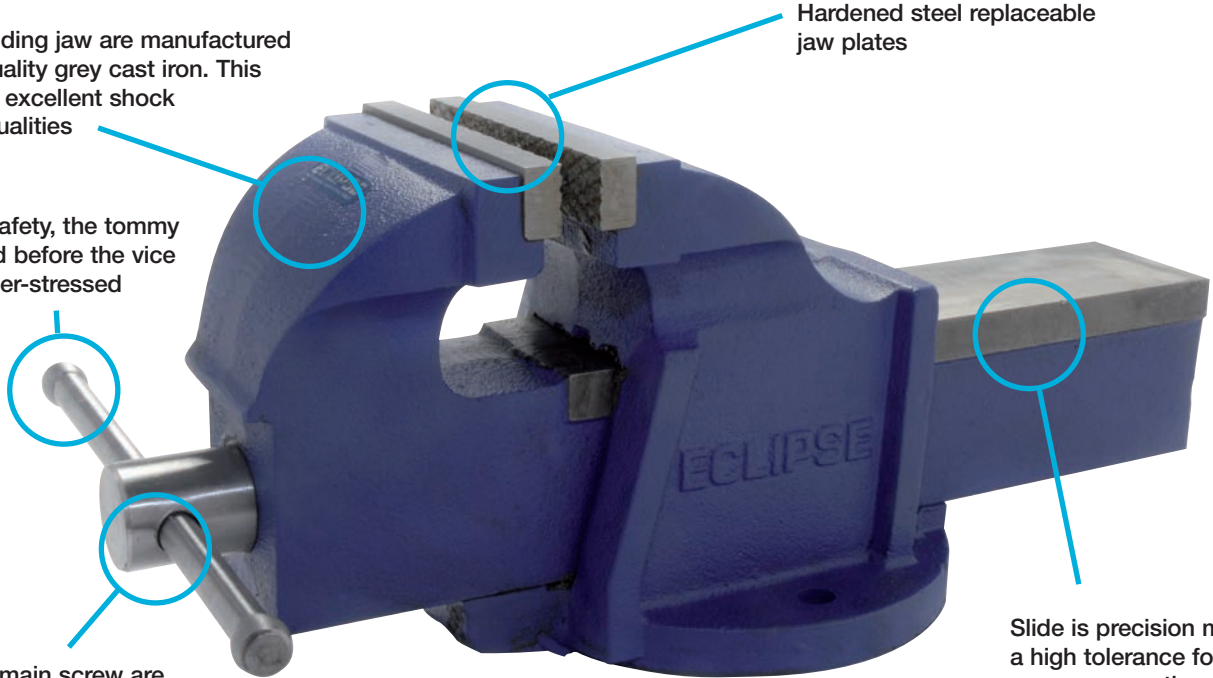
Body and sliding jaw are manufactured from high quality grey cast iron. This material has excellent shock absorbing qualities

For added safety, the tommy bar will bend before the vice becomes over-stressed

Handle and main screw are manufactured from steel

Hardened steel replaceable jaw plates

Slide is precision milled to a high tolerance for a fast, smooth operation



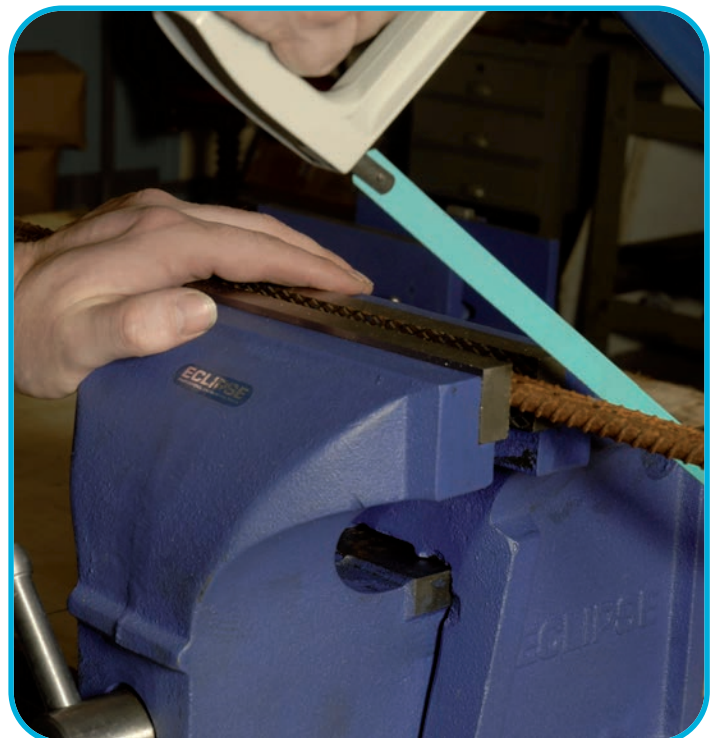
Mechanics' Vices

The body and sliding jaw are manufactured from high quality grey cast iron, which has excellent shock absorbing qualities. The precision milled slide ensures a fast, smooth operation, whilst the fused tommy bar will bend before the vice can become over-stressed. Includes hardened steel replaceable jaws and fixing holes for bench mounting

Part No	Jaw Width	Throat Depth (mm)	Opening (mm)	Clamping Force (kN)	Net Weight (kg)	Qty per pallet
EMV-1	3" / 75mm	48	82	20	4.8	144
EMV-3	4" / 100mm	63	109	25	9.3	90
EMV-5	5" / 125mm	73	136	30	15.8	40
EMV-6	6" / 150mm	86	168	35	24.2	36
EMV-8	8" / 200mm	103	208	45	38.1	24

Jaw Plates with Screws (pair)

Part No	Description	Pack Qty
EMV-1JPS	For use with EMV-1	1
EMV-3JPS	For use with EMV-3	1
EMV-5JPS	For use with EMV-5	1
EMV-6JPS	For use with EMV-6	1
EMV-8JPS	For use with EMV-8	1



VICES

Swivel Bases

For use with Eclipse Mechanics' Vices

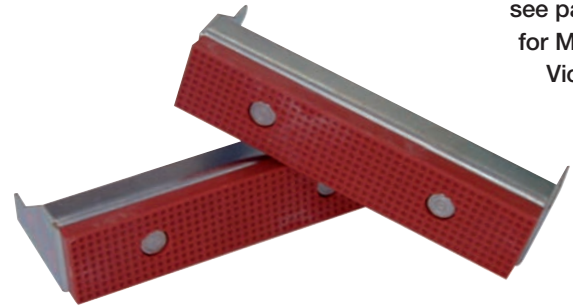


Includes three mount holes for attaching to a workbench.

Part No	Size	For use with
EMVSB-1	Swivel Base for 3" (75mm) Vice	EMV-1
EMVSB-3	Swivel Base for 4" (100mm) Vice	EMV-3
EMVSB-5	Swivel Base for 5" (125mm) Vice	EMV-5
EMVSB-6	Swivel Base for 6" (150mm) Vice	EMV-6
EMVSB-8	Swivel Base for 8" (200mm) Vice	EMV-8

Fibre Grips

For use with Eclipse Mechanics' Vices

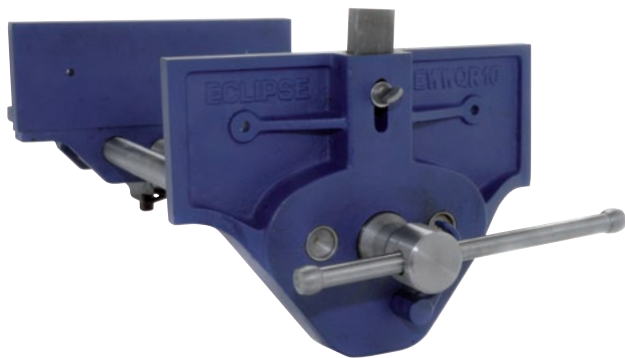


see page 105
for Magnetic
Vice Jaws

A range of high quality fibre grips for use with Eclipse Mechanics' Vices. Prevents damage to workpieces with soft or polished surfaces. Supplied in pairs

Part No	Size	For use with	Pack Qty
EFG1	3" (75mm)	EMV-1	10
EFG3	4" (100mm)	EMV-3	10
EFG5	5" (128mm)	EMV-5	10
EFG6	6" (150mm)	EMV-6	10
EFG8	8" (200mm)	EMV-8	10

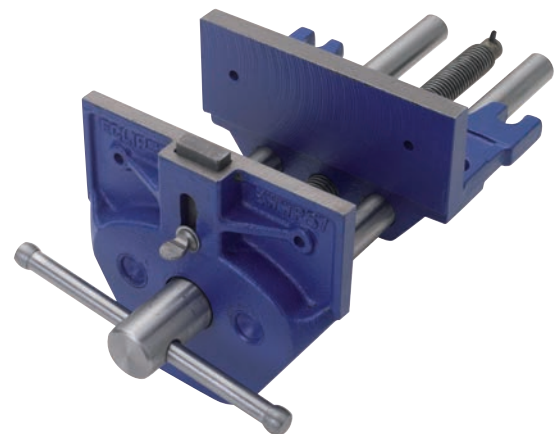
Quick Release Woodworking Vices



Quick release trigger opens and closes the vice quickly without using the mainscrew. Fitted with an adjustable front stop – or dog – that gives an additional clamping facility when used with a bench stop, to provide a normal vice and a tail vice in one tool. To increase safety, the fused tommy bar will bend before the vice can become over-stressed

Part No	Jaw Width	Throat Depth (mm)	Opening (mm)	Net Weight (kg)	Qty per pallet
EWQR7	7" / 178mm	80	202	9.4	60
EWQR9	9" / 230mm	106	260	15.5	32
EWQR10	10" / 254mm	100	380	17.7	24

Plain Screw Woodworking Vices



Plain screw mechanism works through a separate unbreakable nut housed beneath the body seating, to ensure the constant alignment of the screw mechanism. Precision machined grey cast iron body and front to ensure a smooth, parallel action. Fitted with an adjustable front stop – or dog – that gives an additional clamping facility when used with a bench stop, to provide a normal vice and a tail vice in one tool. To increase safety, the fused tommy bar will bend before the vice can become over-stressed

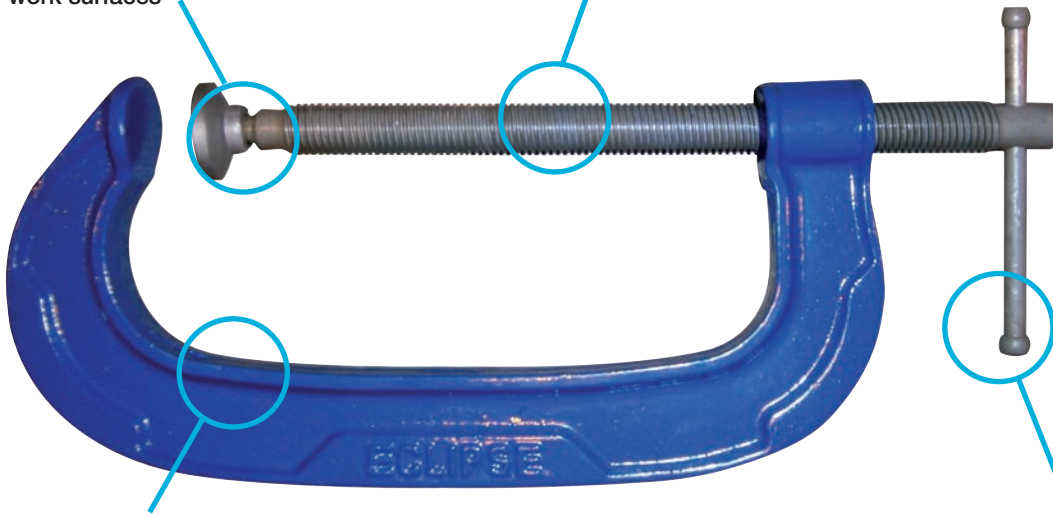
Part No	Jaw Width	Throat Depth (mm)	Opening (mm)	Net Weight (kg)	Qty per pallet
EWPS7	7" / 178mm	80	202	9.4	60
EWPS9	9" / 230mm	106	260	15.5	32

CLAMPS

For woodworking & metalworking applications

Steel swivel shoe applies an even pressure, even on angled work surfaces

Fast action twin start rolled acme thread



Guaranteed unbreakable malleable iron frame

Tommy bar will bend before the frame can become over-stressed



G Clamps - Heavy Duty

G Clamps - Extra Heavy Duty



Average clamping force of 300 – 800kg (660 – 1760lbs). Guaranteed unbreakable malleable iron frame with a fast action twin start rolled acme thread. The steel swivel shoe applies an even pressure, even on angled surfaces, whilst the tommy bar will bend before the frame can become over-stressed.

Ideal for heavy duty fabrication and engineering tasks, where very high clamping forces are often required. Sturdy, drop forged steel frame gives a proof load of over 2,000kg (4,400lbs) on the larger sizes. Substantial acme thread for greater applicable torque. The tommy bar will bend before the frame can become over-stressed, whilst the swivel shoe applies an even pressure on angled surfaces

Part No	Clamping Capacity	Frame Proof Loads	Pack Qty
E20-3	3" (75mm)	1000lbs / 455kg	6
E20-4	4" (100mm)	1200lbs / 545kg	6
E20-6	6" (150mm)	1400lbs / 636kg	6
E20-8	8" (200mm)	1700lbs / 773kg	2
E20-10	10" (250mm)	2000lbs / 909kg	2
E20-12	12" (300mm)	2500lbs / 1136kg	2

Part No	Clamping Capacity	Frame Proof Loads	Pack Qty
E21-3	3" (75mm)	3500lbs / 1588kg	4
E21-4	4" (100mm)	4500lbs / 2041kg	4
E21-6	6" (150mm)	5000lbs / 2268kg	4
E21-8	8" (200mm)	5000lbs / 2268kg	2
E21-10	10" (250mm)	8000lbs / 3629kg	2
E21-12	12" (300mm)	9300lbs / 4218kg	2

CLAMPS

One Handed Bar Clamps & Spreaders

Quick release trigger enables the clamp to be quickly positioned and released, whilst the jaw release clip mechanism allows the jaw to be removed and re-attached to the other end of the bar, thus converting the clamp into a spreader. The carbon steel bar and reinforced nylon body make it both tough and durable, whilst the ergonomically-designed, soft feel pistol grip handle fits easily into the hand. In addition, the toe-in feature means that, when fully closed, the jaws only meet at the top, thus providing an even clamping force across the whole depth of the workpiece. Non-marring pads firmly grip and protect the workpiece



Part No	Clamping Capacity	Spreading Capacity (Min)	Spreading Capacity (Max)	Jaw Depth	Pack Qty
EOHC6	6" (150mm)	6 5/8" (168mm)	13 3/8" (340mm)	3 3/8" (85mm)	1
EOHC6X2*	6" (150mm)	6 5/8" (168mm)	13 3/8" (340mm)	3 3/8" (85mm)	5
EOHC12	12" (300mm)	6 5/8" (168mm)	19 1/2" (495mm)	3 3/8" (85mm)	1
EOHC18	18" (450mm)	6 5/8" (168mm)	25 3/8" (645mm)	3 3/8" (85mm)	1
EOHC24	24" (600mm)	6 5/8" (168mm)	31 1/2" (800mm)	3 3/8" (85mm)	1
EOHC36	36" (900mm)	6 5/8" (168mm)	43 1/2" (1105mm)	3 3/8" (85mm)	1

* 6" (150mm) in pairs - in a display box of 5

Screw Clamps



DIN5117 standard clamps with an average clamping force of 300kg (660lbs). The sliding head quickly sets the clamp to the required capacity, whilst the serrated grooves on the corrosion resistant nickel plated bar prevent slippage in use. The cast iron malleable heads offer maximum strength and the wooden handle provides a firm and comfortable grip.

Part No	Clamping Capacity	Clamping Depth	Pack Qty
EC-SCR8	8" / 200mm	120mm / 4 3/4"	10
EC-SCR12	12" / 300mm	120mm / 4 3/4"	10
EC-SCR16	16" / 400mm	120mm / 4 3/4"	10
EC-SCR24	24" / 600mm	120mm / 4 3/4"	10
EC-SCR32	32" / 800mm	120mm / 4 3/4"	6

Sash Clamps & Clamp Heads

Sash clamps have an average clamping force of 500kg (1100lbs). The ductile head and slide are guaranteed unbreakable, whilst the steel bar offers maximum tensile and yield strength. The slightly tapered jaws enable perfectly parallel clamping and the fast action rolled thread applies pressure quickly and smoothly to the workpiece



Part No	Maximum Clamping Capacity / Type	Bar Length	Box Qty
ESC24	24" (600mm)	30" (760mm)	6
ESC30	30" (760mm)	36" (915mm)	6
ESC36	36" (915mm)	42" (1070mm)	6
ESC42	42" (1070mm)	48" (1220mm)	6
ESC48	48" (1220mm)	54" (1370mm)	6
ESC54	54" (1370mm)	60" (1525mm)	6
ESC66	66" (1680mm)	72" (1830mm)	6
ESC-TSPC	Spare - Tail slide, peg & chain	-	1
ESC-PC	Spare - Peg & Chain	-	1
ECHX2	Clamp Heads (pair)	-	4



T-Bar Clamps



Average clamping force of 1000kg (2200lbs). The drilled feet in the fixed head enable the clamp to be mounted to a workbench. The ductile head and slide are guaranteed unbreakable, whilst the steel bar offers maximum tensile and yield strength. The slightly tapered jaws enable perfectly parallel clamping and the fast action rolled thread applies pressure quickly and smoothly to the workpiece

Part No	Maximum Clamping Capacity	Bar Length	Box Qty
ETBR42	42" (1070mm)	48" (1220mm)	4
ETBR48	48" (1220mm)	54" (1370mm)	4
ETBR54	54" (1370mm)	60" (1525mm)	4
ETBR66	66" (1680mm)	72" (1830mm)	4
ETBR78	78" (1980mm)	84" (2135mm)	4

MAGNETIC WELDING TOOLS

Magnetic Variable Clamp

Part No	Length mm	Height mm	Width mm	Weight (kg)	Pull Force (kg)
E952	195	200	11	0.49	20



NB Dimensions with arm set at 90°

Fast accurate holding of ferrous sheets and tubes for welding and assembly work

Heavy Duty Variable Clamp

Part No	Length mm	Height mm	Width mm	Weight (kg)	Pull Force (kg)
E974	140	140	35	1.40	40



Clamp components during welding, fabrication and assembly. Powerful 40kg clamping force, enabling larger components to be clamped with ease

90° Fixed Magnetic Clamps

Part No	Length mm	Height mm	Width mm	Weight (kg)	Pull Force (kg)
1 E971	140	140	35	1.40	40
2 E972	225	225	22	2.20	75
3 E973	300	300	35	4.70	200



Two magnetic faces in a rigid 90° angle for jiggling on sheets, pipes and tubes. A fast and cost effective means of clamping components rigid at 90° angles during fabrication, assembly and weld preparation applications

Magnetic Holdfasts

Part No	Dia mm	Height mm	Fixing Holes PCD	No. of Holes	Weight (kg)	Pull Force (kg)
E939	44.5	44.5	31.75	2 x M8	0.6	20
E940	54.0	49.2	38.1	2 x M8	1.0	40
E941	70.0	64.5	50.8	2 x M8	2.0	88
E942	101.6	74.6	69.05	3 N/A	4.7	183



Supplied with screw release handle. Can be built into workholding, handling and assembly fixtures to provide a high clamping force and positive grip

Heavy Duty Magnetic Clamp

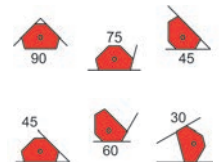
Part No	Depth mm	Height mm	Width mm	Weight (kg)	Pull Force (kg)
E954	14	82	120	0.3	10
E955	18	102	160	0.7	15



Hold workpieces at an exact 45 or 90° angle to each other. 10kg and 15kg of magnetic pull make these ideal for a range of workshop welding and holding applications

'Quick' Magnetic Clamps

Part No	Length mm	Height mm	Width mm	Weight (kg)	Pull Force (kg)
E951	100.5	65.5	12	0.3	10
E953	100.5	65.5	20	0.4	15

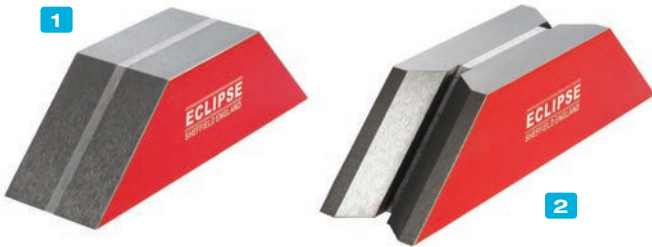


Fast and accurate holding of ferrous metals at different fixed angles. Also suitable for retrieval applications

MAGNETIC WELDING TOOLS

Magnetic Mitre Clamps

Part No	Length base face mm	Length top face mm	Height mm	Width mm	Weight (kg)	Pull Force (kg)
1 923	156	66	45	43	1.36	100
2 924	184	94	45	43	1.64	68



Effective and inexpensive method of clamping flat (923) or round (924) ferrous components

Magnetic Positioner

Part No	Length mm	Height mm	Width mm	Weight (kg)	Pull on flat face (kg)	Pull Force on v face (kg)
922 (Pair)	206	63.5	76	3.17	80	80
922 SU (Single)	63.5	63.5	51	1.48	80	80



2 magnetic blocks connected by 2 non-magnetic steel straps. The blocks contain ferrite magnetic material. Magnetic on two faces. On / off switch located at each end

Magnetic Adjustable Links

Part No	Length mm	Height mm	Width mm	Weight (kg)	Pull Force / Magnet (kg)
920 SU (single unit)	60	25	29	0.35	12
920 (pair)	127	25	51	0.70	12



Ferrite magnet material. Clamp components at any angle for welding and assembly applications

Magnetic Adjustable Links

Part No	Length mm	Height mm	Width mm	Weight (kg)	Pull Force / Magnet (kg)
920SUOT (single unit original type)	60	25	25	0.32	12
920OTPR (original type pair)	127	25	45	0.70	12



Alnico magnet material. Clamp components at any angle for welding and assembly applications

Magnetic Holder

Part No	Length mm	Height mm	Width mm	Weight (kg)	Pull Force (kg)
E925	108	140	108	5.67	100



Provides the welder with a powerful, rigid support on flat and round components at various angles during welding and welding preparation applications. Switchable and can be partially energised to aid positioning

Magnetic Earth Welding Clamp

Part No	Length mm	Height mm	Width mm	Maximum Current (amps)	Weight (kg)	Pull Force (kg)
E946	193	64	90	800	1.6	25



Quick and easy earthing for most steel welding operations. Provides earthing / ground on large welding operations where croc-clip or G-clamps cannot be easily used

MAGNETIC WORKHOLDING

Premier Range Magnetic Chucks

Eclipse Magnetics invented the first permanent magnet chuck in 1934 and we continue to set the benchmark for quality workholding with today's Premier Range.

Premier range chucks are fully serviceable and can provide many years of service

Rectangular

Part No	Length mm	Height mm	Width mm	Pole Pitch mm
AX47/P	203	42	127	17.6
AX510/P	276	53	129	35
AXS612/P	322	63	151	32
AXS614/P	360	63	151	32
AXS618/P	451	63	151	32
AXM824/P	601	63	201	35

Dimensions are for reference only

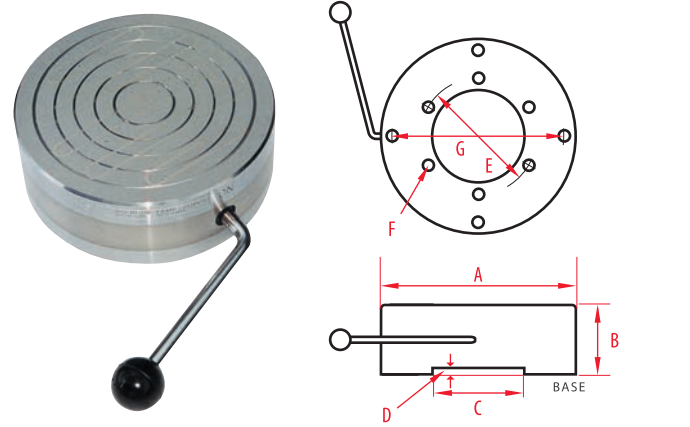
- The all-metal top plate is extra thick to ensure maximum accuracy after frequent re-grinding
- Chrome plated side and end stops for packing and positioning
- The chucks can be partially magnetised to allow part positioning in set up
- Removable, ergonomically designed handles allow easy switching
- Supplied with clamps
- Custom sizes are available



Circular

Part No	A* mm	B mm	C mm	D mm	E mm	F mm	G mm
AX475C/P	121	45	50.8	6.5	76.2	M6	101.6
AX651C/P	167	60	76.22	6.5	101.6	M10	139.7
AX91C/P	229	60	85.8	6.5	114.3	M10	190.5
AX12C/P	305	72	152.4	4.75	184.15	M12	254

* reference diameter only



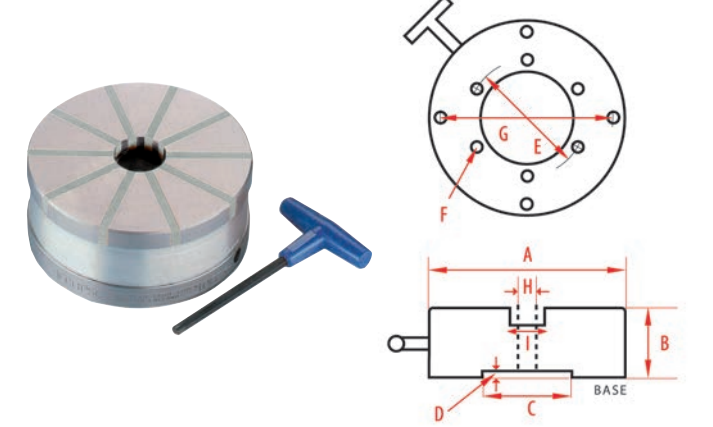
The unique top plate configuration concentrates the magnetic energy on to the face of the chuck

The chucks can be partially magnetised to aid the correct positioning of the workpiece. Grooved rings in the top plate assist in visual positioning to aid quick changeover in set up. Excellent for holding thin ring-shaped components that can be subject to radial distortion. Removable handles allow easy switching

Radial Pole

Part No	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	No. of Poles
NR100C	100	48	50.8	6.5	N/A	M6	76	N/A	N/A	6
NR150C	150	69	76.2	4	N/A	M10	102	32	36	10
NR225C	225	71	85.8	5	114.3	M10	190.5	50	54	14
NR300C	300	71	152.4	54.75	184.15	M12	254	62	66	18

* reference diameter only



Radial pole configuration concentrates the entire magnetism of the chuck into the workpiece – ideal for a wide range of operations from precision grinding to heavy turning

Dynamically balanced to enable use at high rpm. All metal top plate and a rugged, industrial build ensures accuracy and longevity. Through-bore (except the NR100C) allows through-flushing of coolant during machining
Optional centre plug available

MAGNETIC WORKHOLDING

Standard Range Magnetic Chucks

Standard Range chucks provide high performance at a competitive price

- Clamping force: 80N/cm² on test piece (steel ring 52mmØ outer, 38mmØ inner, 10mm thick)
- Brass and steel top plates
- Removable hexagon key handles ensure ease of operation through a 180 degree arc
- All chucks are supplied with side and end stops
- All chucks are supplied with clamps

Standard chucks are available with a choice of 2 pole spacings:



Standard Pole

Pole spacing:
4.0mm steel – 2.0mm brass
Effectively clamps all workpiece thicknesses down to 3mm

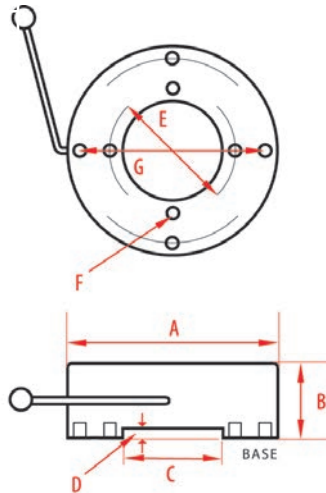


Fine Pole

Pole spacing:
1.5mm steel – 0.5mm brass
Ideal for small workpieces less than 3mm in thickness.

