



**BRASS ELECTRON**

An ISO 9001: 2015 Company



## Earthing & Lightning Protection System



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## EARTHING

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## LIGHTENING PROTECTION SYSTEM

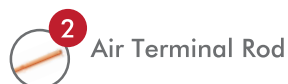
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## EARTHING

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## EARTHING GENERAL INTRODUCTION



## COMPANY PROFILE

### Overview

Global Brass Electron specializes in providing high-quality earthing and grounding products designed to ensure safety, reliability, and compliance with industry standards. With a commitment to innovation and customer satisfaction, we offer a comprehensive range of solutions tailored to meet the diverse needs of our clients across various sectors.

### Products and Services:

#### Earthing Systems

Our range includes earthing rods, conductors, clamps, and accessories designed for efficient dissipation of electrical currents to the ground.

#### Grounding Products

We provide grounding mats, grounding rods, and other components essential for establishing secure electrical grounding systems.

#### Lightning Protection

Our solutions include lightning rods, surge protection devices, and grounding systems to safeguard against electrical surges and lightning strikes.

#### Consulting and Design Services

We offer expert consulting and design services to help clients implement effective earthing and grounding solutions tailored to their specific requirements.

### Quality Assurance

Global Brass Electron adheres to stringent quality standards to ensure the reliability and performance of our products. Each item undergoes rigorous testing and inspection to meet or exceed industry regulations and customer expectations.

### Clientele

Our clientele includes industrial facilities, commercial buildings, telecommunications providers, utilities, and government agencies. We collaborate closely with engineers, architects, and contractors to deliver solutions that enhance safety and operational efficiency.

### Mission Statement

At Global Brass Electron, our mission is to be a trusted partner in electrical safety by providing superior earthing and grounding solutions that protect lives, infrastructure, and investments.

# CERTIFICATIONS



## Welcome to Global Brass Electron

At Global Brass Electron, we specialize in providing high-quality earthing accessories designed to ensure safety, reliability, and optimal performance. Our products are crafted with precision and tested rigorously to meet industry standards, making them ideal for a wide range of applications across residential, commercial, and industrial sectors. Backed by our commitment to innovation and customer satisfaction, we strive to deliver solutions that protect lives and equipment by effectively grounding electrical systems. Discover the difference with Global Brass Electron your trusted partner in earthing solutions.





# EARTHING

## EARTHING ACCESSORIES

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### Earth Rod to Tape 'A' Clamps

These Clamps are used to Joining earth rod to different sizes of copper tape.

Earth Rod Shank Ø mm	Max. Tape Size mm	Grid	Grid	Grid
14.2	20 x 3	43	36	19
16.0	25 x 3	42	44	18
16.0	25 x 6	46	52	23
17.2	30 x 4	43	36	19
17.2	40 x 6	42	44	18
20.0	50 x 3	46	52	23
22.0	50 x 6	48	63	20



**Material :** High Copper Alloy

**Bolt :** Stainless Steel With SS304

# EARTHING

## EARTHING ACCESSORIES

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### Earth Rod to Tape 'G' Clamps

These clamps are used for joining earth rods to difficult size of standard copper conductor.

Earth Rod Shank Ø mm	Max. Conductor mm	L mm	W mm	H mm
14.2	16 - 20	30	20	15
14.2	16 - 95	36	28	18
16.0	16 - 150	41	26	20
17.2	25 - 150	36	28	18
17.2	30 - 70	41	26	20
20.0	35 - 150	48	30	18



**Material :** High Copper Alloy

**Bolt :** Stainless Steel With SS304

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### Earth Rod to Tape 'O' Clamps

These Clamps are used for joining earth rods to different size of standard copper conductor. The clamp have a high resistance to corrosion and are mechanically strong to ensure a lasting connection.

Earth Rod Shank Ø mm	Max. Cable Size mm	L mm	W mm	H mm
14.2	16 - 20	30	20	15
14.2	16 - 95	36	28	18
16.0	16 - 150	41	26	20
17.2	25 - 150	36	28	18
17.2	30 - 70	41	26	20
20.0	35 - 150	48	30	18



**Material :** High Copper Alloy

# EARTHING

## EARTHING ACCESSORIES

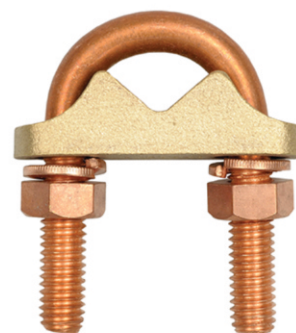
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### 'U' Bolt Clamps

Suitable for use with a combination of rod to conductors

### Single Plate Type for Horizontal Flat Tapes

Maximum Rod Ø mm	Hole Centres mm	L mm	W mm	H mm
16	30	58	62	33
25	37	72	62	33
31	41	82	68	33
38	46	90	75	33
50	63	95	90	33



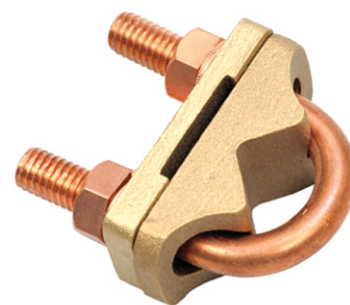
**Material :** High Copper Alloy plate with M10 Threaded Copper 'U' Bolt.

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### Double Plate Type for Vertical Flat Tapes

Suitable for connecting copper tapes to the rod

Maximum Rod Ø mm	Tape Width mm	L mm	W mm	H mm
16	25	58	62	33
25	25	73	62	33
31	25	85	68	33
38	25	80	75	33
50	25	103	90	33



**Material :** High Copper Alloy plate with M10 Threaded Copper 'U' Bolt.



# EARTHING

## EARTHING ACCESSORIES

### 'U' Bolt Clamps

This versatile range of 'U' Bolt clamps can be used to connect flat tapes and standard cables to earth rods.

### Double Plate Type for Vertical Standard Cables

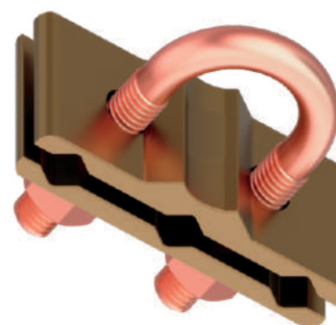
Maximum Rod Ø mm	Conductor Range mm <sup>2</sup>	L mm	W mm	H mm
16	16 - 150	57	52	40
16	150 - 300	69	70	40
20	16 - 70	57	52	40
20	70 - 300	69	70	40
25	16 - 70	75	87	55
25	185 - 300	89	70	55



**Material :** High Copper Alloy plate with M10 Threaded Copper 'U' Bolt.

### 'U' Bolt Rod Clamps 3 conductor type

Rod / Rebar Diameter mm	Conductor Range mm <sup>2</sup>
14 - 25	16 - 70
14 - 25	50 - 150
14 - 25	150 - 500



**Material :** High Copper Alloy

# EARTHING

## EARTHING ACCESSORIES

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### Rod to Cable Lug Clamp

Suitable for connecting threaded and unthreaded rods to cable via lug clamp

### For use with Copperbond Earth Rods (on rod thread)

Normal Rod Size	Thread Size (UNC-2A)	L mm	W mm	H mm
5/8"	5/8"	42	24	26
3/4"	3/4"	51	31	30

**Material :** High Copper Alloy

### For use with Copperbond Earth Rods (on rod shank)

Shank Rod Ø mm	L mm	W mm	H mm
9.5	26	16	20
14.2	42	25	25



**Material :** High Copper Alloy

### For use with Solid Copper & Stainless Steel Earth Rods (on rod shank)

Shank Rod Ø mm	L mm	W mm	H mm
15	42	26	25
16	42	25	26
20	54	29	29

**Material :** High Copper Alloy

# EARTHING

## EARTHING ACCESSORIES

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### Universal Beam Clamp

This universal beam clamps serves as a cable conductor as it is designed to bond 25x3mm copper taps, 50sqmm & 70sqmm standard cable as well as 8mm solid circular conductor to steel beams & RSJ's of up to 15mm thick

Conductor Range mm2	Conductor Size mm	L mm	W mm	H mm	H1 mm
50 - 70	25 x 3	80	43	35	18

**Material :** High Copper Alloy with Stainless Steel Bolts



### Multi-Purpose Rod to Cable & Tape Clamp

This Clamp Specifically design to accommodate copper tape and copper bonded earth rods

Maximum Rod Ø mm	Conductor Range mm2	Conductor Size mm	L mm	W mm	H mm
5/8"	6 - 185	25 x 4	72	83	66

**Material :** High Copper Alloy paltes with M10 threaded Copper 'U' Bolt



# EARTHING

## EARTHING ACCESSORIES

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### Reber Clamps

Suitable to connect rebar rod to conductor



Maximum Rebar Ø mm	Rebar Range Ø mm	L mm	W mm
10	6 - 10	59	60
20	12 - 20	83	62
25	20 - 25	100	67
32	25 - 32	101	80
40	32 - 40	118	95

**Material :** High Copper Alloy

# EARTHING

## EARTHING ACCESSORIES

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### Stainless Steel Rebar Clamp

Rebar Clamp are used to connect rebar or rebar to conductor.

