

# STM | SMART TECH METAL



**Manufacturing & Exporting Excellence :  
Earthing & Lightning Protection Accessories**

'Smart Tech Metal' a decade old company has grown by leaps & bounds through Its excellent working staff & technology updates at regular intervals.

'Smart Tech Metal' is today the leading and one of the largest manufacturer of Earthing, Lightning Protection & Cable Accessories. Extensive know-how in the field of Earthing & lightning Protection, strong R&D activity and continuous innovation in manufacturing technologies and product specification, allows 'Smart Tech Metal' to respond quickly to an increasingly demanding market offering high-quality products that are reliable, durable, safe at competitive rates.

'Smart Tech Metal' products are manufactured strictly by the specifications and designs laid by accepted International Standards. Wide product range, expert and efficient international sales network and sharp focus on customer needs represent the strengths of the 'Smart Tech Metal' Group and ensure a significant competitive advantage in a continuously evolving global market.

'Smart Tech Metal' being the manufacturer has a total control over the quality of the products right from the raw materials to the finished products. Rigorous quality testing and control is enforced. Only that material which passes the rigid norms, finds its way into the market.



## COPPER BONDED EARTH ROD

The reason for the enduring popularity and appeal of this product is that it represents a known technology, the driven earth rod, and combines the conductive properties of copper with the strength of steel. They offer a more economical and stronger alternative to a pure copper rod and a better conductivity than a stainless steel rod, whilst maintaining its corrosion resistant properties. 'Smart Tech Metal' copper bond electrodes are robust enough to be driven through bricks, and can be installed using power tools. Unlike other brands, 'Smart Tech Metal' does not produce sheathed rods due to our commitment to quality and our appreciation of the needs of our clients; all rods have pure copper electrolytically bonded to a steel core.

'Smart Tech Metal' utilises the best materials to ensure that when the two metals are molecularly bonded the product achieves a market-leading specification. This commitment to quality, and our clients, is why 'Smart Tech Metal' is found in the most demanding projects.

### Pointed Copper bonded Ground Rods

- Manufactured of high strength 1035 cold drawn steel
- The Nexus preferred ground rods

PRODUCT CODE	NOMINAL DIAMETER (MM)	SHANK DIA (MM)	LENGTH (MM)	WEIGHT (KG)
SCBR1004	3/8 : 9	9.50	1200	0.62
SCBR1604	5/8" : 16	14.2	1200	1.53
SCBR1605	5/8" : 16	14.2	1500	1.88
SCBR1606	5/8" : 16	14.2	1800	2.29
SCBR1608	5/8" : 16	14.2	2400	3.00
SCBR1610	5/8" : 16	14.2	3000	3.79
SCBR2004	3/4" : 20	17.2	1200	2.19
SCBR2005	3/4" : 20	17.2	1500	2.73
SCBR2006	3/4" : 20	17.2	1800	3.27
SCBR2008	3/4" : 20	17.2	2400	4.35
SCBR2010	3/4" : 20	17.2	3000	5.44



### Sectional Copperbonded Ground Rods

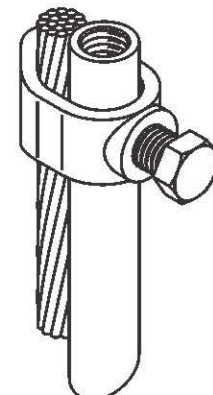
- For use when it is necessary to deep-drive rods
- Cold-rolled threads - stronger than cut threads

**Material:** Pure copper molecularly bonded onto a steel core. **Copper thickness :** 250 Micron Min.

- Resist corrosion better than galvanized rods allowing for a 30-year service life in most soils
- State of the art manufacturing process ensures uniform plating thickness
- Average tensile strength of 80,000 psi and straightness tolerance of .010" per linear

## ROD TO CABLE CLAMP : A TYPE

'Smart Tech Metal' rod to cable type A clamps are designed to join various sizes of cable to the earth rods. The clamps have a high resistance to corrosion and are mechanically strong to ensure a lasting connection



PRODUCT CODE	ROD DIA (MM)	MAX CONDUCTOR SIZE (MM²)	WEIGHT (Kg)
SRC1	5/8 : 16	6-95	0.05
SRC2	3/4 : 20	6-95	0.05

**Material:** Gunmetal

## COUPLING : COPPERBOND ELECTRODE

'Smart Tech Metal' couplers are counter bored to completely enclose threads & protect them from damage and corrosion.



PRODUCT CODE	DESCRIPTION	LENGTH (MM)	BODY DIA (MM)	WEIGHT (KG)
SCC16	16mm ROD COUPLING 5/8" UNC	68	22	0.08
SCC20	20mm ROD COUPLING 3/4" UNC	79	24	0.13

Material: Gunmetal

## DRIVING STUD : COPPERBOND ELECTRODE

'Smart Tech Metal' driving Stud are used to drive tee earth rod to the ground.

PRODUCT CODE	DESCRIPTION	LENGTH (MM)	HEAD DIA (MM)	WEIGHT (KG)
SDS16	16mm DRIVING STUD 5/8" UNC	54	22	0.08
SDS20	20mm DRIVING STUD 3/4" UNC	62	25	0.12

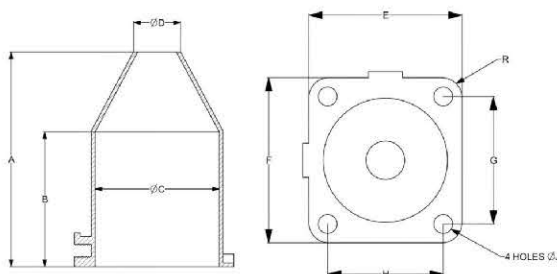
Material: High tensile Steel.



## WIPING GLAND

Used to facilitate the termination of high voltage power cables. Used in dry indoor and outdoor conditions. Smart Tech Metal can supply standard stock or customised brass wiping glands to client specification.

GLAND SIZE	DIA OVER METAL SHEATH OF CABLE (MM)	DIMENSION IN (MM)									
		A	B	ØC	ØD	E	F	G	H	ØJ	R
X	12 to 51	137	90	60	19	90	90	66	66	12	12
Y	25 to 78	155	95	89	32	114	123	95	86	14	14
Z	25 to 94	195	140	108	32	190	-	-	-	14	-



## SOLID COPPER EARTH ROD

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



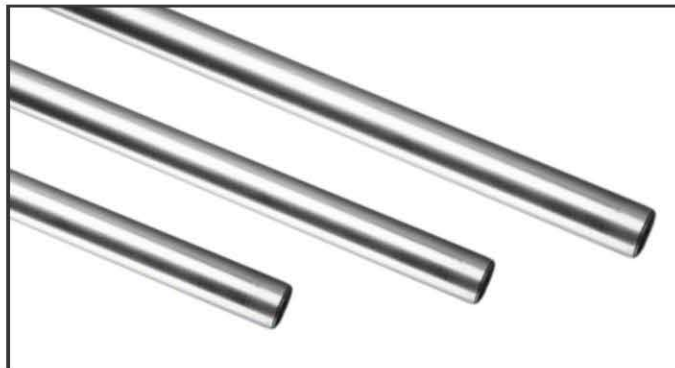
PRODUCT CODE	INTERNAL THREAD SIZE (MM)	DIA (MM)	LENGTH (MM)	WEIGHT (KG)
SSC1612	M10	16	1200	2.05
SSC1615	M10	16	1500	2.50
SSC1618	M10	16	1800	3.00
SSC1624	M10	16	2400	4.00
SSC1630	M10	16	3000	5.00
SSC2012	M10	20	1200	3.35
SSC2015	M10	20	1500	4.20
SSC2018	M10	20	1800	5.04
SSC2024	M10	20	2400	6.72
SSC2030	M10	20	3000	8.40
SSC2512	M10	25	1200	5.20
SSC2515	M10	25	1500	6.50
SSC2518	M10	25	1800	7.80
SSC2524	M10	25	2400	10.40
SSC2530	M10	25	3000	12.95

Material: Cu-ETP, UNS C11000, BS C101

## STAINLESS STEEL EARTH ROD

"Smart Tech Metal" stainless steel ground rods are used to overcome many of the problems caused by galvanic corrosion which can take place between dissimilar metals buried in close proximity.

Other advantages of stainless steel rod are that they are highly resistant to corrosion and are much more anodic than copper.



PRODUCT CODE	INTERNAL THREAD SIZE (MM)	DIA (MM)	LENGTH (MM)	WEIGHT (KG)
SSS1612	M10	16	1200	1.88
SSS1615	M10	16	1500	2.35
SSS1618	M10	16	1800	2.82
SSS1624	M10	16	2400	3.77
SSS1630	M10	16	3000	4.70
SSS2012	M10	20	1200	2.93
SSS2015	M10	20	1500	3.67
SSS2018	M10	20	1800	4.40
SSS2024	M10	20	2400	5.85
SSS2030	M10	20	3000	7.32
SSS2512	M10	25	1200	4.90
SSS2515	M10	25	1500	6.15
SSS2518	M10	25	1800	7.35
SSS2524	M10	25	2400	9.80
SSS2530	M10	25	3000	12.25

**Material: Stainless Steel - AISI 316L**

**Note : Available in other Grades on request.**

## DRIVING HEAD

'Smart Tech Metal' driving heads are designed to protect the internal thread and top of the earth rod when being driven in to the ground.

PRODUCT CODE	THREAD DIA (MM)	LENGTH (MM)	WEIGHT (KG)
SDH16S	10	40	0.02
SDH20S	10	42	0.05
SDH25S	10	45	0.09
SDH16G	10	40	0.02
SDH20G	10	42	0.05
SDH25G	10	45	0.09



**Material: Stainless Steel / Galvanized Steel**

## COUPLING DOWEL

'Smart Tech Metal' coupling dowels are used to join earth rod.

PRODUCT CODE	THREAD DIA (MM)	LENGTH (MM)	WEIGHT (KG)
SCD10S	10	40	0.02
SCD10B	10	40	0.02



**Material: Stainless Steel / Brass**

## DRIVING SPIKE

'Smart Tech Metal' driving spikes are designed to enable the earth rod to be driven in to the ground easily and protects the rod from being damaged.

PRODUCT CODE	THREAD DIA (MM)	LENGTH (MM)	WEIGHT (KG)
SDS16S	10	40	0.02
SDS20S	10	55	0.05
SDS25S	10	60	0.10
SDS16G	10	40	0.02
SDS20G	10	55	0.05
SDS25G	10	60	0.10



**Material: Stainless Steel / Galvanized Steel**

## CONCRETE EARTH PIT

Material : Concrete  
 Dimensions : 310 mm (L) 310 mm (w) 170 mm (h)  
 Product Code : NCEP  
 Weight : 30kg

'Smart Tech Metal' Concrete Earth Pit is suitable for load rating to 5000 kgs. and can have an internal Earth Bar (5 hole OR 7 hole) fitted diagonally across in slots provided for multiple connections. It is made with a propitiatory mortar formulation with advanced polymer fibers & glass fibers for light weight, it also offers water resistance (low porosity) & high insulation properties, long life, stability under all weather conditions.

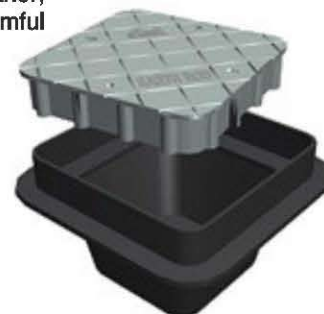


## EARTH PIT / HOUSING

This 'Smart Tech Metal' Earth housing pit is manufactured from heavy high-grade polypropylene for high strength & stress levels to absorb a maximum load of 5000 kg. Stabilised against degradation by non-brittle and by sunlight to prevent cold weather damage. 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 earth electrode connections to be made and reducing the effects from harmful voltage gradients.

Material : Plastic - Body & Cover  
 Product Code : NEP  
 Dimensions : 315 mm (L) 315 mm (w) 230 mm (h)  
 Weight : 2.5 kgs

Material : Plastic Body & Metal Cover  
 Product Code : NEPM  
 Dimensions : 315 mm (L) 315 mm (w) 230 mm (h)  
 Weight : 5.0 kgs



## 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 ground. 'Smart Tech Metal' earth seals are specifically designed to suit earth Rods of various diameters from 1/2" to 3/4". These seals are used alongwith 'Smart Tech Metal' Earth Pits.

Material : Plastic  
 Product Code : NCRS -1234 (Single) (Weight: 2kgs)  
 NCRS-5678 (Double) (Weight: 3kgs)

P.S.: Please specify Earth Rod diameter to be used with.