Circular

Part No Std Pole	Part No Fine Pole	A mm	B mm	C mm	D mm	E mm	F mm	G mm
ECSP100	ECFP100	100	50	50.8	6.35	76.2	M6	N/A
ECSP125	ECFP125	125	50	50.8	6.35	76.2	M6	101.6
ECSP160	ECFP160	160	50	76.2	6.35	101.6	M10	139.7
ECSP195	ECFP195	195	50	76.2	6.35	101.6	M10	139.7
ECSP255	ECFP255	255	50	85.73	6.35	114.3	M10	190.5
ECSP310	ECFP310	310	50	152.4	6.35	184.15	M12	254
ECSP350	ECFP350	350	50	196.85	6.35	196.85	M12	N/A



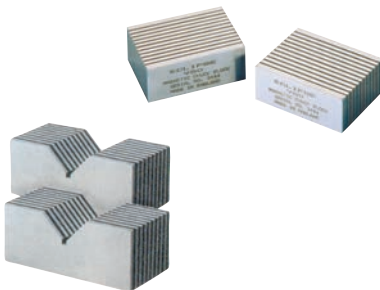
Rectangular

Part No Std Pole	Part No Fine Pole	Length mm	Width mm	Height mm
ERSP1018	ERFP1018	175	100	50
ERSP1325	ERFP1325	255	130	50
ERSP1530	ERFP1530	300	150	50
ERSP1535	ERFP1535	350	150	50
ERSP1545	ERFP1545	450	150	50
ERSP2060	ERFP2060	600	200	50



Chuck Blocks

Part No	Length mm	Width mm	Height mm	Pole Direction Along Width
950	60	75	30	Longitudinal
950V	50	100	40	Longitudinal



Supplied in matched and numbered pairs
Use to extend the flux paths of a magnetic chuck with parallel poles
May be used horizontally or vertically. Can be machined to accommodate awkward workpieces

Simple Magnetic Sine Tables

Part No Std Pole	Part No Fine Pole	Top Plate Length mm	Top Plate Width mm	Base Length mm	Base Width mm	Height at Zero mm	Weight kg
SSTFP1018	ERFP1018	180	100	215	115	73	10
SSTFP1325	ERFP1325	255	130	295	195	78	20.5
SSTFP1535	ERFP1535	350	150	390	165	89	36



Accuracy of sine table within (+/- 5 secs of arc)
Pole spacing 2mm (1.5mm Steel 0.5mm Brass)
Sine table calculations included
Clamping force 80N/cm²

'V' Blocks

Part No	Width mm	Length mm	Height mm	Max. Dia. of Workpiece Top 'V' mm	Max. Dia. of Workpiece Bottom 'V' mm	Weight kg
25 Micron Accuracy						
E934	70	101.6	95.5	65	22	1.98
E934MP	70	101.6	95.5	65	22	3.96
E935	70	80	95.5	65	22	3.12
E935MP	70	80	95.5	65	22	6.24
10 Micron Accuracy						
E993A	70	120	95	65	22	4.4
E933MPA	70	120	95	65	22	8.8
E935A	70	80	95	65	22	2.95
E935MPA	70	80	95	65	22	5.9



'V' blocks are ideal for holding cylindrical and complex workpieces for marking, spark erosion, grinding and measurement operations
Can be used on its base, side or end

ULTRALIFT PLUS+
ULTRALIFT LM
ULTRALIFT TP



MAGNETIC LIFTERS

Magnetic lifters are quicker, easier and safer to use than slings, chains, hooks and grabs, and do not mark the load.

Onboard switching and permanent magnet technology mean installation and operation could not be easier and running costs are non-existent.

Access is only required to the load's top face, allowing for more efficient storage and handling.



Ultralift^{plus}+

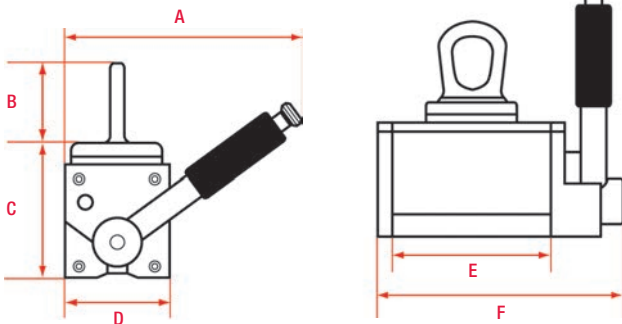
Ultralift Plus

The world's safest lifter

Lifts up to 2000kg (flat) 800kg (round)

3 safety features:

- Locking switch handle mechanism
- Unique 'Safety Shim': pre-test any load to ensure a 3:1 safety factor
- Locking eye mechanism: magnet cannot be switched off while holding a load



3:1 SAFETY FACTOR



The patented 'safety shim' allows pre-testing of the load to be lifted, irrespective of weight, material type, material thickness and surface condition. If the load passes a 3:1 safety factor is guaranteed

Ultralift Plus+

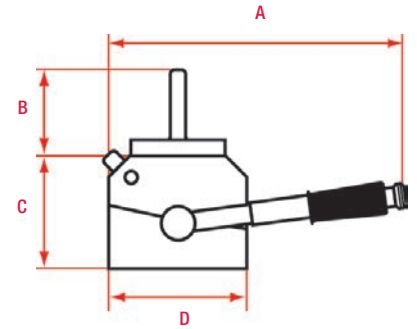
Part No.	Self Weight (kg)	Lifter Dimensions mm						Material Length Max. mm	Lift Specifications			
		A	B	C	D	E	F		Flat Section		Round Section	
									SWL* (kg)	Thickness Min. mm	SWL* (kg)	Diameter Max. mm
UL0125+	4	152	64	74	69	101	155	125	20	50	200	
UL0250+	11	218	94	96	92	155	214	250	25	100	300	
UL0500+	27	266	123	128	122	224	300	500	30	200	400	
UL1000+	63	391	140	174	176	260	359	1000	45	400	450	
UL2000+	157	493	195	227	233	368	477	2000	70	800	600	

* SWL - Safe Work Load

MAGNETIC LIFTERS

Ultralift LM

Part No.	Self Weight (kg)	Lifter Dimensions mm						Material Length Max. mm	Lift Specifications				
		A	B	C	D	E	F		Flat Section		Round Section		
								SWL (kg)	Thickness Min. mm	SWL (kg)	Diameter Max. mm		
LM0125	4.5	150	54	62	76	110	150	1500	125	20	50	250	
LM0250	8.5	210	76	72	90	165	200	1500	250	25	100	300	
LM0500	17.5	281	103	88	106	225	243	1500	500	30	200	400	
LM1000	36.5	391	113	103	136	325	365	1500	1000	45	400	450	
LM2000	79	483	170	132	186	400	526	2000	2000	70	800	600	



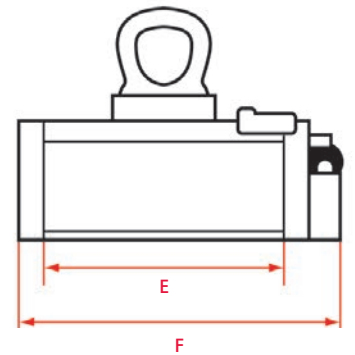
Ultralift LM

Safe, general-purpose lifting

Lifts up to 2000kg (flat)

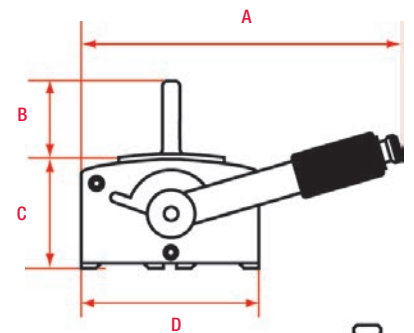
800kg (round)

Locking switch handle mechanism



Ultralift TP

Part No.	Self Weight (kg)	Lifter Dimensions mm						Lift Specifications									
		A	B	C	D	E	F	Material Thickness									
								5mm	6mm	8mm	10mm						
								SWL (kg)	Length Max. mm	SWL (kg)	Length Max. mm	SWL (kg)	Length Max. mm	SWL (kg)	Length Max. mm	SWL (kg)	Length Max. mm
TP150	8	181	52	74	100	150	202	75	1500	100	1500	150	1500	200	1500	200	1500
TP300	15	181	52	74	100	300	352	150	2000	200	2000	300	2000	400	2000	400	2000



Ultralift TM

Thin plate lifter

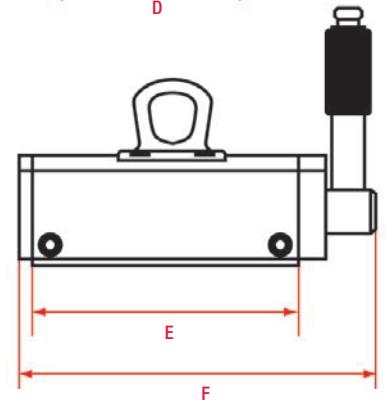
Lifts up to 400kg (flat)

Specifically designed for the safe lifting of thin plate and pressings, it can lift single sheets from the tops of stacks

Locking switch handle mechanism



Testing & Repair Service Available



**PIPE WRENCHES
ADJUSTABLE WRENCHES
CHAIN PIPE WRENCHES
HINGED PIPE VICES
PIPE CUTTERS
HAND BENDER**



WRENCHES & PIPE VICES

Leader Pattern Pipe Wrenches

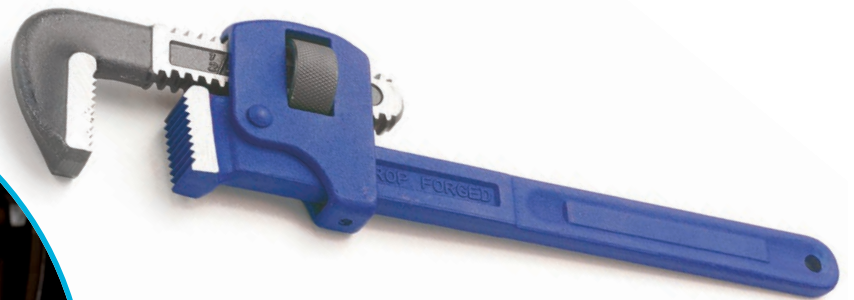
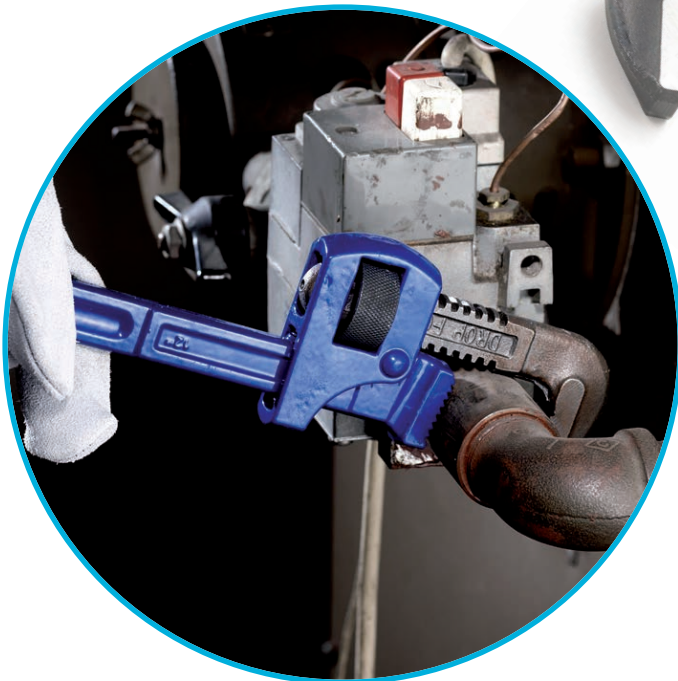


The frame and handle are made from a one piece ductile iron casting which is guaranteed unbreakable, whilst the flash hardened teeth increase wear resistance. The hardened and tempered steel adjustment nut gives a longer working life and the precision machined screw thread and spring jaw remain open until pressure is applied. Can also be used as a crude hammer. Conforms to British Standard BS3594.



Part No	Length (when open)	Pipe Capacity	Box Qty
ELPW8	8" (200mm)	1" (25mm)	4
ELPW10	10" (250mm)	1½" (38mm)	4
ELPW12	12" (300mm)	2" (51mm)	4
ELPW14	14" (350mm)	2" (51mm)	4
ELPW18	18" (450mm)	2½" (63mm)	4
ELPW24	24" (600mm)	3" (76mm)	1
ELPW36	36" (910mm)	5" (127mm)	1
ELPW48	48" (1200mm)	6" (152mm)	1

Stillson Pattern Pipe Wrenches



The hardened and tempered hook jaw eliminates breakage, whilst the flash hardened teeth increase wear resistance. The nut abutment means that all loading is transferred direct from the handle to the nut and jaw via the nut abutment, ensuring that the frame is not load bearing, thus reducing the possibility of frame failure. Conforms to British Standard BS3594

Part No	Length (when open)	Pipe Capacity	Box Qty
ESPW8	8" (200mm)	¾" (19mm)	6
ESPW10	10" (250mm)	1" (25mm)	6
ESPW12	12" (300mm)	1½" (32mm)	6
ESPW14	14" (350mm)	1½" (38mm)	6
ESPW18	18" (450mm)	2" (51mm)	4
ESPW24	24" (600mm)	2½" (63mm)	1
ESPW36	36" (910mm)	3½" (89mm)	1

WRENCHES & PIPE VICES

Adjustable Wrenches

Part No	Description	Jaw Width	Pack Qty
ADJW6	6" (150mm)	1 1/16" (27mm)	5
ADJW8	8" (200mm)	1 1/8" (33mm)	5
ADJW10	10" (250mm)	1 1/2" (38mm)	5
ADJW12	12" (300mm)	1 3/4" (45mm)	5



The extra wide jaw can be used to tighten large nuts and bolts, whilst the metric scale laser etched onto the jaw ensures fast setting of the tool. The rust resistant lacquer increases the product life and the ergonomic soft feel sleeve gives maximum comfort and grip

Adjustable Wrenches - Extra Wide Jaws

Part No	Description	Jaw Width	Pack Qty
ADJW6WJ	6" (150mm)	1 1/8" (34mm)	6
ADJW8WJ	8" (200mm)	1 1/2" (38mm)	6
ADJW10WJ	10" (250mm)	2" (50mm)	5

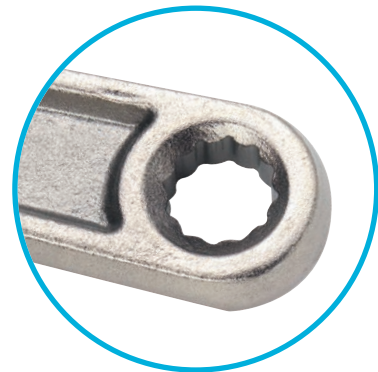


Ideal for use in plumbing, installation and automotive tasks. Not only does the extra wide jaw opening increase versatility, but the super thin head means that the wrench can be used in confined spaces. In addition, the throat depth is deeper than standard adjustable wrenches and the head is angled to offer maximum speed and efficiency. Soft grip handle for added comfort

Adjustable Wrenches - Standard Handle

Part No	Length	Jaw Width	Pack Qty
ADJW6S	6" (150mm)	1 1/16" (27mm)	5
ADJW8S	8" (200mm)	1 1/8" (33mm)	5
ADJW10S	10" (250mm)	1 1/2" (38mm)	5
ADJW12S	12" (300mm)	1 3/4" (45mm)	5
ADJW15S*	15" (375mm)	1 3/4" (45mm)	2

* Ring spanner not included



The extra wide jaw can be used to tighten large nuts and bolts, whilst the metric scale laser etched onto the jaw ensure fast setting of the tool. The rust resistant lacquer increases the product life, whilst the ergonomic handle includes a ring spanner

WRENCHES & PIPE VICES

Swedish Pattern Pipe Wrenches

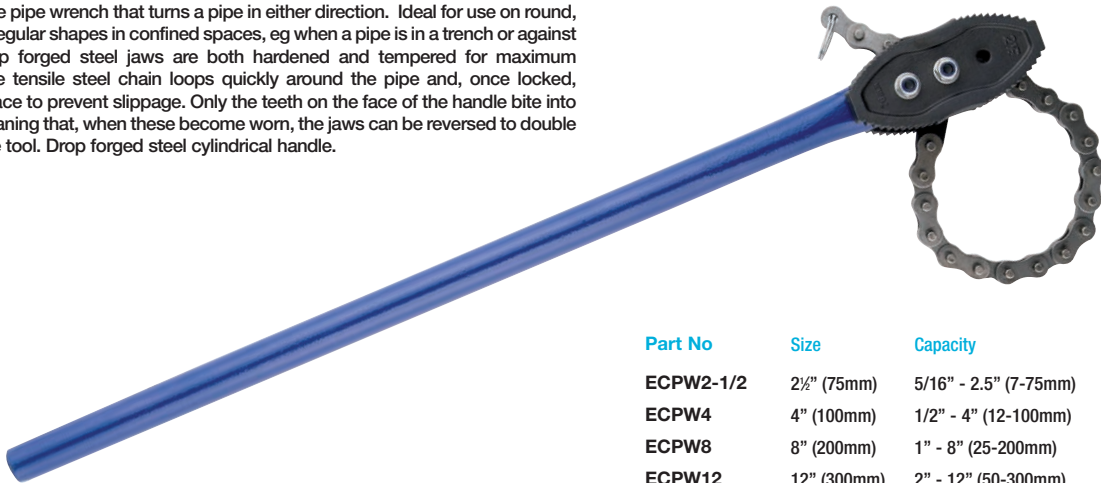


Part No	Length (when open)	Pipe Capacity	Pack Qty
ESWDPW1	13 ³ / ₈ " (335mm)	1" (25mm)	6
ESWDPW15	18 ¹ / ₂ " (470mm)	1 ¹ / ₂ " (38mm)	6
ESWDPW2	24" (610mm)	2" (50mm)	4
ESWDPW3	27 ¹ / ₈ " (695mm)	3" (75mm)	1

Bent nose 90 degree angled head. Manufactured from drop forged, hardened chrome vanadium steel. Hardened jaws.

Chain Pipe Wrenches

An adjustable pipe wrench that turns a pipe in either direction. Ideal for use on round, square, or irregular shapes in confined spaces, eg when a pipe is in a trench or against a wall. Drop forged steel jaws are both hardened and tempered for maximum strength. The tensile steel chain loops quickly around the pipe and, once locked, holds it in place to prevent slippage. Only the teeth on the face of the handle bite into the pipe, meaning that, when these become worn, the jaws can be reversed to double the life of the tool. Drop forged steel cylindrical handle.



Part No	Size	Capacity	Chain Length	Pack Qty
ECPW2-1/2	2 ¹ / ₂ " (75mm)	5/16" - 2.5" (7-75mm)	19" (475mm)	6
ECPW4	4" (100mm)	1/2" - 4" (12-100mm)	29 ¹ / ₂ " (730mm)	6
ECPW8	8" (200mm)	1" - 8" (25-200mm)	40 ¹ / ₈ " (1015mm)	4
ECPW12	12" (300mm)	2" - 12" (50-300mm)	53 ¹ / ₈ " (1340mm)	1

Hinged Pipe Vices



Ideal for repetitive clamping tasks on pipework. Can be fitted to a bench or a stand. The hinged top section allows rapid access to the job, whilst the self locking frame is reversible for right or left-handed operation. The steel tommy bar and mainscrew exert and maintain a powerful gripping force and the SG ductile iron frame is guaranteed unbreakable.

Part No	Size	Pipe Capacity	Pack Qty
EHPV2	3/8" - 2" (10-50mm)	5/16" - 2.5" (7-75mm)	1
EHPV2-1/2	3/8" - 2 ¹ / ₂ " (10-60mm)	1/2" - 4" (12-100mm)	1
EHPV3-1/2	3/8" - 3 ¹ / ₂ " (10-90mm)	1" - 8" (25-200mm)	1
EHPV6	5/8" - 6" (16-150mm)	2" - 12" (50-300mm)	1



PIPE CUTTERS & HAND BENDER

Copper Pipe Slicers



For cutting copper tubing. Single handed operation – ideal for use in confined areas, for example where there is limited space between the wall and copper pipes. Two sizes available for use with 15mm and 22mm copper tube. Spare cutting wheels also available

Part No	Cutting Capacity	Box Qty
ECPS15	1/2" (15mm)	10
ECPS22	3/8" (22mm)	10
ECPS15-SW (Spare Wheel)	1/2" (15mm)	10
ECPS22-SW (Spare Wheel)	3/8" (22mm)	10

Mini Tube Cutter



For cutting 3-22mm (1/8" to 7/8" o.d.) copper and aluminium tubing. Specifically suited to small bore tubing. The compact size makes the mini tube cutter ideal for use in confined spaces. Quickly adjusts to the required cutting position. Spare cutting wheel also available

Part No	Cutting Capacity	Box Qty
ECTC22	1/8" - 7/8" (3-22mm)	10
ECTC22W-SW (Spare Wheels)	1/8" - 7/8" (3-22mm)	(pkt 2) 5
ECTC22W-SS (Spare Wheels - Stainless Steel)	1/8" - 7/8" (3-22mm)	(pkt 6) 24

Telescopic Tube Cutters



For cutting copper, brass, aluminium and light gauge steel tube. Makes clean, fast cuts, leaving little fash to clear away. The feed screw does not expand during use, so telescopic tube cutters are ideal for use in confined spaces. Each cutter includes an integral deburrer and a spare cutting wheel. Spare cutting wheels also available separately

Part No	Cutting Capacity	Box Qty
ECTC32	1/8" - 1 1/2" (3-32mm)	5
ECTC50	3/4" - 2" (5-50mm)	10
ECTC32-SW (Spare Wheels)	1/8" - 1 1/2" (3-32mm)	(2pk) 10
ECTC32W-SS (Spare Wheels) - Stainless Steel	1/8" - 1 1/2" (3-32mm)	(6pk) 24
ECTC50-SW (Spare Wheels)	3/4" - 2" (5-50mm)	(2pk) 10
ECTC50W-SS (Spare Wheels) - Stainless Steel	3/4" - 2" (5-50mm)	(6pk) 24

Plastic Pipe Cutters



For cutting PVC, polythene, MDP and polyethylene pipe, HEP 20, plastic overflow pipe and rubber hoses etc. High quality stainless steel blades ensure clean cuts without distortion to the plastic tubing. Ratchet system ensures a fast, efficient cut. Two sizes available; 32mm and 42mm. Spare blades also available

Part No	Cutting Capacity	Box Qty
EPPC32	1 1/2" (32mm)	1
EPPC42	1 1/8" (42mm)	1
EPPC32-SB (Spare Blade)	1 1/2" (32mm)	1
EPPC42-SB (Spare Blade)	1 1/8" (42mm)	1

Roller Pipe Cutter



For cutting steel and cast iron pipe. Frame made from unbreakable SG Ductile iron. The two rollers keep the cutter squarely on track whilst also rolling down burr to leave a clean cut. Includes a hardened steel cutting wheel and a steel mainscrew that applies a firm pressure, creating a clean cut. The safety stop prevents the cutting wheel from being damaged by the rollers

Part No	Cutting Capacity	Box Qty
ERP2	1/2" - 2" (3-50mm)	1

Hand Bender & Accessories



A compact tool for bending 15mm and 22mm o.d. copper tube. Ideal for installing small heating systems. Supplied with 15mm and 22m formers and guides

Part No	Pipe Capacity	Box Qty
EHB1522	1/2" - 3/8" (15mm - 22mm)	1
EHBG15	15mm Guide	24
EHBG22	22mm Guide	4
EHBF15	15mm Former	10
EHBF22	22mm Former	10

**BOILERMAG
BOILERMAGXT
BOILERMAGXL**

**3 YEAR
WARRANTY**



**Range includes filters
for all property types**



Heating & Cooling System Protection

- Removes ferrous oxide (black sludge)
- Reduces energy and maintenance costs
- Easy to install and service
- Extends boiler life

BoilerMag Domestic - 22 x 28mm connections



Domestic Heating System Protection

- Fast, zero hassle fit
- Removes magnetic and non-magnetic material
- Fits any angle pipe work
- Unique no-block, dual flow design
- Flushing attachment available
- Ideal for flushing and chemical dosing
- High quality valves included

Part No	Pipe Fitting	Box Qty
BM22	22mm	1
BM28	28mm	1
BMFA	Flush Attachment	1



3 YEAR WARRANTY



BOILERMAG

BoilerMag Commercial XL - 1 1/4" (32mm) Connections



- Ideal for medium-sized properties
- Large collection capacity
- Stainless steel construction
- Easy to clean and service

Part No	Pipe Fitting	Box Qty
BMXL	1 1/4" (32mm)	1

3 YEAR WARRANTY



BoilerMag Industrial XT



- For large commercial, industrial and municipal premises
- Large collection capacity
- Stainless steel construction
- Easy to clean and service

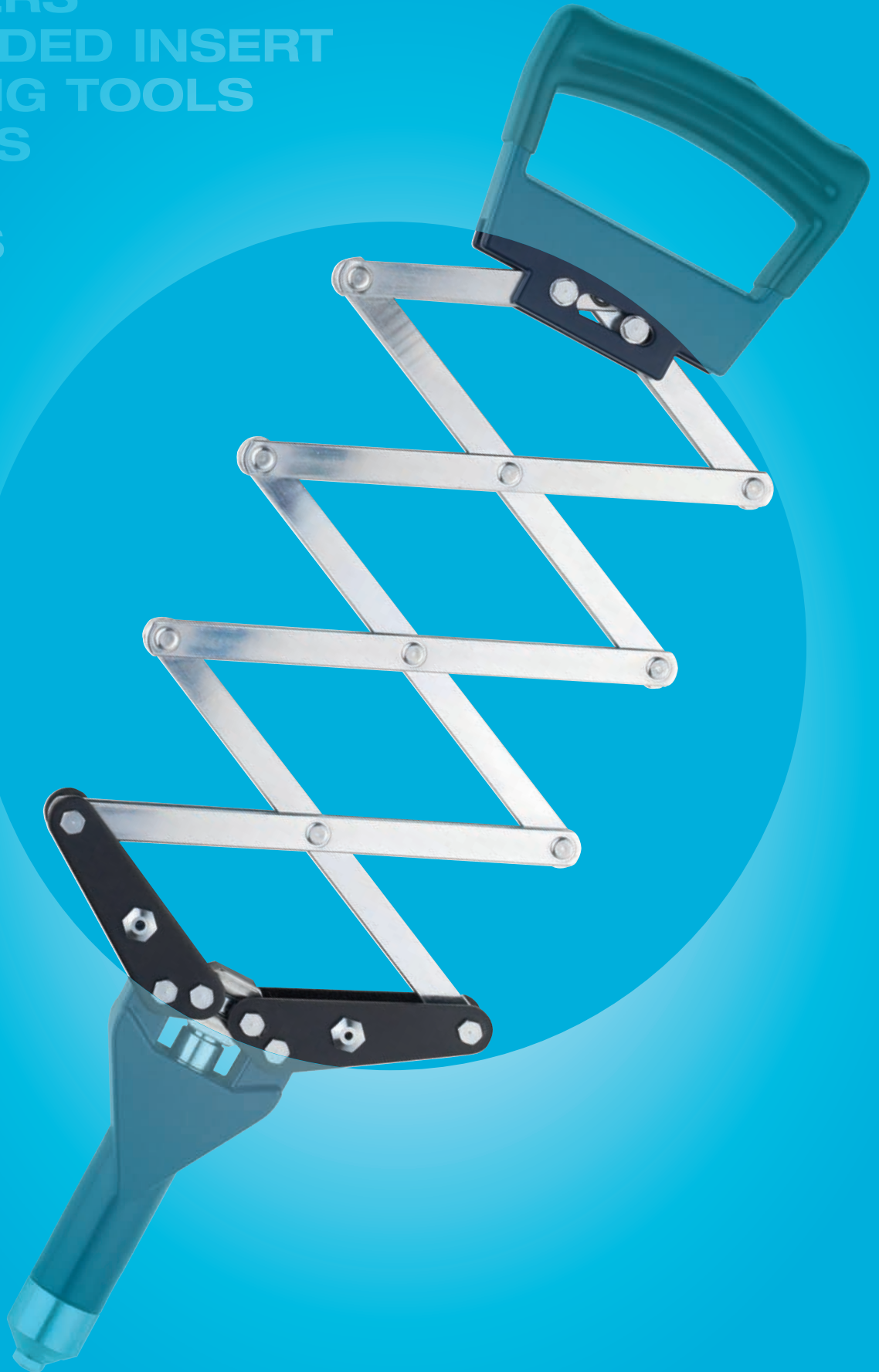
Part No	Pipe Fitting	Box Qty
BMXT150	2"	1
BMXT200	4"	1
BMXT300	4"	1
BMXT300HF	6"	1

For full technical information visit www.boilermag.com

3 YEAR WARRANTY



RIVETERS
THREADED INSERT
SETTING TOOLS
SPARES
KITS
RIVETS



RIVETERS

Lazy Tong - 2750

Part No	Description	For use with Rivet Sizes	Pack Qty
2750	Lazy Tong	3mm (1/8") 4mm (5/16") 5mm (3/8")	1



This powerful and versatile tool has the advantage of being operated with one hand, providing no loss in efficiency. Useful on vehicle maintenance, agricultural projects and construction

Heavy Duty Lazy Tong - 2750HD

Part No	Description	For use with Rivet Sizes	Pack Qty
2750HD	Heavy Duty Lazy Tong	3mm (1/8") 4mm (5/16") 5mm (3/8") 6.4mm (1/4")	1



A fixed head riveter ideal for use with stainless steel rivets up to 6.4mm. This powerful and versatile tool has the advantage of being operated with one hand, providing no loss in efficiency. Useful on vehicle maintenance, agricultural projects and construction.

