



SIMPLEX
CABLES (UK) LTD.

SEAMLESS CONNECTIONS

**Lightning Protection
& Earthing**

www.simplexcables.com

SIMPLEX CABLES UK LTD

RENASCENCE

"A true renaissance is nothing short of a revolution." For the team it was like making the phoenix rise from its ashes. We were dreaming to build a skyscraper without a blueprint.

Working our way upwards right from the bottom, we were very clear that the end result will not only exceed the expectations of the industry but will also make sure the complete product line creates a niche for itself and can be made easily available.

"LEGACY"

The advancements in products and technologies are driven by an ever-evolving human nature to strive for excellence and to constantly improve on what is already available.

This is the concept that has driven us for more than five decades as one of the most prestigious business houses based out of the UK. It has helped us start and drive the revival process to re-introduce our comprehensive range of specialized accessories.

"FORWARD"

We work to ensure that our partners have better value for their money and believe in continuously improving our knowledge, technologies and products. This enables us to provide optimal, efficient solutions and higher value to our customers.





TECHNICAL DATA



LIGHTNING PROTECTION/EARTHING MATERIALS

COPPER BONDED ROD AND FITTINGS

The rods are manufactured from low carbon, high tensile steel with a 99.9 % pure electrolytic copper thickness of 250 microns. Thread rolling after plating preserves the copper thickness ensuring corrosion resistance across the threads. Threads comply with ANSI/ASME B1.1-2003.

Extensible earth rods are coupled using threaded, easy to use brass alloy couplings. Connections can be made by using bolted clamps or exothermic welding process.



DIMENSIONS ROD SIZE (DIA X LENGTH)	ACTUAL ROD DIA. 'S' IN MM	THREAD DIA. 'T' IN MM	PART #
14 x1200	12	14	SBR 1412
14 x1500	12	14	SBR 1415
5/8"x4'or16mm x1200	14.2	5/8"	SBR 112
5/8"x5'or16mm x1500	14.2	5/8"	SBR 115
5/8"x 4or16mm x1200	16	5/8"	SBR 312
5/8 x 5 or 16 mm x 1500	16	5/8"	SBR 315
5/8 x 6 or 16 mm x 1800	16	5/8"	SBR 318
3/4"x 4 or 19 mm x 1200	17.2	3/4"	SBR 212
3/4"x 5 or 19 mm x 1500	17.2	3/4"	SBR 215

SOLID COPPER ROD

Solid copper earth rod is made from 99.9% pure electrolytic copper. Solid copper rods offer greater resistance to corrosion. They are ideally used in applications where soil conditions are very aggressive, for eg. soil with high salt content.

Driving
Head

ROD

Coupling
Dowel

Driving
Tip

LIGHTNING PROTECTION/EARTHING MATERIALS

DIMENSION	ROD DIA	LENGTH	PART #
16x 1200 or 4'	15 mm	1200 mm or 4'	SSC 512
16x1500 or 5'	15 mm	1500 mm or 5'	SSC 515
20x 1200 or 6'	20 mm	1200 mm or 4'	SSC 520
16x1500 or 5'	20 mm	1500 mm or 5'	SSC 521

COUPLING DOWEL

Coupling Dowels are used to join Solid Copper Earth Rods.



READ SIZE	L MM	UNIT WEIGHT KG	PART #
M10	40	0.02	SRD 01
M12	50	0.04	SRD 02

DRIVING SPIKE

Coupling Dowels are used to join Solid Copper Earth Rods.



D MM	L MM	THREAD SIZE	L1 MM	UNIT WEIGHT KG	PART #
16	42	M10	20	0.03	SRCS 16
20	51	M10	20	0.06	SRCS 25
25	60	M12	25	0.10	SRCS 25

LIGHTNING PROTECTION/EARTHING MATERIALS

CONCRETE EARTH PITS

Concrete Earth pits are suitable for a load of 5 Tons. And Can have an internal earth bar (5 holes Or 7 holes) fitted diagonally across in slots provided for multiple connections. It is made with a proprietary mortar formulation with advanced polymer fibers & glass fibers for lightweight, it also offers water resistance (low porosity) & high insulation properties, long life, stability under all weather conditions.



PLASTIC EARTH PIT / HOUSING

This Earth housing pit is manufactured from heavy high-grade polypropylene for high strength & stress levels to absorb a maximum load of 2000 kg. Stabilized against degradation by non-brittle and by sunlight to prevent cold weather damage. The lightweight 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 earth electrode connections to be made and reducing the effects from harmful voltage gradients.