## BENTONITE

Bentonite is a moisture retaining clay used as an earth electrode back-fill to help lower soil resistivity. The clay is a sodium activated montmorillonite, which when mixed with water swells to many times its original dry volume. Bentonite is supplied in powder form. It is a preferred option for pouring into bore holes to ensure the mixture is a thin enough consistency to reach the bottom of the hole. The typical expansion ratio when mixed with water is 2:1.



25 Kg.

Prod. Code : NBEC 25



## EARTH BARS FOR EARTH PITS

'Smart Tech Metal' Earth Bars are used when multiple connections to the ground rod are required. They fit into the slots provided in the earth pits.

PRODUCT CODE	NO. OF HOLES	HOLES (MM)	LENGTH (MM)	WIDTH (MM)	HEIGHT (MM)
SCEBC 05	5	12	290	30	6
SCEBC 07	7	12	290	30	6



Personalized Earth bars available on request as per customer specification.

**Material: Cu-ETP, UNS C11000, BS C101**

## SOLID COPPER PLATES

'Smart Tech Metal' solid copper plates are mainly used for grounding purposed earthing protection. They provide a long lasting solution where earth rods are not fit to be used. 'Smart Tech Metal' offers its customers a wide range of solid copper plates. Also known as earth plates or ground plates, which are fabricated out of electrolytic copper.

PRODUCT CODE	THICKNESS (mm)	LENGTH X WIDTH (MM)	WEIGHT (KG)
SCP60015	1.5	600 x 600	5.00
SCP60030	3.0	600 x 600	11.20
SCP60060	6.0	600 x 600	22.40
SCP90015	1.5	900 x 900	9.74
SCP90030	3.0	900 x 900	21.75
SCP90060	6.0	900 x 900	43.50



**Material: Cu-ETP, UNS C11000, BS C101**

OTHER SIZES AVAILABLE UPON REQUEST.  
Other Grades available on request.

## LATTICE COPPER EARTH MATS

'Smart Tech Metal' lattice copper earth mats are used where step potential could cause problems. They are a lower cost option to the solid plates and when used with Bentonite, they provide a long lasting earth solution. Generally used as an electrode where significant amounts of fault current can be encountered.

PRODUCT CODE	THICKNESS (mm)	LENGTH X WIDTH (MM)	GRID	WEIGHT (KG)
SNLM500	3.0	500 x 500	4 BARS	3.60
SNLM600	3.0	600 x 600	5 BARS	4.02
SNLM900	3.0	900 x 900	5 BARS	6.03



**Material: Cu-ETP, UNS C11000, BS C101**

OTHER SIZES AVAILABLE UPON REQUEST.

## SOLID COPPER EARTH ROD

Air Rod can be installed with or without Multiple Point.



PRODUCT CODE	ROD DIAMETER (MM)	ROD LENGTH (MM)	THREAD DIAMETER (IN)
SSC50	15	500	5/8
SSC100	15	1000	5/8
SSC200	15	2000	5/8

Material: Cu-ETP, UNS C11000, BS C101

## MULTIPLE POINT

Multiple Point is used with Elevation rod.

PRODUCT CODE	ROD DIAMETER (MM)
SMPB16	16 mm or 5/8"
SMPB20	20mm or 3/4"

PRODUCT CODE	ROD DIAMETER (MM)
SMPC16	16 mm or 5/8"
SMPC20	20mm or 3/4"



NMPB



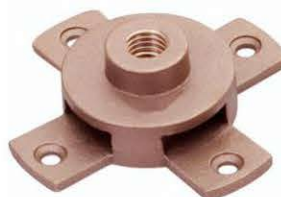
NMPC

Material: Copper Alloy

## TERMINAL BASE

For supporting lightning Air terminal.

PRODUCT CODE	ROD DIAMETER (MM)
STB16	16 mm or 5/8"
STB20	20mm or 3/4"

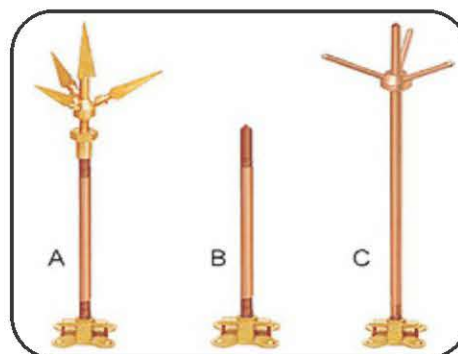


Material : Gunmetal

## AERIAL ROD + MULTIPLE POINT + TERMINAL BASE

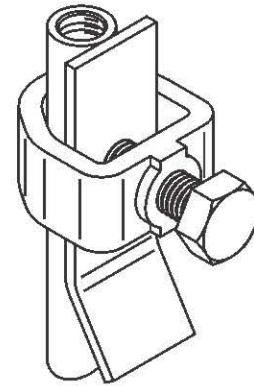
PRODUCT CODE	ITEM
SCLA144	A
SCLA14	B
SCLA154	C

Material :  
 Aerial Rod : Cu-ETP  
 Multiple Point : Copper Alloy  
 Terminal Base : Gunmetal



## ROD TO TAPE CLAMP : B TYPE

These clamps are made from copper alloy body which gives strong resistance to corrosion.

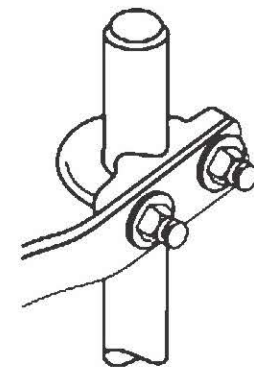


PRODUCT CODE	ROD DIA (MM)	MAX CONDUCTOR SIZE	WEIGHT (Kg)
SBC16	5/8 : 16	29 x 16	0.15
SBC20	3/4 : 20	29 x 13	
SBC16H	5/8 : 16	54 x 16	0.30
SBC20H	3/4 : 20	54 x 13	

Material: Gunmetal

## ROD TO TAPE CLAMP : U BOLT SINGLE PLATE TYPE

These are made from copper with gunmetal plate  
They can be supplied for all the rods from 5/8" to 1" and copper tape



PRODUCT CODE	ROD DIA (MM)	HOLE CENTRES (MM)	WEIGHT (Kg)
SUU16	5/8 : 16	37	0.20
SUU20	3/4 : 20	37	0.21
SUU25	1 : 25	37	0.22

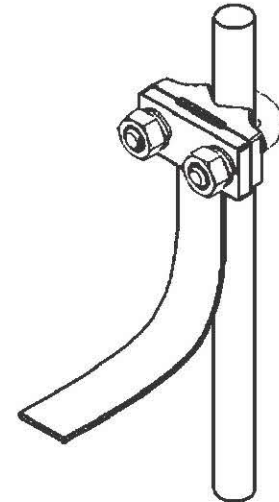
Material: Body - Gunmetal

'U' bolt material - Copper Alloy

## ROD TO TAPE CLAMP : U BOLT DOUBLE PLATE TYPE

'Smart Tech Metal' rod to tape type 'U' Bolt double plate clamps are designed to join 25 x 3 conductor tape to the earth electrode / rebar, without the need to drill the tape.

These clamps have a high resistance to corrosion and are mechanically strong to ensure a lasting connection.



PRODUCT CODE	ROD DIA (MM)	TAPE WIDTH (MM)	WEIGHT (Kg)
SUS16	5/8 : 16	25	0.30
SUS20	3/4 : 20	25	0.34
SUS25	1 : 25	25	0.38

**Material:**

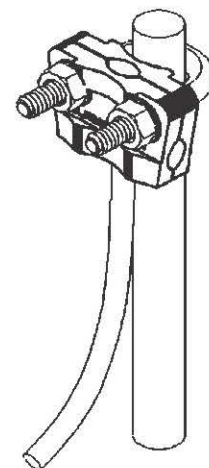
**Body - Gunmetal**

**'U' bolt material - Copper Alloy**

## ROD TO CABLE CLAMP : GUV TYPE

'Smart Tech Metal' GUV type clamps are designed to join various sizes of cable to earth electrodes / rebar's etc.

These clamps have a high resistance to corrosion and are mechanically strong to ensure a lasting connection.



PRODUCT CODE	ROD DIA (MM)	CONDUCTOR RANGE (MM <sup>2</sup> )	WEIGHT (Kg)
SGUV16-70	5/8 : 16	16-70	0.38
SGUV20-70	3/4 : 20	16-70	0.38
SGUV16-185	5/8 : 16	70-185	0.38
SGUV20-185	3/4 : 20	70-185	0.38
SGUV16-300	5/8 : 16	70-185	0.62
SGUV20-300	3/4 : 20	70-185	0.62

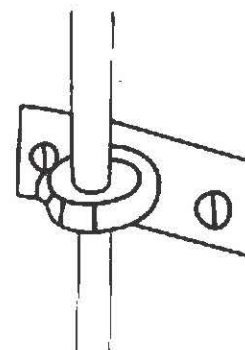
**Material:**

**Body - Gunmetal**

**'U' bolt material - Copper Alloy**

## SIDE MOUNTED ROD BRACKETS

Above bracket provides a 75 mm projection from the face of the wall.

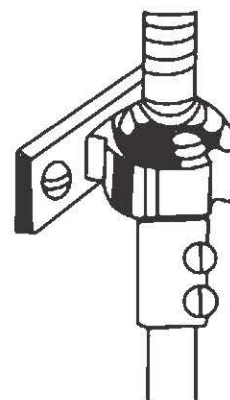


PRODUCT CODE	ROD DIAMETER (MM)	WEIGHT (Kg)
SSM10	10	0.91
SSM16	16	0.91
SSM20	20	1.10

Material: Gunmetal

## ROD TO TAPE COUPLING

Used to secure elevation rod by means of a bolted connection.



PRODUCT CODE	CONDUCTOR SIZE (MM)	ROD DIA (MM)	WEIGHT (Kg)
SRT16	25 x 3	16	0.23

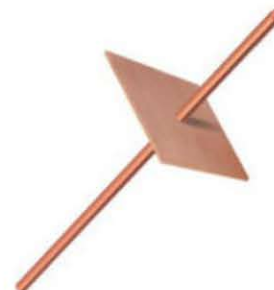
Material: Gunmetal

## PUDDLE FLANGES

'Smart Tech Metal' puddle flanges are designed to take lightning conductors through roofs.

PRODUCT CODE	CONDUCTOR SIZE (MM)	WEIGHT (Kg)
SPF	150 x 150 x 625	1.54

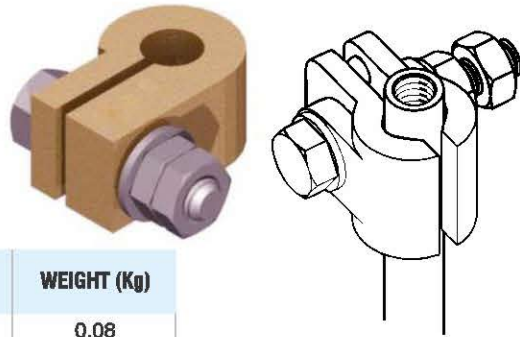
Material : Copper / Steel Copper Bonded



## ROD TO CABLE LUG CLAMP : D TYPE

'Smart Tech Metal' rod to cable lug type clamps are designed to join various sizes of compression lugs to the earth electrode.

These clamps have a high resistance to corrosion and are mechanically strong to ensure a lasting connection.



PRODUCT CODE	ROD DIA (MM)	BOLT SIZE	ROD TYPE	WEIGHT (Kg)
SCKH10	9.5mm	08	COPPERBOND	0.08
SCKH16	16mm	10	COPPERBOND	0.20
SCKH15S	20mm	10	SOLID COPPER	0.35

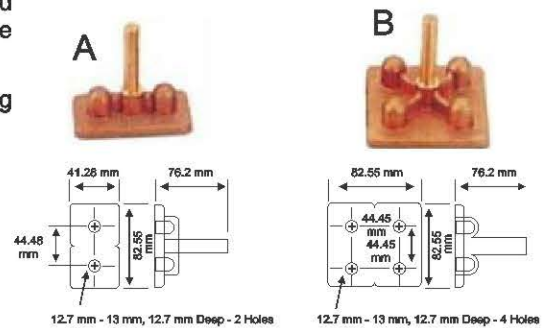
**Material:** Gunmetal  
**Fastener :** Stainless Steel  
**High strength copper alloy.**

## EARTH POINT

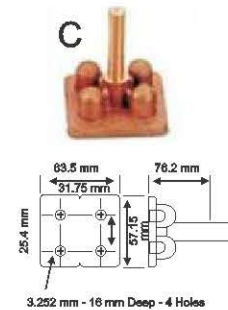
These Plates when used in concrete structures offer convenient ground system connection points. They are used where reinforcing bars are electrically continuous & are to be used as down conductors.