Long Arm - 2760

Part No	Description	For use with Rivet Sizes	Pack Qty
2760	Long Arm	4mm (5/16") 5mm (3/8") 6mm (1/4")	1



The long arms reduce to the minimum the effort required to set rivets up to 6mm. Probably the most powerful industrial hand riveter available today. Ideal for boat building and coachwork, agricultural machine maintenance, etc. Supplied with 4 interchangeable noses

Heavy Duty Long Nose - 2720

Part No	Description	For use with Rivet Sizes	Pack Qty
2720	Heavy Duty Long Nose	3mm (1/8") 4mm (5/16") 5mm (3/8")	1



A versatile variation of the 2730, with extra long nose to facilitate access in recessed situations such as corrugated sheet. Supplied with 4 interchangeable noses

Heavy Duty - 2730

Part No	Description	For use with Rivet Sizes	Pack Qty
2730	Heavy Duty	3mm (1/8") 4mm (5/16") 5mm (3/8")	1



The market leading professional heavy duty riveter, best suited to engineering and maintenance projects. Supplied with 3 interchangeable noses

Easy Grip - 2770

Part No	Description	For use with Rivet Sizes	Pack Qty
2770	Easy Grip	3mm (1/8") 4mm (5/16") 5mm (3/8")	1



Easy one-handed operation. Well suited to light engineering use, especially for the home and workshop, providing a professional finish

General Purpose Riveter - 2800

Part No	Description	For use with Rivet Sizes	Pack Qty
2800	General Purpose	2mm (5/16") 3mm (1/8") 4mm (5/16") 5mm (3/8")	1



General purpose riveter, equipped with 4 interchangeable noses, also features automatic ejection of mandrel, slip guarded comfort handles and an internally stored spanner for changing nose bushes

Easy Grip Kit - 2772

Part No	Description
2772	The 2770 riveter is supplied with a selection of 3mm, 4mm and 5mm aluminium rivets. Packed in attractive hanging box, offering good product visibility



Heavy Duty Kit - 2735

Part No	Description
2735	A carefully conceived engineering riveter kit, comprising robust hinged plastic box and 200 assorted 3, 4 and 5mm aluminium rivets and 2730 heavy duty riveter



THREADED INSERT SETTING TOOLS & KITS



Threaded Insert Setting Tool

Part No Description

- 1 2743** This thin sheet setting tool has been designed to enable threaded nut inserts to be set easily by hand. Invaluable to maintenance engineers for on-the-spot repairs. Supplied in storage wallet complete with 4mm, 5mm, 6mm and 8mm nose bushes and mandrels

Threaded Insert Nose Bush / Mandrel Conversion Kit

Part No.	Size	Qty	Part No.	Size	Qty
72CK211	6 UNC	10	72CK224	1/4 UNF	10
72CK212	8 UNC	10	72CK231	3mm	10
72CK213L	10 UNC	10	72CK232L	4mm	10
72CK214L	1/4 UNC	10	72CK233L	5mm	10
			72CK234	6mm	10
			72CK235	8mm	10

Inserts

Part No.	Size	Qty	Part No.	Size	Qty
724504	4mm	100	724505	5mm	100
724506	6mm	100	724508	8mm	100

Threaded Insert Setting Tool Kit

Part No Description

- 2 2745** As the 2743 but supplied with additional 4mm, 5mm, 6mm and 8mm threaded nutserts. Housed in a compact tool box for easy storage

- Designed for the quick, manual insertion of permanent load bearing threads in materials from 0.20" to 0.128"
- Simple set up and easy uniform stroke allows a nutsert to be set in thin sheet materials without causing surface damage
- A comprehensive range of conversion kits and inserts are available

Product Benefits

- One side application
- Flush mounting
- Permanent thread
- Moisture resistant
- Cost effective
- Strong
- Rapid
- Vibration resistant
- Portable

TSN® GRIP RANGE

SIZE	MINIMUM	MAXIMUM
4mm	0.51mm (0.020")	1.27mm (0.050")
5mm	0.51mm (0.020")	1.27mm (0.050")
6mm	0.76mm (0.030")	1.68mm (0.066")
8mm	0.91mm (0.036")	3.25mm (0.128")

All TSN® are BS, ISO metric screw threads in the coarse pitch series. TSN® (thin sheet nutsert) is the registered trademark of AVDEL LTD.

RIVETER KITS/SPARES/RIVETS/DEBURRING TOOLS

Rivets

SHORT

Rivet Dia	Part No	Maximum Grip	Overall Length to Collar
3mm	A23S	2mm	6mm
4mm	A24S	2mm	6mm
5mm	A25S	3mm	7mm

MEDIUM

Rivet Dia	Part No	Maximum Grip	Overall Length to Collar
3mm	A23M	3.5mm	8mm
4mm	A24M	5mm	8mm
5mm	A25M	7mm	10mm

LONG

Rivet Dia	Part No	Maximum Grip	Overall Length to Collar
3mm	A23L	7.5mm	11mm
4mm	A24L	9mm	14mm
5mm	A25L	11mm	16mm

Washers

Part No	Description	Unit of Pack
S23W	Washers Blister 100 x 3mm (1/8")	10
S24W	Washers Blister 100 x 4mm (5/32")	10
S25W	Washers Blister 100 x 5mm (3/16")	10

Spare Nose Kits

Part No	Description	For use with rivet sizes
1 02738A	Kit 1-5x72HD12A	3mm(1/8")
2 02738B	Kit 2-5x72HD13A	4mm(5/32")
3 02738C	Kit 3-5x72HD14	5mm(3/16")

for use with 2750HD

02738A-HD	Spare Nose Kit - 5 x 3mm	3mm(1/8")
02738B-HD	Spare Nose Kit - 5 x 4mm	4mm(5/32")
02738C-HD	Spare Nose Kit - 5 x 5mm	5mm(3/16")
02738A-HD	Spare Nose Kit - 5 x 6mm	6mm (1/4")

for use with 2760

02768A	Kit 4-1 each 72LA12	4mm(5/32")
	72LA13A (for aluminium)	5mm(3/16")
	72LA13S (for steel)	5mm(3/16")
	72LA14	6mm (1/4")



Deburring Tool

Part No Description

- 1 9350 A multifunctional tool capable of holding a range of different blades, coarse to fine, for external and internal deburring operations. Easy to operate chuck allows for quick blade changeover.



Deburring Tool Blades

Part No Description

- 2 DB1 Heavy Duty HSS blade for steel and aluminium
- 3 DB2 Heavy Duty HSS blade for brass and cast iron. Capable of right and left hand cuts

All blades are ground from quality high speed steel, heat treated for maximum tool life and designed for safety with unique rounded heads

Spare Jaw Kits

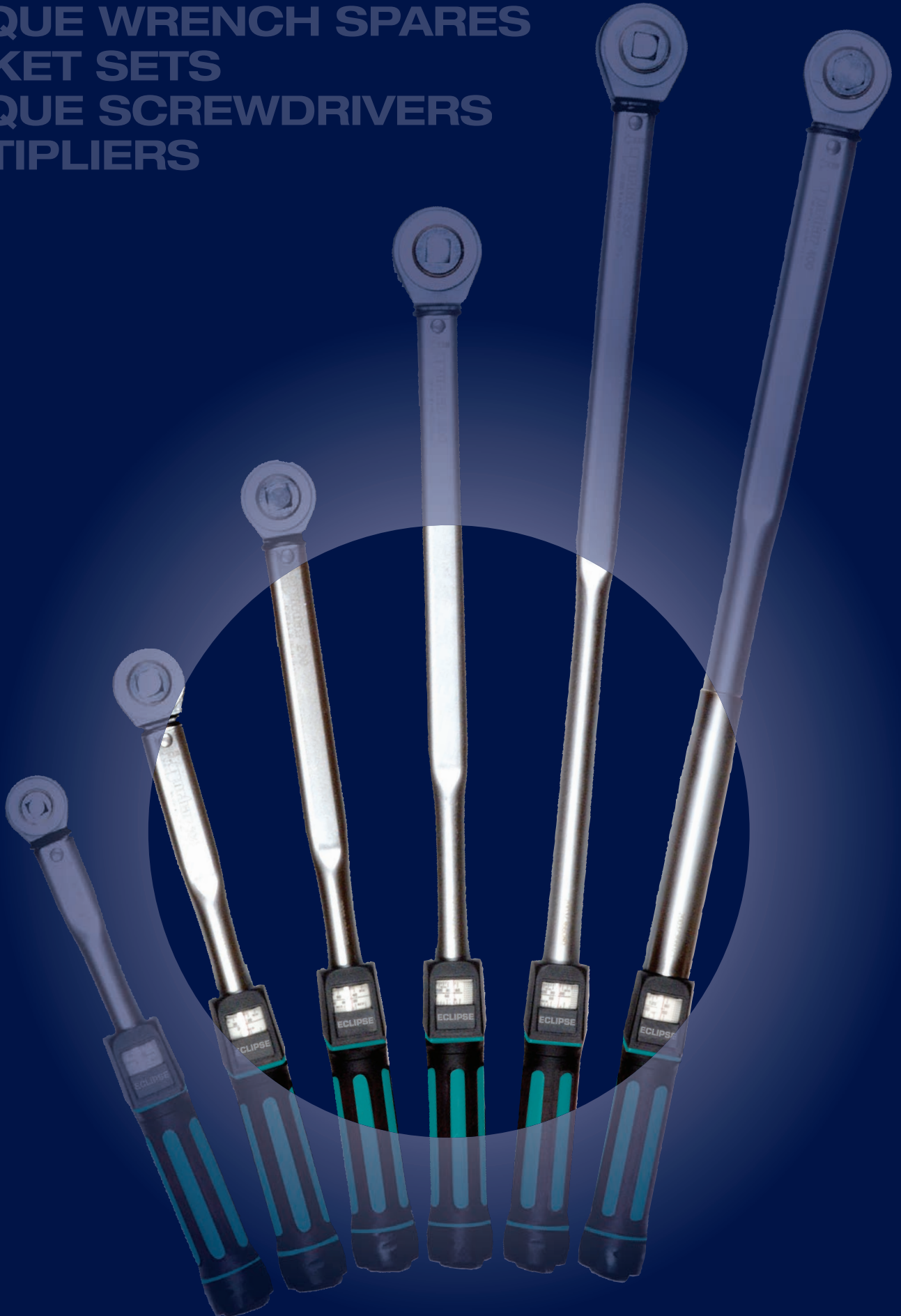
Part No	Description
2738	Pack of 5 jaws to suit models: 2720, 2730, 2750, 2770 Part No. 72HD5A
02768	Pack of 5 jaws to suit models: 2760 Part No. 72LA5

Spares list and drawings are also available for threaded insert setting tool 2743/2745.

Riveter Repair Kits

Part No	Description	Part No	Description
02729	Repair kit for 2720	02759	Repair kit for 2750
02739	Repair kit for 2730/2770	02769	Repair kit for 2760

TORQUE WRENCHES
TORQUE WRENCH SPARES
SOCKET SETS
TORQUE SCREWDRIVERS
MULTIPLIERS



ECLIPSE TORQUE TOOLS

Eclipse torque wrenches are manufactured in the UK and incorporate the very latest design, manufacturing and quality control technology to achieve the highest level of innovation and precision in the field of torque control equipment.

GLOBAL SERVICE

Neill Tools are pleased to advise the availability of tool re-calibration services to the original factory standard at five locations on five different continents. The accredited laboratories are situated in the UK, Australia, USA, Singapore and China, and use the same equipment and procedures as the factory (which has UKAS accreditation). Please contact sales@neill-tools.co.uk for full details of the repair and re-calibration services available.

THE OFFICIAL MARK OF QUALITY



CERT NO. Q6228



0256

Eclipse torque wrenches conform to the most stringent quality standards set by UKAS (the UK Government body who set the laboratory standards for calibration services). The factory manufactures according to BSEN ISO/IEC 17025:2000 which sets the standard for the technical competence of the original testing laboratory. This should not be confused with laboratories claiming ISO 9000:2000, as this standard relates only to a laboratory's quality management systems. We guarantee all our tools and products against defective workmanship and materials so you can be sure of first class quality every time.

ECLIPSE TORQUE WRENCHES: TRACEABLE CALIBRATION

A Certificate of Calibration is generated on the production line during calibration for each torque wrench and is individually packed with each product.

Certificate Key

1. Torque wrench model
2. Torque wrench individual serial number
3. Torque settings to which the wrench is calibrated
4. Upper and lower tolerance
5. The actual torque readings achieved by the wrench
6. The standard against which the wrench is being tested
7. Details of the test equipment and calibration certificate number. This information provides the traceability to our UKAS laboratory and hence to national standards



ECLIPSE
PROFESSIONAL ENGINEERING TOOLS

Neill Tools Ltd
Atlas Way, Atlas North, Sheffield S4 7QQ England
Tel: +44 (0)114 281 4242 Fax: +44 (0)114 281 4252
sales@neill-tools.co.uk www.spear-and-jackson.com

Certificate of Calibration

1. Model: **ESLI 3/8"**

Serial No: **2010/205474** 2.

Maximum Capacity: **54.0** Units: **N.m.**

Inspector: **np** Ambient Temperature: **20°C**

Set Torque	Min	Max	Actual Readings			
10.0	9.62	10.42	9.94	9.92	9.93	9.92
30.0	28.85	31.25	29.63	29.62	29.61	29.58
54.0	51.92	56.25	54.66	54.64	54.60	54.51

The limits shown and the test equipment used for this calibration comply with the requirements of **ISO6789 : 2003** 6.

The uncertainty of the test equipment at 20° is $\pm 1\% k = 2$.

The test equipment used in the performance of the above calibration has international traceability through the following calibration laboratory which is UKAS accredited to ISO 17025:2005

UKAS Laboratory No: 0256

Tester Model: 50028. Dedicated Transducer System

Serial No: 28635

Cert No: 124967

Date of Calibration
19 Oct 2011

Quality Manager
N Parlett

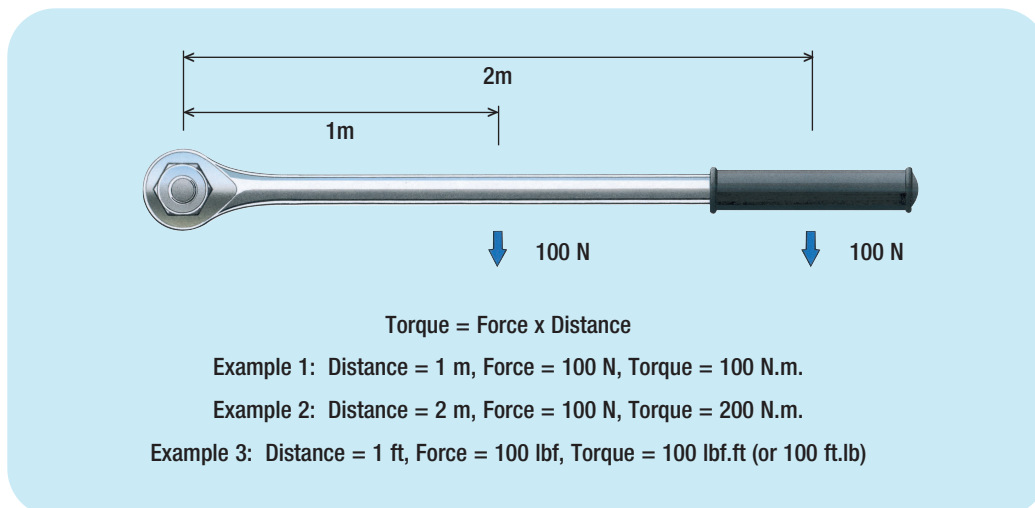
WHAT IS TORQUE?

Torque is any force or system of forces that tends to cause rotation about an axis.

MEASUREMENT OF TORQUE

Imagine someone tightening a bolt using a socket attached to a meter long bar. If they apply 10 kgf of force (kgf) perpendicular to the bar they will produce a torque of 10 kgf.m at the axis (the centre of the bolt).

However, under the S.I. system of measurement, force is expressed in Newtons (N) rather than kgf. The conversion between kgf and N is $\times 9.807$ so the person is applying 98.07 N.m of torque.



THE IMPORTANCE OF TORQUE CONTROL

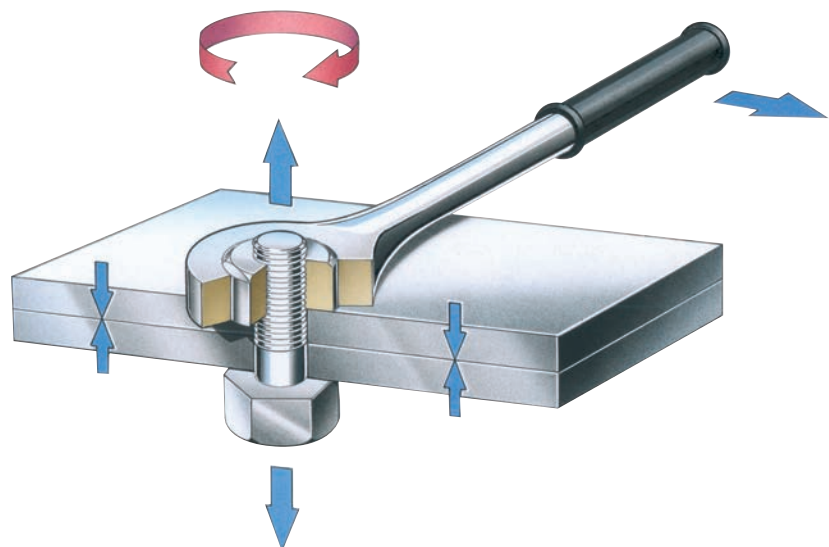
Although many methods exist to join two or more parts together, the ease of assembly and disassembly provided by threaded fasteners make them the ideal choice for many applications.

The object of a threaded fastener is to clamp parts together with a tension greater than the external forces tending to separate them. The bolt then remains under constant stress and is immune from fatigue. However, if the initial tension is too low, varying loads act on the bolt and it will quickly fail. If the initial tension is too high, the tightening process may cause bolt failure. Reliability therefore depends upon correct initial tension. The most practical way of ensuring this is by specifying and controlling the tightening torque.

BOLT TENSION

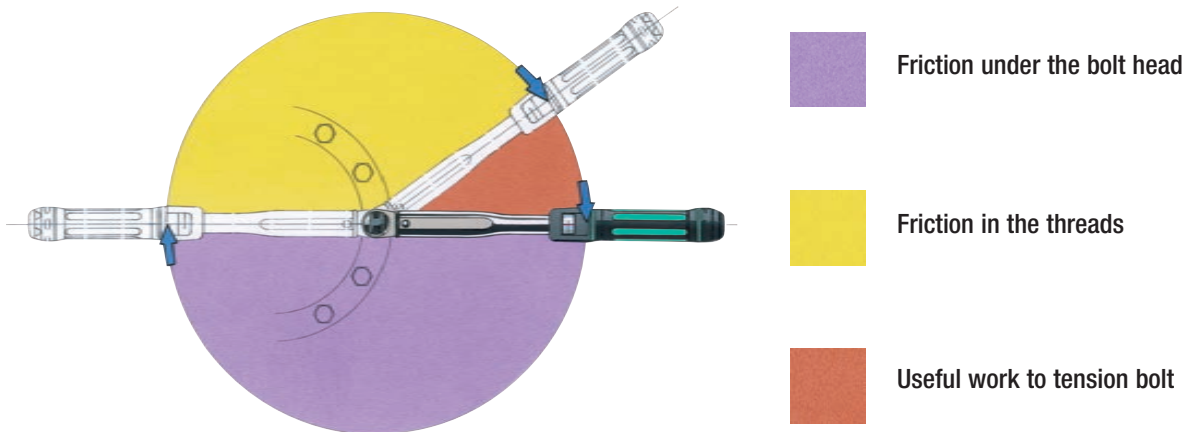
When an assembly is clamped by tightening a nut and bolt, the induced tension causes the bolt to stretch. An equal force acts to compress the parts which are thus clamped.

The proof load of a bolt, normally established by test, is the load which just starts to induce permanent set - also known as the yield point. Typically bolts are tightened to between 75% and 90% of yield.



FRICITION IN THE BOLTED JOINT

When a threaded fastener is tightened, the induced tension results in friction under the head of the bolt and in the threads. It is generally accepted that as much as 50% of the applied torque is expended in overcoming friction between the bolt head and the abutting surface and another 30% to 40% is lost to friction in the threads. As little as 10% of the applied torque results in useful work to tension the bolt.



Given that up to 90% of the applied torque will be lost to friction, it follows that any changes in the coefficient of friction resulting from differences in surface finish, surface condition and lubrication can have a dramatic effect on the torque versus tension relationship. Some general points can be made:

- Most torque tightened joints do not use washers because their use can result in relative motion between the nut and washer or the washer and joint surface during tightening. This has the effect of changing the friction radius and hence affects the torque-tension relationship. Where a larger bearing face is required then flange nuts or bolts can be used. If washers are to be used, hard washers with a good fit to the shank of the bolt give lower and more consistent friction and are generally to be preferred.
- Degreasing fasteners of the film of oil usually present on them as supplied will decrease the tension for a given torque and may result in shear of the fastener before the desired tension is achieved.
- Super lubricants formulated from graphite, molybdenum disulphide and waxes result in minimal friction. Unless allowance is made in the specified tightening torque, the induced tension may be excessive causing the bolt to yield and fail. However, used in a controlled manner, these lubricants serve a useful purpose in reducing the torque to produce the desired tension meaning that a lower capacity tightening tool can be used.
- For reasons of appearance or corrosion resistance, fasteners may be plated. These treatments affect the coefficient of friction and therefore the torque versus tension relationship.
- Friction is often deliberately introduced into the fastener to reduce the possibility of loosening due to vibration. Devices such as lock-nuts must be taken into account when establishing the correct tightening torque.

As a rough guide, the calculated tightening torque should be multiplied by the factor from the table opposite according to surface treatment and lubrication.

		SURFACE CONDITION OF BOLT			
		Untreated	Zinc	Cadmium	Phosphate
SURFACE CONDITION OF NUT	UNTREATED	1.00	1.00	0.80	0.90
	ZINC	1.15	1.20	1.35	1.15
	CADMIUM	0.85	0.90	1.20	1.00
	PHOSPHATE & OIL	0.70	0.65	0.70	0.75
	ZINC & WAX	0.60	0.55	0.65	0.55

RECOMMENDED MAXIMUM TORQUE VALUES



	BOLT GRADE									
	3.6	4.6	5.6	5.8	6.8	8.8	9.8	10.9	12.9	MM
	Torque in N.m									
M 1.6	0.05	0.07	0.09	0.11	0.14	0.18	0.21	0.26	0.31	3.2
M 2	0.11	0.14	0.18	0.24	0.28	0.38	0.42	0.53	0.63	4
M 2.5	0.22	0.29	0.36	0.48	0.58	0.78	0.87	1.09	1.31	5
M 3	0.38	0.51	0.63	0.84	1.01	1.35	1.52	1.9	2.27	5.5
M 4	0.71	0.95	1.19	1.59	1.91	2.54	2.86	3.57	4.29	7
M 5	1.71	2.28	2.85	3.8	4.56	6.09	6.85	8.56	10.3	8
M 6	2.94	3.92	4.91	6.54	7.85	10.5	11.8	14.7	17.7	10
M 8	7.11	9.48	11.9	15.8	19	25.3	28.4	35.5	42.7	13
M 10	14.3	19.1	23.8	31.8	38.1	50.8	57.2	71.5	85.8	17
M 12	24.4	32.6	40.7	54.3	65.1	86.9	97.7	122	147	19
M 14	39	52	65	86.6	104	139	156	195	234	22
M 16	59.9	79.9	99.8	133	160	213	240	299	359	24
M 18	82.5	110	138	183	220	293	330	413	495	27
M 20	117	156	195	260	312	416	468	585	702	30
M 22	158	211	264	352	422	563	634	792	950	32
M 24	202	270	337	449	539	719	809	1011	1213	36
M 27	298	398	497	663	795	1060	1193	1491	1789	41
M 30	405	540	675	900	1080	1440	1620	2025	2430	46
M 33	550	734	917	1223	1467	1956	2201	2751	3301	50
M 36	708	944	1180	1573	1888	2517	2832	3540	4248	55
M 39	919	1226	1532	2043	2452	3269	3678	4597	5517	60
M 42	1139	1518	1898	2530	3036	4049	4555	5693	6832	65
M 45	1425	1900	2375	3167	3800	5067	5701	7126	8551	70
M 48	1716	2288	2860	3813	4576	6101	6864	8580	10296	75
M 52	2210	2947	3684	4912	5895	7859	8842	11052	13263	80
M 56	2737	3650	4562	6083	7300	9733	10950	13687	16425	85
M 60	3404	4538	5673	7564	9076	12102	13614	17018	20422	90
M 64	4100	5466	6833	9110	10932	14576	16398	20498	24597	95
M 68	4963	6617	8271	11029	13234	17646	19851	24814	29777	100

The information supplied here is intended to be an acceptable guide for normal conditions. For critical applications, further information and research will be necessary. The following basic assumptions have been made:

- Bolts are new, standard finish, uncoated and not lubricated (other than the normal protective oil film).
- The load will be 90% of the bolt yield strength.
- The coefficient of friction is 0.14.
- The final tightening sequence is achieved smoothly and slowly.