Maximum Rod Ø mm	Rebar Range Ø mm	L mm	W mm
12	8 - 12	50	22
16	16 - 16	59	22
20	20 - 20	68	26
25	25 - 25	81	31
32	32 - 32	98	39
40	40 - 40	120	48



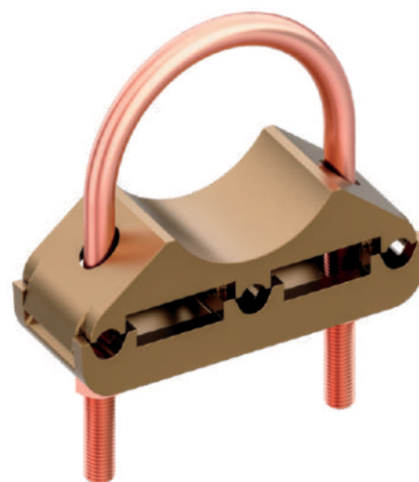
**Material :** Stainless Steel

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### Pipe Clamps

These heavy duty clamp are provide positive earth continuity for water pipes

Maximum Rod Ø mm	Rebar Range Ø mm
½" - 1" (13 - 25mm)	25 - 95
1¼" - 2" (32 - 50mm)	25 - 95
2½" - 3½" (65 - 90mm)	25 - 95
4" - 5" (100 - 125mm)	25 - 95
6" (150mm)	25 - 95
8" (200mm)	25 - 95
10" (250mm)	25 - 95
12" (300mm)	25 - 95



**Material :** High Copper Alloy

# EARTHING

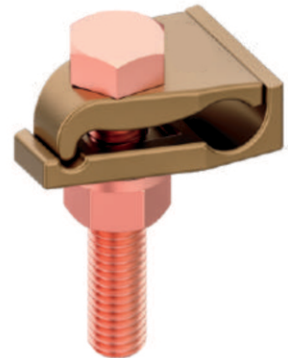
## EARTHING ACCESSORIES

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### Tower Earth Clamps

Tower earth clamps used for bonding copper cables or wires to steel structure.

Conductor Range mm <sup>2</sup>	L mm	W mm	H mm
16 - 70	45	30	17
70 - 120	48	35	22
120 - 185	55	40	28
185 - 240	63	45	35
240 - 300	70	53	42



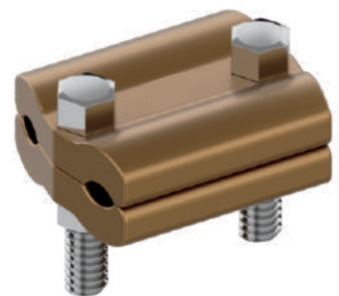
**Material :** High Copper Alloy

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### Parallel Groove Clamps

Parallel Groove Clamps designed to connect two conductors in parallel and especially used to hold transmission conductors.

Conductor Range mm <sup>2</sup>	L mm	W mm	H mm	Set Screw
25 - 70	50	40	7	M8 X 35MM
70 - 95	54	45	8.5	M10 X 45MM
95 - 185	65	57	12.5	M10 X 55MM
185 - 240	78	71	14	M10 X 55MM
240 - 300	94	85	16	M10 X 60MM



**Material :** High Copper Alloy

# EARTHING

## EARTHING ACCESSORIES

### Earth Bonding Points

Earth Bonding Points are installed to provide a convenient earth system connection point in concrete structures. When cast into concrete they connect the re-bar to the earthing or lightning production system.

### Earth Bonding Points only

No. Hole	Hole Size mm	Plate Size mm	Stem Ø mm	L mm
1	M10 X 18	38 X 38	10.07 (70MM2)	75
2	M10 X 18	70 X 35	10.07 (70MM2)	75
4	M10 X 18	63 X 63	10.07 (70MM2)	75
4	M8 X 1.25	100 X 100	10.07 (70MM2)	75



**Material :** High Copper Alloy

### Earth Bonding Points with Pre-welded Tails

No. Hole	TYPE
1	EGP 01 WITH PRE-WELDED 500MM LONG TAIL OF 70MM2 PVC INSULATED CABLE
2	EGP 02 WITH PRE-WELDED 500MM LONG TAIL OF 70MM2 PVC INSULATED CABLE
2	EGP 02 WITH PRE-WELDED 1000MM LONG TAIL OF 70MM2 PVC INSULATED CABLE
2	EGP 02 WITH PRE-WELDED 1500MM LONG TAIL OF 70MM2 PVC INSULATED CABLE
4	EGP 04 WITH PRE-WELDED 500MM LONG TAIL OF 70MM2 PVC INSULATED CABLE
4	EGP 04 WITH PRE-WELDED 1000MM LONG TAIL OF 70MM2 PVC INSULATED CABLE
4	EGP 04 WITH PRE-WELDED 1500MM LONG TAIL OF 70MM2 PVC INSULATED CABLE



**Material :** High Copper Alloy body with PVC insulated copper cable trail.



# EARTHING

## EARTHING ACCESSORIES

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### Earth Bonding Points

### Earth Bonding Points with Double Pre-welded Tails

No. Hole	TYPE
1	EGP 01 WITH 2 X PRE-WELDED 500MM LONG TAIL OF 70MM2 PVC INSULATED CABLE
2	EGP 02 WITH 2 X PRE-WELDED 500MM LONG TAIL OF 70MM2 PVC INSULATED CABLE
2	EGP 02 WITH 2 X PRE-WELDED 1000MM LONG TAIL OF 70MM2 PVC INSULATED CABLE
2	EGP 02 WITH 2 X PRE-WELDED 1500MM LONG TAIL OF 70MM2 PVC INSULATED CABLE
4	EGP 04 WITH 2 X PRE-WELDED 500MM LONG TAIL OF 70MM2 PVC INSULATED CABLE
4	EGP 04 WITH 2 X PRE-WELDED 1000MM LONG TAIL OF 70MM2 PVC INSULATED CABLE
4	EGP 04 WITH 2 X PRE-WELDED 1500MM LONG TAIL OF 70MM2 PVC INSULATED CABLE



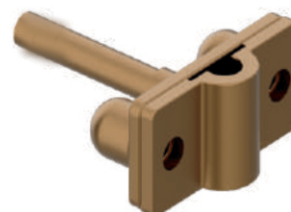
**Material :** High Copper Alloy

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### Earth Bonding Points with A Front Plate

Suitable for 25 x 3mm tape or 70mm2 cable

No. Hole	TYPE
2	EGP 02 WITH A FRONT PLATE



**Material :** High Copper Alloy

# EARTHING

## EARTHING ACCESSORIES

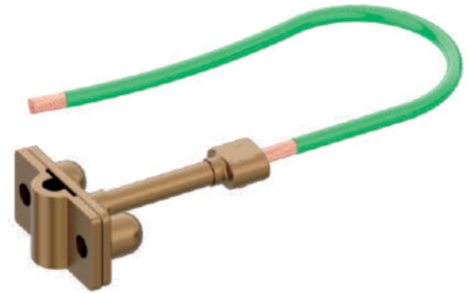
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### Earth Bonding Points

#### Earth Bonding Points with a Pre-welded Tail & Front Plate

Suitable for 25 x 3mm tape or 70mm 2 cable

No. Hole	TYPE
1	EGP 02 500 WITH A FRONT PLATE
2	EGP 02 1000 WITH A FRONT PLATE
2	EGP 02 1500 WITH A FRONT PLATE



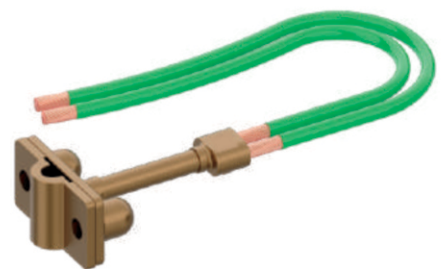
**Material :** High Copper Alloy with  
PVC Insulated Copper Cable Tail

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#### Earth Bonding Points with 2x Pre-welded Tails & Front Plate

Suitable for 25 x 3mm tape or 70mm 2 cable

No. Hole	TYPE
1	EGP 02 WITH A FRONT PLATE
2	EGP 021 2WITH A FRONT PLATE
2	EGP 025 2 WITH A FRONT PLATE



**Material :** High Copper Alloy with  
2x PVC Insulated Copper Cable Tails

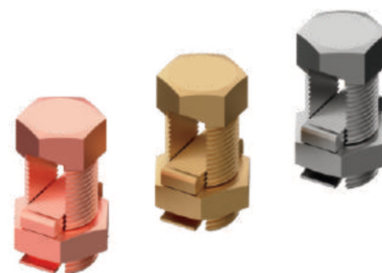
# EARTHING

## EARTHING ACCESSORIES

### Split Bolt Connectors

The High strength split bolt connectors will accept a wide range of standard copper conductors.

Main Conductor A mm <sup>2</sup>	Rebar Range Ø mm	L mm	W mm
10	1.5 - 10	20	4
16	2.5 - 16	23	5
25	2.5 - 25	28	7
35	2.5 - 35	29	8
50	2.5 - 50	35	10
70	2.5 - 70	39	11
95	2.5 - 95	45	14
120	10 - 120	47	15
150	10 - 150	51	16
185	50 - 185	57	18
240	95 - 240	64	19



**Material :** Copper

### Earth Blocks

These blocks allow earth conductor termination, or live conductor termination with a suitable, fully insulated housing.