These earth points allow easy access for the lightning protection & earthing system.

PRODUCT CODE	DRAWING No.	EARTH BOSS	HOLE
SCCP2120	A	120	2 HOLE
SCCP4120	B	120	4 HOLE
SCCP4240	B	240	4 HOLE
SCCPL4240	C	240	4 HOLE

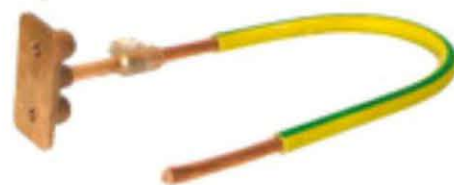


**Material:** Gunmetal



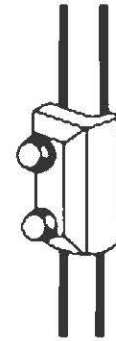
## EARTH POINTS : COMPLETE WITH TAIL

PRODUCT CODE	DRAWING No.	HOLE	COVER PLATE	TAIL LENGTH (MM)
SEPT2120	A	2 HOLE	NO	500
SEPT2120P	A	2 HOLE	YES	500
SEPT4120	B	4 HOLE	NO	500
SEPT2120P	B	4 HOLE	YES	500
SEPT4240	C	4 HOLE	NO	500
SEPT4240P	C	4 HOLE	YES	500



**Material:**  
**Body:** Gunmetal.  
**Tail:** Green/Yellow copper cable.

These are used with bare copper tape conductor



PRODUCT CODE	CONDUCTOR TYPE	CONDUCTOR SIZE (mm)	WEIGHT (Kg)
SOT253	COPPER	25 x 3	0.40
SOT316	COPPER	31 x 6	0.40
SOT506	COPPER	50 x 6	0.50

Material: Gunmetal

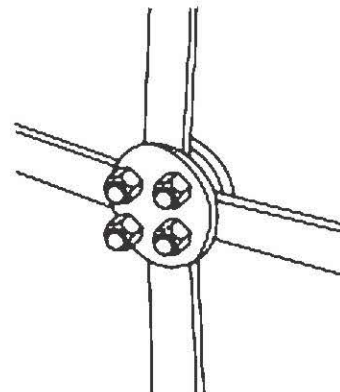
## TEST BOND / TEST CLAMP

These are used for 4-way copper tape connection.

PRODUCT CODE	CONDUCTOR DIA (mm)	CONDUCTOR MATERIAL	WEIGHT (Kg)
STBC253	25X3	COPPER	0.90

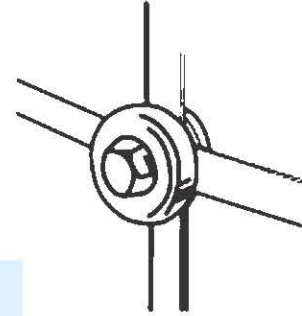


Material: Gunmetal.



## SCREW DOWN TEST CLAMP

These are used for fixing 2 way copper tape.



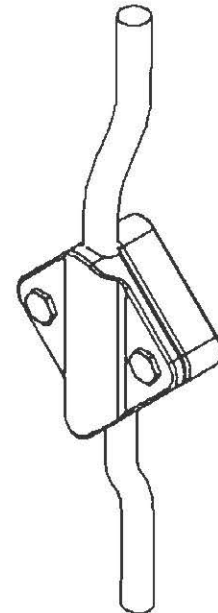
PRODUCT CODE	CONDUCTOR TYPE	CONDUCTOR SIZE (mm)	WEIGHT (Kg)
SSDTC253	COPPER	25 x 3	0.84

Material: Gunmetal.

## CABLE TEST CLAMP

'Smart Tech Metal' cable test clamps are used to form a disconnecting joint between the down conductor system and the earthing system.

The conductors are overlapped end to end and are secured together using two bolts.



PRODUCT CODE	CONDUCTOR TYPE	CONDUCTOR SIZE (mm)	WEIGHT (Kg)
SSDTC50	COPPER	50	0.40
SSDTC70	COPPER	70	0.40
SSDTC95	COPPER	95	0.40

Material: Gunmetal.

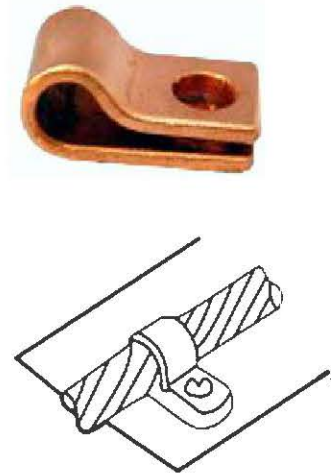


## ONE HOLE CABLE CLIP : CIRCULAR CONDUCTOR

These are recommended to fix cable conductors

PRODUCT CODE	CONDUCTOR TYPE	CONDUCTOR DIA (mm)	WEIGHT (Kg)
SOH8	COPPER	8.0	0.01
SOH12	COPPER	12.0	0.01
SOH16	COPPER	16.0	0.02
SOH20	COPPER	20.0	0.02

Material: Copper



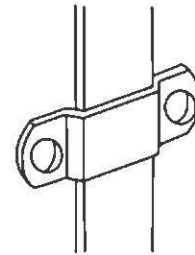
## TAPE CLIP : FLAT CONDUCTOR

These are used with bare copper tape



PRODUCT CODE	CONDUCTOR TYPE	CONDUCTOR SIZE (mm)	WEIGHT (Kg)
STC203	BARE COPPER	20 x 3	0.02
STC253	BARE COPPER	25 x 3	0.02
STC253P	PVC COPPER	25 x 3	0.02

Material: Copper



## SQUARE CLAMP : FLAT CONDUCTOR

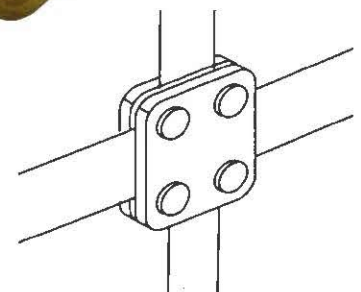
These are suitable for 4- way connections of copper tape.

The base has a countersunk hole in the middle for fixing the clamp in place.



PRODUCT CODE	CONDUCTOR TYPE	CONDUCTOR SIZE (mm)	WEIGHT (Kg)
SSQCC253	COPPER	25 x 3	0.23
SSQCC256	COPPER	25 x 6	0.44
SSQCC313	COPPER	31 x 3	0.30
SSQCC406	COPPER	40 x 6	0.79
SSQCC506	COPPER	50 x 6	1.00

Material: Gunmetal



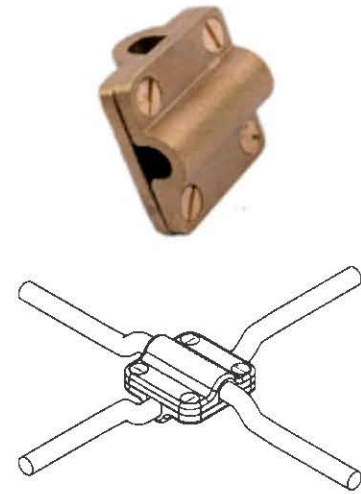
## SQUARE CLAMP : CIRCULAR CONDUCTOR

'Smart Tech Metal' square clamps are designed for a four way connection and are suitable for crossing over cable, straight through joints or 'T' connections to form a continuous network of cables.

The base has a countersunk hole in the middle for fixing the clamp in place.

PRODUCT CODE	CONDUCTOR TYPE	CONDUCTOR SIZE (mm / mm <sup>2</sup> )	WEIGHT (Kg)
SSCC50	COPPER	50	0.30
SSCC70	COPPER	70	0.26
SSCC95	COPPER	95	0.33
SSCC08	COPPER	8 DIA	0.23

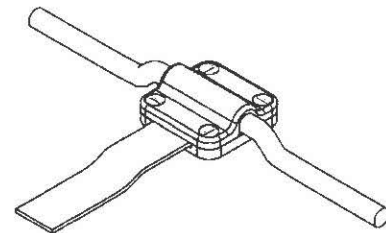
Material: Gunmetal



## SQUARE CLAMP : TAPE TO CIRCULAR CONDUCTOR

'Smart Tech Metal' square clamps are designed for a four way connection and are suitable for crossing over tapes and cables together in straight through joints or 'T' connections to form a continuous network of tapes and cables.

The base has a countersunk hole in the middle for fixing the clamp in place.



PRODUCT CODE	CONDUCTOR SIZE (mm)	CONDUCTOR RANGE (mm / mm <sup>2</sup> )	WEIGHT (Kg)
SCTJ08	25 x 3	8 DIA.	0.16
SCTJ50	25 x 3	50	0.16
SCTJ70	25 x 3	70	0.14
SCTJ95	25 x 3	95	0.12

Material: Gunmetal.

## TEE CLAMP

These are used for forming and bonding Tee Joint for conductor

PRODUCT CODE	CONDUCTOR DIA (mm)	CONDUCTOR MATERIAL	WEIGHT (Kg)
STEC08	8.0	COPPER	0.17

Material: Gunmetal

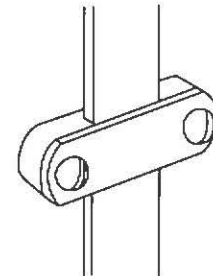


## DC TAPE CLIPS : FLAT CONDUCTOR

These are used with bare copper tape conductor

PRODUCT CODE	CONDUCTOR TYPE	CONDUCTOR SIZE	WEIGHT (Kg)
SDTC253	BARE COPPER	25 x 3	0.08
SDTC256	BARE COPPER	25 x 6	0.10
SDTC283	BARE COPPER	28 x 3	0.09
SDTC286	BARE COPPER	28 x 6	0.10
SDTC406	BARE COPPER	40 x 6	0.14
SDTC506	BARE COPPER	50 x 6	0.17

**Material: Gunmetal**



## HEAVY DUTY CAST CABLE SADDLE

These are used with 8 mm conductor or for supporting air terminals when used in conjunction with wall mounted air terminal base

PRODUCT CODE	CONDUCTOR TYPE	CONDUCTOR SIZE	WEIGHT (Kg)
SDTC502	BARE COPPER	50mm <sup>2</sup>	0.10
SDTC702	BARE COPPER	70mm <sup>2</sup>	0.10
SDTC952	BARE COPPER	95mm <sup>2</sup>	0.10
SDTC08	BARE COPPER	8mm	0.10

**Material: Gunmetal**



## BI - METALLIC CONNECTOR

These are used for joining aluminium and copper circular conductors, particularly when copper is used as Earthing in aluminium lightning protection systems.

PRODUCT CODE	APPLICATION	MATERIAL
SBI253	25 X 3	STAINLESS STEEL
SBI08	8 mm Dia	STAINLESS STEEL
SBI08253	25 x 3 to 8 mm Dia	STAINLESS STEEL
SBI8	8 mm Dia. Al to 8 mm Dia. Cu	COPPER / ALUMINIUM
SBI825	8 mm Dia. Al to 25 x 3 Cu Tape	COPPER / ALUMINIUM
SBI253	25 x 3 Al Tape to 25 x 3 Cu Tape	COPPER / ALUMINIUM

Other sizes available on request.



## SPLIT BOLT CONNECTOR H TYPE

Our range of Split Bolt Connectors with Round Head is used for joining aerial hard drawn copper conductors or insulated copper conductors. Split bolts are made from a high conductivity copper alloy with captive saddle, which applies a distributed pressure to conductors. The head of the split bolt is suitable for standard spanner to fit in. We also can supply these in natural copper alloy or electro tinned.