If lubrication is to be applied to the nut/bolt, multiply the recommended torque by the appropriate factor shown in the table on page 56.

TORQUE CONVERSION FACTORS

Units to be converted	S.I Units		Imperial Units		Metric Units		
	cN.m	N.m	ozf.in	lbf.in	lbf.ft	kgf.cm	kgf.m
1 cN.m=	1	0.01	1.416	0.088	0.007	0.102	0.001
1 N.m=	100	1	141.6	8.851	0.738	10.20	0.102
1 ozf.in=	0.706	0.007	1	0.0625	0.005	0.072	0.0007
1 lbf.in=	11.3	0.113	16	1	0.083	1.152	0.0115
1 lbf.ft=	135.6	1.356	192	12	1	13.83	0.138
1 kgf.cm=	9.807	0.098	13.89	0.868	0.072	1	0.01
1 kgf.m=	980.7	9.807	1389	86.8	7.233	100	1

Force lbf x 4.45 = N N x 0.225 = lbf	Flow l/s x 2.119 = cu.ft/min cu.ft/min x 0.472 = l/s	Pressure lbf/in ² x 0.069 = bar bar x 14.504 = lbf/in ²	Power hp x 0.746 = kW kW = N.m x rev/min 9546
---	---	--	---

FORMULAE

Accepted formulae relating torque and tension, based on many tests are:-

$$M = \frac{P \times D}{60}$$

M = torque lbf.ft
P = bolt tension lbf
D = bolt dia.ins

$$M = \frac{P \times D}{5000}$$

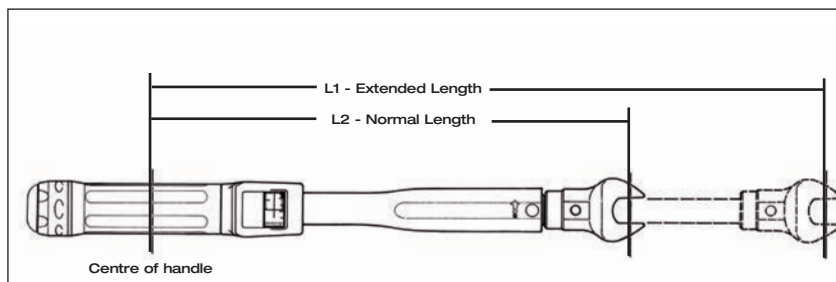
M = torque N.m
P = bolt tension Newtons
D = bolt dia.mm

These formulae may be used for bolts outside the range of the tables.

FORMULAE FOR CALCULATING THE EFFECT OF TORQUE WRENCH EXTENSIONS

$$M1 = M2 \times L1/L2$$

Where L1 is the normal length and L2 is the extended length, M1 is the set torque and M2 the actual torque applied to the nut.



EXAMPLE

The required torque on the fastener is 130 N.m (M2) but what do you set on the torque wrench scale?

$$L1 = 500 \quad L2 = 650$$

(units of length not important, this is a ratio)

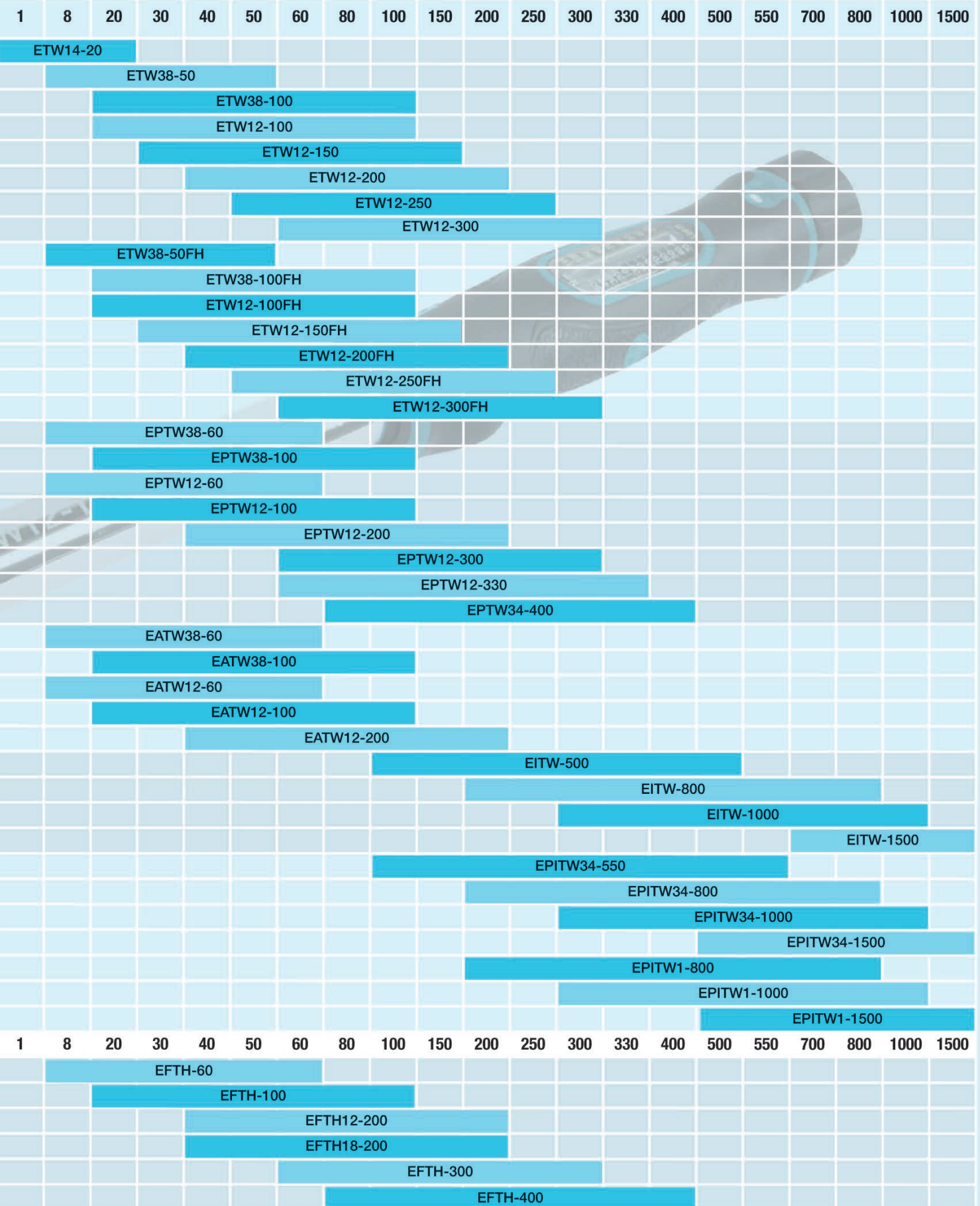
$$M1 = 130 \times 500/650$$

$$M1 = 100$$



RANGE	HEAD TYPE	ACCURACY	OTHER SELECTION CRITERIA	TYPICAL APPLICATIONS	DRIVE
ECLIPSE	Push Through Ratchet	+/-3%	Can be used in a clockwise & an anti-clockwise direction (push) through ratchet	General workshop, garage and tyre shop torque applications	1/4"
					3/8"
					1/2"
ECLIPSE FIXED HEAD	Fixed, Push Through	+/-3%	Fewer working parts compared to ratchet type wrenches	General workshop, garage and tyre shop torque applications	3/8"
					1/2"
ECLIPSE PROFESSIONAL	Push Through Ratchet	+/-3%	Can be used in a clockwise & an anti-clockwise direction (push) through ratchet Finer adjustment than the Eclipse range	General workshop, garage and tyre shop torque applications	3/8"
					1/2"
					3/4"
ECLIPSE AUTOMOTIVE	Bi-directional Ratchet	+/-3%	Where space is limited	Torque applications in the confined spaces of modern motor vehicles	3/8"
					1/2"
ECLIPSE INDUSTRIAL	Ratchet	+/-4%	For ultimate torque control in heavy duty applications	Truck and bus tyre shops, as well as rail maintenance	3/4"
ECLIPSE PROFESSIONAL INDUSTRIAL	Ratchet	+/-3%	For precision applications requiring a higher torque	Truck and bus tyre shops, as well as rail maintenance	3/4"
					1"
ECLIPSE PROFESSIONAL TORQUE HANDLES	Female End Adjustable	+/-3%	Where a spanner end fitting rather than a socket is required	When the joint is a break union, eg a brake pipe	Size
					9 x 12
					9 x 12
					9 x 12
					14 x 18
					14 x 18

Torque in N.m



ECLIPSE TORQUE WRENCHES RATCHET HEAD

Torque Mechanism

Accuracy of +/- 3% exceeds all international standards for torque wrenches. Each wrench is supplied with a traceable calibration certificate

Ratchet

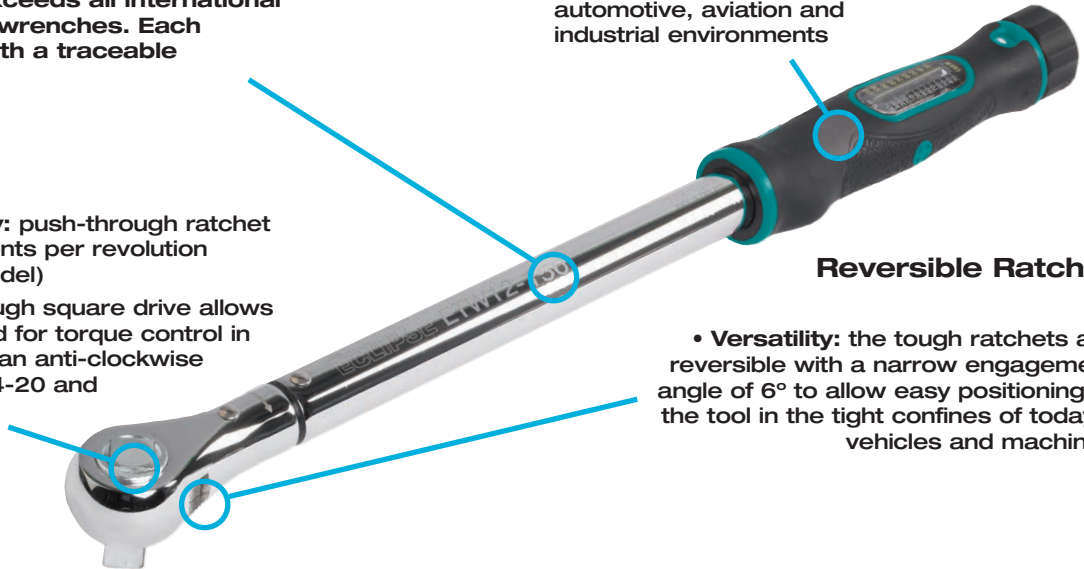
- **Strength & Durability:** push-through ratchet with 60-72 engagements per revolution (depending on the model)
- **Versatility:** push through square drive allows the wrench to be used for torque control in both a clockwise and an anti-clockwise direction (note: ETW14-20 and ETW38-50 are with reversible ratchets so do not have this feature)

Handle

- **Comfort & Safety:** two component ergonomic handle for maximum comfort and slip resistance
- **Durability:** Handle material and lens resist chemicals in common usage in the automotive, aviation and industrial environments

Reversible Ratchet

- **Versatility:** the tough ratchets are reversible with a narrow engagement angle of 6° to allow easy positioning of the tool in the tight confines of today's vehicles and machines



Micrometer Scale

Versatility & Accuracy: micrometer scale gives simple and error free setting (On dual scale wrenches, the micrometer increment applies to the N.m scale)



Adjustment Mechanism

Safety: a robust lock prevents accidental adjustment of the wrench during use.
Speed and Ease of Use: quick and light adjustment with the minimal of effort over the entire scale in approximately ten complete turns.



Torque Wrenches - Ratchet Head

Part No.	Square Drive	Range	Range	Resolution	Ratchet Diameter	Engagements per Revolution	Length	Weight
	Inch	N.m	lb.ft	N.m	mm		mm	kg
ETW14-20	1/4"	1-20	10-180*	0.05	30	72	230	0.4
ETW38-50	3/8"	8-50	6-35	0.10	30	72	230	0.4
ETW38-100	3/8"	20-100	15-75	0.50	38	60	405	1.0
ETW12-100	1/2"	20-100	15-75	0.50	38	60	405	1.0
ETW12-150	1/2"	30-150	20-110	0.50	38	60	455	1.1
ETW12-200	1/2"	40-200	30-150	1.00	46	60	505	1.2
ETW12-250	1/2"	50-250	40-185	1.00	46	60	560	1.4
ETW12-300	1/2"	60-300	45-220	1.00	46	60	610	1.6

*lb.ft.in

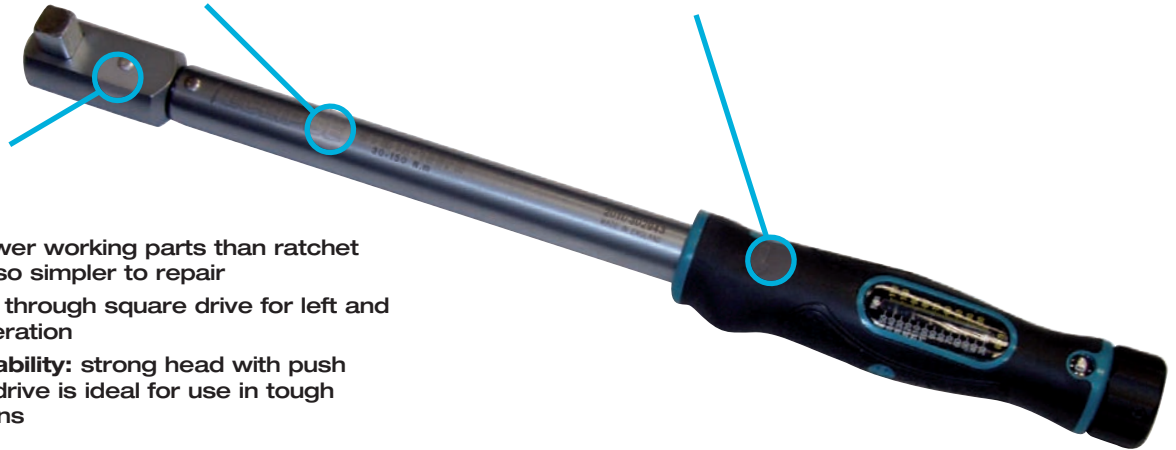
ECLIPSE TORQUE WRENCHES FIXED HEAD

Torque Mechanism

Accuracy of +/- 3% exceeds all international standards for torque wrenches. Each wrench is supplied with a traceable calibration certificate

Handle

- **Comfort & Safety:** two component ergonomic handle for maximum comfort and slip resistance
- **Durability:** Handle material and lens resist chemicals in common usage in the automotive, aviation and industrial environments



Fixed Head

- **Ease of use:** fewer working parts than ratchet type wrenches, so simpler to repair
- **Versatility:** push through square drive for left and right handed operation
- **Strength & Durability:** strong head with push through square drive is ideal for use in tough working conditions

Micrometer Scale

Versatility & Accuracy: micrometer scale gives simple and error free setting (On dual scale wrenches, the micrometer increment applies to the N.m scale)



Adjustment Mechanism

Safety: a robust lock prevents accidental adjustment of the wrench during use.

Speed and Ease of Use: quick and light adjustment with the minimal of effort over the entire scale in approximately ten complete turns.



Torque Wrenches - Fixed Head

Part No.	Square Drive	Range	Range
	Inch	N.m	lbf.ft
ETW38-50FH	3/8"	8-50	6-35
ETW38-100FH	3/8"	20-100	15-75
ETW12-100FH	1/2"	20-100	15-75
ETW12-150FH	1/2"	30-150	20-110
ETW12-200FH	1/2"	40-200	30-150
ETW12-250FH	1/2"	50-250	40-185
ETW12-300FH	1/2"	60-300	45-220

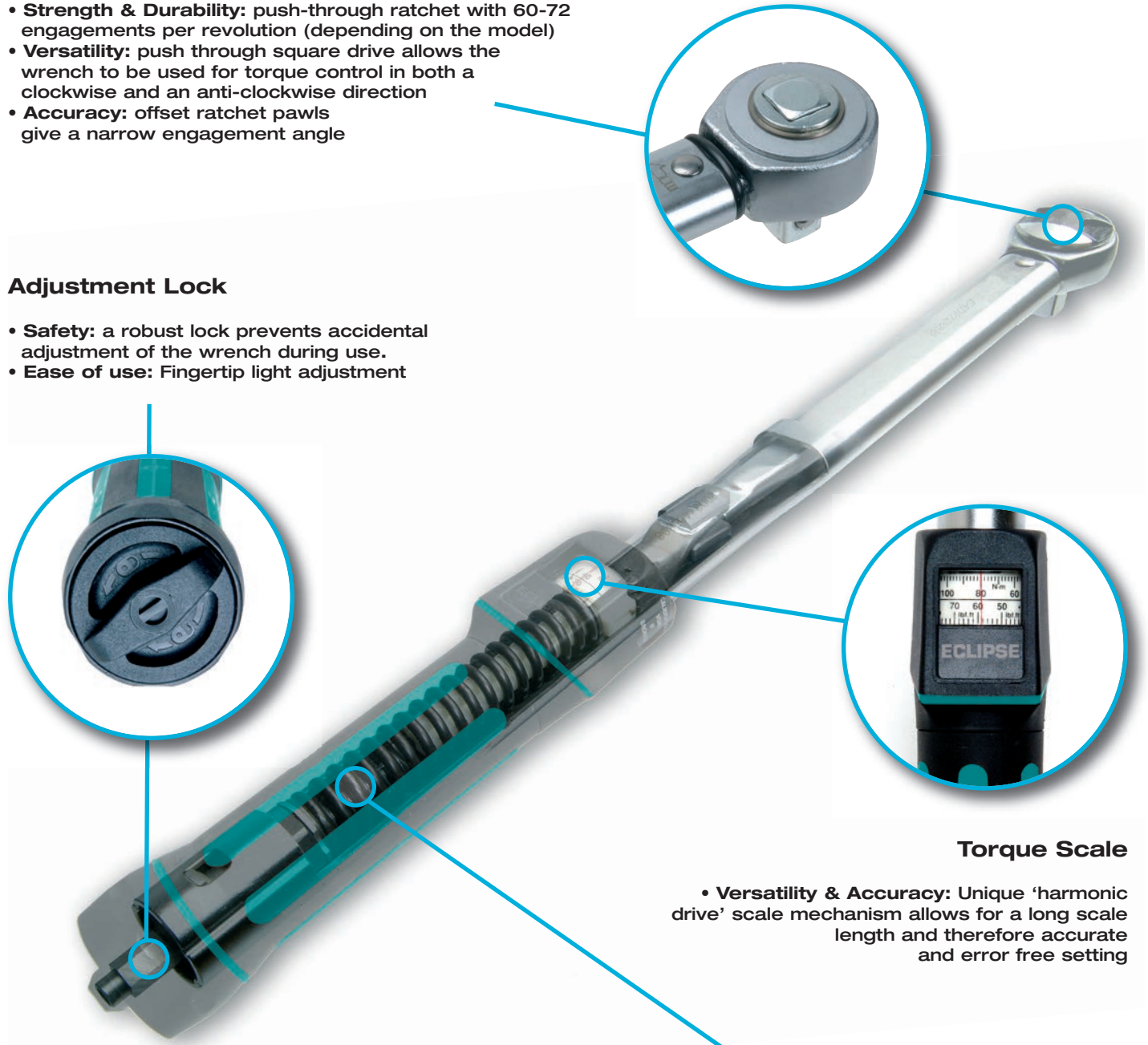
ECLIPSE PROFESSIONAL TORQUE WRENCHES RATCHET HEAD

Ratchet

- **Strength & Durability:** push-through ratchet with 60-72 engagements per revolution (depending on the model)
- **Versatility:** push through square drive allows the wrench to be used for torque control in both a clockwise and an anti-clockwise direction
- **Accuracy:** offset ratchet pawls give a narrow engagement angle

Adjustment Lock

- **Safety:** a robust lock prevents accidental adjustment of the wrench during use.
- **Ease of use:** Fingertip light adjustment



Handle

- **Comfort & Safety:** two component ergonomic handle for maximum comfort and slip resistance
- **Durability:** Handle material and lens resist chemicals in common usage in the automotive, aviation and industrial environments

Torque Scale

- **Versatility & Accuracy:** Unique 'harmonic drive' scale mechanism allows for a long scale length and therefore accurate and error free setting

Torque Mechanism

- **Accuracy:** less parts to maintain when compared to 'pivot block' mechanisms
 - **Accuracy:** +/-3% exceeds all international standards for torque wrenches. Each wrench is supplied with a traceable calibration certificate
 - **Ease of use:** Simple calibration adjustments without disassembly



Professional Torque Wrenches - Ratchet Head

Part No.	Square Drive Inch	Range N.m	Range lbf.ft	Ratchet Diameter mm	Engagements per Revolution	Length mm	Weight kg
EPTW38-60	3/8"	8-60	5-45	35	72	312	0.66
EPTW12-60	1/2"	8-60	5-45	40	72	320	0.74
EPTW38-100	3/8"	20-100	15-80	35	72	353	0.73
EPTW12-100	1/2"	20-100	15-80	40	72	359	0.80
EPTW12-200	1/2"	40-200	30-150	42	72	442	1.01
EPTW12-300	1/2"	60-300	45-220	49	60	570	1.38
EPTW12-330	1/2"	60-330	45-250	49	60	683	1.50
EPTW34-400	3/4"	80-400	60-300	49	60	683	2.09

ECLIPSE PROFESSIONAL TORQUE HANDLES (FEMALE FITTING)*

- For many applications a spanner end fitting rather than a socket is the best or, often, the only solution. Typically this will be because the joint is a pipe union (such as a brake pipe)
- 9x12mm and 14 x 18mm rectangular type handles



Professional Torque Handles - Ratchet Head

Part No.	Square Drive	Range	Range	Length	Weight
	Inch	N.m	lbf.ft	mm	kg
EFTH-60	9x12	8-60	5-45	300	0.55
EFTH-100	9x12	20-100	15-80	340	0.6
EFTH12-200	9x12	40-200	30-150	421	0.78
EFTH18-200	14x18	40-200	30-150	431	0.78
EFTH-300	14x18	60-300	45-220	546.5	1.13
EFTH-400	14x18	80-400	60-300	658	1.78

*Available on request. Minimum order quantities apply

ECLIPSE AUTOMOTIVE TORQUE WRENCHES (RATCHET HEAD)*

- **Versatility:** The reversible ratchet is designed with compact dimensions and a narrow engagement angle resulting from the 72 tooth pattern. This makes the wrench ideal for use in the confined spaces of modern motor vehicles and other applications where space is limited
- **Accuracy:** of +/- 3% exceeds all international standards for torque wrenches. Each wrench is supplied with a traceable calibration certificate
- **Comfort & Safety:** two component ergonomic handle for maximum comfort and slip resistance
- **Durability:** Handle material and lens resist chemicals in common usage in the automotive, aviation and industrial environments
- **Safety:** a robust lock prevents accidental adjustment of the wrench during use



Automotive Torque Wrenches - Ratchet Head

Part No.	Square Drive	Range	Range	Ratchet Diameter	Engagements per Revolution	Length	Weight
	Inch	N.m	lbf.ft	mm		mm	kg
EATW38-60	3/8"	8-60	5-45	31	72	307	0.6
EATW12-60	1/2"	8-60	5-45	31	72	307	0.6
EATW38-100	3/8"	20-100	15-80	31	72	347	0.7
EATW12-100	1/2"	20-100	15-80	31	72	347	0.7
EATW12-200	1/2"	40-200	30-150	41	72	443	1.0

ECLIPSE SLIMLINE TORQUE HANDLE (FEMALE FITTING)

- Adjustable torque handle - female end fitting
- Accuracy exceeds all international standards
- Traceable calibration certificate supplied to satisfy ISO 9000:2000 quality systems
- Moulded grip aids correct handle location and operator comfort

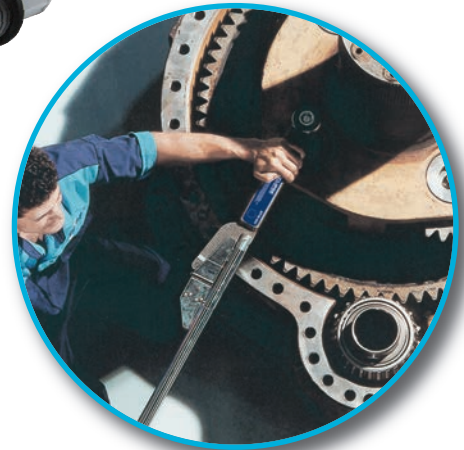


Slimline Torque Handle

Part No.	End Fitting	Range		Length	Weight
	Inch	N.m	lbf.ft	mm	kg
ESLH38-20	9x12	4-20	40-180	205	0.4

ECLIPSE INDUSTRIAL TORQUE WRENCHES

- **Accuracy:** +/-4%, even in arduous working conditions. Each wrench is supplied with a traceable calibration certificate
- **Accuracy:** large break angle improves accuracy by reducing the possibility of over torquing
- **Safety:** cam control of the mechanism gives a controlled break which will not throw the operator off balance
- **Versatility:** dual scaled - N.m and lbf.ft

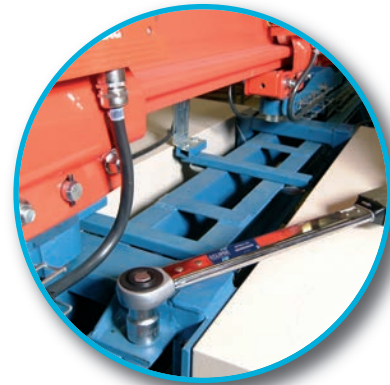


Industrial Torque Wrenches

Part No.	Square Drive	Range		Ratchet Diameter	Engagements per Revolution	Length	Weight
	Inch	N.m	lbf.ft	mm		mm	kg
EITW-500	3/4"	100-500	70-350	70	36	910	5.2
EITW-1000	3/4"	300-1000	200-750	70	36	1475	7.3
EITW-1500	3/4"	70-1500	500-1000	70	36	1475	10.4