TYPE	L mm	W mm	H mm
4 - Way Single	54	9	12
4 - Way Double	51	18	12
8 - Way Double	88	18	12



**Material :** Tinned Brass

# EARTHING

## EARTHING ACCESSORIES

### Standing Seam Clamps

Standing Seam Clamps are designed to allow the installer to secure lightning conductor to roofing sheets that use the Standing Seam Construction

FIXING TYPE	Conductor Size mm	Material
Square Clamp	25 x 3	Aluminium
Square Clamp Hot Stamped Design	25 x 3	Aluminium
Standing Seam Only	NA	Aluminium



**Material :** Aluminium

### Reinforcing Conductor Clamp

Reinforcing Conductor Clamps are used to connect flat and circular conductor to reinforce bar

Reber Size mm2	Circular Conductor	Flat Conductor mm
6 - 20	NA	25X3-30X3.5
6 - 20	8to10 mm DIA	25X3-30X3.5
25	8to10 mm DIA	25X3-30X3.5
30	NA	25X3-30X3.5



**Material :** Tinned Bronze

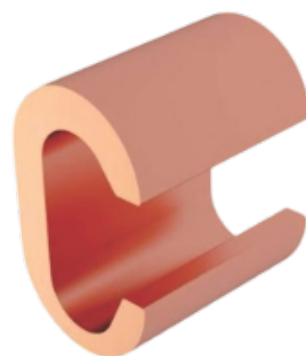
# EARTHING

## EARTHING ACCESSORIES

### 'C' Crimp Connector

These range taking 'c' Crimp Connector are specially designed for tap & parallel connections of standard copper cables in earthing applications

Main Conductor A mm2	Main Conductor B mm2	L mm	W mm	H mm
10	4 - 10	13	12	9
10 - 16	10 - 16	19	17	12
16	4	19	17	12
16 - 25	15 - 10	20	12	13
25	10 - 16	21	19	12
25	10 - 25	24	20	15
35	15 - 16	24	20	15
35	25 - 35	27	20	15
50	4 - 16	27	20	15
50	16 - 50	27	20	17
70	15 - 25	27	20	17
50 - 70	4 - 35	33	28	21
50 - 70	35 - 70	34	28	21
70 - 95	35 - 70	41	30	26
95	4 - 35	41	30	26
70 - 95	95	41	30	26
120	35 - 120	45	30	28
150	6 - 70	45	30	28
150	95 - 150	45	30	28
120 - 185	95 - 185	54	35	33
150 - 185	70 - 150	54	35	33
240	10 - 70	54	35	34
240	95 - 120	54	37	34
240	150 - 240	54	40	43



**Material : Copper**

## Welcome to Global Brass Electron

A lightning protection system is designed to safeguard structures and their occupants from the destructive effects of lightning strikes. Lightning, a powerful natural electrical discharge, can cause significant damage to buildings, equipment, and even endanger lives if not properly managed. The fundamental purpose of a lightning protection system is to intercept, conduct, and safely disperse the electrical current from a lightning strike into the ground, thus minimizing the risk of injury, fire, or structural damage.

Key components of a typical lightning protection system include:

**Air Terminals (Lightning Rods):** These are elevated points on a structure designed to capture lightning strikes.

**Conductors:** These are cables or wires that connect the air terminals to the grounding system. They provide a low-resistance path for the lightning current to flow safely to the ground.

**Grounding System:** This system consists of electrodes buried in the earth near the structure. Its role is to dissipate the lightning current safely into the ground.

**Bonding:** Connecting all metal components of a structure together ensures that they share the same electrical potential during a lightning strike, preventing potential differences that could lead to damage.

Overall, a well-engineered lightning protection system not only protects buildings and equipment but also provides peace of mind by reducing the risk of harm from one of nature's most powerful forces.



# LIGHTNING PROTECTION SYSTEM

## CONVENTIONAL AIR TERMINATION SYSTEM

### Taper Pointed Air Rod

Air rods form an important part of the air termination network of a lightning protection system. All of our air rods are supplied with a locknut enabling the rod to be locked tight against the conductor.

### Copper Air Rods

L mm	L1 mm	Thread Size
300	40	M16
500	40	M16
600	40	M16
1000	40	M16
1500	40	M16
2000	40	M16
3000	40	M16
300	40	M20
500	40	M20
1000	40	M20
1500	40	M20
2000	40	M20
3000	40	M20



**Material :** Copper

### Aluminium Air Rods

L mm	L1 mm	Thread Size
300	40	M16
500	40	M16
1000	40	M16
1500	40	M16
2000	40	M16

**Material :** Aluminium



# LIGHTNING PROTECTION SYSTEM

## CONVENTIONAL AIR TERMINATION SYSTEM

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### Multi - Point

Used in conjunction with the taper pointed copper air rods.

Air Rod Ø mm	L mm	W mm
16 & 20	156	72



**Material :** High Copper Alloy

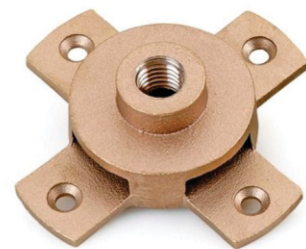
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### Light Duty Air Rod Saddles

Light duty saddles are used used to support air rods on flat roof surface.

### For use with Copper Air Rods

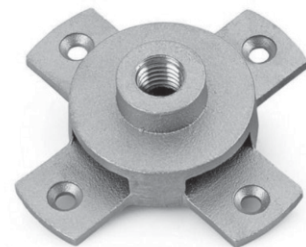
Thread Size	Conductor Size mm	L mm	W mm
M16	25 x 3	100	37
M20	25 x 3	100	37



**Material :** High Copper Alloy

### For use with Copper Air Rods

Thread Size	Conductor Size mm	L mm	W mm
M16	25 x 3	100	37



**Material :** Aluminium

# LIGHTNING PROTECTION SYSTEM

## CONVENTIONAL AIR TERMINATION SYSTEM

### DC Clips

Metallix DC clips secure the flat tape conductor to the building surface

Conductor Size mm	L mm	W mm	H mm
20 x 3	50	21	10
25 x 3	51	21	10
25 x 4	51	21	11
25 x 6	51	21	12
30 x 2	56	21	9
30 x 5	56	21	12
31 x 3	60	21	10
31 x 4	56	21	11
31.5 x 4	56	21	11
31 x 6	56	21	12
38 x 3	69	21	10
38 x 5	64	21	12
38 x 6	69	21	12
40 x 3	70	21	10
40 x 4	69	21	11
40 x 5	69	21	12
40 x 6	69	21	12
50 x 3	76	21	10
50 x 4	76	21	11
50 x 6	76	21	12
50 x 8	76	21	14
60 x 5	90	21	11
63 x 10	102	25	16
70 x 5	110	25	13
75 x 6	110	25	14
80 x 5	110	25	11
80 x 6	11	25	14



**Material :**  
High Copper Alloy

# LIGHTNING PROTECTION SYSTEM

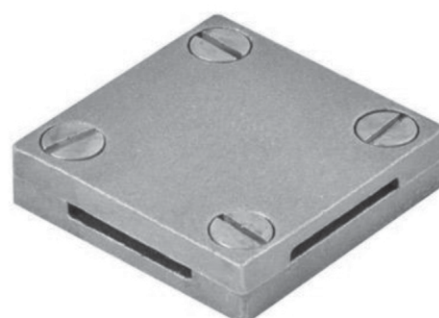
## CONVENTIONAL AIR TERMINATION SYSTEM

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### Square Tape Clamps

Global Square tap clamps are manufactured from high quality alloys of either copper or aluminium providing an effective low resistance connection between overlapping tapes

Conductor Size mm	L mm	W mm	H mm
25 x 3	50	50	13
25 x 4	50	50	15
25 x 6	50	50	20
30 x 2	56	56	12
30 x 5	56	56	17
31 x 3	60	60	14
31 x 6	56	56	19
38 x 6	71	71	22
40 x 3	66	66	13
40 x 4	66	66	15
40 x 5	66	66	18
50 x 3	80	80	18
50 x 6	80	80	22
50 x 8	80	80	27



**Material :**  
High Copper Alloy  
Aluminium

# LIGHTNING PROTECTION SYSTEM

## AIR RODS - ACCESSORIES

### Air Rod Ridge Saddles

Ridge Saddles are used to support air rods on roof ridges.

#### For use with Copper Air Rods

Thread Size	L mm	W mm
M16	137	34



**Material :** High Copper Alloy

#### For use with Aluminium Air Rods

Thread Size	L mm	W mm
M16	137	34



**Material :** Aluminium

### Flat Air Rod Saddles

Flat saddles are used to support air rods on flat roof surface

#### For use with Copper Air Rods

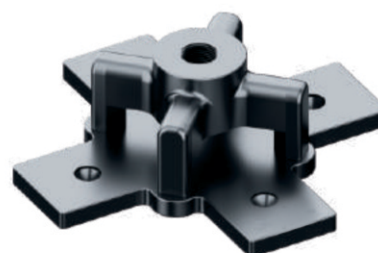
Thread Size	Conductor Size mm	L mm	W mm
M16	25 x 3	137	40
M16	32 x 6	120	37



**Material :** High Copper Alloy

#### For use with Aluminium Air Rods

Thread Size	Conductor Size mm	L mm	W mm
M16	25 x 3	137	40



**Material :** Aluminium

# LIGHTNING PROTECTION SYSTEM

## AIR RODS - ACCESSORIES

### Side Mounting Air Rod Brackets

Mounting bracket are hardware product use to attach electric wiring and conductors to walls and studs during building constructions

#### For use with Copper Air Rods

Air Rod Ø mm	L mm	W mm
16	97	120
20	97	120



**Material :** High Copper Alloy

#### For use with Aluminium Air Rods

Air Rod Ø mm	L mm	W mm
M16	97	120



**Material :** Aluminium

### Rod to Tape Couplings

The rod to tape couplings are use to unable the flat tap to be connected to the air rod

#### For use with Copper Air Rods

Thread Size	L mm	W mm
M16	80	40
M20	80	40

**Material :** High Copper Alloy

#### For use with Aluminium Air Rods

Thread Size	L mm	W mm
M16	80	40

**Material :** Aluminium



# LIGHTNING PROTECTION SYSTEM

## AIR RODS - ACCESSORIES

### Tape Clips

Tape clips hold the flat tape conductor flush to the building surface. Fix countersunk woodscrew 1 1/2" x No. 10 and No. 10 wall plug

### For use with Bar Copper Tapes

Conductor Size mm	L mm	W mm	H mm
20 x 3	68	20	7
25 x 3	70	20	7
50 x 6	73	20	8



**Material :** Copper

### For use with Aluminium Air Rods

Conductor Size mm	L mm	W mm	H mm
20 x 3	68	20	7
25 x 3	70	20	7
50 x 6	73	20	8

**Material :** Aluminium

### Cable Saddle

Conductor Size mm
8 MM DIA
10 MM DIA
50 MM2
70 MM2
95 MM2
120 MM2
150 MM2



**Material :** High Copper Alloy

# LIGHTNING PROTECTION SYSTEM

## AIR RODS - ACCESSORIES

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### Oblong Junction Clamps

Designed to join a range of tape size in a straight through position. In many applications the clamp enables tapes to be overlapped and secured by the two set of screws.