**Technical Data:**

**Conductive Material:**  
Copper alloy

**Operating Temperature:-**  
55°C to 100°C

**Electroplating Material:**  
Tin 99.7% pure

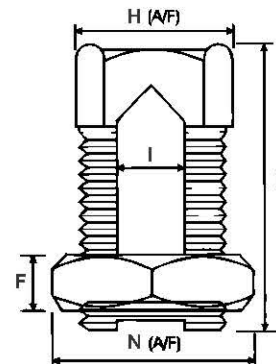
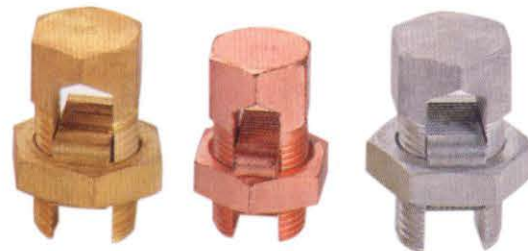


PRODUCT CODE	MAX. COND. SIZE (mm <sup>2</sup> )	SLOT WIDTH mm <sup>2</sup>	CROSS REFERENCE
SSBC12	16	6.6	-
SSBC22A	25	5.3	Type A
SSBC24B	35	8.3	Type B
SSBC25C	70	10.9	Type C
SSBC26D	95	12.9	Type D
SSBC28E	185	18.5	Type E

## SPLIT BOLT CONNECTORS

We offer a wide range of line taps to meet the material and dimensional specifications laid by different international standards. Brass line taps are made with high tensile brass as per BS 2874 – CZ 112. Threads are formed by rolling process giving the nut extra clamping force. Pressure pads are made from extruded bars (not cast), preventing the pads from cracking. Brass line taps are manufactured in passivated natural brass with electro tinned finish. These are also supplied in high conductivity copper.

PRODUCT CODE	CABLE SIZE MM <sup>2</sup>	I	H a/f	N a/f	F	L
SSBC6	6	4.00	12.70	13.35	4.80	19.85
SSBC10	10	4.70	12.70	19.00	5.60	26.75
SSBC16	16	5.70	12.70	19.00	5.60	26.00
SSBC25	25	7.30	16.00	19.00	5.60	28.00
SSBC35	35	7.80	18.50	24.00	6.35	35.00
SSBC50	50	9.70	24.10	27.20	8.65	42.00
SSBC70	70	11.50	24.10	27.20	8.65	44.50
SSBC95	95	14.40	26.50	35.40	9.40	50.00
SSBC120	120	16.20	30.00	35.40	12.00	57.50
SSBC150	150	16.20	30.00	35.40	12.00	57.50
SSBC185	185	18.20	31.75	38.00	12.00	57.50
SSBC240	240	22.00	40.00	48.20	14.25	72.50
SSBC300	300	24.00	42.00	50.00	14.25	72.50
SSBC400	400	26.00	48.00	56.00	16.00	76.50
SSBC500	500	30.00	55.00	65.00	16.00	80.00



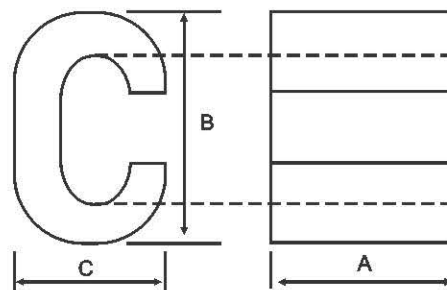
**Material : Copper alloy.**

## COPPER 'C' TYPE CONNECTORS

PRODUCT CODE	CABLE SIZE MM <sup>2</sup>	DIMENSIONS		
		A	B	C
SCC6-6	C6 - C6	9	9,8	6,4
SCC10-10	C10 - C10	12	12,6	8,4
SCC16-16	C16 - C16	17	19,4	12,0
SCC25-25	C25 - C25	17	21,4	13,0
SCC35-35	C35 - C35	21	26,6	15,6
SCC50-50	C50 - C50	26	38,0	21,0
SCC70-70	C70 - C70	28	34,0	21,0
SCC95-95	C95 - C95	29	41,0	26,0
SCC120-120	C120 - C120	30	45,0	28,0
SCC150-150	C150 - C150	30	48,0	28,0
SCC185-185	C185 - C185	32	52,0	32,0
SCC240-240	C240 - C240	32	55,0	38,0

Add "T" for Tinned Connectors      **Note :** All dimensions in mm

**Material:** Cu-ETP, UNS C11000, BS C101



## EARTH BOSS

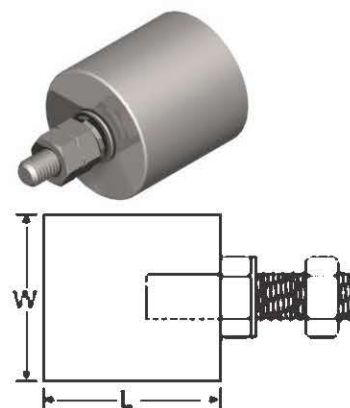
Earth Boss for welding to steel vessel, tanks and structures etc.

Connections to be wrapped with Denso Tape to stop the ingress of moisture.

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

Phosphor Bronze fixing assembly is available upon request. Add "/PB" to the end of the Part Number to specify Phosphor Bronze Assembly.

PRODUCT CODE	DIAMETER (MM)	LENGTH (MM)	THREAD SIZE	WEIGHT (Kg)
SEB25M08	25	25	M08	0.09
SEB30M08	30	30	M08	0.16
SEB30M10	30	30	M10	0.18
SEB40M10	40	40	M10	0.41
SEB40M12	40	40	M12	0.43
SEB50M10	50	50	M10	0.78
SEB50M12	50	50	M12	0.78



**Material:**

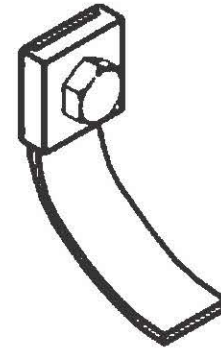
**Body :** Mild steel (Stainless Steel on request)

**Fasteners :** Stainless Steel

Other sizes / configurations available upon request.

## TOWER BOND CLAMP : FLAT SURFACES

'Smart Tech Metal' Tower bond connections are designed to bond either copper or Aluminium conductor to flat metal surfaces.

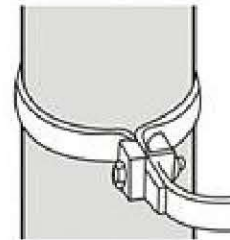


PRODUCT CODE	CONDUCTOR SIZE (MM)	BOLT SIZE	CONDUCTOR MATERIAL	WEIGHT (Kg)
SB26	25 X 3	10	COPPER	0.10

Material: Gunmetal.

## RWP BOND CLAMP

These are used for bonding tape to rain water pipes, handrails etc



PRODUCT CODE	CONDUCTOR SIZE (MM)	BOLT SIZE	CONDUCTOR MATERIAL	WEIGHT (Kg)
SRW26	26	M10	COPPER	0.2

Material: Gunmetal.

## WATERMAIN BOND

These are used for bonding copper tape to water main pipes



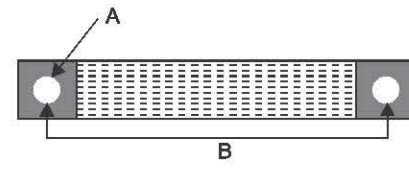
PRODUCT CODE	CONDUCTOR SIZE (MM)	BOLT SIZE	CONDUCTOR MATERIAL	WEIGHT (Kg)
SWMB26	26	M10	COPPER	0.15

Material: Gunmetal.

## FLEXIBLE FLAT COPPER BRAID BOND

### COPPER BRAID

PRODUCT CODE	LENGTH B (MM)	OVERALL DIMENSIONS (MM)	HOLE DIA A (MM)	CROSS-SEX AREA (MM <sup>2</sup> )	WEIGHT (Kg)
SCBB200/6/7	200	12 x 1	7.0	6.0	0.01
SCBB400/6/7	400	12 x 1	7.0	6.0	0.02
SCBB200/10/7	200	15 x 1.5	7.0	10	0.02
SCBB400/10/7	400	15 x 1.5	7.0	10	0.04
SCBB200/16/9	200	19 x 2.5	9.0	16	0.03
SCBB400/16/9	400	19 x 2.5	9.0	16	0.06
SCBB200/25/11	200	25 x 3	11	25	0.05
SCBB400/25/11	400	25 x 3	11	25	0.10
SCBB200/35/11	200	25 x 3.5	11	35	0.09
SCBB400/35/11	400	25 x 3.5	11	35	0.15
SCBB200/50/11	200	30 x 5	11	50	0.10
SCBB400/50/11	400	30 x 5	11	50	0.20
SCBB200/70/13	200	32 x 6	13	70	0.13
SCBB400/70/13	400	32 x 6	13	70	0.25
SCBB200/95/13	200	37 x 6	13	95	0.19
SCBB400/95/13	400	37 x 6	13	95	0.37
SCBB200/120/17	200	45 x 6	17	120	0.23
SCBB400/120/17	400	45 x 6	17	120	0.46
SCBB200/150/17	200	50 x 8	17	150	0.30
SCBB400/150/17	400	50 x 8	17	150	0.60



Flexible copper or flexible tinned copper braid terminated with pressed ferrule connector at each end, suitable for bonding gates, doors, fences etc.

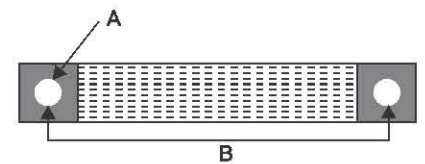
Other sizes, materials, hole sizes etc. available upon request.

**Material: Cu ETP, UNS C11000, BS C101**  
Available in Bare Copper & Tinned Copper

## FLEXIBLE CIRCULAR COPPER BRAID BOND

### COPPER BRAID

PRODUCT CODE	LENGTH B (MM)	OVERALL DIMENSIONS (MM)	HOLE DIA (MM)	CROSS-SEX AREA (MM <sup>2</sup> )	WEIGHT (Kg)
SCRB200/6/7	200	4.2	7.0	6.0	0.01
SCRB400/6/7	400	4.2	7.0	6.0	0.02
SCRB200/10/7	200	5.4	7.0	10	0.02
SCRB400/10/7	400	5.4	7.0	10	0.04
SCRB200/16/9	200	7.0	9.0	16	0.03
SCRB400/16/9	400	7.0	9.0	16	0.06
SCRB200/25/11	200	8.5	11	25	0.05
SCRB400/25/11	400	8.5	11	25	0.10
SCRB200/50/11	200	11.5	11	50	0.10
SCRB400/50/11	400	11.5	11	50	0.20
SCRB200/70/13	200	14.5	13	70	0.13
SCRB400/70/13	400	14.5	13	70	0.25
SCRB200/95/13	200	16.0	13	95	0.19
SCRB400/95/13	400	16.0	13	95	0.37



Flexible copper or flexible tinned copper braid terminated with pressed ferrule connectors at each end, suitable for bonding gates, doors, fences etc.

Other sizes, materials, hole sizes etc. available upon request.

**Material: Cu ETP, UNS C11000, BS C101**  
Available in Bare Copper & Tinned Copper

## DISCONNECTING LINKS

As periodic testing or inspections may require the isolation of earth connections this disconnecting link provides the means to do so.

PRODUCT CODE	L mm	W mm	H mm	Pack Qty.	Unit Wt. kg
SDL01	120	90	90	1	0.60

**Material :** 50x6 mm hard drawn copper bar  
**Base :** Steel Powder Coated (Colour - Black)  
**Fasteners :** Stainless Steel 316L (other grade on request)



## STANDARD EARTH BAR

PRODUCT CODE	DESCRIPTION	DIMANSIONS (MM) L x W x H
SEB6	6 WAY EARTH BAR	300 x 90 x 90
SEB8	8 WAY EARTH BAR	450 x 90 x 90
SEB10	10 WAY EARTH BAR	450 x 90 x 90
SEB12	12 WAY EARTH BAR	520 x 90 x 90
SEB14	14 WAY EARTH BAR	650 x 90 x 90
SEB16	16 WAY EARTH BAR	650 x 90 x 90
SEB18	18 WAY EARTH BAR	800 x 90 x 90
SEB20	20 WAY EARTH BAR	800 x 90 x 90
SEB22	22 WAY EARTH BAR	900 x 90 x 90
SEB24	24 WAY EARTH BAR	1050 x 90 x 90
SEB26	26 WAY EARTH BAR	1050 x 90 x 90
SEB28	28 WAY EARTH BAR	1250 x 90 x 90
SEB30	30 WAY EARTH BAR	1250 x 90 x 90



**Material :** 50x6 mm hard drawn copper bar  
**Base :** Steel Powder Coated (Colour - Black)  
**Fasteners :** Stainless Steel 316L  
 (other grade on request)

The standard connections are M10. Other sizes are available upon request.  
 Also available in Tin Plating on request.