ECLIPSE PROFESSIONAL INDUSTRIAL TORQUE WRENCHES RATCHET HEAD

- **Accuracy:** +/- 3% reading
- **Ease of Use:** non length dependent - extension handle can be used to reduce operator effort (handle supplied as standard with 800, 1000 and 1500 N.m models)
- **Accuracy:** long scale length in N.m and lbf.ft allows error free setting
- **Versatility:** fine 60 tooth ratchet allows the wrench to be used in confined spaces
- **Ease of Use:** positive 'click' can be heard, seen and felt
- **Storage & Protection:** supplied in hard carry case

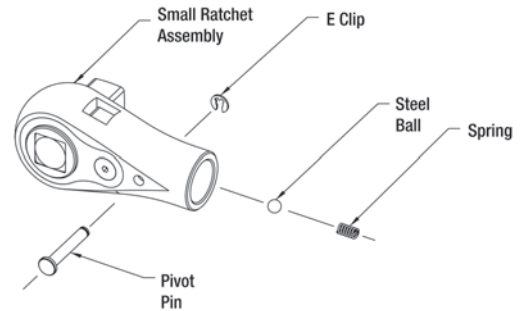
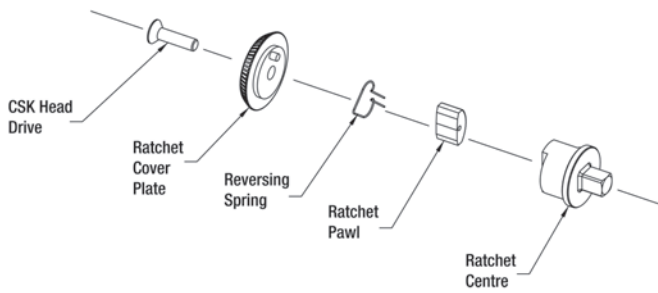


Professional Industrial Torque Wrenches - Ratchet Head

Part No.	Square Drive Inch	Range N.m	Range lbf.ft	Ratchet Diameter mm	Engagements per Revolution	Length mm	Length (Inc Ext Handle) mm	Weight kg
EPITW34-550	3/4"	110-550	80-400	61	60	845	-	4.0
EPITW34-800	3/4"	200-800	150-600	75	60	1035	1535	5.2
EPITW1-800	1"	200-800	150-600	75	60	1035	1535	5.2
EPITW34-1000	3/4"	300-1000	220-750	75	60	1250	1750	5.8
EPITW1-1000	1"	300-1000	220-750	75	60	1250	1750	5.8
EPITW34-1500	3/4"	500-1500	370-1100	75	60	1570	2070	6.7
EPITW1-1500	1"	500-1500	370-1100	75	60	1570	2070	6.7

RATCHET REPAIR KITS

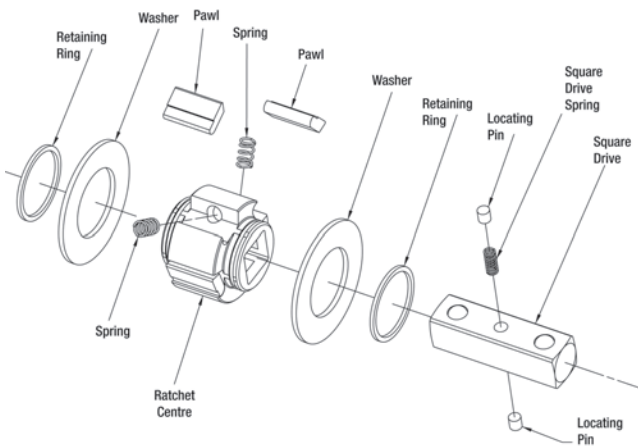
Eclipse Range



Part No	For Torque Wrenches	Box Qty
E13425	ETW14-20	1
E13426	ETW-38-50	1

Part No	For Torque Wrenches	Box Qty
E13427	ETW1/2-50	1
E13407	ETW38-100	1
E13409	ETW12-100 / ETW12-150	1
E13408	ETW12-200 / ETW12-250 / ETW12-300	1

Eclipse Professional Range



Part No	For Torque Wrenches	Box Qty
E13212	EPTW38-60 / EPTW38-100	1
E13213	EPTW12-60 / EPTW12-100	1
E13214	EPTW12-200	1
E13215	EPTW12-300 / EPTW12-330	1
E13216	EPTW34-400	1

Eclipse Automotive Professional Range

Assembled Ratchet Head

Part No	For Torque Wrenches	Box Qty
E11598	EATW38-60 / EATW38-100	1
E11618	EATW12-60 / ETW12-100	1
E11622	EATW12-200	1

Eclipse Industrial Range

Ratchet Repair Kit

Part No	For Torque Wrenches	Box Qty
E12307	EITW-500 / EITW-800 / EITW-1000 / EITW-1500	1

Kit contains

Description	Qty
Ratchet Centre	1
Side Washers	2
Circlips	2
Pawls	4
Springs	4

11 Piece Socket Sets

Part No	Box Qty
EC-SS11M1/2U	1

Sockets	Qty
10mm	1
11mm	1
12mm	1
13mm	1
14mm	1
15mm	1
17mm	1
19mm	1
21mm	1
22mm	1
Plus	Qty
Ratchet	1



Socket Sets are used for tightening and loosening nuts

- 1/2" square drive, double hex
- Triple plated chrome vanadium
- Surface drive and high torque system
 - full face contact for maximum torque
 - ideal for fasteners with worn heads

24 Piece Socket Sets

Part No	Box Qty	Sockets	Qty	Sockets	Qty
EC-SS24M1/2U	1	10mm	1	21mm	1
		11mm	1	22mm	1
		12mm	1	23mm	1
		13mm	1	24mm	1
		14mm	1	27mm	1
		15mm	1	30mm	1
		17mm	1	32mm	1
		19mm	1		
		Plus			Qty
		Sliding T Bar 250mm			1
		Universal Joint			1
		Speed Handle 395mm			1
		Extension Bar 125mm			1
		Extension Bar 250mm			1
		Reversible 72 tooth Ratchet Handle			1



ECLIPSE TORQUE SCREWDRIVERS

Versatility:
bit holder is shaped for use in confined spaces

Ease of Use:
supplied with a 1/4" hexagon bit holder that is designed using a 4mm hexagon stem

Accuracy:
tool 'slips' when torque is achieved, thus removing the possibility of over-tightening

Safety:
includes a lock to prevent accidental adjustment of the set torque

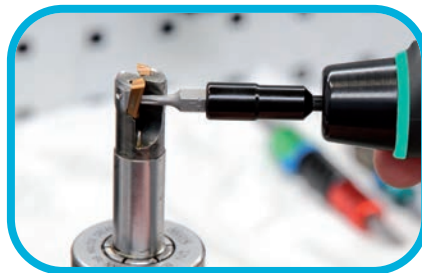
Reliability:
exceeds the requirements of ISO6789

Durability, Comfort & Safety:
the handle is constructed from two materials; the strong base material is overlaid with a soft feel grip for comfort and slip resistance

Ease of Use:
straightforward torque adjustment without the need for additional specialist tools



Bit holder can be removed and replaced with a wide range of screwdriver blades



Torque Screwdrivers

Part No.	Hex Holder Size	Range N.m	Length mm	Weight kg
ETS14-15	1/4"	0.3 - 1.5	155	0.235
ETS14-30	1/4"	0.6 - 3.0	155	0.235
ETS14-60	1/4"	1.2 - 6.0	155	0.235

TORQUE MULTIPLIERS

WHAT IS A TORQUE MULTIPLIER?

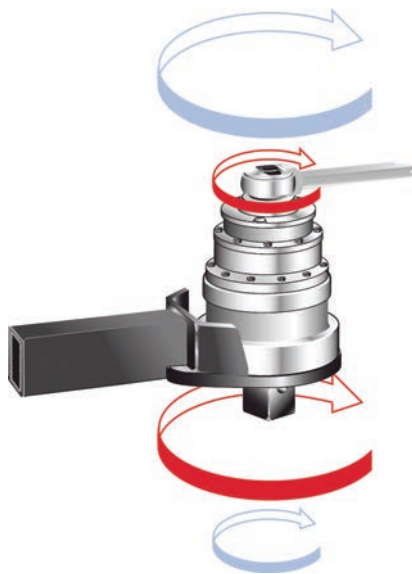
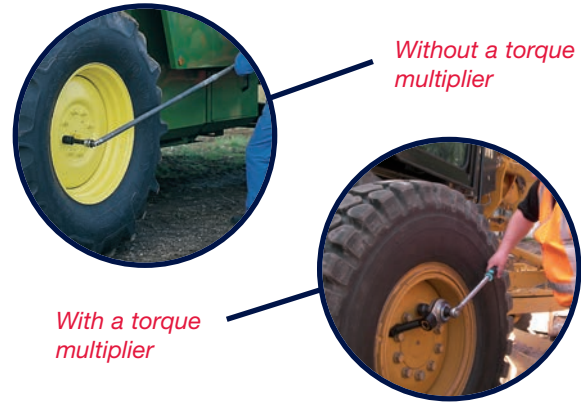
A torque multiplier is a device that increases the torque that can be applied. Because the power output cannot exceed the power input, the number of output revolutions will be lower than the number of input revolutions (torque x rpm = power).

WHAT ARE THE ADVANTAGES OF TORQUE MULTIPLIERS?

Safety: Using long levers can be dangerous. Torque multipliers reduce the lever length or operator effort by a factor of 5, 25 or 125.

Flexibility: Torque multipliers are ideal for use in confined spaces where it may not be possible to fit long levers.

Accuracy: Torque is most accurate when it is applied smoothly and slowly. Torque multipliers help to achieve this by removing much of the physical effort from the tightening task.



HOW DO ECLIPSE HANDTORQUE™ MULTIPLIERS WORK?

Eclipse Handtorque™ Multipliers incorporate an ‘epicyclic’ or ‘planetary’ gear train that has one or more stages. Each stage of gearing increases the torque applied by a factor of 5, so Eclipse multipliers typically offer ratios of 5:1, 25:1 and 125:1

With the planetary gear system, torque is applied to the input gear (known as the ‘sun’ gear), causing the three or four ‘planet’ gears whose teeth engage with the ‘sun’ gear to rotate. The outside casing of the multiplier (the annulus) also engages with the planet gear teeth and would normally rotate in the opposite direction to the sun gear.

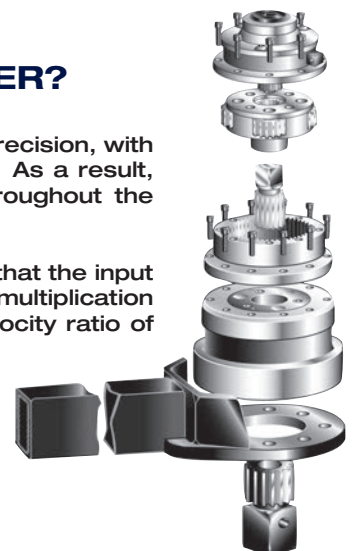
However, a reaction arm prevents the annulus from rotating, allowing the planet gears to orbit around the sun. The planet gears are held in a ‘planetary’ carrier which also holds the input square drive so that, as the planet gears orbit around the sun gear, the carrier and therefore the square drive turn. Without the reaction arm to keep the annulus stationary, the output square will not apply torque.

WHY CHOOSE AN ECLIPSE HANDTORQUE™ MULTIPLIER?

Accuracy & Reliability: Eclipse gearboxes are built to an extremely high standard of precision, with all gears rotating on needle roller bearings about hardened and ground journal pins. As a result, Eclipse Handtorque™ multipliers have a torque multiplication accuracy of +/-4% throughout the operating range, taking the uncertainty out of high torque tightening.

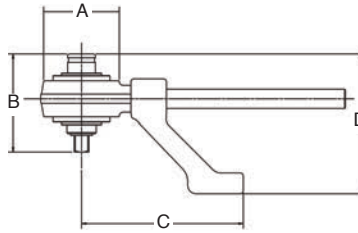
Accuracy: No gearbox is 100% efficient and so the velocity ratio (the number of turns that the input has to make to achieve one revolution of the output) is not the same as the torque multiplication ratio. Eclipse multipliers are engineered such that each gear stage has a typical velocity ratio of 5.45:1, resulting in a true torque multiplication factor of 5:1.

Safety & Ease of Use: Torque output calculations on Eclipse multipliers are a matter of simple arithmetic, with little risk of incorrect bolt loading due to conversion errors. Unlike most other manufacturers’ multipliers, there is no need for graphs or formulae to calculate the input torque required to achieve a particular output.



ECLIPSE HT3 'HIGHWAYMAN' TORQUE MULTIPLIERS

- 5:1 torque multiplication with a guaranteed accuracy of better than +/- 4%.
- Two reaction bar styles for maximum versatility.
- Robust construction for minimum maintenance and a longer life.
- Spare 3/4" output square included in the 1300 N.m kit.
- Robust carry case ideal for inclusion in a heavy vehicle tool kit.

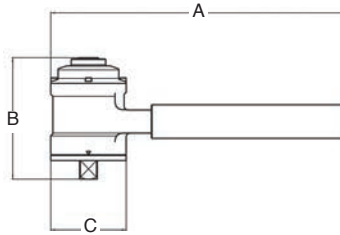


HT3 'Highwayman' Torque Multipliers

Part No	Description	Range N.m	Range lbf.ft	Ratio	Input Square in	Output Square in	A mm	B mm	C mm	D mm	Tool Weight kg	Reaction Weight kg
E17220	HT3 Torque Multiplier	1300	960	5:1	1/2	3/4	108	126	210	180	3.8	1.3
E17221	HT3 Torque Multiplier	2700	2000	5:1	3/4	1	108	128	210	186	3.8	1.3

ECLIPSE HT4 TORQUE MULTIPLIERS

- True 15.5:1 or 26:1 torque multiplication with a guaranteed accuracy of better than +/- 4%.
- High ratios allow small torque wrenches to be used.
- Robust construction for minimum maintenance and a longer life.
- Anti Wind Up Ratchet (anti backlash) fitted to allow safer and more practical operation.
- Angle protractor for easy torque and angle tightening.
- Robust carry case with replacement square.

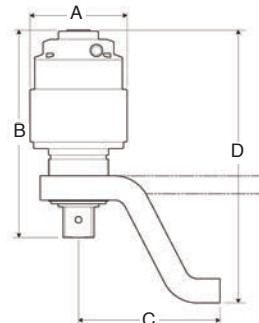


HT4 Torque Multipliers

Part No	Description	Range N.m	Range lbf.ft	Ratio	Input Square in	Output Square in	A mm	B mm	C mm	Tool Weight kg	Reaction Weight kg
E17022	HT4 Torque Multiplier	3000	2200	15.5:1	1/2	1	108	156	450	6.1	1.9
E17021	HT4 Torque Multiplier	4500	3300	26:1	1/2	1	108	173	450	7.0	1.9

ECLIPSE HANDTORQUE™ SMALL DIAMETER SERIES

- Reduced diameter allows for better access, particularly on pipe flanges.
- Reaction taken from high strength spline
- Reaction foot can slide on the spline to allow for sockets of various lengths.
- Anti Wind Up Ratchet (anti backlash) fitted to allow safer and more practical operation.



Handtorque™ Small Diameter Series

Part No	Description	Range N.m	Range lbf.ft	Ratio	Input Square in	Output Square in	A mm	B mm	C mm	D min mm	D max mm	Tool Weight kg	Reaction Weight kg
E18008	Small diameter torque multiplier 60/25	6000	4400	25:1	1/2	1 1/2	119	271	154	320	351	10.6	4
E18012	Small diameter torque multiplier 60/125	6000	4400	125:1	1/2	1 1/2	119	301	172	350	381	12.1	4

WHAT IS AN ANTI WIND UP RATCHET?

With any high ratio gearbox (25:1 or more), a certain amount of wind up (backlash) has to be taken up before any useful tightening work is applied to the nut. Each time the input device is released, the wind up will rotate it back against the direction of operation. The Anti Wind Up Ratchet (AWUR) on Eclipse torque multipliers retains all of the wind up force as it is created.

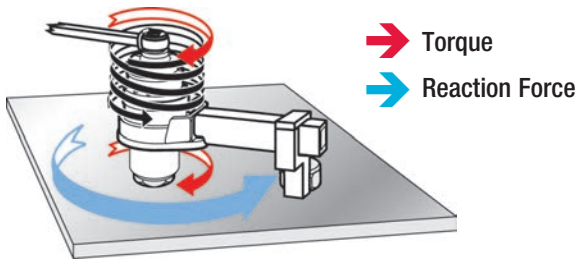


WHAT ARE THE BENEFITS OF THE ECLIPSE ANTI WIND UP RATCHET?

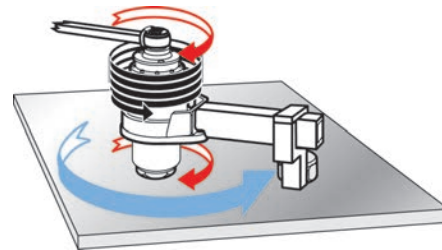
Safety: The torque input device cannot fly backwards against the direction of operation if it is suddenly released.

Ease of Use: Without an anti wind up ratchet, it is generally necessary to make continuous 360° sweeps with the torque input device to prevent the multiplier unwinding. However, any obstructions will make this impossible.

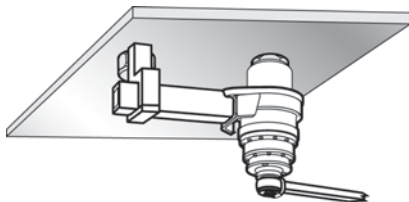
Versatility and Safety: With an Anti Wind Up Ratchet fitted, the multiplier locks onto the nut, because the reaction plate is held hard against the reaction point. This means that, even when used upside down, the multiplier supports its own weight.



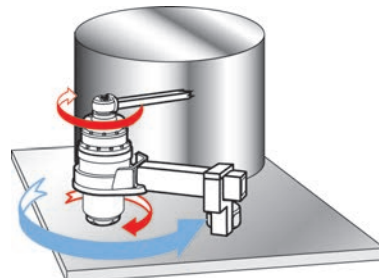
Multiplier behaves like a very stiff 'spring'



Multiplier will achieve maximum torque only after the 'spring' has been taken up



In this application the multiplier is used upside down and is able to support its own weight because the reaction plate is held hard against the reaction point



In this application, if it takes more than 180° to take up the wind-up at the required torque, this tightening operation will be impossible without an 'Anti Wind-Up Ratchet'

**HAND TOOLS
MACHINE TOOLS
WOODWORKING TOOLS**



PUNCHES



Centre Punches

Used to indent, mark, scribe lines and to make indentations in workpieces prior to drilling. Punch point accurately ground to an angle of 90°

Part No	Point Diameter	Length	Pack Size
351A	3.2mm (1/8")	100mm (4")	10
351B	4mm (5/32")	100mm (4")	10
351C	4.8mm (3/16")	100mm (4")	10
351D	6.35mm (1/4")	100mm (4")	10
351W	Wallet containing one of each		1 set
Carded retail products			
65-600R	3.2mm (1/8")	100mm (4")	5

Parallel Punches

Used to punch out pins and dowels

Part No	Point Diameter	Length	Pack Size
161AA	1.7mm (1/16")	100mm (4")	10
161A†	2.3mm (3/32")	100mm (4")	10
161B†	3.1mm (1/8")	100mm (4")	10
161CC	3.9mm (5/32")	100mm (4")	10
161C†	4.7mm (3/16")	100mm (4")	10
161DD	5.3mm (1/4")	100mm (4")	10
161D	6.1mm (1/4")	100mm (4")	10
161E	7.6mm (5/16")	150mm (6")	5
161FF	9.5mm (3/8")	150mm (6")	5
161W	Wallet containing one of each	1 set	

† also available in bulk packs of 200 (161ABP, 161BBP, 161CBP)

Nail Punches

Designed to drive nail heads below the surface of wood. Cupped and bevelled points limit skidding off nail head

Part No	Point Diameter	Length	Pack Size
352A	1.6mm (1/16")	100mm (4")	10
352B	2.4mm (3/32")	100mm (4")	10
352C	3.2mm (1/8")	100mm (4")	10
352D	4mm (5/32")	100mm (4")	10
352W	Wallet containing one of each	1 set	
Carded retail products			
65-232R Nail punch	1.6mm (1/16")	100mm (4")	5
65-332R Nail punch	2.4mm (3/32")	100mm (4")	5
65-432R Nail punch	3.2mm (1/8")	100mm (4")	5
65-532R Nail punch	4mm (5/32")	100mm (4")	5

Auto Centre Punches

Delivers a punch when hand pressure applied to knurled head. One handed operation, hammer should not be used. Depth of impression adjusted by turning knurled head

Part No	Length mm	Operating Pressure Range kg	Operating Pressure Range lb	Pack Size
65-171R	120mm (4 3/8")	13.5-2.25	30-5	10
E172	149mm (5 7/8")	22.5-6.3	50-14	1

Nail & Pin Drivers

Two quality drivers for pushing home nails and pins when using a hammer would be hazardous or cause damage. Magnetic head holds nail in place, and spring return allows automatic thrusting of nail below material surface. Pistol grip handle for extra secure grip. 2.5mm: for pushing home panel pins and nails up to 2.5mm diameter. 4mm: for nails up to 4mm diameter.

Part No	Head Type	Diameter	Pack Size
9180	Pin driver	2.5mm (1/8")	6
9185	Nail driver	4mm (5/16")	6

SCRAPERS / PIN VICES / CHUCKS & COLLETS



Hand scrapers are designed for the removal of high spots on machined surfaces to give a smoother surface on slideways, bearings, cast iron surface plates and precision marking out plates. All scrapers have a soft feel handle and are made from high grade tool steel suitably hardened, to maintain a very keen cutting edge

Erector Scrapers

Suitable for large jobs or heavy engineering. Manufactured from chrome vanadium steel

Part No	Overall Length	Blade Length	Cutting Edge	Pack Size
256	335mm (13 ¹ / ₄ "	210mm (8 ³ / ₄ "	Flat	5
257	350mm (14"	225mm (9"	Curved	5

Pin Vices

Hand held tools designed for holding round materials. Hollow handle enables material greater than the overall length of the pin chuck to be used

Part No	Capacity	Type	mm	inches	Overall Length	Pack Size
121	Chuck		0-1.0	0-0.04	75mm (3")	10
122	Chuck		0.75-1.5	0.03-0.062	85mm (3 ³ / ₁₆ "	10
123	Chuck		1.4-3.1	0.055-0.122	95mm (3 ⁷ / ₁₆ "	10
124	Chuck		3.1-5.00	0.122-0.196	105mm (4 ¹ / ₄ "	10
8	Set of 1 each		(121, 122, 123 and 124)		1 set	

Engineers' Scrapers

Suitable for toolroom and small engineering work

Part No	Blade Length	Cutting Edge	Pack Size
96A	100mm (4")	Three Square	5
97A	140mm (5 ¹ / ₂ "	Three Square	5
99A	200mm (8")	Three Square	5
96B	100mm (4")	Flat	5
97B	150mm (6")	Flat	5
99B	200mm (8")	Flat	5
96C	100mm (4")	Curved half round	5
97C	150mm (6")	Curved half round	5
97D	200mm (8")	Curved half round	5
96	Set of 3 comprising Nos 96A, B, and C	1 set	
97	Set of 4 comprising Nos 97A, B, C and D	1 set	

Pin Chuck & Replacement Collects

Used for gripping very small drills, mainly on automatic lathes, where pin chuck does not revolve

Part No	Overall Length mm/inches	Description	Pack Size
9	160 (6 ³ / ₁₆ "	Chuck with 3 collets capacity from 0.25-2.5mm(0.01-0.1")	1
RP621HRD		Replacement Collet capacity from 0.25-0.75mm(0.01-0.03")	1
RP622MRD		Replacement Collet capacity from 0.75-1.5mm(0.03-0.06")	1
RP623FRD		Replacement Collet capacity from 1.5-2.5mm(0.06-0.10")	1

Bearing Scrapers

Part No	Overall Length	Blade Length	Pack Size
2584	180mm (7 ¹ / ₄ "	100mm (4")	5
2586	240mm (9 ¹ / ₂ "	150mm (6")	5
2588	290mm (11 ³ / ₈ "	200mm (8")	5
258	Set of 3 comprising 258/4, 258/6 and 258/8		1 set

NUTSPINNERS

Nut Spinner - BA

Part No	Blade Length	Blade Size	Pack Size
7800	150mm (6")	0 BA	6
7801	150mm (6")	1 BA	6
7802	150mm (6")	2 BA	6
7803	150mm (6")	3 BA	6
7804	150mm (6")	4 BA	6
7806	150mm (6")	6 BA	6



For loosening and securing nuts particularly where spanners cannot reach or are awkward to use. Tribolular handle with tapered neck for ergonomic fit. Dual material handle for comfort in use. Integral moulded finger grips around neck to allow increased torque

Nut Spinner - Metric

Part No	Blade Length	Blade Size	Pack Size
7840	150mm (6")	4mm	6
7850	150mm (6")	5mm	6
7855	150mm (6")	5.5mm	6
7860	150mm (6")	6mm	6
7870	150mm (6")	7mm	6
7880	150mm (6")	8mm	6
7810	150mm (6")	10mm	6
7830*	7mm (7/16") AF, flexible shaft, with thicker handle for improved working grip. High strength flexible spring shaft. Ideal for use with hose clips.		6



For loosening and securing nuts particularly where spanners cannot reach or are awkward to use. Tribolular handle with tapered neck for ergonomic fit. Dual material handle for comfort in use. Integral moulded finger grips around neck to allow increased torque

Nut Spinner Set - Metric

Part No	Description	Pack Size
5490	9-piece metric nut spinner set with: handle, extension piece, 9 interchangeable blades-sizes: 4, 4.5, 5, 5.5, 6, 7, 8, 9 and 10mm in high quality tool roll.	1



For loosening and securing nuts particularly where spanners cannot reach or are awkward to use. Ergonomically designed handle. Low slip textured finish for improved grip and torque

SCRIBERS / JEWELLERS SCREWDRIVERS



Engineers' Scribes

Double ended for marking out in confined spaces, e.g. grooves

Part No	Overall Length	Description	Pack Size
1 E222	190mm (7 ^{1/2} "	Double Ended	10

Handy Scribes

Double ended with pointed and knife-edge ends. Suitable for marking and scoring most materials including wood, metal, laminates and plastics

Part No	Overall Length	Pack Size
6 76-229R	175mm (7")	5

Pocket Scribes

Available with either hardened steel or tungsten carbide points. Reversible point prevents tearing and snagging of clothing when clipped in a pocket

Part No	Size when closed	Description	Pack Size
2 E220	89mm (3 ^{1/2} "	With hardened steel point	10
3 E225	89mm (3 ^{1/2} "	With tungsten carbide point	10
220/05	-	Replacement hardened steel point	10
4 225/02	-	Replacement tungsten carbide point	10

Jewellers' Screwdrivers

Designed to carry out fine, delicate work by toolmakers, jewellers, watch makers, instrument engineers and opticians. Blade sizes match all commonly used slotted screws. 110mm (4^{5/16} in) overall length when fitted with blade