### For use with Bar Copper Tapes

Main Conductor Size mm	L mm	W mm	H mm
25 x 3	60	51	24
25 x 6	70	45	30
50 x 3	90	63	26



**Material :** High Copper Alloy

### For use with Bare Aluminium Tapes

Main Conductor Size mm	L mm	W mm	H mm
25 x 3	68	40	23



**Material :** Aluminium

---

### Set Down Test Clamp

The Screw down test clamp allows easy access to copper conductors where frequent inspection and testing may be necessary.

Main Conductor Size mm	L mm
25 x 3	61



**Material :** High Copper Alloy



# LIGHTNING PROTECTION SYSTEM

## AIR RODS - ACCESSORIES

---

### Plate Type Test Clamps

This Clamp is used to form a disconnecting joint between the down conductor and earthing system

#### For use with Copper Tapes

Main Conductor Size mm	D mm	H mm
25 x 6	70	38



**Material :** High Copper Alloy

#### For use with Aluminium Tapes

Main Conductor Size mm	D mm	H mm
25 x 6	70	38



**Material :** Aluminium

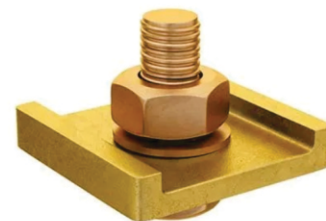
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### 'B' Bonds

These 'B' bonds are used for bonding aluminium and copper tapes to flat metal surface.

#### For use with Copper Tapes

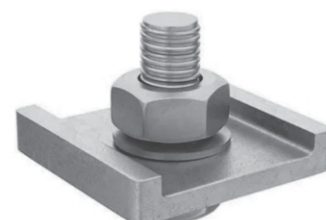
Conductor Size mm	L mm	W mm	H mm
25 x 3	35	35	10



**Material :** High Copper Alloy

#### For use with Aluminium Tapes

Conductor Size mm	L mm	W mm	H mm
25 x 3	35	35	10



**Material :** Aluminium

# LIGHTNING PROTECTION SYSTEM

## AIR RODS - ACCESSORIES

### Bimetallic Connectors

These connectors are used to join aluminium and copper tapes together. They are a neat practical jointing method without the need for tinning, riveting or wrapping the joint.

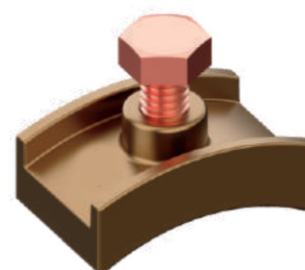
Conductor Size mm	Material Type	L mm	W mm	H mm
25 x 3	Aluminium & Copper	85	28	27
25 x 3	Aluminium & Copper	80	37	17
25 x 3	Stainless Steel	75	32	11
50 x 6	Aluminium & Copper	143	50	20



### Watermain Pipe Bond

Designed to bond large diameter metallic pipes into the earthing & lightning protection system.

Conductor Size mm	L mm	W mm
25	45	36



**Material :** High Copper Alloy

# LIGHTNING PROTECTION SYSTEM

## AIR RODS - ACCESSORIES

### (RWP) Rainwater Pipe Bond

This pipe bonds can be used on any application where tape can be wrapped around objects such as pipes or rails.

#### For use with Bare Copper Tapes

Main Conductor Size mm	L mm	W mm	H mm
25	32	32	16



**Material :** High Copper Alloy with Stainless Steel Screw

#### For use with Bare Aluminium Tapes

Main Conductor Size mm	L mm	W mm	H mm
25	32	32	16



**Material :** Aluminium with Stainless Steel Screw

### Multi-Purpose Air Rod Saddles

These saddles can be installed horizontally on roofs or vertically on parapets and are used in conjunction with the air rods show above. The saddles are suitable for use with 8mm diameter solid circle conductor as well as 25 x 3mm flat tape.

#### For use with Copper Tapes

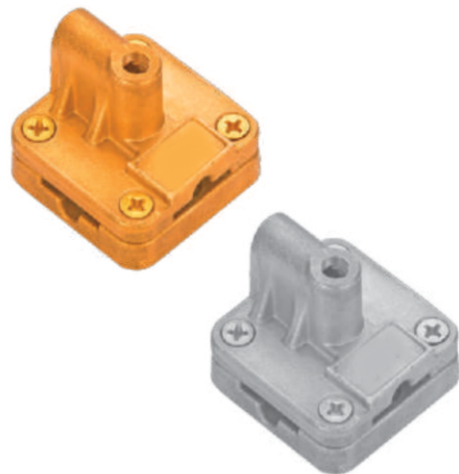
Thread Size	L mm	W mm	H mm
M10	50	50	38

**Material :** High Copper Alloy

#### For use with Aluminium Tapes

Thread Size	L mm	W mm	H mm
M10	50	50	38

**Material :** Aluminium



# LIGHTNING PROTECTION SYSTEM

## AIR RODS - ACCESSORIES

### One Hole Conductor Clips

One hole conductor clips provide an easy method of fixing copper and aluminium conductors to surfaces

Conductor Size mm
8 mm DIA
10 mm DIA
50 mm <sup>2</sup>
70 mm <sup>2</sup>
95 mm <sup>2</sup>
120 mm <sup>2</sup>
150 mm <sup>2</sup>



### 'MV' Clamps

These four-way connectors are suitable for crossing over, making straight joints and tee connections with solid circular conductor.

Conductor Size mm	L mm	W mm	H mm
8	40	40	18



**Material :** Copper & Aluminium

# LIGHTNING PROTECTION SYSTEM

## AIR RODS - ACCESSORIES

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### 'T' Connector Clamps

'T' clamps are designed for a three way connection of lightning protection or earthing conductors

#### For use with Bare Solid Circular Copper Conductor

Conductor Size mm	L mm	W mm	H mm
8	45	45	19



**Material :** High Copper Alloy

#### For use with Bare Solid Circular Aluminium Conductor

Conductor Size mm	L mm	W mm	H mm
8	45	45	19



**Material :** Stainless Steel

---

### Solid Circular to Tape Connectors

Four-way Connector is suitable for crossing over flat tape and solid circular conductor. It will also serve for making straight through joints and tee connections.

#### For use with Bare Copper Conductor

Conductor Size mm	L mm	W mm	H mm
50.8 & 25 x 3	51	51	25
50.8 & 25 x 3	51	51	31
50.8 & 25 x 3	51	51	34
50.8 & 25 x 3	51	51	37



**Material :** High Copper Alloy



# LIGHTNING PROTECTION SYSTEM

## AIR RODS - ACCESSORIES

---

### Metalwork Bonding Clamps

These clamps are designed for bonding 8mm solid circular conductors onto metal surface

### For use with Bare Solid Circular Copper Conductor

Conductor Size mm	L mm	W mm	H mm
8	82	40	25



**Material :** Copper

### For use with Bare Solid Circular Aluminium Conductor

Conductor Size mm	L mm	W mm	H mm
8	82	40	25



**Material :** Aluminium

---

### Multi-Purpose 'B' Bonds

These Multi-Purpose 'B' Bonds can be used for bonding both 25x3mm flat tape & 8mm diameter solid circular conductor to flat metal surface.

### For use with Bare Copper Conductor

Conductor Size mm	L mm	W mm	H mm	Set Screw
8 & 25 x 3	34	34	13	M8 x 25mm



**Material :** High Copper Alloy

### For use with Bare Aluminium Conductor

Conductor Size mm	L mm	W mm	H mm	Set Screw
8 & 25 x 3	34	34	13	M8 x 25mm



**Material :** Aluminium

# LIGHTNING PROTECTION SYSTEM

## AIR RODS - ACCESSORIES

### Circular Conductor Shoes

Used to bond 8mm bare solid circular conductors to metal surfaces

### For use with Bare Solid Circular Copper Conductor

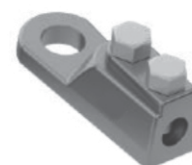
Conductor Size mm	Palm Hole Ø mm	L mm	W mm	H mm	Set Screw
8	12	61	23	25	M8 x 12mm



**Material :** High Copper Alloy

### For use with Bare Solid Circular Aluminium Conductor

Conductor Size mm	Palm Hole Ø mm	L mm	W mm	H mm	Set Screw
8	12	61	23	25	M8 x 12mm



**Material :** Stainless Steel

### Rod to Cable Couplings

Enables the standard cable to be connected to the air rod. Used in conjunction with the side mounting air rod brackets

Conductor Size mm <sup>2</sup>	Thread Size	L mm	D mm
50	M16	80	40
70	M16	80	40



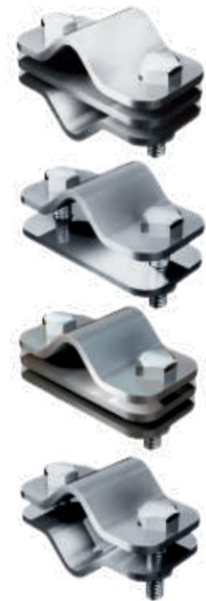
**Material :** High Copper Alloy

# LIGHTNING PROTECTION SYSTEM

## AIR RODS - ACCESSORIES

### Test Joint (Disconnecting Clamp)

Type	Suitable Conductor	Dimension LxWxB	Rod/Rod Size (mm)
Type-1 With Intermediate Plate	Connect Rod to Rod	30 x 58 x 2.5	8-10/8-10
Type-2 Without Intermediate Plate	Connect Rod to Rod	30 x 58 x 2.5	8-10/8-10
Type-3 With Intermediate Plate	Connect Rod to Flat	30 x 58 x 2.5	8-10/8-10
Type-4 Without Intermediate Plate	Connect Rod to Flat	30 x 58 x 2.5	8-10/8-10