EARTH ROD SEALS

The Earth Rod Seal is fitted when the earth rod connection is below the water level and where there is a possibility of water entering the inspection housing from below the ground. Simplex Earth seals are specifically designed to suit earth rods of various diameters from ½ " to ¾ ". These seals are used along Simplex PVC Earth Pit Chambers.



HIGH CONDUCTIVITY CU TAPE TO BS - 1432 - C101/C103

CONDUCTOR (A X B) MM	PART #
25 x 3	SCT - 253
25 x 6	SCT - 256
50 x 3	SCT - 503
50 x 6	SCT - 506



LIGHTNING PROTECTION/EARTHING MATERIALS

TAPE CLIP

CONDUCTOR SIZE	PART #
25 x 3	STC-253
50 x 6	STC-506

Mtl : Brass
These are used with Bare Copper Tape



DC TAPE CLIP

CONDUCTOR SIZE	PART #
25 x 3	SDTC-253
25 x 6	SDTC-256
50 x 6	SDTC-506

Mtl : Naval Brass / Gunmetal
These are used with Bare Copper Tape Conduct



SQUARE TAPE CLAMP

CONDUCTOR SIZE	PART #
25 x 3	SSTC-253
25 x 6	SSTC-256
50 x 6	SSTC-506

Mtl : Naval Brass / Gunmetal
These are used with Bare Copper Tape Conduct



OBLONG TEST CLAMP

CONDUCTOR SIZE	PART #
25 x 3	SOT-253
50 x 6	SOT-506

Mtl : Gunmetal / Brass
These are used with Bare Copper Tape Conductor



LIGHTNING PROTECTION/EARTHING MATERIALS

DISCONNECTING LINKS

Earth Bars and Disconnecting Links

All above products consist of 50 x 6 mm copper bar.

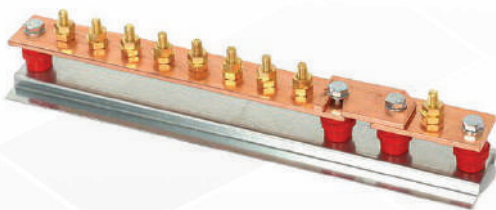
TAPE SIZE IN (MM)	LENGTH IN (MM)	WIDTH IN (MM)	HEIGHT IN (MM)	PART #
Disconnecting Link	125	90	90	SDL 11
Six-Way earth Bar With Single Disconnecting Link	575	90	96	SDL 12
Six-Way earth Bar With Twin Disconnecting Link	650	90	96	SDL 13
Six-Way Earth Bar	520	90	90	SDL 14



SDL - 11



SDL - 12



SDL - 13



SDL - 14

Earth Plate - Lattice Copper

Mtl : Electrolytic Copper

SIZE A X B X C	PART #
500 x 500 x 3	SLP-53
600 x 600 x 3	SLP-63
900 x 900 x 3	SLP-93

EARTHING MATERIALS

THREADED DRIVING STUD

These threaded driving heads are suitable for driving earth rods by hand or with a power hammer. The driving head screws into the threaded coupling to allow deep driving of the earth rods.



E	L (MM)	D (MM)	UNIT WEIGHT KG	PART #
5/8"				
	55	22	0.08	SRBD 16
3/4"	60	25	0.08	SRBD 20

COUPLER

These couplings are used for joining copper bond threaded earth rods together. They facilitate deep driving and ensure continual contact between the rods both during and after installation. The coupling also protects the earth rod threads during installation with the driving head. There is a lead-in for ease of assembly and a hex on the outside for grip and keeping the coupling tight when driving into the ground. All Wallis couplings are manufactured from a high copper content alloy ensuring excellent corrosion resistance.



YPE	L (MM)	D (MM)	UNIT WEIGHT KG	PART #
5/8"				
	68	21	0.12	SRB0 16
3/4"	78	25	0.18	SRB0 20

EARTHING MATERIALS

SPLIT CONNECTOR CLAMP

Split connector clamps are used to connect cable lugs onto earth rods. The clamps are designed to suit our full range of earth rods. All clamps are assembled with an M12 x 50mm set screw and fittings, except ERS010 which has an M8 x 40mm set screw and fittings.