## SINGLE DISCONNECTING LINK

PRODUCT CODE	DESCRIPTION	DIMANSIONS (MM) L x W x H
SEB6 - 1	6 WAY EARTH BAR C/W SINGLE DISC. LINK	475 x 90 x 90
SEB8 - 1	8 WAY EARTH BAR C/W SINGLE DISC. LINK	575 x 90 x 90
SEB10 - 1	10 WAY EARTH BAR C/W SINGLE DISC. LINK	725 x 90 x 90
SEB12 - 1	12 WAY EARTH BAR C/W SINGLE DISC. LINK	825 x 90 x 90
SEB14 - 1	14 WAY EARTH BAR C/W SINGLE DISC. LINK	925 x 90 x 90
SEB16 - 1	16 WAY EARTH BAR C/W SINGLE DISC. LINK	1025 x 90 x 90
SEB18 - 1	18 WAY EARTH BAR C/W SINGLE DISC. LINK	1125 x 90 x 90
SEB20 - 1	20 WAY EARTH BAR C/W SINGLE DISC. LINK	1275 x 90 x 90
SEB22 - 1	22 WAY EARTH BAR C/W SINGLE DISC. LINK	1375 x 90 x 90
SEB24 - 1	24 WAY EARTH BAR C/W SINGLE DISC. LINK	1475 x 90 x 90
SEB26 - 1	26 WAY EARTH BAR C/W SINGLE DISC. LINK	1575 x 90 x 90
SEB28 - 1	28 WAY EARTH BAR C/W SINGLE DISC. LINK	1725 x 90 x 90
SEB30 - 1	30 WAY EARTH BAR C/W SINGLE DISC. LINK	1825 x 90 x 90



**Material :** 50x6 mm hard drawn copper bar  
**Base :** Steel Powder Coated (Colour - Black)  
**Fasteners :** Stainless Steel 316L  
 (other grade on request)

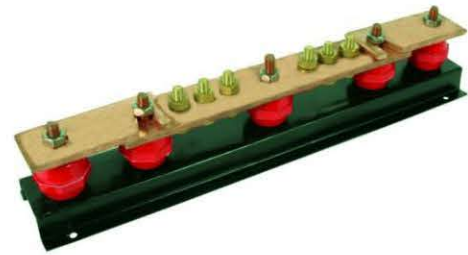
The standard connections are M10. Other sizes are available upon request.  
 Also available in Tin Plating on request.



## TWIN DISCONNECTING LINK

PRODUCT CODE	DESCRIPTION	DIMANSIONS (MM) L x W x H
SEB6-2	6 WAY EARTH BAR C/W TWIN DISC. LINK	550 x 90 x 90
SEB8-2	8 WAY EARTH BAR C/W TWIN DISC. LINK	650 x 90 x 90
SEB10-2	10 WAY EARTH BAR C/W TWIN DISC. LINK	800 x 90 x 90
SEB12-2	12 WAY EARTH BAR C/W TWIN DISC. LINK	900 x 90 x 90
SEB14-2	14 WAY EARTH BAR C/W TWIN DISC. LINK	1000 x 90 x 90
SEB16-2	16 WAY EARTH BAR C/W TWIN DISC. LINK	1100 x 90 x 90
SEB18-2	18 WAY EARTH BAR C/W TWIN DISC. LINK	1200 x 90 x 90
SEB20-2	20 WAY EARTH BAR C/W TWIN DISC. LINK	1350 x 90 x 90
SEB22-2	22 WAY EARTH BAR C/W TWIN DISC. LINK	1450 x 90 x 90
SEB24-2	24 WAY EARTH BAR C/W TWIN DISC. LINK	1550 x 90 x 90
SEB26-2	26 WAY EARTH BAR C/W TWIN DISC. LINK	1650 x 90 x 90
SEB28-2	28 WAY EARTH BAR C/W TWIN DISC. LINK	1800 x 90 x 90
SEB30-2	30 WAY EARTH BAR C/W TWIN DISC. LINK	1900 x 90 x 90

The standard connections are M10. Other sizes are available upon request.  
Also available in Tin Plating on request.



Material : 50x6 mm hard drawn copper bar  
Base : Steel Powder Coated (Colour - Black)  
Fasteners : Stainless Steel 316L  
(other grade on request)

## 600 AMP & 1000 AMP : INCL. TINNED

PRODUCT CODE	DESCRIPTION	DIMANSIONS (MM) L x W x H	WEIGHT (Kg.)
SEB600	600amp EARTH BAR	285 x 70 x 80	1.30
SEB1000	1000amp EARTH BAR	520 x 90 x 90	3.24
SEB600/T	600amp TINNED EARTH BAR	285 x 70 x 80	1.30
SEB1000/T	1000amp TINNED EARTH BAR	520 x 90 x 90	3.24

Earth bars are an efficient and convenient way of providing a common earth point.

'Smart Tech Metal' earth bars are supplied with a powder coated base as standard.

EBAR600 - 2 x M06 connections, 4 x M10 connections.

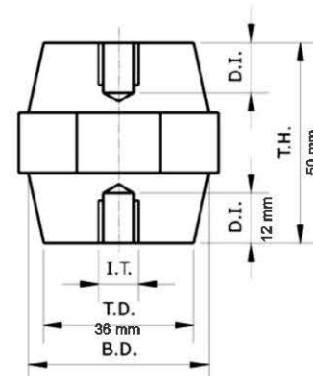
EBAR1000 - 9 x M08 connections, 5 x M12 connections.



Material : Hard drawn copper bar  
Base : Steel Powder Coated (Colour - Black)  
Fasteners : Stainless Steel 316L  
(other grade on request)

## INSULATORS

PRODUCT CODE	THREAD SIZE (IT)
SINS01	M8
SINS02	M10
SINS03	M12
SINS04	M14
SINS05	M16
SINS06	M20

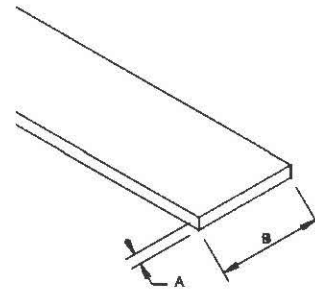
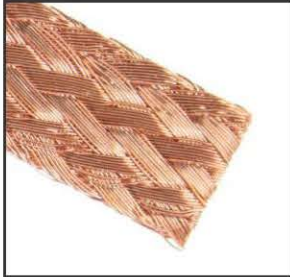


Available in Hexagonal, Cylindrical & Conical Shapes

## FLEXIBLE FLAT COPPER BRAID

'Smart Tech Metal' flexible flat copper braid is suitable for applications of earth bonding.

The braid can also be supplied as standard pre-cut and drilled braid bonds.

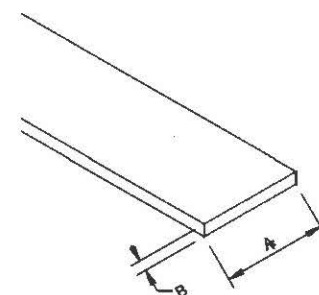


PRODUCT CODE	OVERALL NOMINAL	C.S.A. (MM <sup>2</sup> )	WEIGHT (Kg)
SCFB1201	12 x 1.0	6.0	0.055
SCFB1515	15 x 1.5	10	0.096
SCFB1925	19 x 2.5	16	0.16
SCFB2530	25 x 3.0	25	0.25
SCFB2535	25 x 3.5	35	0.34
SCFB3050	30 x 5.0	50	0.49
SCFB3260	32 x 6.0	70	0.63
SCFB3780	37 x 8.0	95	0.93
Other sizes and types of braid can be made to order.			
SCFB4560	45 x 6.0	120	1.15
SCFB5080	50 x 8.0	150	1.45

**Material: Cu-ETP, UNS C11000, BS C101**

## STAINLESS STEEL EARTHING TAPE

PRODUCT CODE	COND. SIZE (AxB)(mm)	WEIGHT (Kg/m)	COIL SIZE (m)
SCT2030	20x3	0.48	100
SCT2530	25x3	0.60	25 or 50
SCT2560	25x6	1.20	40
SCT3020	30x2	0.48	50
SCT3030	30x3	0.71	50
SCT5030	50x3	1.20	40
SCT5060	50x6	2.40	20



**Material: Stainless Steel AISI 316L & AISI 316TI**

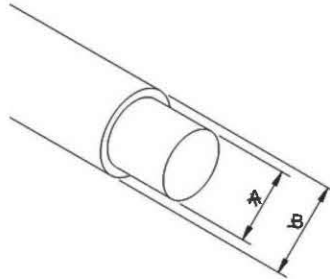
All Stainless steel tape supplied in specified sizes. other sizes on request.

All Stainless steel tape supplied & specified coil lengths and other coil length available on request.

## SOLID CIRCULAR COPPER : PVC COVERED

'Smart Tech Metal' offers a wide range of UV-stabilised PVC covered circular conductor in a range of different colours. These colours have been chosen to match the most common structural materials and will reduce the visual impact of a lightning protection conductor.

'B' is the conductor diameter including the PVC sheathing - 10mm.

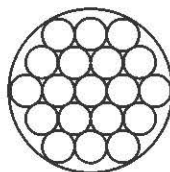


PRODUCT CODE	COLOUR	DIAMETER (A (mm))	COIL SIZE (m)	WEIGHT (Kg/m)
SBLCC	BLACK	8.0	50	0.49
SBRCC	BROWN	8.0	50	0.49
SGCC	GREY	8.0	50	0.49
SSCC	STONE	8.0	50	0.49
SWCC	WHITE	8.0	50	0.49

**Material: Copper conductor to BS EN 13601**

All PVC circular sold in the specified coil lengths only.

## COPPER CABLE : BARE STRANDED



**Material:**  
Soft drawn stranded copper cable to BS EN 60228.

\*\*Stranding may vary.

PRODUCT CODE	C.S.A. (mm <sup>2</sup> )	STRANDING No. / DIA (mm)**	NOMINAL DIAMETER (mm)	WEIGHT (Kg/m)
SCS006	6.0	7 / 1.04	3.12	0.05
SCS016	16	7/1.70	5.10	0.15
SCS025	25	7 / 2.14	6.42	0.23
SCS035	35	7 / 2.52	7.56	0.32
SCS050	50	19 / 1.78	8.90	0.43
SCS070	70	19 / 2.14	10.70	0.62
SCS095	95	19 / 2.52	12.60	0.86
SCS120	120	37 / 2.03	14.21	1.09
SCS150	150	37 / 2.25	15.75	1.33
SCS185	185	37 / 2.52	17.64	1.67
SCS240	240	61 / 2.25	20.25	2.20
SCS300	300	61 / 2.52	22.68	2.76
SCS400	400	61 / 2.85	25.65	3.53

## COPPER CABLE : GREEN / YELLOW PVC COVERED

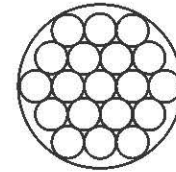
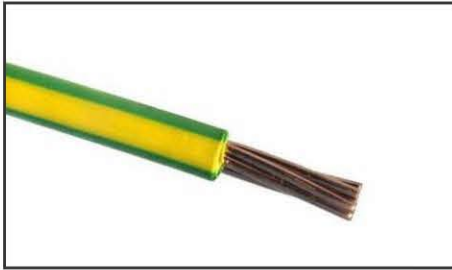


Illustration  
Purpose Only

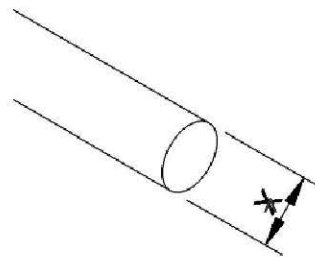
PRODUCT CODE	C.S.A. (mm <sup>2</sup> )	STRANDING No. / DIA (mm)**	WEIGHT (Kg/m)
SCGY016	16	7/1.70	0.15
SCGY025	25	7 / 2.14	0.23
SCGY035	35	7 / 2.52	0.32
SCGY050	50	19 / 1.78	0.43
SCGY070	70	19 / 2.14	0.62
SCGY095	95	19 / 2.52	0.86
SCGY120	120	37 / 2.03	1.09
SCGY150	150	37 / 2.25	1.33
SCGY185	185	37 / 2.52	1.67
SCGY240	240	61 / 2.25	2.20
SCGY300	300	61 / 2.52	2.76
SCGY400	400	61 / 2.85	3.53

**Material:**

Soft drawn stranded copper cable to BS EN 60228.

\*\*Stranding may vary.