**Material :** Stainless Steel, Carbon Steel, Brass & Copper

### Square Clamps (Circular Conductor)

Square Clamps provides four way connection and are suitable for crossing over cable

Conductor Size (mm/mm sq.)
8 DIA
50
70
95



**Material :** High Copper Alloy

# LIGHTNING PROTECTION SYSTEM

## AIR RODS - ACCESSORIES

### Rod To Conductor Clamps

Suitable for cross and T connections between conductors

#### Type - 1

Dimension LxWxB	Rod/Rod Size (mm)
75 x 75 x 5	8-12.5 / 40

**Material :** Stainless Steel, Brass & Copper



#### Type - 2

Dimension LxWxB	Rod/Rod Size (mm)
70 x 70 x 3	8-12.5 / 40

**Material :** Stainless Steel, Brass & Copper



### Cross Clamp for Above

#### Type - 1 without Intermediate Plate

Suitable Connect Rod to Rod Conductor

Dimension LxWxB	Rod/Rod Size (mm)
50 x 50 x 2.5	8 to 10
70	M16

**Material :** Stainless Steel, Brass & Copper



#### Type - 2 with Intermediate Plate

Suitable Connect Rod to Rod Conductor

Dimension LxWxB	Rod/Rod Size (mm)
50 x 50 x 2.5	8 to 10
70	M16

**Material :** Stainless Steel, Brass & Copper



# LIGHTNING PROTECTION SYSTEM

## AIR RODS - ACCESSORIES

### Cross Clamp for Above & Underground Connection

#### Type - 1 with Intermediate Plate

Suitable Connect Rod to Rod Conductor

Dimension LxWxB	Rod Size (mm)	Tape Size (mm)
50 x 50 x 3	8 to 10	30 X 3
50 x 50 x 4	8 to 10	40 X 3



**Material :** Stainless Steel, Brass & Copper

#### Type - 2 without Intermediate Plate

Suitable Connect Rod to Flat Conductor

Dimension LxWxB	Rod Size (mm)	Tape Size (mm)
50 x 50 x 3	8 to 10	30 X 3
50 x 50 x 4	8 to 10	40 X 3



**Material :** Stainless Steel, Brass & Copper

#### Type - 3 with Intermediate Plate

Suitable Connect Rod to Flat Conductor

Dimension LxWxB	Rod Size (mm)	Tape Size (mm)
50 x 50 x 3	8 to 10	30 X 3
50 x 50 x 4	8 to 10	40 X 3
50 x 50 x 3	8 to 10	30 x 6
50 x 50 x 4	8 to 10	40 x 6



**Material :** Stainless Steel, Brass & Copper

#### Type - 4 without Intermediate Plate

Suitable Connect Rod to Flat Conductor

Dimension LxWxB	Rod Size (mm)	Tape Size (mm)
50 x 50 x 3	8 to 10	30 X 3
50 x 50 x 4	8 to 10	40 X 3
50 x 50 x 3	8 to 10	30 x 6
50 x 50 x 4	8 to 10	40 x 6



**Material :** Stainless Steel, Brass & Copper

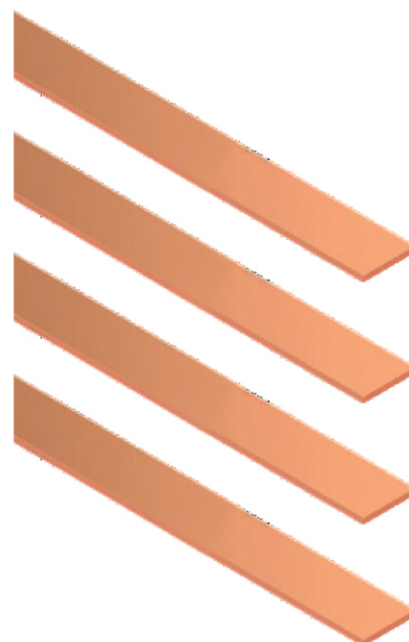
# LIGHTNING PROTECTION SYSTEM

## AIR RODS - ACCESSORIES

### Copper Tapes

High conductivity bare copper tape is used on both lightning protection & earthing applications. It is annealed for ease of use & has radius edges

Size W x H mm	C.S.A. mm <sup>2</sup>	Standard Coil Size m
12.5 x 15	18.75	100
12.5 x 3	37.5	100
20 x 15	30	100
20 x 3	60	100
20 x 4	80	70
20 x 5	100	60
25 x 15	37.5	100
25 x 2	50	50
25 x 2.5	62.5	90
25 x 3	75	25 & 50
25 x 4	100	50
25 x 5	125	40
25 x 6	150	40
30 x 2	60	50
30 x 3	90	50
30 x 3.5	105	50
30 x 4	120	40
30 x 5	150	40
30 x 10	300	20
31 x 3	93	50
31.5 x 1.8	56.7	100
31.5 x 4	126	40
31 x 6	186	30
32 x 6	192	30
35 x 6	210	25
38 x 3	114	50
38 x 5	190	30
38 x 6	228	25



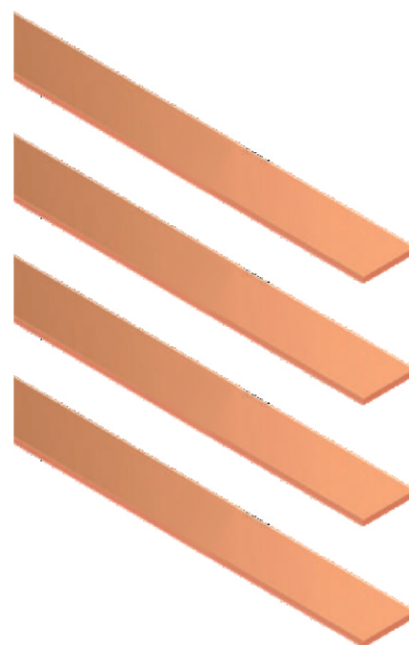
**Material :**  
Copper to BS EN  
13601  
(formerly BS 1432)

# LIGHTNING PROTECTION SYSTEM

## AIR RODS - ACCESSORIES

### Copper Tapes (Continued)

Size W x H mm	C.S.A. mm <sup>2</sup>	Standard Coil Size m
40 x 3	120	40
40 x 4	160	30
40 x 5	200	25
40 x 6	240	25
40 x 6.3	252	25
40 x 8	320	20
50 x 3	150	40
50 x 4	200	30
50 x 5	250	20
50 x 6	300	10 & 20
50 x 6.3	315	20
50 x 7	350	20
50 x 8	400	20
50 x 10	500	10
50 x 12	600	10
60 x 5	300	20
60 x 6	360	15
60 x 8	480	12
63 x 10	630	10
65 x 6	390	15
70 x 6	420	15
75 x 6	450	7
75 x 12	900	8
80 x 6	480	12



**Material :** Copper to BS EN 13601  
(formerly BS 1432)



# EARTHING

## EARTH RODS & ACCESSORIES

### Copper Bonded Earth Rod

Earth Rods Earth rods are commonly utilized as the principle earth electrode in the design and installation of an earthing system. Global offers a selection of copper bonded steel, solid copper and stainless steel earth rods which are manufactured to meet International Standards.



L mm	Rod Size	Shank D mm	L1 mm	Thread Size
1200	1/2"	12.7	30	9/16"
1500	1/2"	12.7	30	9/16"
1800	1/2"	12.7	30	9/16"
2400	1/2"	12.7	30	9/16"
1200	5/8"	14.2	40	5/8"
1500	5/8"	14.2	40	5/8"
1800	5/8"	14.2	40	5/8"
2400	5/8"	14.2	40	5/8"
3000	5/8"	14.2	40	5/8"
1200	3/4"	17.2	35	3/4"
1500	3/4"	17.2	35	3/4"
1800	3/4"	17.2	35	3/4"
2400	3/4"	17.2	35	3/4"
3000	3/4"	17.2	35	3/4"
2400	1"	23.0	50	1"
3000	1"	23.0	50	1"

### Material

Pure Copper Molecularly Bonded on to a steel core

# EARTHING

## EARTH RODS & ACCESSORIES

### Driving Studs (Copperbond Earth Rods)

High Strength Driving Studs for Repeated use with power hammers.

Description	L mm	Head Dia. (mm)
16mm Driving Stud 5/8"	50	20
20mm Driving Stud 5/8"	50	22



**Material :** High Tensils Steel with a socket-head cap screw

### Couplings (Copperbonded Earth Rods)

Fitting for Threaded & Unthreaded Earth Rods

Description	L mm	Body Dia. Across Flats (mm)
Rod Coupling 5/8" UNC	70	20
Rod Coupling 3/4" UNC	70	22

Description	L mm	Across Flats (mm)
16mm Rod Coupling 5/8" UNC (HEX)	70	18
20mm Rod Coupling 5/8" UNC (HEX)	70	23

Description	L mm	Body Dia. (mm)
5/8" Rod Couplings	70	24

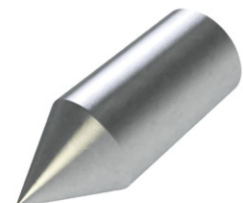


**Material :** High Copper Content Alloy & Silicon Aluminium Bronze

### Driving Spikes (Copperbond Earth Rods)

Driving Spikes for use with our copperbond Earth Rods. They enable rods to be driven into hard/compacted ground with ease and are internally threaded for screwing directly onto the Earth Rod.