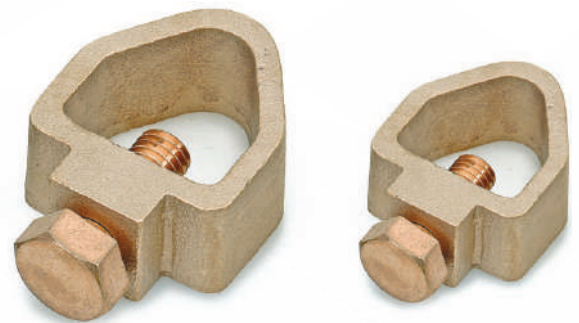
NOMINAL ROD SIZE	THREAD SIZE [UNC-2A]	L (MM)	W (MM)	H (MM)	UNIT WEIGHT KG	PART #
5/8"	5/8"	42	56	26	0.22	SRS 016
3/4"	3/4"	50	29	29	0.31	SRS 020

EARTH ROD TO TAPE CLAMPS (A)

Rod to Tape Type 'A' Clamps are designed to join various sizes of Conductor Tape to the earth electrode. The clamps have a high resistance to corrosion and are mechanically strong to ensure a lasting connection.

Material: High strength copper alloy.

Tightening Torque: 15Nm.



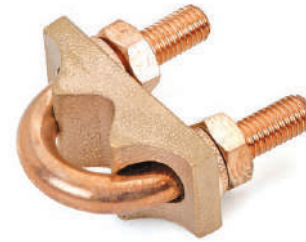
EARTH ROAD SIZE MM	COPPER TAPE SIZE	WEIGHT KG	PART #
14	25x3	0.11	SRTC-14253
14	25x6	0.11	SRTC-14256
14	30x6	0.18	SRTC-14306
16	25x3	0.11	SRTC-16523
16	25x3	0.11	SRTC-16256
16	30x6	0.18	SRTC-16306
17	25x3	0.16	SRTC-14259
17	25x6	0.16	SRTC-14260
17	30x6	0.22	SRTC-14261
17	40x3	0.24	SRTC-14262
17	50x6	0.26	SRTC-14263
20	25x3	0.16	SRTC-14264
20	25x6	0.16	SRTC-14265
20	30x6	0.22	SRTC-14266
20	40x3	0.24	SRTC-14267
20	50x6	0.26	SRTC-14268



EARTHING MATERIALS

U BOLT CLAMPS

U bolt clamps can be used to connect flat tapes and stranded cables to earth rods, reinforcing bars (re-bar), handrails etc. Material: Gunmetal plate with M10 threaded Copper 'U' Bolt.



Single Plate Type for Horizontal Flat Tapes

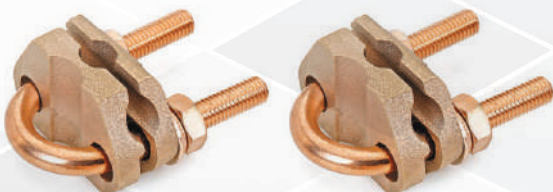
MAXIMUM ROD Ø MM	HOLE CENTRES MM	L (MM)	W (MM)	H (MM)	UNIT WEIGHT KG	PART #
16	30	58	62	33	0.17	SRU 016
25	37	72	62	33	0.19	SRU 025
31	41	82	68	33	0.25	SRU 031
38	46	90	75	33	0.29	SRU 038
50	63	95	90	33	0.39	SRU 050

Double Plate Type for Vertical Flat Tape

MAXIMUM ROD Ø MM	TAPE WIDTH MM	L (MM)	W (MM)	H (MM)	UNIT WEIGHT KG	PART #
16	25	58	62	33	0.23	SRU 216
25		73	60	33	0.23	SRU 225
31		85	68	33	0.32	SRU 231
38		80	75	33	0.34	SRU 238
50		103	90	33	0.53	SRU 250

ROD TO CABLE CLAMP (G CLAMP)

These clamps are used for joining earth rods to different sizes of the stranded copper conductor. The clamps have a high resistance to corrosion and are mechanically strong to ensure a lasting connection. Material: Gunmetal with M10 x 25mm Phosphor Bronze Set Screw



EARTH ROD SIZE MM	CONDUCTOR SIZE MM ²	WEIGHT KG	PART #
14	16-95 mm ²	0.090	SRCC-1416
14	70-185 mm ²	0.110	SRCC-1470
16	16-95 mm ²	0.090	SRCC-1616
16	70-185 mm ²	0.110	SRCC-1670
17	16-95 mm ²	0.100	SRCC-1716
17	70-185 mm ²	0.120	SRCC-1770
20	16-95 mm ²	0.100	SRCC-2016
20	70-185 mm ²	0.120	SRCC-2070

EARTHING MATERIALS

ROD TO CABLE CLAMP: GUV TYPE

GUV Type Clamps are designed to join various sizes of cable to earth electrodes / rebar's etc. The clamps have a high resistance to corrosion and are mechanically strong to ensure a lasting connection.