## SOLID CIRCULAR COPPER : BARE

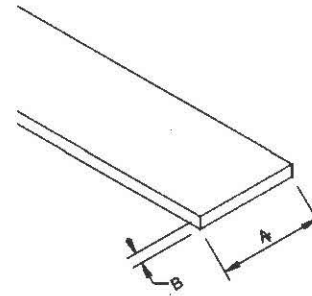


PRODUCT CODE	COND. SIZE (BxA)(mm)	WEIGHT (Kg/m)	COIL SIZE (m)
SC08	8.0	0.44	50

**Material:** Copper conductor to BS EN 13601

## COPPER TAPE : BARE

'Smart Tech Metal' offers a wide range of UV-stabilised PVC covered circular conductor in a range of different colours. These colours have been chosen to match the most common structural materials and will reduce the visual impact of a lightning protection conductor.



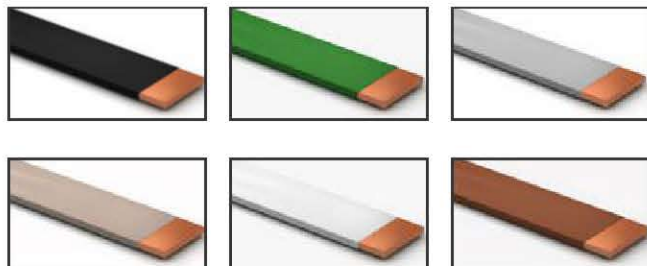
PRODUCT CODE	COND. SIZE (AxB)(mm)	C.S.A. (mm <sup>2</sup> )	WEIGHT (Kg/m)	COIL SIZE (m)
SCT1215	12.5x1.5	18.75	0.17	100
SCT1230	12.5x3	37.50	0.33	100
SCT2015	20 x 1.5	30.00	0.27	100
SCT2030	20x3	60.00	0.53	100
SCT2515	25 x 1.5	37.50	0.33	100
SCT2530	25x3	75.00	0.67	25 or 50
SCT2540	25x4	100	0.89	50
SCT2560	25x6	150	1.34	40
SCT3020	30x2	60.00	0.53	50
SCT3030	30x3	90.00	0.80	50
SCT3040	30x4	120	1.07	40
SCT3050	30x5	150	1.33	40
SCT3150	31 x 3	93.00	0.83	50
SCT3160	31 x 6	186	1.65	30
SCT3830	38x3	114	1.01	50
SCT3850	38x5	190	1.69	30
SCT3860	38x6	228	2.03	25
SCT4030	40x3	120	1.06	40
SCT4040	40x4	160	1.42	30
SCT4050	40x5	200	1.78	25
SCT4060	40x6	240	2.13	25
SCT5030	50x3	150	1.33	40
SCT5040	50x4	200	1.78	30
SCT5050	50x5	250	2.22	20
SCT5060	50x6	300	2.68	20

**Material: Copper to BS EN 13601**  
**Available In Tinned Copper & Bare Copper**

All copper tape sold in the specified coil lengths and other coil length available on request.

## COPPER TAPE : PVC COVERED

'Smart Tech Metal' offers a wide range of UV-stabilised PVC covered circular conductor in a range of different colours. These colours have been chosen to match the most common structural materials and will reduce the visual impact of a lightning protection conductor.



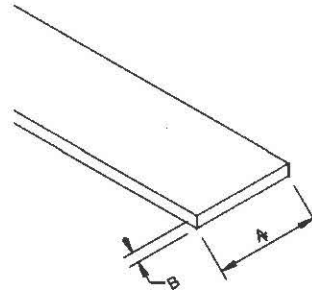
PRODUCT CODE	COND. SIZE (Y x X) (mm)	COLOUR	WEIGHT (Kg / m)	COIL SIZE (m)
SBL253	25 x 3	BLACK	0.78	25
SBR253	25 x 3	BROWN	0.78	25
SBR253	25 x 3	GREEN	0.78	25
SBY253	25 x 3	GREY	0.78	25
SB253	25 x 3	STONE	0.78	25
SB253	25 x 3	WHITE	0.78	25
SBR256	25 x 6	GREEN	1.53	20
SBR506	50 x 6	GREEN	2.96	20

**Material: Copper to BS EN 13601**

All PVC covered copper tape sold in the specified coil lengths & any other length on request.

COLOUR	COLOUR
BLACK	
GREEN	
GREY	
STONE	
WHITE	
BROWN	

## COPPER BAR : PLAIN

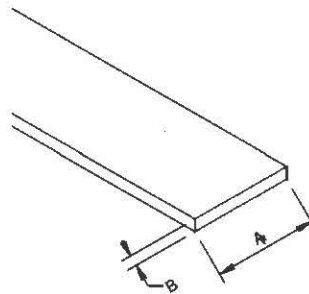


PRODUCT CODE	COND. SIZE (AxB)(mm)	C.S.A. (mm <sup>2</sup> )	LENGTH (m)	WEIGHT (Kg/m)
SCB253	25 x 3	75	2.0	0.67
SCB256	25 x 6	150	2.0	1.34
SCB323	32 x 3	93	2.0	0.83
SCB383	38 x 3	114	2.0	1.01
SCB386	38 x 6	228	2.0	2.03
SCB506	50 x 6	300	2.0	2.67
SCB5010	50 x 10	500	2.0	4.45
SCB606	60 x 6	600	2.0	3.20
SCB756	75 x 6	450	2.0	4.00
SCB1006	100 x 6	600	2.0	5.34

**Material:** : Cu ETP, UNS C11000, BS C101  
 Available in : Bare Copper / Tinned Copper

Other sizes are available on request.  
 Other lengths are available on request.

## ALUMINIUM TAPE : BARE



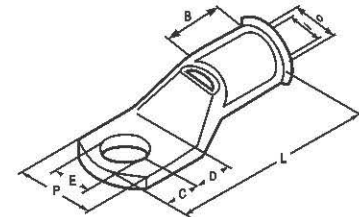
PRODUCT CODE	OVERALL NOMINAL SIZE (A x B) (mm)	LENGTH (m)	WEIGHT (Kg/m)
SAT2530	25 x 3	50	0.21
SAT3030	30 x 3	50	0.25
SAT2560	25 x 6	50	0.42
SAT4060	40 x 6	50	0.67
SAT5060	50 x 6	50	0.85

**Material:** High Conductivity Aluminum Grade 6063  
 All aluminium tape sold in the specified coil lengths only.

# CRIMPING TYPE COPPER TUBULAR CABLE TERMINAL ENDS - BELL MOUTH

Note : All dimensions in mm

Prod. Code	Cable mm <sup>2</sup>	Stud Hole E	Dimensions						
			I	O	B	P	C	D	L
STB-10-5	10	M5.2	4.5	6.2	10	11	6	7	26
STB-10-6	10	M6.5	4.5	6.2	10	11	6	7	26
STB-10-8	10	M8.4	4.5	6.2	10	12	6	9	28
STB-10-10	10	M10.5	4.5	6.8	11	15	8	11	33
STB-10-12	10	M13	4.5	6.8	11	18	9	11	36
STB-16-5	16	M5.2	5.4	7.1	12	12	7	7	30
STB-16-6	16	M6.5	5.4	7.1	12	12	7	7	30
STB-16-8	16	M8.4	5.4	7.1	12	12	7	7	30
STB-16-10	16	M10.5	5.5	7.6	12	15	8	12	36
STB-16-13	16	M13	5.5	7.6	12	17	11	13	39
STB-16-16	16	M17	5.5	7.6	12	21	13	14	44
STB-20-8	20	M8.4	6	7.7	12	12	7	7	32
STB-25-6	25	M6.5	6.8	8.8	12	13	7	7	30
STB-25-8	25	M8.4	6.8	8.8	12	13	7	7	30
STB-25-10	25	M10.5	6.8	8.8	13	15	10	11	38
STB-25-12	25	M13	6.8	9.2	15	17	10	12	41
STB-25-16	25	M17	6.8	9.2	15	21	13	14	47
STB-35-6	35	M6.5	8.2	10.6	13.5	15.3	9	9	37
STB-35-8	35	M8.4	8.2	10.6	13.5	15.3	9	9	37
STB-35-10	35	M10.5	8.2	10.6	13.5	15.3	9	9	37
STB-35-12	35	M13	8.2	10.6	13.5	15.3	10	12	41
STB-35-16	35	M17	8.2	10.6	15	22	13	14	47
STB-50-6	50	M6.5	9.5	12.4	17	17.8	9	10	42
STB-50-8	50	M8.4	9.5	12.4	17	17.8	9	10	42
STB-50-10	50	M10.5	9.5	12.4	17	17.8	9	10	42
STB-50-13	50	M13	9.5	12.4	17	20	10	12	45
STB-50-14	50	M14.5	9.5	12.4	18	22	15	15	54
STB-50-16	50	M17	9.5	12.4	18	22	15	15	54
STB-50-20	50	M21	9.5	12.4	18	26	16	18	60
STB-70-8	70	M8.4	11.3	14.6	18.5	21	11	11	47
STB-70-10	70	M10.5	11.3	14.6	18.5	21	11	11	47
STB-70-12	70	M13	11.3	14.6	18.5	21	11	11	47
STB-70-14	70	M14.5	11.3	14.6	18.5	22	14	15	55
STB-70-16	70	M17	11.3	14.6	18.5	26	14	16	56
STB-70-20	70	M21	11.3	14.6	18.5	28	16	18	63
STB-95-8	95	M8.4	13.5	17.4	21	25	12	13	53
STB-95-10	95	M10.5	13.5	17.4	21	25	12	13	53
STB-95-12	95	M13	13.5	17.4	21	25	12	13	53
STB-95-14	95	M14.5	13.5	17.4	22	25	14	15	55
STB-95-16	95	M17	13.5	17.4	22	25	14	16	56
STB-95-20	95	M21	13.5	17.4	22	28	15	16	63
STB-120-8	120	M8.4	15	19.4	23	28	13	14	60
STB-120-10	120	M10.5	15	19.4	23	28	13	14	60
STB-120-12	120	M13	15	19.4	23	28	13	14	60
STB-120-14	120	M14.5	15	19.4	23	28	13	14	60
STB-120-16	120	M17	15	19.4	23	28	16	16	64
STB-120-20	120	M21	15	19.4	23	28	16	20	68
STB-150-8	150	M8.4	16.5	21.2	27	30	16	16	70
STB-150-10	150	M10.5	16.5	21.2	27	30	16	16	70
STB-150-12	150	M13	16.5	21.2	27	30	16	16	70
STB-150-14	150	M14.7	16.5	21.2	27	30	16	16	70
STB-150-16	150	M17	16.5	21.2	27	30	16	16	70
STB-150-20	150	M21	16.5	21.2	27	30	16	16	73
STB-185-10	185	M10.5	18.5	23.5	32	34	17	19	80
STB-185-12	185	M13	18.5	23.5	32	34	17	19	80
STB-185-14	185	M14.7	18.5	23.5	32	34	17	19	80
STB-185-16	185	M17	18.5	23.5	32	34	17	19	80
STB-185-20	185	M21	18.5	23.5	32	34	17	19	80
STB-240-10	240	M10.5	21	26.5	39	38	20	21	94
STB-240-12	240	M13	21	26.5	39	38	20	21	94
STB-240-14	240	M14.5	21	26.5	39	38	20	21	94
STB-240-16	240	M17	21	26.5	39	38	20	21	94
STB-240-20	240	M21	21	26.5	39	38	20	21	94



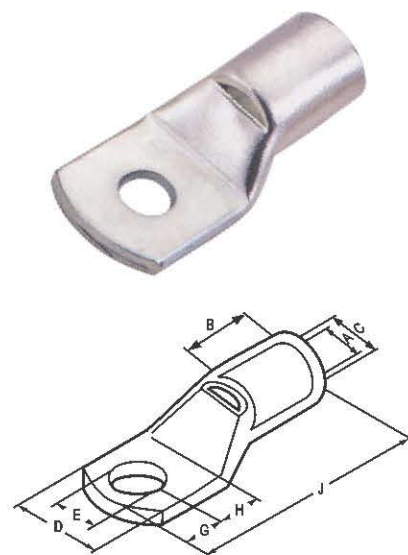
Material : E - Copper  
Finish : Copper / Electro Tinned