Description	L mm	Head Dia. (mm)
Driving Spike for 16mm (5/8")	40	20
Driving Spike for 16mm (3/4")	40	22



**Material :** Hardened Steel

# EARTHING

## EARTH RODS & ACCESSORIES

### Solid Copper Earth Rod

Solid Copper Earth Rods Global range of solid copper earth rods are manufactured from hard drawn copper and are best installed in highly corrosive conditions such as soils containing excessive salt content. All solid copper rods manufactured by Global are supplied with an external thread.



L mm	Shank D mm	L mm	Thread Size
1200	12	15	M8
1200	15	20	M10
1200	15	20	M10
1500	15	20	M10
1800	15	20	M10
2400	15	20	M10
3000	15	20	M10
1200	20	20	M10
1500	20	20	M10
1800	20	20	M10
2400	20	20	M10
3000	20	20	M10
1200	25	25	M12
1500	25	25	M12
1800	25	25	M12
2400	25	25	M12
3000	25	25	M12
3600	25	25	M12

**Material : 99.9% Hard Drawn Copper**

# EARTHING

## EARTH RODS & ACCESSORIES

### Driving Head (Solid Copper Earth Rod)

Driving head made from high tensile steel are designed for driving threaded copper bonded rods by hand tools or power hammer. These reusable studs are fixed on the top of the rod with the help of the coupler.

Description	L mm	Head Dia. (mm)
16mm Rod Driving Head	40	10
20mm Rod Driving Head	40	10
25mm Rod Driving Head	40	12



**Material : Steel**

### Coupling Dowel (Solid Copper Earth Rods)

Coupling Dowels are used to join solid copper Earth Rods

Description	L mm	Head Dia. (mm)
M10 Coupling Dowel	40	10



**Material : Phosphor Bronze**

### Driving Spikes (Solid Copper Earth Rods)

Driving Spikes enable the solid copper Earth Rod to be driven into the ground easily while protecting the end of the rod from damage.

Description	L mm	Head Dia. (mm)
16mm Rod Driving Spike	40	10
20mm Rod Driving Spike	40	10
25mm Rod Driving Spike	50	12



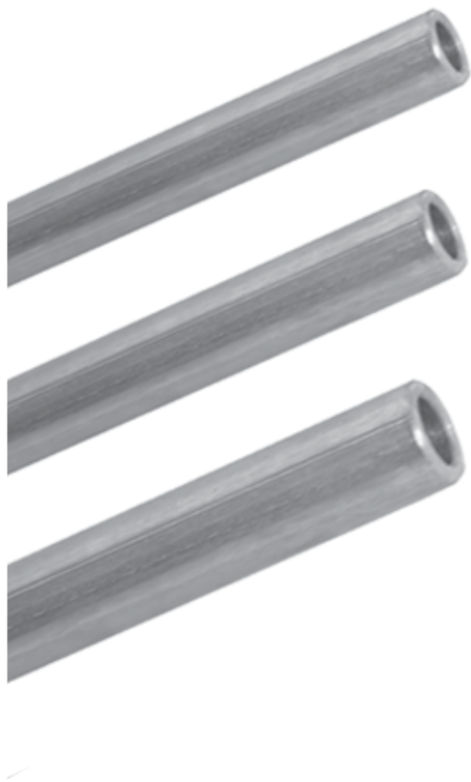
**Material : Case Hardened Steel**

# EARTHING

## EARTH RODS & ACCESSORIES

### Stainless Steel Earth Rod

Stainless Steel rods are used to overcome galvanic corrosion which can be caused by dissimilar metals or components having different electronegativity buried on adjacent sides.



L mm	Shank D mm	L mm	Thread Size
1200	15	20	M10
1200	16	20	M10
1500	16	20	M10
1800	16	20	M10
2400	16	20	M10
3000	16	20	M10
1200	20	20	M10
1500	20	20	M10
1800	20	20	M10
2400	20	20	M10
3000	20	20	M10
1200	25	25	M12
1500	25	25	M12
1800	25	25	M12
2400	25	25	M12
3000	25	25	M12
3600	25	25	M12

**Material :** Stainless Steel

# EARTHING

## EARTH RODS & ACCESSORIES

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### Driving Heads (Stainless Steel Earth Rods)

Driving Heads are designed to protect both the internal thread and the top of the Stainless Steel Rod while the rods are being driven into the ground

Description	L mm	Head Dia. (mm)
16mm Rod Driving Head	40	10
20mm Rod Driving Head	40	10
25mm Rod Driving Head	40	12



**Material : Steel**

---

### Coupling Dowel (Stainless Steel Earth Rods)

Coupling Dowels are used to join stainless steel Earth Rods

Description	L mm	Head Dia. (mm)
M10 Coupling Dowel	40	10



**Material : Stainless Steel**

---

### Driving Spikes (Stainless Steel Earth Rods)

Driving Spikes enable the solid copper Earth Rod to be driven into the ground easily while protecting the end of the rod from damage.

Description	L mm	Head Dia. (mm)
16mm Rod Driving Spike	40	10
20mm Rod Driving Spike	40	10
25mm Rod Driving Spike	50	12



**Material : Case Hardened Steel**

# EARTHING

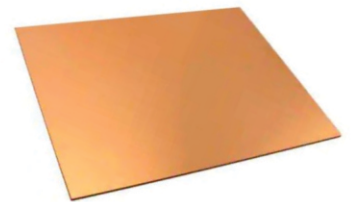
## PLATES & MATS

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### Solid Copper Plates

Solid Copper plate provide a long lasting earthing solution in place where diving earth rods might be impractical. Earth plates are made up of electrolytic grade solid copper sheet.

L x W mm	H mm	Surface Area m2
600 x 600	1.5	0.73
600 x 600	3.0	0.73
900 x 900	1.5	1.63
900 x 900	3.0	1.63
100 x 500	5.0	1.02

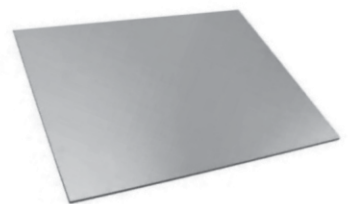


**Material : Copper**

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### Stainless Solid Plates

L x W mm	H mm	Surface Area m2
600 x 600	1.5	0.73
600 x 600	3.0	0.73
900 x 900	1.5	1.63
900 x 900	3.0	1.63



**Material : Stainless Steel**



# EARTHING

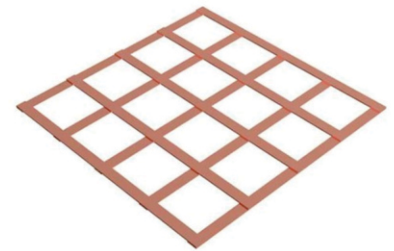
## PLATES & MATS

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### Solid Copper Lattice Mats

Solid Copper Lattice Mats offer a more economical cost option to installing solid copper plates.

L x W mm	H mm	Surface Area m2	Grid
600 x 600	3.0	0.31	5 Bar
600 x 600	3.0	0.65	6 Bar
900 x 900	3.0	0.46	6 Bar



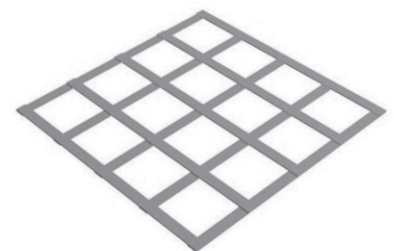
**Material :** Copper

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### Stainless Steel Lattice Mats

Stainless Steel Lattice Mats, Manufactured from Stainless Steel 316 Grade, are used in areas where high corrosive environment is present.

L x W mm	H mm	Surface Area m2	Grid
600 x 600	3.0	0.31	5 Bar
600 x 600	3.0	0.55	10 Bar
900 x 900	3.0	0.65	6 Bar
900 x 900	5.0	0.89	10 Bar
900 x 900	5.0	0.56	6 Bar



**Material :** Stainless Steel

# EARTHING

## INSPECTION PIT

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### Concrete Inspection Pit

Concrete Inspection Pits are suitable for load rating 4,500kg and are suitable for most types of Earthing and Lightning Protection installations. The concrete inspection pit protects the earth rod connection and makes it available for inspection. The Concrete Inspection Pit can have an Earth Bar fitted diagonally in slot provided for multiple conductor connections.

Description	Dimensions (mm)
Concrete Inspection Pit	315 x 315 x 165
Concrete Inspection Pit	450 x 450 x 450
Concrete Inspection Pit	500 x 500 x 500



**Material :** Concrete

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### Light Weight Plastic Earth Pit

Earth housing pit is manufactured from heavy high-grade polypropylene for high strength & stress levels to absorb a maximum load of 5000ks. The light weight feature allows easy handling, storage and transportation, thus increasing installation efficiency. Termination area is increased by 100% due to simple locking of two units together, allowing deeper electrode connections to be made and reducing the effects from harmful voltage gradients.

Size
300 x 300



**Material :** Polymer Body & Cover

# EARTHING

## BENTONITE

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### Bentonite

Bentonite is used as a backfill to reduce soil resistivity. When mixed with water, it swells to several times its dry volume. This moisture content can be retained for a considerable time and future moisture can be absorbed during rainfall etc. Bentonite can be supplied in either powder or granular form. Approximately 18 x 25kg bags create a volume of 10hm

Material	Grid
Granulated Moisture Retaining Clay	25
Powdered Moisture Retaining Clay	25



### Earthing Compound

**Granular :** Granular is the preferred option for filling trenches. The conductor is surrounded with Bentonite and then water poured over and mixed in the trench.

**Powder :** Powder is the preferred product for pouring into bore holes, ensuring the mixture is of a thin enough consistency to reach the bottom of the bore hole

**Material :** Sodium carbonate activated calcium montmorillonite clay. The product is a naturally occurring substance with no known ecological hazards, and can be disposed of as nonhazardous waste.