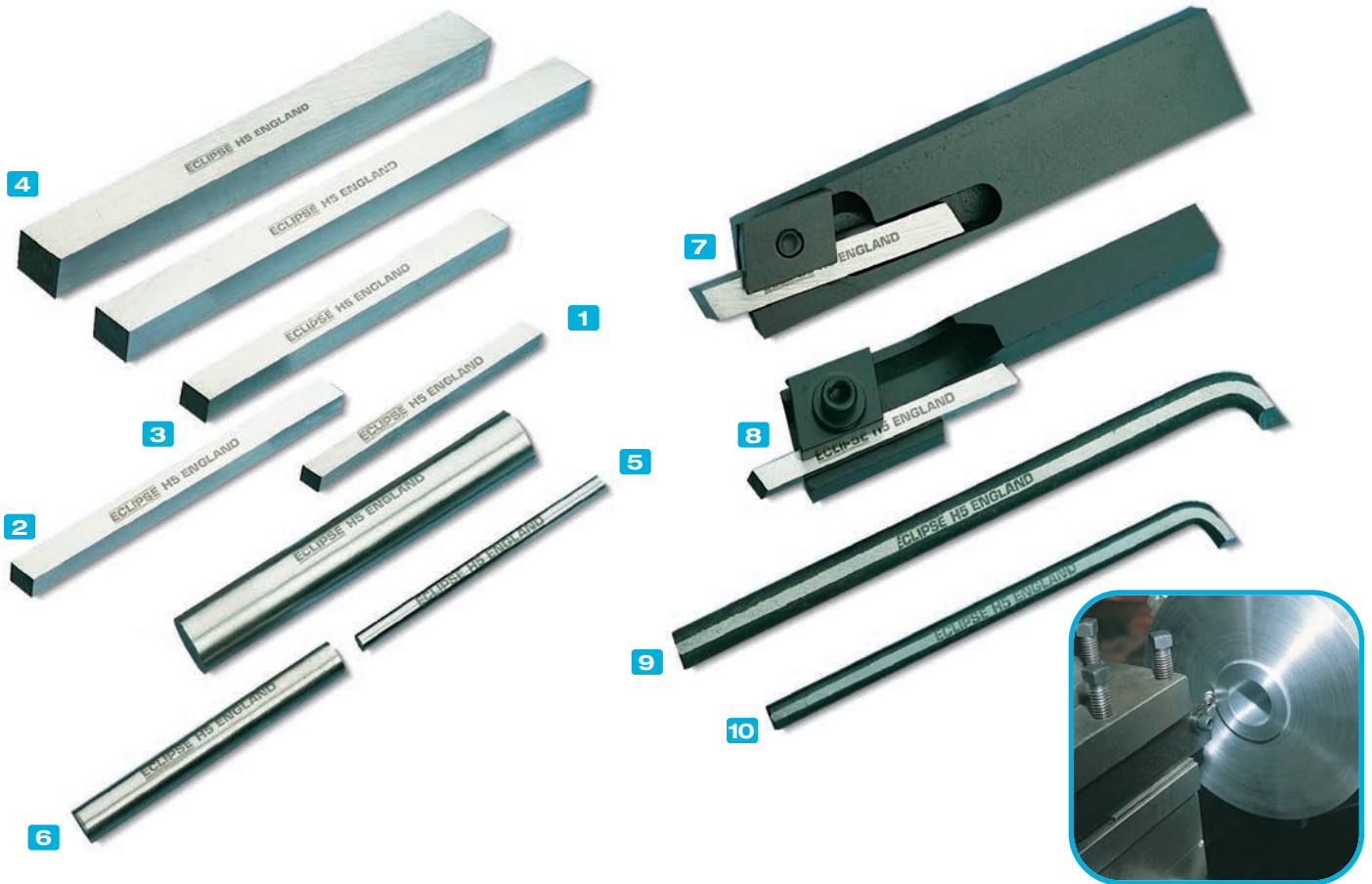
Part No	Blade Width	Pack Size
	mm	in
777/1	Set of six complete screwdrivers supplied in fitters case	
		1 set
7 777/2	Pocket set containing one screwdriver body and six interchangeable blades with widths from 0.6mm (0.025in) to 2.5mm (0.100in)	
		1 set

Machinists' Scriber

Designed for the machinist. For marking out in confined spaces, particularly on pre-machined workpieces

Part No	Overall Length	Description	Pack Size
5 E227	114mm (4 ^{1/2} "	One piece single ended scriber	10

TOOL BITS / HOLDERS / BORING BARS



Tool Bits

Eclipse H5 tool bits have a 5% cobalt content to give optimum hardness, grindability and cutting performance. Square tool bits can be used in lathes and shaping machines. Round tool bits used in internal boring bars and slotting machines. Tool bits manufactured to ISO5421

H5 Square Part No.	H5 Round Part No.	Dimensions Section	Length	Pack Size
	TE70D/10	4.8mm (3/16")	51mm (2")	10
	TE74B/10	4.8mm (3/16")	76mm (3")	10
TD109R/10		6.4mm (1/4")	76mm (3")	10
1 TD111M/10	TE111C/10	6.4mm (1/4")	102mm (4")	10
TD149M/10			76mm (3")	10
TD151N/10	TE151D/10	7.9mm (5/16")	102mm (4")	10
2 TD189N/10	TE189J	9.5mm (3/8")	76mm (3")	10
TD191W/10		9.5mm (3/8")	102mm (4")	10
3 TD195C/10		9.5mm (3/8")	153mm (6")	10
TD271F	TE271E	12.7mm (1/2")	102mm (4")	5
TD275B/10		12.7mm (1/2")	153mm (6")	5
TD311E/10		15.9mm (5/8")	102mm (4")	5
TD315M		15.9mm (5/8")	153mm (6")	5
4 TD351R/10		19.0mm (3/4")	102mm (4")	5
TD355N/10		19.0mm (3/4")	153mm (6")	5

Diameters quoted are approximate, actual diameters being slightly more than the nominals quoted. We recommend that tool bits be ground under a copious flow of coolant to prevent build-up of heat.

Tool Bit Holders

Eclipse tool bit holders are designed to optimise toolbit performance. Eclipse holders clamp the tool bit securely and rigidly. Supplied complete with an Allen key and one Eclipse H5 tool bit

Part No.	Capacity mm	Capacity in	Shank Size mm	Shank Size in	Overall Length	Pack Size
524SL	5-7	3/16 - 1/4	11.1 x 25.4	7/16 x 1	130mm (5 1/8")	1
7 534SL	8-10	5/16 - 3/8	15.9 x 31.8	5/8 x 1 1/4	155mm (6")	1
544SL	10-12.7	3/8 - 1/2	22.2 x 38	7/8 x 1 1/2	230mm (9")	1
8 523S	5-7	3/16 - 1/4	14.3 x 19	9/16 x 3/4	125mm (5")	1
533S	8-10	5/16 - 3/8	17.5 x 25.4	1 1/16 x 1	155mm (6")	1

Holders with the suffix 'SL' are designed for use in American type (slotted pillar) tool posts. Holders with suffix 'S' are of more robust construction and are designed for use on English type lathes with flat tool rests, or 4 way turret tool posts.

Boring Bars

Made from H5 cobalt high speed steel. Shank ground on underside to provide a flat surface for ease of setting and to ensure rigidity when used in a tool post. Ends ground ready for use

Part No	Diameter	Length	Pack Size
9 TK105B	5mm (3/16")	114mm (4 1/2")	10
TK146C/10	6.5mm (1/4")	127mm (5")	10
TK188P/10	8mm (5/16")	153mm (6")	10
10 TK230J/10	9.5mm (3/8")	178mm (7")	10

CUTTING OFF TOOLS / LATHE TOOLS / HOLDERS



Cutting Off Tools - Bevel Section

Bevel section accurately ground with clearance angle at cutting edge

	H5 Square	Width	Top Thickness	Bottom Thickness	Length	Pack Size
1	TH325M	12.70mm (1/2")	2.4mm (3/32")	1.6mm (1/16")	114mm (4 1/2")	10
2	TH466F	15.87mm (5/8")	2.4mm (3/32")	1.6mm (1/16")	127mm (5")	10
3	TH628V/10	19.05mm (3/4")	3.2mm (1/8")	1.6mm (1/16")	153mm (6")	10
4	TH750R	22.23mm (7/8")	3.2mm (1/8")	1.6mm (1/16")	178mm (7")	10
5	TH912T	25.40mm (1")	4.8mm (3/16")	3.2mm (1/8")	203mm (8")	5

Cutting Off Tools - Hollow Ground

Hollow ground providing extra side clearance

	Part No	Capacity	Thickness	Length	Pack Size
1	TJ123V	7.93mm (5/16")	1.6mm (1/16")	89mm (3 1/2")	10
2	TJ445T	12.70mm (1/2")	2.4mm (3/32")	114mm (4 1/2")	10
3	TJ465G	12.70mm (1/2")	3.2mm (1/8")	114mm (4 1/2")	10
4	TJ766J	17.46mm (11/16")	4.0mm (5/32")	127mm (5")	5

Cutting Off Tool Holders

633S designed specifically for use on small lathes. The only toolholder in our range suitable for hollow ground cutting off tools. All holders include a clamp designed to ensure that the tools are held securely and rigidly

	Part No.	Capacity mm	Capacity in	Shank Size mm	Shank Size in	Base to Underside	Overall Length
6	633S	8	3/16	8 x 14.2	5/16 x 3/16	2.4mm (1/32")	95mm (3 7/8")
7	653S	12.7-16	1/2 - 5/8	12.7 x 25.4	1/2 x 1	3.2mm (1/8")	155mm (6")
8	673S	19-22.2	3/4 - 7/8	16 x 35	3/8 x 1 1/8	4.75mm (3/16")	180mm (7")
9	693S	25.4-28.5	1 - 1 1/8	19 x 43	3/4 x 1 1/16	5.5mm (1/32")	190mm (7 1/2")

Additional information

	Part No	Part No. of Suitable Cutting-Off Tool	Pack Size
6	633S	TJ123V	1
7	653S	TH325M or TH466F	1
8	673S	TH628V or TH750R	1
9	693S	TH912T	1

Lathe Tool Sets

Each set contains six H5 tools in a plastic rack. Ends are ground ready for use and bases are ground to ensure correct seating and rigidity. Individual tools in each set are available separately

	Part No	Nominal Thickness	Length	Pack Size
1	E420/10	6.5mm (1/4")	90mm (3 1/2")	1 set
2	E430/10	9.5mm (3/8")	125mm (5")	1 set

each set contains 1 of each:
Roughing, Finishing, Parting-Off, External Threading, Boring, Internal Threading

	E 430 Series Part No	Unit of Pack
1	E435 Boring	5
2	E436 Internal Threading	5

TAP WRENCHES & ACCESSORIES



Trammel Heads

Supplied as one pair of heads. Suitable for laying out the distance between two points and scribing arcs and circles. To be used in conjunction with any wood offcut between 3/4" to 1 1/2" wide, minimum thickness of 3/8"

Part No	Suitable for beam sizes	Pack Size
1 33	19 x 38mm (3/4" - 1 1/2") Thick, & 38mm (3/4") Wide	pair

Standard Bar Type Tap Wrench

Provides a comfortable and positive grip plus the sensitivity required when tapping a blind hole. Knurled locknut ensures a constant grip on the tap when in use

Part No.	Capacity mm	Square A/F ISO	BA	BSW BSF	UNC	UNF	Length mm	in	Unit of Pack
2 E240	1.5-4.6	M1-M6	14-0	3/8-3/4	0-12	1/4	110/105	4 1/4	1
3 E241	2.0-7.2	M3-M12	5-0	1/2-3/4	4-12	1/2-3/4	164/156	6 1/4	1
4 E242	2.5-9.0	M4-M16	3-0	3/8-3/4	8-12	1/2-3/4	230/220	9	1

Chuck Type Tap Wrench

Stepped jaws greatly extend range of taps for each wrench. Adjustable tommy bar for tapping close to a shoulder or other obstructions. Available in normal and long reach designs

Part No	Body Length	Width	Pack Size
5 E141 (Fixed Bar)	50mm (1 7/8")	57mm (2 1/4")	1
6 E142	65mm (2 5/8")	90mm (3 1/2")	1
6 E143	90mm (3 5/8")	127mm (5")	1
6 E145	165mm (6 1/2")	90mm (3 1/2")	1
7 E146	245mm (10")	127mm (5")	1

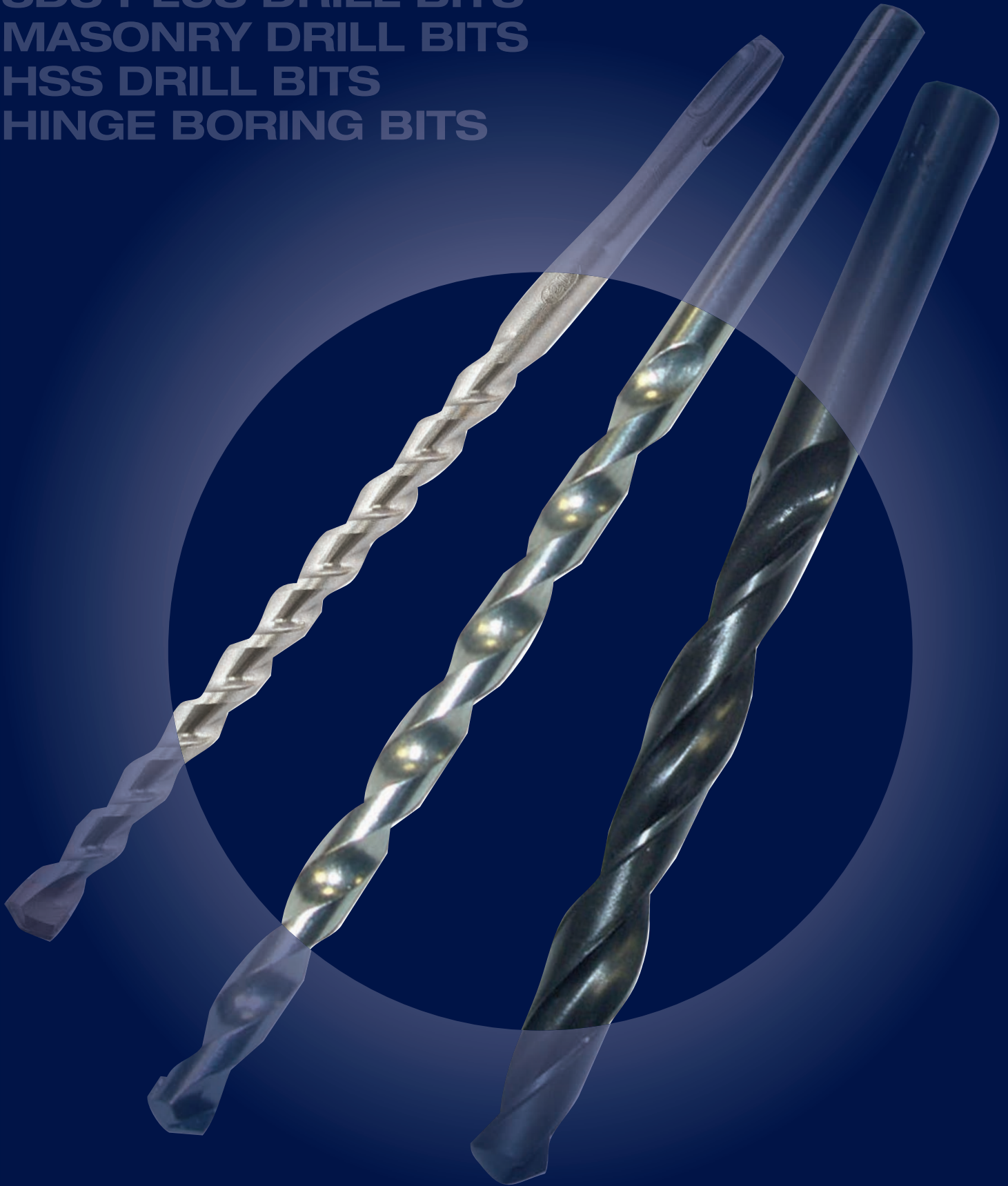
Part No.	Jaw Capacities	Square A/F mm	ISO	BA	BSW BSF	UNC	UNF
5 E141	Min Max	1 2.8	M1 M3.5	14 4	- 3/8	1 6	- -
6 E142 & E145	Min Max	2.0 5.0	M1 M6	14 0	3/8 0	6 12	- 3/4
6 E143 & 7 E146	Min Max	3.0 8.0	M4 M12	3 0	3/8 0	8 12	1/2 1/2

Tool Makers' Clamp

Manufactured from case-hardened steel, designed to ensure jaws remain in place

Part No	Jaw Capacity	Length of Jaw	Jaw Section	Pack Size
8 410	25mm (1")	50mm (2")	8.0mm (3/16 sq in)	1
8 411	38mm (1 1/2")	75mm (3")	11.1mm (7/16 sq in)	1
9 412	63mm (2 1/2")	100mm (4")	14.3mm (9/16 sq in)	1
9 413	89mm (3 1/2")	125mm (5")	17.5mm (11/16 sq in)	1

SDS PLUS DRILL BITS
MASONRY DRILL BITS
HSS DRILL BITS
HINGE BORING BITS



PREMIUM SDS PLUS HAMMER DRILL BITS

Fast, efficient and accurate

Flute geometry design ensures maximum amount of spoil removal. Multi-carbide tip increases penetration rate, cutting accuracy, and life. Optimum core width and flute geometry provides the perfect balance between speed and strength. Copper brazing between body and tip for ultimate strength.



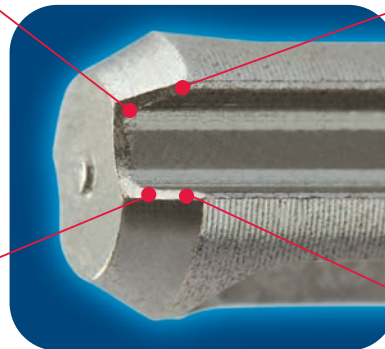
CUTTING-EDGE 'FAST-FIT' BIT-CHANGE TECHNOLOGY



The widened entry profile of the 'Fast-Fit' Eclipse SDS drive-groove rapidly guides the shank into the locked position. Reduces down-time and minimises chuck wear. Compatible with all SDS/SDS Plus machines

Enables drill bit to be easily located in SDS Plus chuck

Widened entry profile of SDS drive-groove for 'Fast Fix'



Ease of location reduces wear on machine chuck

Significantly faster to load an Eclipse bit compared with a standard SDS Plus

Metric

Part No	Size Ø x Length	Working Length	Pack Size
EC-SDS040011	4.0 x 110mm	50mm	10
EC-SDS050011	5.0 x 110mm	50mm	10
EC-SDS055011	5.5 x 110mm	50mm	10
EC-SDS060011	6.0 x 110mm	50mm	10
EC-SDS070011	7.0 x 110mm	50mm	10
EC-SDS080011	8.0 x 110mm	50mm	10
EC-SDS100011	10.0 x 110mm	50mm	10
EC-SDS040016	4.0 x 160mm	100mm	10
EC-SDS050016	5.0 x 160mm	100mm	10
EC-SDS055016	5.5 x 160mm	100mm	10
EC-SDS060016	6.0 x 160mm	100mm	10
EC-SDS065016	6.5 x 160mm	100mm	10
EC-SDS070016	7.0 x 160mm	100mm	10
EC-SDS080016	8.0 x 160mm	100mm	10
EC-SDS090016	9.0 x 160mm	100mm	10
EC-SDS100016	10.0 x 160mm	100mm	10
EC-SDS110016	11.0 x 160mm	100mm	10
EC-SDS120016	12.0 x 160mm	100mm	10
EC-SDS130015	13.0 x 150mm	100mm	10
EC-SDS140015	14.0 x 150mm	100mm	10
EC-SDS150015	15.0 x 150mm	100mm	10
EC-SDS160015	16.0 x 150mm	100mm	10
EC-SDS050021	5.0 x 210mm	150mm	10
EC-SDS055021	5.5 x 210mm	150mm	10
EC-SDS060021	6.0 x 210mm	150mm	10
EC-SDS065021	6.5 x 210mm	150mm	10
EC-SDS070021	7.0 x 210mm	150mm	10
EC-SDS080021	8.0 x 210mm	150mm	10
EC-SDS090021	9.0 x 210mm	150mm	10
EC-SDS100021	10.0 x 210mm	150mm	10
EC-SDS120021	12.0 x 210mm	150mm	10
EC-SDS140020	14.0 x 200mm	150mm	10
EC-SDS160020	16.0 x 200mm	150mm	10
EC-SDS180020	18.0 x 200mm	150mm	10
EC-SDS200020	20.0 x 200mm	150mm	10
EC-SDS055026	5.5 x 260mm	200mm	10
EC-SDS060026	6.0 x 260mm	200mm	10
EC-SDS065026	6.5 x 250mm	200mm	10
EC-SDS080026	8.0 x 260mm	200mm	10

Part No	Size Ø x Length	Working Length	Pack Size
EC-SDS100026	10.0 x 260mm	200mm	10
EC-SDS110026	11.0 x 260mm	200mm	10
EC-SDS120025	12.0 x 250mm	200mm	10
EC-SDS130025	13.0 x 250mm	200mm	10
EC-SDS140025	14.0 x 250mm	200mm	10
EC-SDS150025	15.0 x 250mm	200mm	10
EC-SDS160025	16.0 x 250mm	200mm	10
EC-SDS180025	18.0 x 250mm	200mm	10
EC-SDS220025	22.0 x 250mm	200mm	10
EC-SDS240025	24.0 x 250mm	200mm	1
EC-SDS250025	25.0 x 250mm	200mm	1
EC-SDS260025	26.0 x 250mm	200mm	1
EC-SDS100031	10.0 x 310mm	250mm	10
EC-SDS110031	11.0 x 310mm	250mm	10
EC-SDS120030	12.0 x 300mm	250mm	10
EC-SDS130030	13.0 x 300mm	250mm	10
EC-SDS140030	14.0 x 300mm	250mm	10
EC-SDS160030	16.0 x 300mm	250mm	10
EC-SDS180030	18.0 x 300mm	250mm	10
EC-SDS200030	20.0 x 300mm	250mm	10
EC-SDS100036	10.0 x 360mm	300mm	10
EC-SDS060045	6.0 x 450mm	400mm	1
EC-SDS080045	8.0 x 450mm	400mm	1
EC-SDS100045	10.0 x 450mm	400mm	1
EC-SDS120045	12.0 x 450mm	400mm	1
EC-SDS130045	13.0 x 450mm	400mm	1
EC-SDS140045	14.0 x 450mm	400mm	1
EC-SDS150045	15.0 x 450mm	400mm	1
EC-SDS160045	16.0 x 450mm	400mm	1
EC-SDS180045	18.0 x 450mm	400mm	1
EC-SDS200045	20.0 x 450mm	400mm	1
EC-SDS220045	22.0 x 450mm	400mm	1
EC-SDS240045	24.0 x 450mm	400mm	1
EC-SDS250045	25.0 x 450mm	400mm	1
EC-SDS260045	26.0 x 450mm	400mm	1
EC-SDS280045	28.0 x 450mm	400mm	1
EC-SDS300045	30.0 x 450mm	400mm	1



PREMIUM SDS PLUS HAMMER DRILL BITS

Imperial

Part No	Size Ø x Length	Working Length	Pack Size	Part No	Size Ø x Length	Working Length	Pack Size	Part No	Size Ø x Length	Working Length	Pack Size
EC-SDS031604	3/16 x 4"	2"	10	EC-SDS031608	3/16 x 8"	6"	10	EC-SDS034012	3/4 x 12"	10"	10
EC-SDS014004	1/4 x 4"	2"	10	EC-SDS073208	7/32 x 8"	6"	10	EC-SDS078012	7/8 x 12"	10"	10
EC-SDS093294	9/32 x 4"	2"	10	EC-SDS014008	1/4 x 8"	6"	10	EC-SDS100012	1x12"	10"	1
EC-SDS051604	5/16 x 4"	2"	10	EC-SDS051608	5/16 x 8"	6"	10	EC-SDS038018	3/8 x 18"	16"	1
EC-SDS031606	3/16 x 6"	4"	10	EC-SDS038008	3/8 x 8"	6"	10	EC-SDS012018	1/2 x 18"	16"	1
EC-SDS073206	7/32 x 6"	4"	10	EC-SDS058008	5/8 x 8"	6"	10	EC-SDS091618	9/16 x 18"	16"	1
EC-SDS014006	1/4 x 6"	4"	10	EC-SDS034008	3/4 x 8"	6"	10	EC-SDS058018	5/8 x 18"	16"	1
EC-SDS093206	9/32 x 6"	4"	10	EC-SDS012010	1/2 x 10"	8"	10	EC-SDS034018	3/4 x 18"	16"	1
EC-SDS051606	5/16 x 6"	4"	10	EC-SDS058010	5/8 x 10"	8"	10	EC-SDS078018	7/8 x 18"	16"	1
EC-SDS038006	3/8 x 6"	4"	10	EC-SDS073212	7/32 x 12"	10"	10	EC-SDS100018	1 x 18"	16"	1
EC-SDS071606	7/16 x 6"	4"	10	EC-SDS051612	5/16 x 12"	10"	10	EC-SDS058024	5/8 x 24"	22"	1
EC-SDS012006	1/2 x 6"	4"	10	EC-SDS071612	7/16 x 12"	10"	10	EC-SDS100024	1x 24"	22"	1
EC-SDS091606	9/16 x 6"	4"	10	EC-SDS012012	1/2 x 12"	10"	10				
EC-SDS058006	5/8 x 6"	4"	10	EC-SDS058012	5/8 x 12"	10"	10				
EC-SDS034006	3/4 x 6"	4"	10								

Non-standard sizes are available subject to lead-time, minimum order quantity and pricing agreement.

MASONRY DRILL BITS

Fast, efficient and accurate

Straight shank bits for use in percussion drilling in concrete, brick, stonework and cement.



Metric

Part No	Size Ø x Length	Working Length	Pack Size	Part No	Size Ø x Length	Working Length	Pack Size
EMD30X60	3 x 60mm	30mm	1	EMD70X200	7 x 200mm	112mm	1
EMD35X70	3.5 x 70mm	40mm	1	EMD80X200	8 x 200mm	112mm	1
EMD40X70	4 x 70mm	50mm	1	EMD10X200	10 x 200mm	112mm	1
EMD45X75	4.5 x 75mm	50mm	1	EMD12X200	12 x 200mm	112mm	1
EMD50X85	5 x 85mm	50mm	1	EMD60X400	6 x 400mm	350mm	1
EMD55X85	5.5 x 85mm	60mm	1	EMD80X400	8 x 400mm	350mm	1
EMD60X100	6 x 100mm	60mm	1	EMD10X400	10 x 400mm	350mm	1
EMD65X100	6.5 x 100mm	60mm	1	EMD12X400	12 x 400mm	350mm	1
EMD70X100	7 x 100mm	80mm	1	EMD14X400	14 x 400mm	350mm	1
EMD80X120	8 x 120mm	80mm	1	EMD16X400	16 x 400mm	350mm	1
EMD90X120	9 x 120mm	80mm	1	EMD18X400	18 x 400mm	350mm	1
EMD10X120	10 x 120mm	90mm	1	EMD20X400	20 x 400mm	350mm	1
EMD11X150	11 x 150mm	90mm	1	EMD22X400	22 x 400mm	350mm	1
EMD12X150	12 x 150mm	90mm	1	EMD25X400	25 x 400mm	350mm	1
EMD13X150	13 x 150mm	90mm	1	EMD60X600	6 x 600mm	550mm	1
EMD14X140	14 x 140mm	90mm	1	EMD80X600	8 x 600mm	550mm	1
EMD15X160	15 x 160mm	90mm	1	EMD10X600	10 x 600mm	550mm	1
EMD16X150	16 x 150mm	100mm	1	EMD12X600	12 x 600mm	550mm	1
EMD18X150	18 x 150mm	100mm	1	EMD14X600	14 x 600mm	550mm	1
EMD20X160	20 x 160mm	100mm	1	EMD16X600	16 x 600mm	550mm	1
EMD22X160	22 x 160mm	100mm	1	EMD18X600	18 x 600mm	550mm	1
EMD25X160	25 x 160mm	100mm	1	EMD20X600	20 x 600mm	550mm	1
EMD50X200	5 x 200mm	112mm	1	EMD22X600	22 x 600mm	550mm	1
EMD55X200	5.5 x 200mm	112mm	1	EMD25X600	25 x 600mm	550mm	1
EMD60X200	6 x 200mm	112mm	1				
EMD65X200	6.5 x 200mm	112mm	1				



HSS DRILL BITS

Fast, efficient and accurate

Manufactured to DIN 338 standards with an 118 degree point angle that is suitable for drilling into a wide range of materials, including steel, cast iron, copper, brass, iron and plastic. Flute geometry designed for rapid removal of the drilled material.