## CRIMPING TYPE COPPER TUBULAR CABLE TERMINAL ENDS

Note : All dimensions in mm

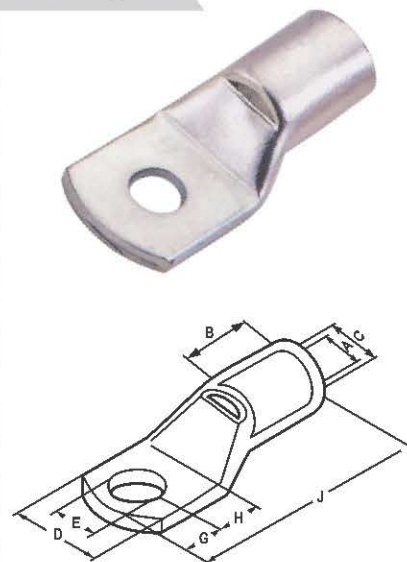
Prod. Code	Cable mm <sup>2</sup>	Stud Hole E	Dimensions						
			A	C	D	G	H	B	J
ST1.5-4	1.5	4.2	1.8	3.7	8	4	5	6	17
ST1.5-5		5.2	1.8	3.7	8	4	5	6	17
ST1.5-6		6.5	1.8	3.7	10	4	6	6	18
ST2.5-4	2.5	4.2	2.4	4	8	4	5	8	19
ST2.5-5		5.2	2.4	4	8	4	5	8	19
ST2.5-6		6.5	2.4	4	10	5	6	8	21
ST2.5-8		8.4	2.4	4.2	12	6	9	8	26
ST4-4	4	4.2	3.1	4.8	10	5	6	8	21
ST4-5		5.2	3.1	4.8	10	5	6	8	21
ST4-6		6.5	3.1	4.8	10	5	6	8	21
ST4-8		8.4	3.1	4.8	12	6	9	8	26
ST6-5	6	5.2	3.8	5.5	10	5	6	10	24
ST6-6		6.5	3.8	5.5	10	5	6	10	24
ST6-8		8.4	3.8	5.5	12	6	9	10	28
ST6-10		10.5	3.8	6	15	8	1	10	32
ST10-6	10	6.5	4.5	6.2	11	6	7	10	26
ST10-8		8.4	4.5	6.2	12	6	9	10	28
ST10-10		10.5	4.5	6.8	15	8	11	11	33
ST16-6	16	6.5	5.4	7.1	12	7	7	12	30
ST16-8		8.4	5.4	7.1	12	7	7	12	30
ST16-10		10.5	5.4	7.6	15	8	2	12	36
ST16-12		13	5.4	7.6	17	11	3	12	39
ST20-8	20	8.4	6	7.7	12	7	7	12	32
ST25-6	25	6.5	6.8	8.8	13	7	7	12	30
ST25-8		8.4	6.8	8.8	13	7	7	12	30
ST25-10		10.5	6.8	8.8	15	10	11	13	38
ST25-12		13	6.8	9.2	17	10	12	15	41
ST35-6	35	6.5	8.2	10.6	16	9	9	13.5	37
ST35-8		8.4	8.2	10.6	16	9	9	13.5	37
ST35-10		10.5	8.2	10.6	16	9	9	13.5	37
ST35-12		13	8.2	10.6	18	10	12	13.5	41
ST35-16		17	8.2	10.6	22	14	18	13.5	50
ST50-8	50	8.4	9.5	12.4	18	9	10	17	42
ST50-10		10.5	9.5	12.4	18	9	10	17	42
ST50-12		13	9.5	12.4	20	10	12	17	45
ST50-16		17	9.5	12.4	22	15	15	18	54
ST70-8	70	8.4	11.3	14.6	21	11	11	18.5	47
ST70-10		10.5	11.3	14.6	21	11	11	18.5	47
ST70-12		13	11.3	14.6	21	11	11	18.5	47
ST70-14		14.5	11.3	14.6	22	14	15	18.5	55
ST70-16		17	11.3	14.6	26	14	16	18.5	56



Material: E - Copper  
Finish : Copper / Electro Tinned

## CRIMPING TYPE COPPER TUBULAR CABLE TERMINAL ENDS

Prod. Code	Cable mm <sup>2</sup>	Stud Hole E	Dimensions						
			A	C	D	G	H	B	J
ST95-10	95	10.5	13.5	17.4	25	12	13	21	53
ST95-12		13	13.5	17.4	25	12	13	21	53
ST95-14		14.5	13.5	17.4	25	14	15	22	55
ST120-12	120	13	15	19.4	28	13	14	23	60
ST120-14		14.5	15	19.4	28	13	14	23	60
ST2.5-16		17	15	19.4	28	16	16	23	64
ST150-12	150	13	16.5	21.2	30	16	16	27	70
ST150-14		14.5	16.5	21.2	30	16	16	27	70
ST150-16		17	16.5	21.2	30	16	16	27	70
ST150-20		21	16.5	21.2	30	19	16	27	73
ST185-12	185	13	18.5	23.5	34	17	19	32	80
ST185-14		14.5	18.5	23.5	34	17	19	32	80
ST185-16		17	18.5	23.5	34	17	19	32	80
ST185-20		21	18.5	23.5	34	17	19	32	80
ST240-12	240	13	21	26.5	38	20	20	37	94
ST240-14		17	21	26.5	38	20	20	37	94
ST240-16		17	21	26.5	38	20	20	37	94
ST240-20		21	21	26.5	38	20	20	37	94
ST240-BL		-	21	26.5	38	-	-	37	94
ST300-12	300	13	23.5	30	43	22	22	42	102
ST300-14		14.5	23.5	30	43	22	22	42	102
ST300-16		17	23.5	30	43	22	22	42	102
ST300-20		21	23.5	30	43	22	22	42	102
ST300-BL		-	23.5	30	43	-	-	42	102
ST300-12	400	13	28.5	36.5	52.5	26	26	44	114
ST400-12		14.5	28.5	36.5	52.5	26	26	44	114
ST400-16		17	28.5	36.5	52.5	26	26	44	114
ST400-20		21	28.5	36.5	52.5	26	26	44	114
ST400-BL		-	28.5	36.5	52.5	-	-	44	114
ST500-16	500	17	30	39	56	28	28	48	121
ST500-20		21	30	39	56	28	28	48	121
ST500-BL		-	30	39	56	-	-	48	121
ST630-16	630	17	35	45	63.8	33	33	58	144
ST630-20		21	35	45	63.8	33	33	58	144
ST630-BL		-	35	45	63.8	-	-	58	144
ST630-16	*630	16	35	41.5	61	25	25	70	144
ST630-20	*630	20	35	41.5	61	25	25	70	144
ST800-BL	800	-	39	50.6	72	-	-	78	170
ST100-BL	1000	-	43	56.2	78.5	-	-	90	200



Note : All dimensions in mm

\* 630 for Low voltage Connection

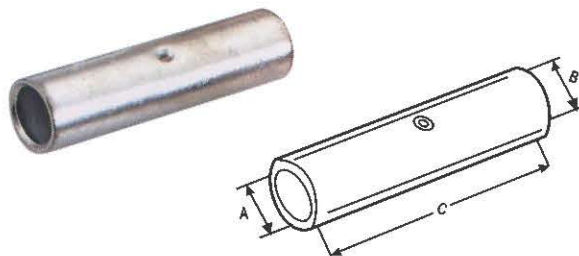
Material: E - Copper  
Finish : Copper / Electro Tinned

# CRIMPING TYPE COPPER TUBULAR IN - LINE CONNECTORS (LINKS)

## Long Barrel Connectors

Note : All dimensions in mm

Prod. Code	Cable mm <sup>2</sup>	Dimensions		
		A	B	C
SC1.5	1.5	1.8	3.7	22
SC2.5	2.5	2.4	4	22
SC4	4	3.1	4.8	22
SC6	6	3.8	5.5	22
SC10	10	4.5	6.2	22
SC16	16	5.4	7.1	44
SC20	20	6.3	7.7	44
SC25	25	6.8	8.8	47
SC35	35	8.2	10.6	47
SC50	50	9.5	12.4	47
SC70	70	11.3	14.7	50
SC95	95	13.5	17.4	54
SC120	120	15	19.4	65
SC150	150	16.5	21.2	65
SC185	185	18.5	23.5	65
SC240	240	21	26.5	89
SC300	300	23.5	30	89
SC400	400	28.5	36.5	90
SC500	500	30	39	115
SC550	550	31.7	41.5	115
SC630	630	35	45	115
SC800	800	39	50.6	230
SC1000	1000	43	56.2	230

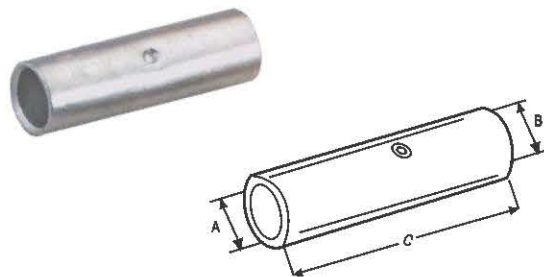


Material: E - Copper

Finish : Copper / Electro Tinned

## Short Barrel Connectors

Prod. Code	Cable mm <sup>2</sup>	Dimensions		
		A	B	C
SL1.5	1.5	1.8	3.7	12
SL2.5	2.5	2.4	4	15
SL4	4	3.1	4.8	15
SL6	6	3.8	5.5	15
SL10	10	4.5	6.2	20
SL16	16	5.4	7.1	20
SL20	20	6.3	7.7	22
SL25	25	6.8	8.8	32
SL35	35	8.2	10.6	36
SL50	50	9.5	12.4	40
SL70	70	11.3	14.7	45
SL95	95	13.5	17.4	45
SL120	120	15	19.4	45
SL150	150	16.5	21.2	55
SL185	185	18.5	23.5	60
SL240	240	21	26.5	80
SL300	300	23.5	30	85
SL400	400	28.5	36.5	85
SL500	500	30	39	100
SL550	550	31.7	41.5	110
SL630	630	35	45	110
SL800	800	39	50.6	150
SL1000	1000	43	56.2	170



Note : All dimensions in mm

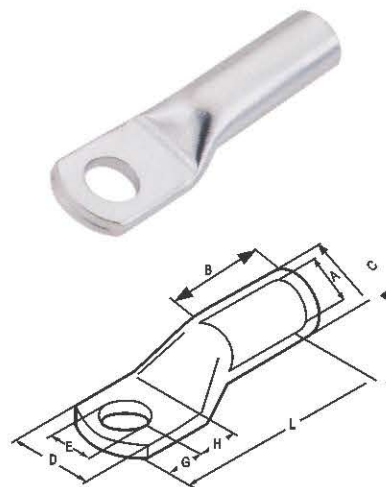
## LONG BARREL TINNED COPPER CABLE TERMINAL ENDS

Note : All dimensions in mm

Prod. Code	Cable mm <sup>2</sup>	Stud Hole E	Dimensions							
			A	C	D	F	G	H	B	J
STL6-8	6	8.4	3.8	5.5	12	1	6	9	11	29
STL10-8	10	8.4	4.5	6.2	12	1.2	6	9	11	29
STL16-8	16	8.4	5.4	7.1	12	1.4	7	7	15	35
STL25-8	25	8.4	6.8	8.8	16	2	7	7	15	35
STL35-8	35	8.4	8.2	10.6	15.3	2.4	9	9	15	38
STL50-12	50	13	9.5	12.4	18	2.9	10	11	20	47
STL70-12	70	13	11.2	14.7	21	3.5	12	13	22	54
STL95-12	95	13	13.5	17.4	25	3.9	13	13	24	59
STL120-12	120	13	15	19.4	28	4.4	14	14	27	65
STL150-12	150	13	16.5	21.2	30	4.7	16	16	32	75
STL185-12	185	13	18.5	23.5	34	5	17	17	39	85
STL240-16	240	17	21	26.5	38	5.5	20	20	46	100
STL300-20	300	21	23.5	30	43	6.5	22	22	51	110
STL400-20	400	21	28.5	36.5	50.1	8	26	26	53	123
STL500-20	500	21	30	39	56	9	28	28	58	134

Material: E - Copper

Finish : Copper / Electro Tinned



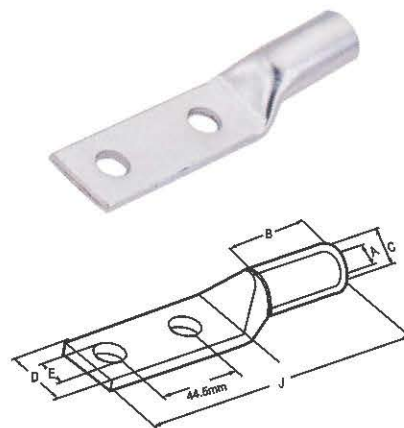
## COPPER CABLE TERMINAL ENDS WITH EXTENDED PALM (2 HOLE)