Material: Body – High strength copper alloy; 'U' bolt material – Copper.

EARTH ROD SIZE MM	CONDUCTOR SIZE MM ²	WEIGHT KG	PART #
14	16-95 mm ²	0.2	SUBC-1416
14	70-185 mm ²	0.23	SUBC-1470
16	16-95 mm ²	0.2	SUBC-1616
16	70-185 mm ²	0.23	SUBC-1670
17	16-95 mm ²	0.21	SUBC-1716
17	70-185 mm ²	0.24	SUBC-1770
20	16-95 mm ²	0.21	SUBC-2016
20	70-185 mm ²	0.24	SUBC-2070



SOLID COPPER EARTH PLATE

Solid copper plates provide a long lasting earthing solution in places where driving earth rods might be impractical. They are often installed in conjunction with Low-Resistance Earthing Compound or Bentonite.

COPPER BONDED EARTH PLATE

SIZE (A x B x C)	PART #
600 x 600 x 1.5	SBP - 615
500 x 500 x 1.5	SBP - 515
600 x 600 x 3	SBP - 63
900 x 900 x 3	SBP - 93
500 x 500 x 3	SBP - 53



Material: Electrolytic Copper

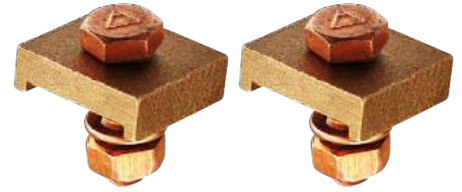
SIZE (A x B x C)	PART #
600 x 600 x 1.5	SSCP - 615
600 x 600 x 3	SSCP - 63
600 x 600 x 5	SSCP - 65
500 x 500 x 3	SSCP - 53
500 x 500 x 3	SSCP - 55
900 x 900 x 3	SSCP - 93
900 x 900 x 5	SSCP - 95
1000 x 1000 x 3	SSCP - 103
1000 x 1000 x 5	SSCP - 105

EARTHING MATERIALS

TOWER BOND

Tower bond is used for bonding aluminum and copper tapes to flat metal surface

Material: Brass / Gun Metal.



CONDUCTOR SIZE MM	L (MM)	W (MM)	H (MM)	UNIT WEIGHT KG	PART #
25 x 3	35	35	10	0.03	SBG 253 SS

RAIN WATER PIPE BOND

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

Material: Brass / Gun Metal.



CONDUCTOR SIZE MM	L (MM)	W (MM)	H (MM)	UNIT WEIGHT KG	PART #
26	32	32	16	0.20	SRG 253

WATER MAIN PIPE BOND

Designed to bond large diameter pipes into the earthing and lightning protection systems

Material: Gunmetal with M10 x 35mm Phosphor Bronze Set Screw



MAXIMUM CONDUCTOR WIDTH MM	L (MM)	W (MM)	UNIT WEIGHT KG	PART #
26	45	36	0.21	SWG 253

EARTHING MATERIALS

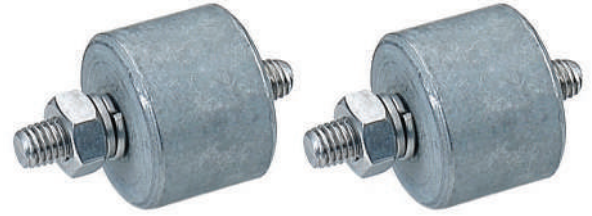
EARTH BOSS

Earth Bosses for welding to steel vessels, tanks, and structures etc.

Comes complete with A2 Stainless Steel dowel, flat washer, spring washer and two nuts.

Connections to be wrapped with Denso tape to stop ingress of moisture.

Material – Mild Steel.



TOWER EARTH CLAMP

Tower earth clamps are used for bonding copper conductors onto steel surfaces. The double-plate design provides a robust fixing in areas where cladding may be installed or where the complete clamp will be covered by concrete. The clamp is fixed by drilling a hole in the steelwork and securing with the set screw provided.



CONDUCTOR RANGE MM ²	L (MM)	W (MM)	H (MM)	SET SCREW	UNIT WEIGHT KG	PART #
16-70	45	30	17	M10 x 50mm	0.12	STC 070
70-120	48	35	22	M12 x 60mm	0.23	STC 120

ROD TO CABLE CLAMP (O TYPE)

'O' clamps are used for connecting the earth rod to the standard copper conductor. These durable clamps are resistant to corrosion and ensure a lasting connection.

Material: Brass & Gunmetal with M10 x 25 mm.