Metric

Part No	Size Ø x Length	Pack Size	Part No	Size Ø x Length	Pack Size
EHSS10	1.00mm	1 tube of 10	EHSS85	8.50mm	1 tube of 5
EHSS15	1.50mm	1 tube of 10	EHSS90	9.00mm	1 tube of 5
EHSS20	2.00mm	1 tube of 10	EHSS95	9.50mm	1 tube of 5
EHSS21	2.10mm	1 tube of 10	EHSS100	10.00mm	1 tube of 5
EHSS22	2.20mm	1 tube of 10	EHSS105	10.50mm	1 tube of 5
EHSS25	2.50mm	1 tube of 10	EHSS110	11.00mm	1 tube of 5
EHSS30	3.00mm	1 tube of 10	EHSS115	11.50mm	1 tube of 5
EHSS31	3.10mm	1 tube of 10	EHSS120	12.00mm	1 tube of 5
EHSS32	3.20mm	1 tube of 10	EHSS125	12.50mm	1 tube of 5
EHSS35	3.50mm	1 tube of 10	EHSS130	13.00mm	1 tube of 5
EHSS40	4.00mm	1 tube of 10			
EHSS41	4.10mm	1 tube of 10	EHSS6PC	HSS Drill Bits Set - 6pc Contains: 2, 3, 4, 5, 6, 8mm - PVC Wallet	1
EHSS42	4.20mm	1 tube of 10			
EHSS43	4.30mm	1 tube of 10	EHSS19PC	HSS Drill Bits Set - 19pc Contains: 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5, 10mm - Metal Case	1
EHSS45	4.50mm	1 tube of 10			
EHSS50	5.00mm	1 tube of 10	EHSS25PC	HSS Drill Bits Set - 25pc Contains: 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5, 10, 10.5, 11, 11.5, 12, 12.5, 13mm - Metal Case	1
EHSS55	5.50mm	1 tube of 10			
EHSS60	6.00mm	1 tube of 10			
EHSS65	6.50mm	1 tube of 10			
EHSS70	7.00mm	1 tube of 10			
EHSS75	7.50mm	1 tube of 10			
EHSS80	8.00mm	1 tube of 5			



HINGE BORING BITS

For boring out holes when making hinges (not to be used in plane routing machines). High Speed steel for hard and soft woods. Tungsten carbide models for harder man-made boards

Hinge Boring Bits

Part No	Size mm	Material	Max RPM
1235	35	High Speed Steel	1800
1335	35	Tungsten Carbide	1800



UTILITY KNIVES & BLADES
TAPE MEASURES



UTILITY KNIVES & BLADES

Standard Trimming Knife

Standard retractable utility knife with a zinc alloy body. Supplied with one blade



Part No	Description	Pack Qty
E1770	Standard Trimming Knife	12 (bulk pack)



Heavy Duty Trimming Knife

Heavy duty retractable utility knife designed to fit the hand and maintain a strong grip. Ideal for cutting tough materials such as carpets, roofing felt and vinyl. Hinged body assists quick blade change. Supplied with one blade



Part No	Description	Pack Qty
E1780	Heavy Duty Trimming Knife	8 (bulk pack)

Utility Blades

Supplied in handy dispensers which allow easy access to one blade at a time and minimises contact with the blade



Part No	Description	Pack Qty
1702BP	Straight	100
1702R	Straight	10
1603BC	Hooked (no dispenser cellophaned in bundles of 10)	100

TAPE MEASURES

Tape Measures

Auto lock system. Magnetic hook & pause button. Blades with both metric and imperial graduations or just metric. Belt clip and wrist band. Ergonomic soft feel grip



Part No	Size	Description	Pack Qty
E30430	3m (10ft)	Metric & Imperial Graduations	12
E30435	5m (16ft)	Metric & Imperial Graduations	12
E30440	8m (26ft)	Metric & Imperial Graduations	6
E30430M	3m	Metric Only Graduations	12
E30435M	5m	Metric Only Graduations	12
E30440M	8m	Metric Only Graduations	6

**PERMANENT MAGNETS
ELECTRO-MAGNETS
MAGNETIC TOOLS**



PERMANENT MAGNETS - MAGNET MATERIALS

ALNICO

AlNiCo

- Alnico 5 magnet material (unless stated)
- 550°C max. operating temp.
- Magnetically stable at high temperatures
- Good corrosion resistance

Cylindrical Bar Magnets

Part No	Diameter mm	Length* mm	Weight per pair (kg)	Gauss	Pack Qty (Pair)
E808**	4	10	0.002	1200	5
E809**	5	10	0.003	1200	5
E810**	6	10	0.004	1200	5
E805	6	20	0.008	1200	10
E806	8	25	0.018	1200	5
E807	10	30	0.035	1200	5

* Magnetic axis ** Supplied natural



Sold in pairs

Rectangular Bar Magnets

Part No	Material	Width mm	Height mm	Length* mm	Weight per pair (kg)	Gauss	Pack Qty (Pair)
E842	Alnico 2	15	10	50	0.220	750	2
E843	Alnico 2	15	10	75	0.330	750	2
E844	Alnico 5	10	5	20	0.030	1100	5
E845	Alnico 5	12.5	5	40	0.040	1100	5
E846	Alnico 5	15	5	60	0.130	1100	5

* Magnetic axis



Sold in pairs. North pole is indicated by a notch / dimple

Minor Magnet

Part No	Width mm	Height mm	Length mm	Pole Gap	Weight (kg)	Max Pull (kg)	Pack Qty
E801	7.9	11.1	22.2	6.3	0.01	0.9	10



Button Magnets

Part No	Dia. mm	Height mm	Slot Size Min - Max mm	Hole Size	Weight (kg)	Max Pull (kg)	Pack Qty
E821	12.7	9.5	4.0 - 7.2	4.4	0.006	0.7	10
E822	19.1	12.7	5.6 - 8.7	4.8	0.020	1.9	10
E825	22.2	19.1	6.3 - 6.3	4.8	0.050	3	10
E823	25.4	15.9	5.6 - 8.7	4.8	0.050	3.4	10
E824	31.8	25.4	8.0 - 12.7	7.1	0.113	4.8	2



Pocket Magnets

Part No	Length mm	Width mm	Height mm	Width of Gap	Weight (kg)	Max Pull (kg)	Pack Qty
E802	28.5	7.6	25.4	6.3	0.030	2.4	10
E803	33.3	15.9	35	7.9	0.090	4	5



Power Magnets

Part No	Length mm	Height mm	Width mm	Width of Gap mm	Hole Size mm	Hole Centres mm	Weight (kg)	Pull Force (kg)	Pack Qty
811	30	20	20	15	5	N/A	0.060	4.5	5
812	40	25	25	20	5	N/A	0.120	9	5
813	45	30	30	23	5	N/A	0.180	11.8	2
814	57	35	44.5	27.8	2 x 7.9	31.75	0.370	23.5	1
815	70	41.3	57.2	34.1	2 x 7.9	38.10	0.710	37	1
816	79.4	54	82.6	38.1	2 x 9.5	42.86	1.450	47	1
817	60.3	39.7	62	31.75	N/A	N/A	0.80	35	1
818	79.4	54	85.7	47.6	N/A	N/A	1.80	60	1



Major Magnet

Part No	Length mm	Width mm	Height mm	Pole Gap mm	Weight (kg)	Flux density at gap centre* Wb/m ² - Gauss	Pack Qty
862	103.5	50	111	27.3	2.9	0.210 - 2000	1

* at room temperature and pressure



PERMANENT MAGNETS - MAGNET MATERIALS

NEODYMIUM

NdFeB

- Neodymium iron boron 'rare earth' material
- Strongest magnet material available
- 80°C max. operating temp.
- High resistance to de-magnetisation
- Anisotropic
- N35 Grade



Button Magnets

Part No	Dia. mm	Height* mm	Weight (kg)	Pull Force (kg)	Pack Qty
E800	3	2	0.0001	0.3	10
E801	4	2	0.0002	0.4	10
E802	4	3	0.0003	0.7	10
E803	4	4	0.0004	0.9	10
E804	5	2	0.0003	0.55	10
E805	5	3	0.0004	0.85	10
E806	5	5	0.0007	1.3	10
E807	6	3	0.0006	1.0	10
E808	6	4	0.0008	1.3	10
E809	8	4	0.0015	1.7	10
E810	8	5	0.0017	2.12	10
E811	9	3	0.0014	1.6	10
E812	10	3	0.0018	1.65	10
E813	10	5	0.0029	2.7	10
E814	15	3	0.0040	2.5	3
E815	20	3	0.0071	3.3	3
E816	20	10	0.0236	10.5	1

* Magnetic axis

Ring Magnets

Part No	Dia. mm	Height* mm	Hole	Screw Head	Weight (kg)	Pull Force (kg)	Pack Qty
N822	20	10	6 Csk	M6	0.0214	4.7	1
E823	37	3.5	6 Csk	M6	0.0275	4.9	1

* Magnetic axis

Countersunk hole



Block Magnets

Part No	Length mm	Width mm	Height* mm	Weight (kg)	Pull Force (kg)	Pack Qty
E817	25	10	3	0.0056	4.7	4
E818	25	10	5	0.0094	4.9	4
E819	35	10	5	0.0131	5.8	1
E820	50	20	3	0.0225	5.8	1
E821	50	50	12.5	0.2438	40.1	1

* Magnetic axis



FERRITE

- 250°C max. operating temp.
- Isotropic - multi-pole magnetised on one face

Disc Magnets

Part No	Length mm	Height* mm	Weight (kg)	Pull Force (kg)	Pack Qty
CM700-R	14	5	0.0038	0.123	10
CM701-R	20	5	0.0079	0.175	10
CM702-R	30	5	0.0177	0.262	10



PERMANENT MAGNETS - POT MAGNETS

ALNICO

AlNiCo

Standard products indicated

Customised designs available
subject to quantity

Please contact our sales office

Shallow Pot Magnets

Part No	Dia. mm	Height	Hole Size (Csk)	Screw Head Size	Weight Kg	Pull Force Kg	Pack Qty
826	19	7.5	4.5	M3 Csk	0.010	3.0	10
827	28.5	8.5	5.2	M4 Csk	0.030	5.0	10
828	38.1	10.35	5.2	M4 Csk	0.080	13.0	5

Deep Pot Magnets

Part No	Dia. mm	Height	Thread Size	Weight Kg	Pull Force Kg	Pack Qty
829	9.5	15	M3	0.005	1	10
830	12.7	15.9	M4	0.015	2	10
831	17.5	16	M6	0.023	2.65	10
832	20.5	19	M6	0.040	4	5
833	27	25	M6	0.085	6.1	5
834	35	30	M6	0.184	14.75	2

Max. operating temperature 220°
Mild Steel pot
Painted Red



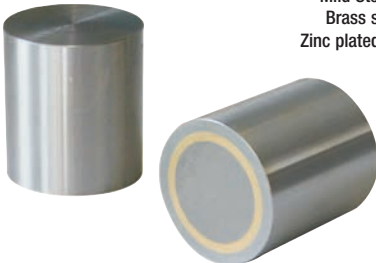
Max. operating temperature 220°
Mild Steel pot, aluminium spacer
Painted Red



Deep Pot Magnets

Part No	Dia. mm	Height mm	Weight (kg)	Pull Force (kg)	Pack Qty
E790	6	20	0.004	0.2	20
E791	8	20	0.007	0.4	20
E792	10	20	0.011	0.8	20
E793	13	20	0.019	1.0	20
E794	16	20	0.029	1.8	10
E795	20	25	0.057	4.2	5
E796	25	35	0.140	8.0	2

Max. operating temperature 220°
Mild Steel pot
Brass spacer
Zinc plated body



Deep Pot Magnets - H6

Part No	Dia. mm	Height mm	Weight (kg)	Pull Force (kg)	Pack Qty
E730	6	10	0.002	0.2	20
E731	8	12	0.004	0.3	20
E732	10	16	0.009	0.5	20
E733	13	18	0.017	1.0	20
E734	16	20	0.029	1.5	10
E735	20	25	0.057	3.5	5
E736	25	30	0.110	8.0	5
E737	32	35	0.200	15.0	2
E738	40	45	0.420	20.0	2
E739	50	50	0.720	35.0	1

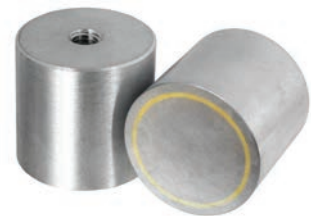
Max. operating temperature 220°
Mild Steel pot
Brass spacer
Zinc plated body
Diameter ground to H6 tolerance



Deep Pot Magnets - Threaded

Part No	Dia. mm	Height mm	Thread Size	Weight Kg	Pull Force Kg	Pack Qty
E740	6	20	M3	0.004	0.2	20
E741	8	20	M3	0.007	0.4	20
E742	10	20	M4	0.011	0.8	20
E743	13	20	M4	0.019	1.0	20
E744	16	20	M4	0.029	1.8	10
E745	20	25	M6	0.055	4.2	5
E746	25	35	M6	0.25	8.0	2
E747	32	40	M8	0.37	15.0	2
E748	45	44	M10	0.5	30.0	2

Max. operating temperature 220°
Mild Steel pot
Brass spacer
Zinc plated body



NEODYMIUM

NdFeB

Standard products indicated

Customised designs available
subject to quantity

Please contact our sales office

N35 Grade

Shallow Pot Magnets

Part No	Dia. mm	Height mm	Weight (kg)	Pull Force (kg)	Pack Qty
E760NEO	6	4.5	0.001	0.5	20
E761NEO	8	4.5	0.0018	1.3	20
E762NEO	10	4.5	0.0025	2.5	20
E763NEO	13	4.5	0.0045	6	20
E764NEO	16	4.5	0.0055	9.5	20
E765NEO	20	6	0.015	14	10
E766NEO	25	7	0.031	20	10
E767NEO	32	7	0.04	35	10

Zinc plated body



Shallow Pot Magnets - Threaded

Part No	Dia. mm	Pot Height mm	Total Height	Thread Size	Ferrule Outer Dia.	Weight (kg)	Pull Force (kg)	Pack Qty
E770NEO	6	4.5	11.5	M3	6	0.0027	0.5	20
E771NEO	8	4.5	11.5	M3	6	0.0035	1.3	20
E772NEO	10	4.5	11.5	M3	6	0.0045	2.5	20
E773NEO	13	4.5	11.5	M3	6	0.0075	6	20
E774NEO	16	4.5	11.5	M4	8	0.0132	9.5	20
E775NEO	20	6	13	M4	8	0.0165	14	10
E776NEO	25	7	14	M4	8	0.034	20	10
E777NEO	32	7	15.5	M5	10	0.048	35	5

Threaded Hole
Zinc plated body



PERMANENT MAGNETS - POT MAGNETS

Hook Magnets

Part No	Dia. mm	Pot Height mm	Total Height	Weight (kg)	Pull Force (kg)	Pack Qty
M19863XR	32	7	38	0.051	35	1



Mild Steel pot, painted white
See also Ferrite Hook Magnets on Pg100
(pull up to 10kg, more cost effective)

Deep Pot Bi-Pole Magnets

Part No	Dia. mm	Height mm	Thread Size mm	Weight (kg)	Pull Force (kg)	Pack Qty
NH025	12.7	12	M5	0.01	2.5	10
NH065	16	16	M6	0.018	8.0	10
NH130	22.2	20	M6	0.04	16.0	5
NH240	25.4	25	M6	0.07	25.0	5



Aluminium pot
Mild steel pole pieces
Painted blue
Threaded hole

Deep Pot Bi-Pole Magnets

Part No	Dia. mm	Height mm	Weight (kg)	Pull Force (kg)	Pack Qty
E750NEO	6	20	0.004	1.0	20
E751NEO	8	20	0.007	2.5	20
E752NEO	10	20	0.011	4.5	20
E753NEO	13	20	0.019	7.0	20
E754NEO	16	20	0.029	15.0	10
E755NEO	20	25	0.057	28.0	5
E756NEO	25	35	0.128	45.0	2
E757NEO	32	40	0.228	70.0	2



Brass pot
Diameter ground to H6 tolerance

SAMARIUM COBALT $SmCo$

Standard products indicated

Customised designs available
subject to quantity

Please contact our sales office

Shallow Pot Magnets - Threaded Hole

Part No	Dia. mm	Height Body mm	Height Inc Thread mm	Thread Size	Ferrule Outer Dia. mm	Weight (kg)	Pull Force (kg)	Pack Qty
E770	6	4.5	11.5	M3	6	0.0027	0.5	20
E771	8	4.5	11.5	M3	6	0.0035	1.1	20
E772	10	4.5	11.5	M3	6	0.0045	2.0	20
E773	13	4.5	11.5	M3	6	0.0075	4.0	20
E774	16	4.5	11.5	M4	8	0.009	6.0	20
E775	20	6	13	M4	8	0.0165	9.0	10
E776	25	7	14	M4	8	0.033	15.0	10
E777	32	7	15.5	M5	10	0.048	22.0	5

Max. operating temperature 200°
Mild Steel pot
Zinc plated body
Threaded Hole



Shallow Pot Magnets

Part No	Dia. mm	Height mm	Weight (kg)	Pull Force (kg)	Pack Qty
E760	6	4.5	0.001	0.5	20
E761	8	4.5	0.0015	1.1	20
E762	10	4.5	0.0025	2.0	20
E763	13	4.5	0.0045	4.0	20
E764	16	4.5	0.0065	6.0	20
E765	20	6	0.015	9.0	10
E766	25	7	0.022	15.0	10
E767	32	7	0.04	22.0	10



Max. operating temperature 200°
Mild Steel pot
Zinc plated body

Deep Pot Magnets - H6

Part No	Dia. mm	Height mm	Weight (kg)	Pull Force (kg)	Pack Qty
E750	6	20	0.004	0.8	20
E751	8	20	0.007	2.2	20
E752	10	20	0.011	4.0	20
E753	13	20	0.019	6.0	20
E754	16	20	0.029	12.5	10
E755	20	25	0.057	23.0	5
E756	25	35	0.128	40.0	2
E757	32	40	0.228	60.0	2



Max. operating temperature 200°
Brass pot
Diameter ground to H6 tolerance

PERMANENT MAGNETS - POT MAGNETS

FERRITE

Standard products indicated

Customised designs available
subject to quantity

Please contact our sales office

Shallow Pot Magnets - Countersunk Mounting

Part No	Dia. mm	Height mm	Hole Size mm	Screw Head	Weight (kg)	Pull Force (kg)	Pack Qty
E887	20	6	4.2	M4	0.09	2.7	10
E876	25	7	5.5	M5	0.016	3.6	10
E877	32	7	5.5	M5	0.027	7.2	10
E878	40	8	5.5	M5	0.053	9.0	5

Max. operating temperature 120°
Mild Steel pot
Zinc plated body
Countersunk mounting



Shallow Pot Magnets

Part No	Dia. mm	Height mm	Hole in Body mm	Hole in Magnet mm	Weight (kg)	Pull Force (kg)	Pack Qty
E888	50	10	8.5	22	0.009	18	5
E889	80	18	6.5	16	0.48	54	1

Max. operating temperature 120°
Mild Steel pot
Zinc plated body



Shallow Pot Magnets - Male Thread

Part No	Dia. mm	Pot Height mm	Overall Height mm	Thread	Weight (kg)	Pull Force (kg)	Pack Qty
E720	22	7	17	M5	0.020	3.5	5
E723	32	7	22	M5	0.032	8.0	5

Max. operating temperature 120°
Mild Steel pot
Male Thread



Shallow Pot Magnets

Part No	Dia. mm	Height mm	Weight (kg)	Pull Force (kg)	Pack Qty
E700	10	4.5	0.002	0.4	20
E701	13	4.5	0.003	1.0	20
E702	16	4.5	0.0045	1.8	20
E703	20	6	0.010	3.0	10
E704	25	7	0.019	4.0	10
E705	32	7	0.030	8.0	10
E706	40	8	0.055	12.5	5
E707	50	10	0.100	22.0	5
E708	63	14	0.230	35.0	1
E709	80	18	0.485	60.0	1

Max. operating temperature 120°
Mild Steel pot
Zinc plated body



Hook Magnets

Part No	Dia. mm	Pot Height mm	Total Height mm	Thread Size	Weight (kg)	Pull Force (kg)	Pack Qty
E879-RB	25	8	34	M4	0.027	4.0	1
E880-RB	32	8	34	M4	0.034	8.0	1
E881-RB	36	8	34	M4	0.038	10.0	1

Max. operating temperature 120°
Mild Steel pot. Painted white
See also neodymium hook magnets pg99 (35kg pull)



PERMANENT MAGNETS - POT MAGNETS

Shallow Pot Magnets - Threaded Hole

Part No	Dia. mm	Pot Height mm	Total Height mm	Thread Size	Weight (kg)	Pull Force (kg)	Pack Qty
E860	10	4.5	11	M3	0.003	0.4	20
E861	13	4.5	11.5	M3	0.005	1.0	20
E862	16	4.5	11.5	M3	0.006	1.8	20
E863	20	6	13	M3	0.011	3.0	10
E864	25	7	15	M4	0.022	4.0	10
E865	32	7	15	M4	0.032	8.0	5
E866	36	8	16	M4	0.045	10.0	5
E867	40	8	18	M5	0.060	12.5	5
E868	47	9	17	M4	0.090	18.0	1
E869	50	10	22	M6	0.110	22.0	1
E870	57	10.5	18.5	M4	0.145	28.0	1
E871	63	14	30	M8	0.240	35.0	1
E872	80	18	34	M10	0.520	60.0	1
E873	90	20	40	M10	0.820	70.0	1
E874	100	22	42	M12	0.940	90.0	1
E875	125	26	50	M14	1.720	130.0	1

Max. operating temperature 120°
Mild steel pot
Zinc plated
Female thread



Shallow Pot Magnets - Threaded Hole

Part No	Dia. mm	Height mm	Thread	Weight (kg)	Pull Force (kg)	Pack Qty
E780	50	10	M8	0.16	15	1
E781	80	18	M10	0.56	55	1

Max. operating temperature 120°
Mild steel pot
Painted red
Threaded hole



Shallow Pot Magnets

Part No	Dia. mm	Height mm	Thread	Weight (kg)	Pull Force (kg)	Pack Qty
E890	46	10.7	M6	0.090	6	5
E891	56	10.7	M6	0.130	16	5
E892	66	10.7	M6	0.190	25	5

Max. operating temperature 120°
Mild steel pot with removeable hook
Painted red



Shallow Pot Magnets - M6 Tapped Holes

Part No	Dia. mm	Height mm	Fixing Stud Centres PCD M6	Centre Fixing Point	Weight (kg)	Pull Force (kg)	Pack Qty
E895	66	10.7	46mm - 3 Holes	M6	0.270	25	1
E896	76	12.5	46mm - 3 Holes	M6	0.300	33	1
E897	100	15.5	70mm - 3 Holes	M6	0.610	55	1

Max. operating temperature 120°
Mild steel pot with removeable hook
Painted red
Three M6 tapped holes to aid mounting products



Channel Magnets

Part No	Length mm	Width mm	Height mm	Plain Fixing Holes mm	Hole Centres mm	Weight each (kg)	Pull Force (kg)	Pack Qty
E898/1	115	30	13mm	4.2	80	0.25	8	5
E898/2	130	30	13mm	4.2	90	0.30	14	5
E899	190	43	13mm	4.2	110	0.55	48	2

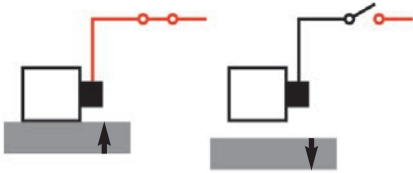
Max. operating temperature 120°
Mild steel pot
Painted red



ELECTRO MAGNETS

Electro Magnets - Energised to hold

Energise to hold



Electric current required to turn the magnet ON

Sturdy nickel plated cylinder, passivated with body mounting

High-quality permeable iron for low remanence

Armature plates to suit

Operating voltage

12VDC, 24VDC & 240VAC (with rectified plug connector)

Connector options

Flying leads, two-pole connector and Hirschman connector

Mountings

Threaded holes in magnet rear face

Finish

Bright nickel plated with machined face

ED rating

100%

IP rating

54 (20 for the two-pole connector)



Two-pole connector

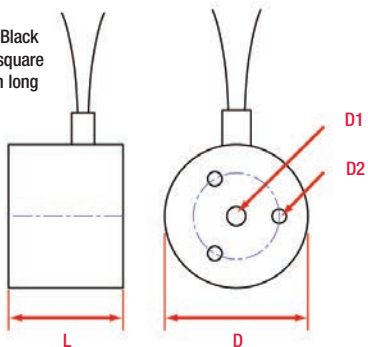
Standard Operating Voltage

Diameter mm	240vac		24vdc		12vdc		Air Gap mm									
	Part No.	Current mA	Part No.	Current mA	Part No.	Current mA	0	0.09	0.18	0.27	0.36	0.59	1.00	1.59	2.00	
25			M52172/24VDC	90	M52172/12VDC	180	113	34	19	11	7	4	2	-	-	
30			M52173/24VDC	140	M52173/12VDC	280	253	94	50	32	21	11	5	3	2	
40			M52174/24VDC	230	M52174/12VDC	440	575	289	153	97	59	32	15	8	4	
50	M52175/240VA	40	M52175/24VDC	240	M52175/12VDC	470	1097	639	403	268	190	100	48	24	10	
65	M52176/240VA	50	M52176/24VDC	340	M52176/12VDC	690	1677	949	554	347	237	129	64	31	15	

25, 30mm diameter

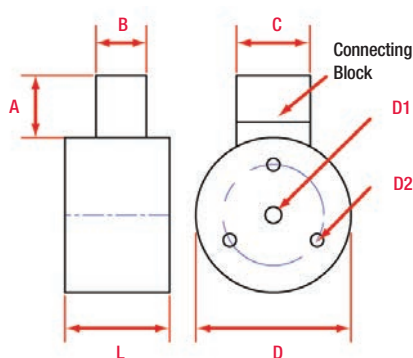
Free leads (500mm long)