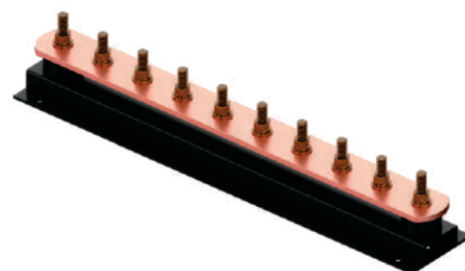
# EARTHING

## EARTH BARS

### Earth Bars

Earth bars provides a convenient common earthing point for electrical installations. Our standard earth bars are manufactured from 50mm x 6mm hard drawn copper bar and come complete with M10 fittings & insulators. The pvc base makes our earth bars lighter & easier to handle as well as being entirely corrosion proof

No Terminations	L mm	W mm	H mm
2	200	90	60
3	250	90	60
4	300	90	60
6	400	90	60
8	500	90	60
9	600	90	60
10	650	90	60
12	750	90	60
14	850	90	60
16	950	90	60
18	1100	90	60
20	1250	90	60
22	1300	90	60
24	1400	90	60
26	1550	90	60
28	1650	90	60
30	1800	90	60



**Bar :** 50 x 3mm hard drawn copper bar to BS EN 13601

**Base :** Plastic

**Fittings :** M10 Hexagon Head Set Screw, Nuts & Washers.

# EARTHING

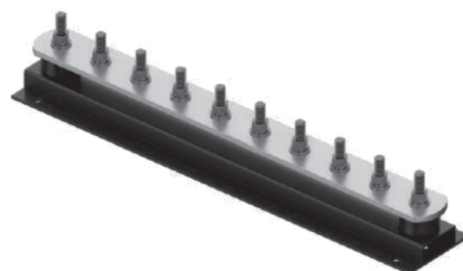
## EARTH BARS

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### Tinned Earth Bars

Tinned earth bars have been used on a variety of high-profile projects, this is partly due to the fact that our tinned earth bars offer excellent resistance to water corrosion, and subsequently provide enhanced conductivity

No Terminations	L mm	W mm	H mm
2	200	90	60
3	250	90	60
4	300	90	60
6	400	90	60
8	500	90	60
9	600	90	60
10	650	90	60
12	750	90	60
14	850	90	60
16	950	90	60
18	1100	90	60
20	1250	90	60
22	1300	90	60
24	1400	90	60
26	1550	90	60
28	1650	90	60
30	1800	90	60



**Bar :** 50 x 6mm tinned hard drawn copper bar to BS EN 13601

**Base :** Plastic

**Fittings :** M10 Hexagon Head Set Screw, Nuts & Washers.

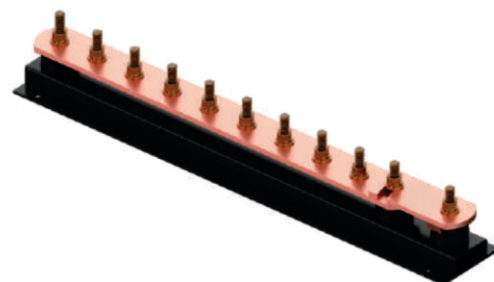
# EARTHING

## EARTH BARS

### Earth Bars with Single Disconnecting Link

Single disconnecting link earth bars are mainly used to offer a temporary break in the connection to the earth, allowing the inspection & testing of multiple earth rods / systems while disconnected from the lightening and earth system

No Terminations	L mm	W mm	H mm
2	285	90	60
3	330	90	60
4	375	90	60
6	475	90	60
8	575	90	60
9	685	90	60
10	725	90	60
12	825	90	60
14	925	90	60
16	1025	90	60
18	1175	90	60
20	1325	90	60
22	1375	90	60
24	1475	90	60
26	1625	90	60
28	1725	90	60
30	1875	90	60



**Bar :** 50 x 6mm hard drawn copper bar to BS EN 13601

**Base :** Plastic

**Fittings :** M10 Hexagon Head Set Screw, Nuts & Washers.

# EARTHING

## EARTH BARS

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### Tinned Earth Bars with Single Disconnecting Link

Single disconnecting link tinned earth bars are mainly used to offer a temporary break in the connection to the earth, allowing the inspection and testing of multiple earth rods / system while disconnected from the lightning and earth system

No Terminations	L mm	W mm	H mm
2	285	90	60
3	330	90	60
4	375	90	60
6	475	90	60
8	575	90	60
9	685	90	60
10	725	90	60
12	825	90	60
14	925	90	60
16	1025	90	60
18	1175	90	60
20	1325	90	60
22	1375	90	60
24	1475	90	60
26	1625	90	60
28	1725	90	60
30	1875	90	60



**Bar :** 50 x 6mm tinned hard drawn copper bar to BS EN 13601

**Base :** Plastic

**Fittings :** M10 Hexagon Head Set Screw, Nuts & Washers.



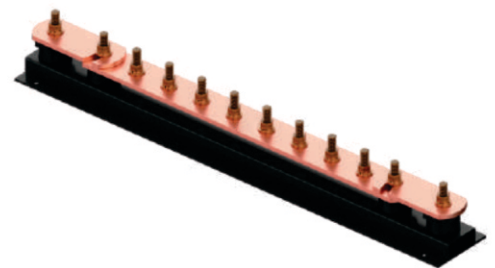
# EARTHING

## EARTH BARS

### Earth Bars with Double Disconnecting Link

Double Disconnecting link earth bars are mainly used to offer a temporary break in the connection to the earth, allowing the inspection and testing of multiple earth rods / systems while disconnected from the lightning & earth system.

No Terminations	L mm	W mm	H mm
2	350	90	60
3	400	90	60
4	450	90	60
6	550	90	60
8	650	90	60
9	725	90	60
10	800	90	60
12	900	90	60
14	1000	90	60
16	1100	90	60
18	1250	90	60
20	1400	90	60
22	1450	90	60
24	1550	90	60
26	1700	90	60
28	1800	90	60
30	1950	90	60



**Bar :** 50 x 6mm finned hard drawn copper bar to BS EN 13601

**Base :** Plastic

**Fittings :** M10 Hexagon Head Set Screw, Nuts & Washers.

# EARTHING

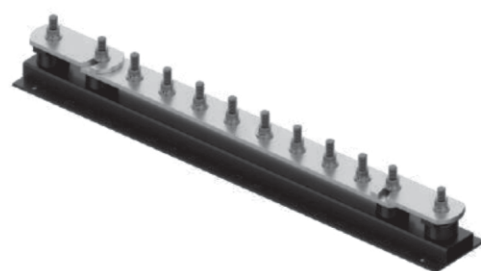
## EARTH BARS

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### Tinned Earth Bars with Double Disconnecting Links

Double Disconnecting link earth bars are mainly used to offer a temporary break in the connection to the earth, allowing the inspection and testing of multiple earth rods / systems while disconnected from the lightning & earth system.

No Terminations	L mm	W mm	H mm
2	350	90	60
3	400	90	60
4	450	90	60
6	550	90	60
8	650	90	60
9	725	90	60
10	800	90	60
12	900	90	60
14	1000	90	60
16	1100	90	60
18	1250	90	60
20	1400	90	60
22	1450	90	60
24	1550	90	60
26	1700	90	60
28	1800	90	60
30	1950	90	60



**Bar :** 50 x 6mm tinned hard drawn copper bar to BS EN 13601

**Base :** Plastic

**Fittings :** M10 Hexagon Head Set Screw, Nuts & Washers.

# EARTHING

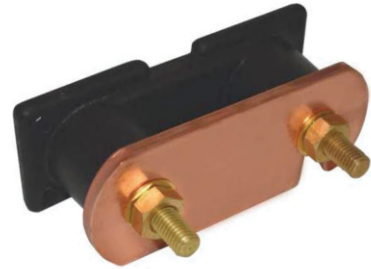
## EARTH BARS

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### Disconnecting Link

The disconnecting link provides a temporary break in the earth connection to allow inspection and testing of the earth electrode.

L mm	W mm	H mm
120	45	45



**Material :** Copper

**Bar :** 50 x 6mm hard drawn copper bar to BS En 13601

**Base :** Plastic

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### Telecommunication Main Grounding Earth Bar

Telecommunication earth bar provides a common grounding point within the telecommunication room and its typically located on walls within a data room

L mm	W mm	H mm
305	229	102
305	229	102
508	229	102
508	229	102



### This Includes

1 - Grounding Bar Assembly

6 - #6 compression lugs

1 each - #2, 1/0, 2/0, 3/0 compression lugs

12 each - 1/4" - 20 x 3/4" (19.0mm) SS4 hex bolts, hex nuts & lock washers

6 each - 3/8" - 16 x 1" (25.4mm) Ss4 hex bolts, hex nuts & lock washers

# EARTHING

## EARTH BARS

### Telecommunications Grounding Earth Bar

This item provides a common grounding point within the telecommunications room. Typically located on walls within a data room

L mm	L1 mm	W mm
305	229	51
305	229	51



#### This Includes

1 - Grounding Bar Assembly

6 - #6 compression lugs

1 each - #2, 1/0, 2/0, 3/0 compression lugs

12 each - 1/4" - 20 x 3/4" (19.0mm) SS4 hex bolts, hex nuts & lock washers

6 each - 3/8" - 16 x 1" (25.4mm) Ss4 hex bolts, hex nuts & lock washers

### Insulators

Insulators are supplied with or without studs & locking nuts.