CONDUCTOR RANGE MM ²	PACK QUANTITY	ROD DIA MM	PART #
16-70	10	16	STC 070
35-95		20	STC 120

LIGHTNING PROTECTION MATERIALS

AERIAL ELEVATION ROD

Mtl : Electrolytic Copper

Air Rod can be installed with or without Multiple Point

ROD DIAMETER	THREAD DIAMETER	LENGTH OF ROD
15	5/8"	500
15	5/8"	1000
15	5/8"	2000

MULTIPLE POINT

Mtl : Electrolytic Copper

Air Rod can be installed with or without Multiple Point

ROD DIAMETER	PART #
16 - 5/8'	SMP-16
20 - 3/4'	SMP-20



RIDGE SADDLE

PROD. CODE : HRDS - 1

Mtl - Gunmetal / Brass

Used for supporting Lightning Conductor Air Terminals on Ridges

AERIAL ROD + TERMINAL BASE

Aerial Rod + Multiple Point + Terminal Base

ITEM	PART #
A	SLA-144
B	SLA-14
C	SLA-154



LIGHTNING PROTECTION MATERIALS

SIDE MOUNTING ROD BRA

Mtl : Brass / Gunmetal
 Above bracket provides a 75mm projection from the face of a wall.
 Mfgd. either in Gunmetal or Brass.

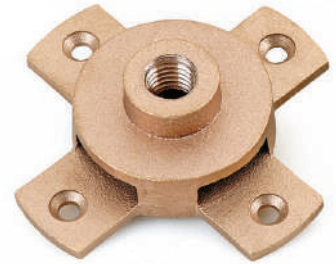
AIR ROD DIAMETER	PART #
10	SSM-10
16	SSM-16
20	SSM-20



LIGHT DUTY SADDLE

Mtl : Brass / Gunmetal
 Used for supporting lightning conductor Air Terminal

THREAD DIA (MM)	MAX COND. WIDTH MM	PART #
10	25	SLD-1025
16	25	SLD-1625
20	25	SLD-2025



FLAT SADDLE

Mtl : Brass / Gunmetal
 Used for supporting lightning conductor Air Terminals

THREAD DIA (MM)	MAX COND. WIDTH MM	PART #
10	25	SFLD-1025
16	25	SFLD-1625
20	25	SFLD-2025



LIGHTNING PROTECTION MATERIALS

FLAT SADDLE - A

Mtl : Brass / Gunmetal

Used for supporting taper pointed or blunt air rods on flat surfaces.

Recommended fixing : Countersunk woodscrew 1 1/2. x no.10 & wall Plug



ROD LENGTH	ROD DIA	THREAD DIA	PART #
50	15	5/8	SSD-155
70	15	5/8	SSD-160
95	15	5/8	SSD-165

ROD TO TAPE COUPLING

Mtl : Brass / Gunmetal

Used to secure elevation rod by means of a bolted connection



AIR ROD DIA	THREAD DIA	ROD MATERIAL	PART #
15	16	Copper	SRT-16 C
15	16	Aluminum	SRT-16 A

OUR CLIENT AREAS INCLUDE

ELECTRICITY SUBSTATIONS

RENEWABLE ENERGY

RAIL NETWORKS

OIL AND GAS

MOBILE MAST SITES

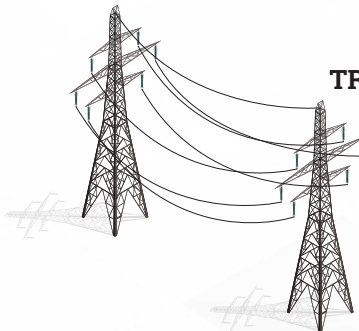
LIGHTING PROTECTION

GENERATION



1,000 MW 30 kv
XFMR 500 kv

EARTHING



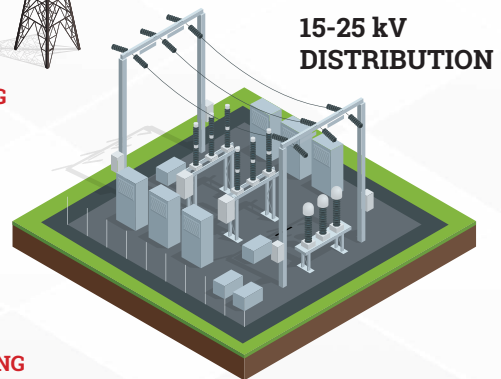
TRANSMISSION

EARTHING



25kv XFMR
480V 30

EARTHING



15-25 kV
DISTRIBUTION

EARTHING



25 kv XFMR
240/120V 10

EARTHING

15-25 kV
DISTRIBUTION

EARTHING



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