Leads:
1 Red, 1 Black
0.3 mm square
x 500mm long



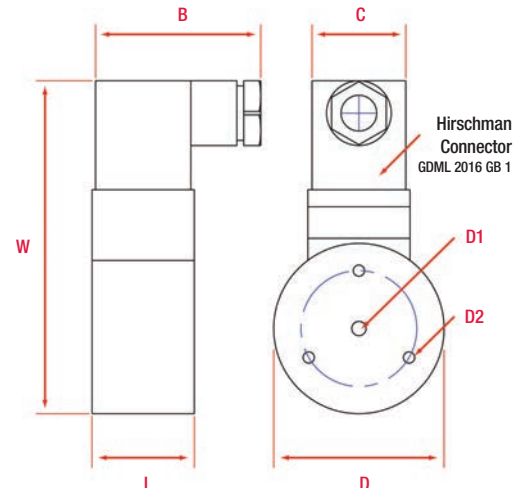
40, 50, 65mm diameter,

12VDC & 24VDC
Two pole connector



50, 65mm diameter 240VAC

Hirschman connector

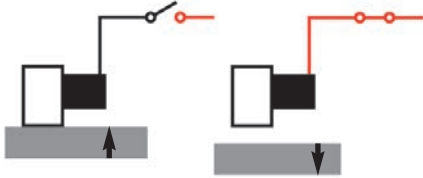


Part No.	Dimensions mm							PCD	Current A	
	D	L	W	A	B	C	D1			D2
12v and 24v units										
M52172/	25	20	-	-	-	-	M4	M3	15	66
M52173/	30	24	-	-	-	-	M5	M3	18	108
M52174/	40	27	-	16	13	19	M5	M4	26	210
M52175/	50	30	-	16	13	19	M5	M4	34	364
M52176/	65	35	-	16	13	19	M8	M5	40	710
240v units										
M52175/240VA	50	30	98	-	50	30	M5	M4	34	408
M52176/240VA	65	35	111	-	50	30	M8	M5	40	744

ELECTRO MAGNETS

Electro Magnets - Energised to release

Energise to release



Electric current required to turn the magnet OFF
Sturdy nickel plated cylinder, passivated with body mounting.
High-quality permeable iron for low remanence.
Armature plates to suit

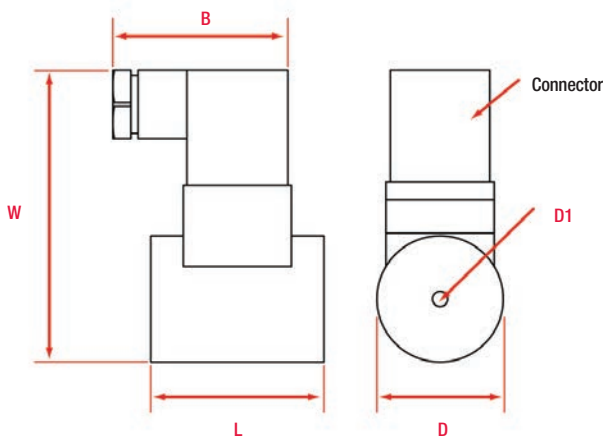


Hirschman Connector

- Operating voltage** 24VDC & 240VAC (with rectified plug connector)
- Connector options** Hirschman connector
- Mountings** Central machined hole in rear face of magnet
- Finish** Bright nickel plated with machined face
- IP rating** 54
- Duty Cycle** 52

Standard Operating Voltage

Diameter mm	240vac		24vdc		Air Gap mm							
	Part No.	Current mA	Part No.	Current mA	0	0.09	0.18	0.27	0.36	0.59	1.00	1.59
35	M52177/240VA	50	M52177/24VDC	240	285	98	54	37	31	17	-	-
50	M52178/240VA	40	M52178/24VDC	350	471	398	264	190	131	112	54	32



Part No.	Dimensions mm				Connector	D1	Weight (g)
	D	L	B	W			
M52177/24VDC	35	48	50	78	Hirschman Style	M5	352
M52178/24VDC	50	63	50	94	Hirschman Style	M5	874
M52177/240VA	35	48	50	81	Hirschman	M5	354
M52178/240VA	50	63	50	97	Hirschman	M5	880

Armature Plates

Part No	Dia. mm	Height mm	Screw	To suit unit dia. mm	Weight (g)
M52171/25ARM	25	3	M3	25	15
M52171/30ARM	30	4	M4	25	30
M52171/40ARM	40	5	M4	30 or 35	50
M52171/50ARM	50	6	M4	40	100
M52171/65ARM	65	8	M5	50	210
M52171/80ARM	80	10	M6	65	400



**To fit both types
Supplied with screw
We recommend you use
armature plates that are
the same diameter
as the magnet or larger**

MAGNETIC TOOLS (GENERAL)

Recovery Magnet

Part No	Width mm	Height mm	Thickness mm	Weight (kg)	Pull Force (kg)
E936	80	101.5	36	1.4	50



Constructed from a ferrite magnet sandwiched between two steel plates
Designed for recovery or retrieval applications such as retrieving objects from coolant tanks and vats

Magnetic Tool Rack

Part No	Width mm	Height mm	Length mm	Weight (kg)	Pull Force (kg)
E985-R	15	40	350	0.31	20



Contains 2 x 350mm powerful magnet bars with extruded magnetic rubber lengths, housed between two pole pieces
Neatly secures and holds tools in the garage or workshop and knives in the kitchen

Magnetic Trays

Part No	Dia. mm	Weight (kg)
E633	150	0.11
E634	102	0.10



Magnet in base attaches the tray firmly to ferrous surfaces and holds ferrous items in the tray
Magnet base is rubber coated to safeguard surfaces

Magnetic Tool Mat

Part No	Width mm	Height mm	Thickness mm	Weight (kg)	Pull Force (kg)
EM981-R	210	150	15	0.36	5



3 strong ceramic magnets encapsulated in a tough PVC casing
Widely used in production areas for keeping tools and parts within easy reach
Magnetic both sides

Telescopic Pick-up Tool

Part No	Length mm	Weight (kg)	Pull Force (kg)
EM967-R	147 - 660	0.04	1



Powerful neodymium iron boron magnets are used to ensure maximum pull from a small magnetic area
Ideal for retrieving ferrous objects that are out of reach
Pen-sized with clip

Flexible Pick-up Tool

Part No	Length mm	Magnet Dia. mm	Weight (kg)	Pull Force (kg)
E600	450	6	0.11	0.5
E601	450	10	0.12	1.0
E602	520	13	0.13	1.8



Semi-rigid, bendable pick-up tool, ideal for retrieving difficult to reach objects.

Magnetic Sweeper

Part No	Head Width mm	Height inc. handle mm	Weight (kg)
MSW385	385	1050	2



Adjustable telescopic handle
Quickly and easily clear workshop and factory floors, sports pitches and car parks of spilt items or potentially damaging and dangerous metal debris such as nails, pins, staples and metal fragments
Handle mounted quick release mechanism

Magnetic Swarf Wand

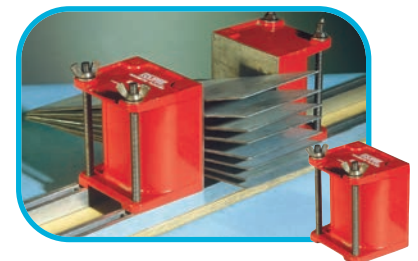
Part No	Length mm	Weight (kg)	Collection Capacity (kg)
MW400	400	0.476	6.35



Separate small parts after rumbling
Quick release handle
Lightweight, non-rusting shaft
Quickly and safely pick-up iron and steel offcuts, filings, chips, swarf and small components

Magnetic Sheet Floaters

Part No	Width mm	Height mm	Depth mm	Mounting Hole Size	Weight per pair (kg)
E913	73	76	65	M8	1.40
E914	92	102	76	M8	3.10
E915	113	152	89	M10	6.75



Sheet separators use mutual magnetic repulsion to separate sheets in a stack so they can be removed more easily
Sold in pairs

MAGNETIC TOOLS (GENERAL)

Table-top demagnetiser

Part No	Voltage	Width mm	Height mm	Length mm	Weight (kg)
DA955/UK	240	150	117	87	3.83
DA955/EUR	220	150	117	87	3.83
DB956/EUR	110	150	117	87	3.83



also see page 44-47 for magnetic workholding products

Lightweight unit for the removal of residual magnetism from components after workholding
CE approved
(Max usage: 2 minutes in any 4 minute period)

Hand Magnet

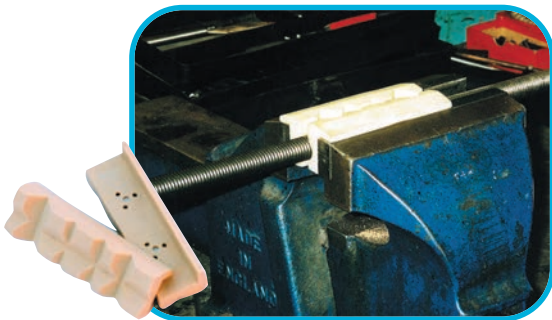
Part No	Length mm	Height mm	Width mm	Weight (kg)	Pull Force (kg)
E961	121	235	41	2.75	1.15



Powerful ferrite magnet attracts ferrous items to base
Quick release handle frees attracted items
Ideal for picking up small components, nails, bolts, spilt materials

Magnetic Vice Jaws

Part No	Width mm	Height mm	Length mm	Weight per pair (kg)
EM983-R	31	32	103	0.13



Powerful neodymium magnet material encased in polyurethane
Secure round and irregular workpieces without damage or distortion

Magnetic Plate Drag

Part No	Length mm	Height mm	Width mm	Weight (kg)	Pull (kg)
E964	118	98	38	2.8	50



Use to remove steel sheets from a stack and transport sheets to and from machines etc
Contains powerful permanent ferrite magnets in an aluminium housing

Magnet Pole Indicator

Part No	Length mm	Width mm	Thickness mm	Weight (kg)
MPI/100	132	22	19	0.11



Shows the true north or true south pole of magnets. Pocket sized. Battery powered (includes 4 x 1.5v batteries)

Gauss Meter

Part No	Weight (kg)
GMET/1	0.5
GMET/2	0.5

Digital hand held Gauss meter for checking magnetic flux.
Supplied with 2 probes (Transverse (TX) and Axial (AX)), case, battery (PP3).

Measurement units: Gauss, Tesla, Oersted, Ampere meters.

Measuring range settings:

1: 1 to 3000 Gauss (0.0001 to 0.3 Tesla)

Resolution - 1 Gauss

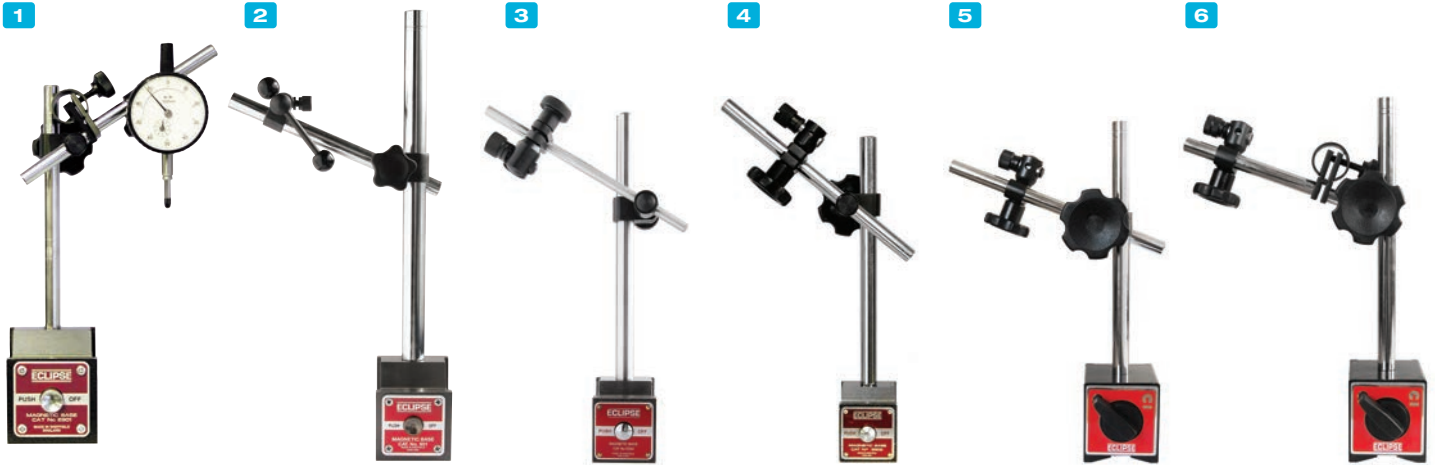
2: 10 to 30,000 Gauss (0.001 to 3 Tesla)

Resolution - 10 Gauss

Auto: Automatically measures between settings 1 and 2 +/- 15mT on/off hysteresis



MAGNETIC BASES



Complete Magnetic Stands

Part No	Base Part No	Switching Type	Fitment Part No	Fitment Type	Max Pull (kg)
1 E901	E901WF	Push Button	RP991BL	Heavy duty with fine adjustable	80
2 E901/1	E901WF	Push Button	RP901/1	Extra large heavy duty	80
3 E903CP	E900WF	Push Button	RP72CP	Light duty	30
4 E908M	E900WF	Push Button	RP995BL	Heavy duty	30
5 E905	E905WF	Lever	RP995BL	Heavy duty	80
6 E906	E905WF	Lever	RP991BL	Heavy duty with fine adjustable	80
7 E907M	E905WF	Lever	RP907S	Flexible snake arm F/A	80
8 E910	E905WF	Lever	RP999	Mechanical one piece	80
9 E909	834	Non-switchable	RP909FIT	One pillar	14

For use in the measurement, inspection and positioning of workpieces with dial indicators.

To measure the flatness of a workpiece after grinding or milling

For checking concentricity of a workpiece. All stands will clamp onto curved and flat surfaces, with the exception of E909 (flat only)



Magnetic Bases - Push Button

Part No	Length mm	Height mm	Width mm	Hole Size	Weight (kg)	Clamping Force (kg)
E900WF	48	52	40	M8	0.5	30
E901WF	64	76	64	M8	1.7	80



4 magnetic faces. Eclipse magnetic bases can be attached to any ferrous surface to provide a rigid support

Magnetic Bases - Toggle Switch

Part No	Length mm	Height mm	Width mm	Hole Size	Weight (kg)	Clamping Force (kg)
E905WF	65	55	50	M8	1.05	80
E905WF/100	75	55	50	M8	1.20	100

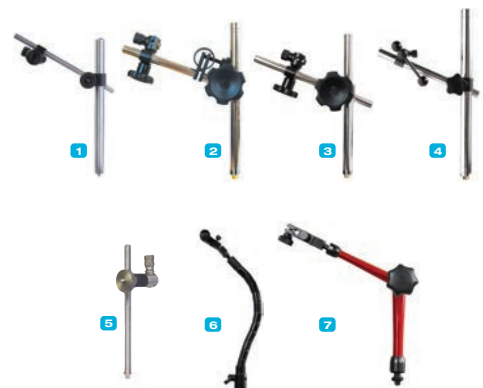


3 magnetic faces: top, bottom & back

Magnetic Bases - Fitment Sets

Part No	Pillar Height mm	Pillar Dia. mm	Crossbar Length mm	Crossbar Dia. mm	Screw Fixing
1 RP72CP	185	12.5	150	6.3	M8
2 RP991BL	175	12	165	10	M8
3 RP995BL	175	12	165	10	M8
4 RP901/1	300	20	200	14	M8
5 RP907FIT	120	6	N/A	N/A	M6

Part No	Max Extension Height mm	Screw Fixing
6 RP909S	355	M8
7 RP999	295	M8



**FOR RETAIL, OFFICE &
WAREHOUSE APPLICATIONS**

**MAGNETIC TAPE
MAGNETIC SHEET
MAGNETIC LABELLING
RACKING STRIP
WHITEBOARDS
MAGNETIC MARKERS**



FLEXIBLE MAGNETS

Magnetic Tape

Part No	Width mm	Thickness mm	Length m	Weight (kg)	Pull Force (g/cm ²)	Pack Qty
EM884-R	13	0.5	1	0.027	28	1
FM660	7.5	0.75	10	0.240	44	1
FM661	12.5	0.75	10	0.390	44	1
FM662	20	0.75	10	0.630	44	1
FM652	10	1.5	30	1.7	55	1
FM663	12.7	1.5	30	2.1	55	1
FM664	20	1.5	30	3.3	55	1
FM665	25.4	1.5	30	4.2	55	1

Material: strontium ferrite in thermo-plastic binder
Max. operating temperature 80°C
Magnetic on 1 face only
Can be cut with scissors

All supplied with standard acrylic adhesive.
FM652, FM663, FM664, FM665 are also available with premium acrylic or foam adhesive

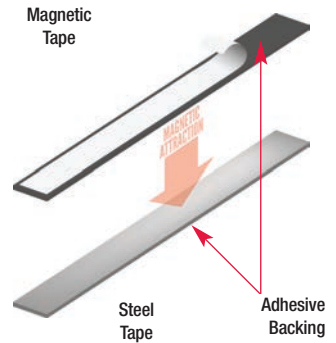


Steel Tape

Part No	Matching Magnetic Tape	Width mm	Thickness mm	Roll Length m	Weight (kg)	Pack Qty
FM667	FM663	13	0.2	30	0.8	1
FM668	FM664	20	0.2	30	1.2	1
FM669	FM665	25	0.2	30	1.5	1

Adhesive-backed steel tape can be used with the matching width adhesive-backed magnetic tape to provide temporary and semi-permanent fixings

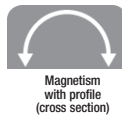
Supplied with standard acrylic adhesive



Magnetic Extrusion

Part No	Width mm	Thickness mm	Length m	Weight (kg)	Pull Force (g/cm ²)	Pack Qty
EM888-R (pairs)*	9.5	3.6	0.15	0.021	65	10 pairs
FM880-R	9.5	3.6	2	0.026	65	1
FM670	9.5	3.6	10	1.44	65	1
FM671	11	4.6	10	2.07	65	1
FM672	15	6.4	10	3.64	65	1

* Adhesive backing



Material: strontium ferrite in thermo-plastic binder
Max operating temperature 80°C
Forms a strong bond when paired with itself
Magnetic on 1 face
Please contact us if you require custom extruded profiles



Magnetic Sheet

Part No	Thickness mm	Width mm	Roll Length m	Weight (kg)	Pull Force (g/cm ²)	Finish	Pack Qty
060510A2	0.50	620	30	35	28	Plain	
060710A2	0.75	620	30	53	44	Plain	
060524A2	0.60	620	30	43	28	Gloss Vinyl White	
060724A2	0.85	620	30	60	44	Gloss Vinyl White	
060724D2	0.85	620	15	30	44	Gloss Vinyl White	
060724X5	0.60	1000	10	23	28	Gloss Vinyl White	
060724X4	0.85	1000	10	33	44	Gloss Vinyl White	
060711A2	0.80	620	30	60	44	Adhesive Backed	
Part No	Thickness mm	Width mm	Tile Length m	Weight (kg)	Pull Force (g/cm ²)	Finish	Pack Qty
FM650	0.75	150	0.15	0.071	44	Adhesive	5

Material: strontium ferrite in thermo-plastic binder
Max. operating temperature 80°C
Magnetic on 1 face
UV coating for cleaner handling
Flexible and impact resilient but can easily be cut using scissors. Regular shapes can be cut using inexpensive dies
Available with plain, white gloss or standard acrylic adhesive backing
Coloured and dry-wipe finishes also available



Secondary Glazing / Fly Screen Kit

Part No	Materials	Thickness mm	Width mm	Roll Length m	Adhesive
DIY2NDDG13	Magnetic Tape	1.5	12.7	30	Foam
	Steel Tape	0.2	13	30	Std Acrylic
DIY2NDDG25	Magnetic Tape	1.5	25.4	30	Foam
	Steel Tape	0.2	25	30	Std Acrylic

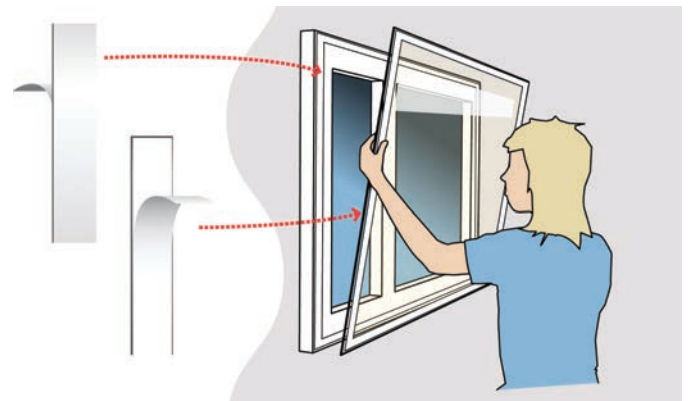
The quickest and easiest way to install permanent or temporary secondary glazing

Kit contains 30 metres of adhesive backed magnetic tape and 30 metres of matching adhesive backed steel tape. Attach the steel to your window frame and the magnetic strip to your plastic glazing (not supplied)

Steel has a standard acrylic adhesive and is coated white. It can be painted to match your frame. Magnetic tape has white foam adhesive backing

Both materials are easily cut with scissors

Attach the steel strip to the frame....



....and the magnet strip to the glazing

OFFICE / WAREHOUSE MAGNETS

Magnetic Labelling

Part No	Description	Application	Size	Thickness mm	Finish	Pack Qty
FM651	Magnetic Paper	Laser or Inkjet Printing	A4	0.25	White Matt	10
060511D1	Self Adhesive Magnetic Sheet	Application to existing card / label	business card (85x55mm)	0.6	Adhesive Backed	25
060711Y6	Self Adhesive Magnetic Sheet	Application to existing card / label	A4	0.8	Adhesive Backed	10
06050U14	Dry Wipe Magnetic Sheet	Dry Wipe Marker	A4	0.6	White Dry-wipe	10



3 ways to make your own custom magnetic labels:

Print with laser printer or inkjet on to matt or gloss magnetic paper

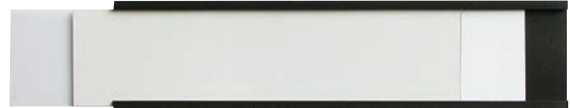
Apply self-adhesive magnetic sheet to the back of existing labels, signs, notices and graphics

Write on dry-wipe flexible magnetic sheet

All materials are easily cut with scissors

Magnetic Label Holders

Part No	Description	Roll Length m	Width mm	Height mm	Weight (kg)	Pack Qty
FM676/B	Label Packs	-	100	25	1.01	50
FM677/B	Label Packs	-	100	30	1	50
FM683	Label Packs	-	150	35	0.125	5
FM674C	Roll	50	-	15	7	1
FM676C	Roll	50	-	25	7	1
FM677C	Roll	50	-	30	7	1



Temporary / permanent signage, labelling, identification

Can be used on steel racking, cabinets, shelving or any magnetically receptive surface

Complete with magnetic rubber, white card, acrylic cover

Magnetic Racking Strip / Bay Markers

Width mm	Colour Yellow	Colour Blue	Colour Red	Colour White	Colour Green
20	060610U8/Y	060610U8/B	060610U8/R	060610U8/W	060610U8/G
30	060610U9/Y	060610U9/B	060610U9/R	060610U9/W	060610U9/G
50	060610U10/Y	060610U10/B	060610U10/R	060610U10/W	060610U10/G
70	060610U11/Y	060610U11/B	060610U11/R	060610U11/W	060610U11/G
90	060610U12/Y	060610U12/B	060610U12/R	060610U12/W	060610U12/G

Sticks to all steel racking

Dry wipe surface – write on, wipe off

Supplied in 10 metre rolls. Thickness 0.5mm



Whiteboards

Part No	Width mm	Height mm
MDWB300450	450	300
MDWB600450	600	450
MDWB900600	900	600
MDWB1200900	1200	900

Dry-wipe magnetic white boards with anodised aluminium frame and dropdown shelf for pens and eraser. Supplied with fixings, pack of 4 pens and eraser



Marker Magnets

Width mm	Colour Yellow	Colour Blue	Colour Red	Colour White	Colour Green	Colour Black	Colour Orange
20	RM765/Y	RM765/BLU	RM765/R	RM765/W	RM765/G	RM765/BLK	RM765/O
30	RM768/Y	RM768/BLU	RM768/R	RM768/W	RM768/G	RM768/BLK	RM768/O

Marker magnets

Magnet material in a coloured plastic shell

Ideal for filing cabinets, fridge doors, noticeboards and our magnetic whiteboards



Pens and Erasers

Part No
MDWB/PENS
MDWB/ERASER



Dry wipe pens and erasers for use with whiteboards

Pens come in a pack of four in red, green, blue and black



Hook Magnets

Neodymium - see page 99
Ferrite - see page 100

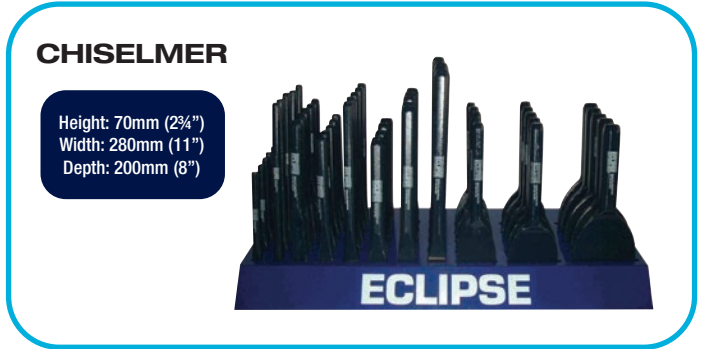
MERCHANDISING / POINT OF SALE

We offer a range of merchandising and point of sale materials to support our stockists. Some of the options are shown below*



UNISTAND

Height: 2360mm (93")
Width: 1230mm (48½")
Depth: 660mm (26")



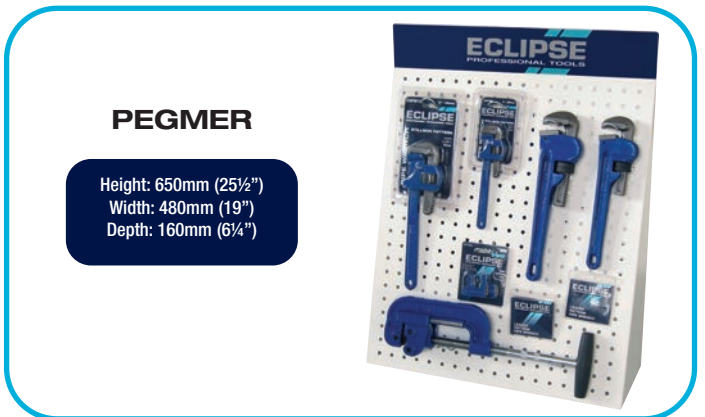
CHISELMER

Height: 70mm (2¾")
Width: 280mm (11")
Depth: 200mm (8")



HOLESAWMER

Height: 780mm (30¾")
Width: 590mm (23¼")
Depth: 130mm (5")



PEGMER

Height: 650mm (25½")
Width: 480mm (19")
Depth: 160mm (6¼")



POINT OF SALE MATERIALS

Subject to quantities of products ordered we can provide a range of promotional materials including posters, banners, literature dispensers, stickers and counter mats



SPIN-MER

Height: 500mm (19½")
Width: 360mm (14")

* Products shown for illustration purposes only

Please see our website for further details on all of our ranges



www.eclipsegroup.com
www.spear-and-jackson.com
www.eclipsemagnetics.com