Type	Thread Size mm	W mm	H mm
Insulator	M10	40	40
Insulator	M10	40	40
Insulator	M6	18	20
Insulator	M6	32	30
Insulator	M8	38	40
Insulator	M10	46	50
Insulator	M10	50	60
Insulator	M12	55	70
Insulator with 2 studs & 3 nuts	M10	40	40



**Material :** Reinforced Polyester

# EARTHING

## EARTH BARS

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### Earthing Bosses

Earth bosses are used for equipotential bonding which is the process of connecting different metal parts of structures together in such ways that they are at the same electrical potential

D mm	L mm	Thread Size
25	25	M8
30	30	M8
30	30	M10
30	40	M10
30	40	M12
30	50	M10
30	50	M12
40	30	M8
40	30	M10
40	40	M10
40	40	M12
40	50	M10
40	50	M12
50	30	M8
50	30	M10
50	40	M10
50	40	M12
50	50	M10
50	50	M12



**Material :** Mild Steel with Stainless Steel Fittings.

# EARTHING

## EARTH BARS

### **Stainless Steel Earth Bosses**

Earth bosses are used for equipotential bonding which is the process of connecting different metal parts of structures together in such ways that they are at the same electrical potential.

D mm	L mm	Thread Size
25	25	M8
30	30	M8
30	30	M10
30	40	M10
30	40	M12
30	50	M10
30	50	M12
40	30	M8
40	30	M10
40	40	M10
40	40	M12
40	50	M10
40	50	M12
50	30	M8
50	30	M10
50	40	M10
50	40	M12
50	50	M10
50	50	M12



**Material :** Stainless Steel body & Stainless Steel Fittings.

# EARTHING

## EARTH BARS

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### Flexible Copper Braid Bonds

Flexible Copper Braids are used for continuous current grounding and bonding application for equipotential bonding

Size W X H mm	Hole Centres L mm	Hole Size
10 x 2	100	6
10 x 2	200	6
10 x 2	300	6
12 x 2	100	6
12 x 2	200	6
12 x 2	300	6
19 x 2.5	100	10
19 x 2.5	200	10
19 x 2.5	300	10
25 x 3	100	10
25 x 3	200	10
25 x 3	400	10
25 x 3.5	200	11
25 x 3.5	300	11
25 x 3.5	400	11
30 x 4.5	200	10
30 x 4.5	400	10
32 x 5	200	10
32 x 5	400	10

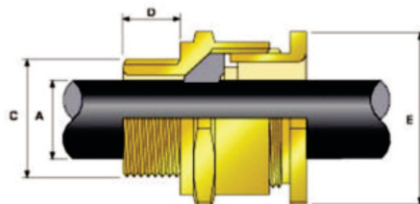


**Material :** Copper & Tinned Copper

# CABLE GLANDS

## A1/A2 Industrial Cable Gland

Gland Size	Metric Entry Thread C	Minimum Thread Length D	Overall Diameter A		Across Corners Dia E Max
			Min	Max	
16	16	16	15	3.5	24.4
20SS	20	20	15	3.5	24.4
20S	20	20	15	8.0	26.5
20L	20	20	15	11.0	26.5
25S	25	25	15	13.0	39.9
25L	25	25	15	13.0	39.9
32	32	32	15	19.0	45.5
40L	40	40	15	25.0	55.4
50S	50	50	15	31.5	61.0
50L	50	50	15	36.5	66.5
63S	63	63	15	42.5	77.6
63L	63	63	15	49.5	83.2
75S	75	75	15	54.5	88.7
76L	75	75	15	60.5	94.2
90	90	90	20	65.0	120.7
100	100	100	20	75.0	132.0

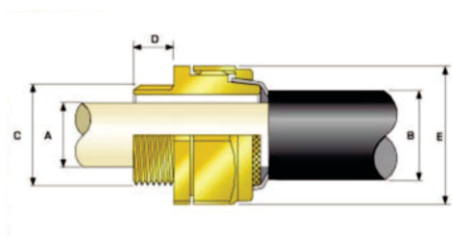




# CABLE GLANDS

## BW Industrial Cable Gland

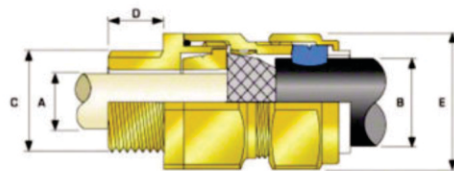
Gland Size	Metric Entry Thread C	Minimum Thread Length D	Under Armour Dia A	Overall Dia B	Armour Wire Dia	Across Corners Dia E Max
16	16	10	6.0	13.2	0.9	24.4
20S	20	10	11.6	15.8	0.9/1.25	26.0
20L	20	10	13.9	21.0	0.9/1.25	27.6
25S	25	10	17.8	23.8	1.25/1.60	34.3
25L	25	10	19.9	27.2	1.25/1.60	38.1
32	32	10	26.2	33.5	1.60/2.0	45.4
40S	40	10	29.4	38.5	1.60/2.0	50.2
40L	40	15	32.1	39.9	1.60/2.0	53.8
50S	50	15	38.1	46.3	2.0/2.25	64.8
50L	50	15	44.0	52.6	2.0/2.5	69.8
63S	63	15	50.0	59.0	2.5	78.2
63L	63	15	55.98	65.3	2.5	84.6
75S	75	15	61.9	71.6	2.5	95.0
75L	75	15	67.9	78.0	2.5	101.0
90	90	15	79.3	90.4	3.15	115.9



# CABLE GLANDS

## CW Industrial Cable Gland

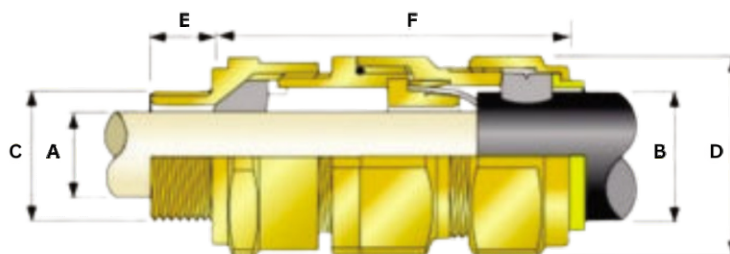
Gland Size	Metric Entry Thread C	Minimum Thread Length D	Under Armour Dia A Max	Overall Dia B Max	Armour Wire Dia	Across Corners Dia E Max
16	16	15	6.0	13.2	0.9	24.4
20SS	20	15	8.6	13.2	0.9	24.4
20S	20	15	11.6	15.8	0.9/1.25	26.5
20L	20	15	13.9	20.8	0.9/1.25	30.8
25S	25	15	15.5	25.8	0.9/1.25	37.0
25L	25	15	19.9	27.2	0.9/1.25	38.1
32	32	15	26.2	33.5	1.60/2.0	48.0
40S	40	15	29.4	38.5	1.60/2.0	55.6
40L	40	15	32.1	39.9	1.60/2.0	57.7
50S	50	15	40.8	51.0	2.0/2.25	58.6
50L	50	15	44.0	52.6	2.0/2.25	71.3
63S	63	15	50.6	58.9	2.5	81.3
63L	63	15	55.9	65.3	2.5	88.4
75S	75	15	61.9	71.6	2.5	97.4
75L	75	15	67.9	78.0	2.5	108.0
90	90	20	74.0	88.0	3.15	116.9



# CABLE GLANDS

## E1W/F industrial cable gland

Gland Size	Metric Entry Thread C	Minimum Thread Length D	Under Armour Dia A		Overall Dia B		Armour Wire Dia	Across Corners Dia E Max
			Min.	Max.	Min.	Max.		
16	16	15	6.3	8.6	8.0	13.2	0.9	13.2
20SS	20	15	6.3	8.6	8.0	13.2	0.9	26.5
20S	20	15	7.8	11.6	8.8	16.6	0.9/1.25	26.5
20L	20	15	11.8	14.4	11.7	21.0	0.9/1.25	30.8
25S	25	15	13.0	16.5	17.0	26.5	1.25/1.60	37.0
25L	25	15	14.0	20.6	17.0	27.4	1.25/1.60	38.1
32	32	15	19.7	26.4	23.5	33.9	1.60/2.0	48.0
40L	40	15	26.5	32.3	29.0	41.7	1.60/2.0	55.6
50S	50	15	32.2	38.1	38.0	46.0	2.0/2.25	58.6
50L	50	15	38.4	44.2	39.5	52.9	2.0/2.25	71.3
63S	63	15	44.1	50.0	50.0	58.9	2.5	81.3
63L	63	15	50.1	55.9	51.3	65.3	2.5	88.4
75S	75	15	56.0	61.9	62.0	71.6	2.5	97.8
75L	75	15	62.0	67.9	62.5	78.0	2.5	108.0
90	90	20	68.0	74.0	68.0	88.0	3.15	116.9



# FASTNERS

## Hexagon Head Set Screw

Thread Size	Thread Length
M6	10
	12
	16
	20
M8	16
	20
	25
	30
M10	16
	20
	25
	30
	35
M12	25
	30
	35
	40
	50



**Material :** Stainless Steel / Copper Alloy

## Hexagon Nut

Thread Size
M6
M8
M10
M12



**Material :** Stainless Steel / Copper Alloy

## Flat Round Washer

Thread Size
M6
M8
M10
M12



**Material :** Stainless Steel / Copper Alloy

# FASTNERS

## Hexagon Head Set Screw

### Nail

Ø x L In (mm)
3 x 50
4 x 50
5 x 50
6 x 50

**Material :** Copper Plated Mild Steel

### Wood Screw

Thread Size
1 1/4" x NO. 10
1 1/4" x NO. 12
1 1/2" x NO. 10
1 1/2" x NO. 12

**Material :** Stainless Steel / Copper Alloy

### Plastic Wall Plugs

Screw Size
M10
M12
M14

**Material :** PVC Plastic

## Benefits of using Stainless Steel Fasteners

All SS Fasteners are manufactured from non magnetic grade SS 304

Highly Corrosion Resistant

No extra treatment required for protection against corrosion

High tensile strength for better torque ratings to ensure proper functioning of the products





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