Note : All dimensions in mm

Prod. Code	Cable mm <sup>2</sup>	Stud Hole E	Dimensions				
			A	C	D	B	J
ST162E10	16	10.5	5.4	7.6	14.5	16	100
ST252E10	25	10.5	6.8	8.8	15	16	100
ST352E10	35	10.5	8.2	10.6	16.5	16	100
ST502E10	50	10.5	9.5	12.4	17	25	109
ST502E12		13	9.5	12.4	17	25	109
ST702E10	70	10.5	11.3	14.7	21	30	114
ST702E12		13	11.3	14.7	21	30	114
ST952E10	95	10.5	13.5	17.4	25	30	116
ST952E12		13	13.5	17.4	25	30	116
ST1202E10	120	10.5	15	19.4	27.5	35	122
ST1202E12		13	15	19.4	27.5	35	122
ST1502E10	150	10.5	16.5	21.2	30	40	126
ST1502E12		13	16.5	21.2	30	40	126
ST1852E10	185	10.5	18.5	23.5	33.5	42	132
ST1852E12		13	18.5	23.5	33.5	42	132
ST2402E10	240	10.5	21	26.5	38.5	50	143
ST2402E12		13	21	26.5	38.5	50	143
ST3002E10	300	13.7	23.5	30	43	55	144
ST4002E10	400	13.7	28.5	36.5	52.5	60	149
ST5002E10	500	13.7	30	39	56	65	160
ST6302E10	630	13.7	35	45	36.8	75	160

Material: E - Copper

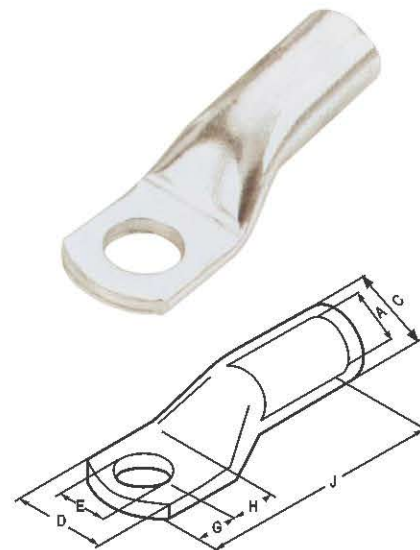
Finish : Copper / Electro Tinned



# HIGH VOLTAGE COPPER TERMINALS - 33 KV

Note : All dimensions in mm

Prod. Code	Cable mm <sup>2</sup>	Stud Hole E	Dimensions					
			A	C	D	G	H	J
SVCT25-8	25	8	6.8	10	14	8	9	65
SVCT25-10		10	6.8	10	18	11	13	72
SVCT25-12		12	6.8	10	21	14	16	78
SVCT35-12	35	12	8.2	12.5	21	14	16	79
SVCT35-16		16	8.2	12.5	26	17	19	85
SVCT50-12	50	12	9.5	14.5	21	14	16	79
SVCT50-16		16	9.5	14.5	26	17	19	85
SVCT70-12	70	12	11	16	28	14	16	81
SVCT70-16		16	11	16	30	17	19	87
SVCT95-12	95	12	13.5	19	28	14	16	91
SVCT95-14		14	13.5	19	29	16	18	95
SVCT95-16		16	13.5	19	30	17	20	97
SVCT120-12	120	12	15	20.5	31	14	16	97
SVCT120-14		14	15	20.5	31	16	18	101
SVCT150-12	150	12	16.5	23	32	14	16	97
SVCT150-14		14	16.5	23	32	16	18	101
SVCT185-14	185	14	17	23.5	32.5	16	18	101
SVCT240-14	240	14	19.2	25.5	44	16	18	105
SVCT300-14	300	14	23.5	32	43	16	18	105
SVCT400-14	400	14	27	38	51	19	22	140
SVCT400-16		16	27	38	51	19	22	140
SVCT400-20		20	27	38	51	23	24	146
SVCT500-16	500	16	30.3	41	56.5	19	22	147
SVCT500-20		20	30.3	41	56.5	23	24	153
SVCT630-16	630	16	33.4	43	61.5	19	22	159
SVCT630-20		20	33.4	43	61.5	23	24	165



Material: E - Copper  
Finish : Copper / Electro Tinned

## SPECIAL CABLE TERMINAL ENDS



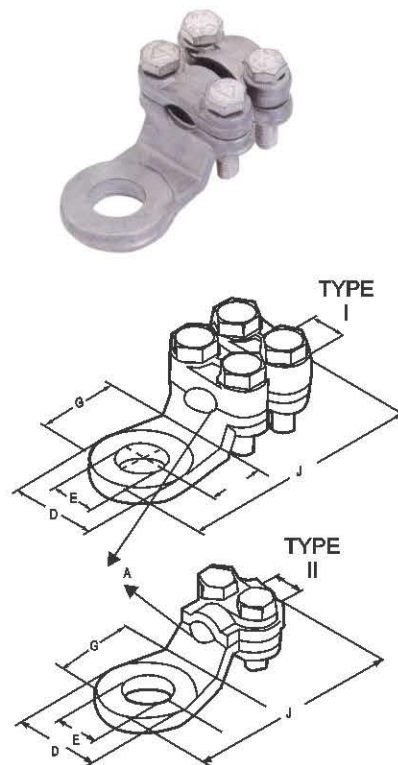
We have specially developed these terminals for supply to leading manufacturers of panel builders, distribution boards, transformers, railways, power stations, etc. 'Smart Tech Metal' has all the expertise needed in developing & manufacturing special types of terminal ends as per customers design & specifications.

## MECHANICAL CABLE LUGS - BOLTED WITH 2 SCREWS AND 4 SCREWS

Note : All dimensions in mm

Prod. Code	Cable mm <sup>2</sup>	Dimensions				Screw	Type
		A	G	D	J		
S2B10	10	4	6	15	32.5	M - 5	I
S2B16	16	5.1	8.5	17	37	M - 5	I
S2B25	25	6.3	8.5	18.75	42	M - 5	I
S2B35	35	7.5	10.5	21.5	4	M - 5	I
S4B50	50	9.5	10.5	23	56.5	M - 6	II
S4B75	75	11	13.25	26	61	M - 6	II
S4B100	100	13	14.3	29	65	M - 6	II
S4B120	120	14	14.8	32	71	M - 6	II
S4B170	170	16	16	33	81	M - 8	II
S4B200	200	17	17	35	85	M - 8	II
S4B250	250	18	17	38	87.5	M - 8	II
S4B300	300	21	19.8	45	118	M - 10	II
S4B400/500	400 / 500	25.5	22	53	132	M - 10	II
S4B700	700	34	22	60	150	M - 10	II

Material: Brass  
Finish : Electro Plated

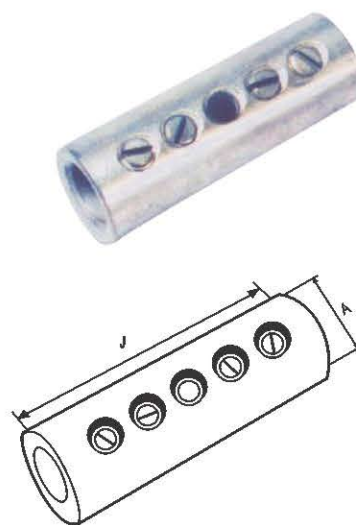


## MECHANICAL CABLE LUGS - BOLTED WITH 2 SCREWS AND 4 SCREWS

Note : All dimensions in mm

Prod. Code	Cable mm <sup>2</sup>	Dimensions	
		A	J
STBSS6	6	3.5	20
STBSS10	10	4.4	30
STBSS16	16	5.5	40
STBSS25	25	6.8	45
STBSS35	35	8.2	45
STBSS50	50	9.5	48
STBSS70	70	11.2	52
STBSS95	95	13.4	55
STBSS120	120	15	55
STBSS150	150	16.5	60
STBSS185	185	19	60
STBSS240	240	21	65
STBSS300	300	23.5	65

Material: Brass  
Finish : Electro Tinned



## ALUMINIUM - COPPER BI-METAL TERMINALS (WITH COPPER PALMS)

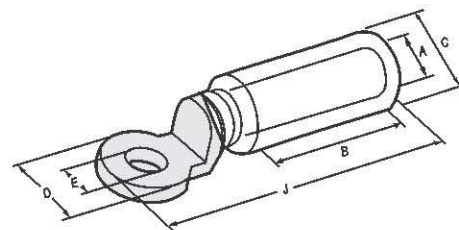
Al-Cu Bi-metal terminals are used for connecting aluminium cables to copper busbars.

**Crimping Test Applied Force :**

- Upto 240 mm<sup>2</sup> -13 x 105 N
- 300 mm<sup>2</sup> to 630 mm<sup>2</sup> – 2.0x105 N
- Above 630 mm<sup>2</sup> - 43 x 105 N

**Construction :** Forged circular copper palm is friction welded to an EC grade Aluminium circular barrel thus achieving to test possible transition.

Made to order Bi-metallic terminals as per the customers specifications / samples / diagram are also available.



Prod. Code	Cable mm <sup>2</sup>	Dimensions					
		A	C	D	E	J	B
SBT16-10	16	5.5	16	20	10.3	79	43
SBT25-10	25	6.5	16	20	10.3	79	43
SBT35-10	35	8	16	20	10.3	79	43
SBT50-12	50	9	20	25	12.8	85	43
SBT70-12	70	11	20	25	12.8	85	43
SBT95-12	95	12.5	20	25	12.8	85	43
SBT120-12	120	13.7	25	30	12.8	108	59
SBT150-12	150	15.5	25	30	12.8	108	59
SBT185-14	185	17	32	35	14.5	115	59
SBT240-14	240	19.5	32	35	14.5	115	59
SBT300-16	300	23.3	40	36	16.5	137	85
SBT400-16	400	26	40	36	16.5	153.5	85
SBT500-16	500*	29.1	47	60x60	4Ø 9	196	95
SBT630 4X9	630*	33.5	47	60x60	4Ø 9	196	95
SBT800 4X9	800*	37.5	53	80x80	4Ø 9	232	100
SBT1000 4X9	1000*	42	60	80x80	4Ø 9	256	126
SBT1300 4X11	1300*	46.5	65	80x80	4Ø 11	267	136

**Note :** All dimensions in mm

\* Square Palm

## TECHNICAL DATA

General Specification : BS standard BS 6121 part 1989

- Material :
- a) Glands - Bodies, Caps & Rings are manufactured from brass.
  - b) Seals - Nitrile rubber
  - c) Shrouds / Sleeves - Black Poly Vinyl Chloride (PVC)
  - d) Earth tag - Natural Brass
  - e) Locknut - Natural Brass / Galvanised

Finish : Natural Brass / Nickle Plated.

Entry Thread : Isometric (Imperial thread, NPT thread, PC thread available on request.)

## GLAND SELECTION CHART

The gland sizes recommended are in accordance with calculations based on cables manufactured to BS 6346 (1969) and 'Smart Tech Metal' does not accept any responsibility for cables that prove to deviate materially from the nominal diameters quoted in BS 6346 (1969).

### 600/1000V stranded copper conductors PVC insulated with steel wire steel wire armour & PVC sheathed overall

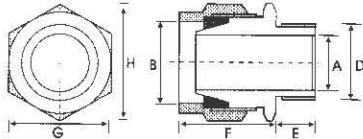
Cable Size Conductor		Number of Cores												
Nom.area mm <sup>2</sup>	Neutral	1	2	3	31/2	4	5	7	10	12	19	27	37	48
1.5	-	-	20/16	20/16	-	20S	20S	20s	20	20	25	25	32	32
2.5	-	-	20S	20S	-	20S	20S	20	25	25	25	32	32	40
4	-	-	20S	20	-	20	20	25	25	32	32	40		
6	-	-	20	20	-	20								
10	-	-	25	25	-	25								
16	-	-	25	25	-	25								
25	16	-	32	32	32	32								
			25	25		32								
35	16	-	32	32	32	40								
			25	32		32								
50	25	25	32	32	32	40								
70	35	25	32	40	40	40								
95	50	25	40	40	50S	50S								
120	70	32	40	50S	50	50								
150	70	32	50S	50	50	63S								
185	95	32	50	50	63S	63								
240	120	40	50	63S	63	75S								
300	150	40	63S	63	75S	75								
300	185	-	-	-	75	-								
400	185	50S	63	75S	90	90								
500	-	50	-	-	-	-								
630	-	50	-	-	-	-								
800	-	63S	-	-	-	-								
1000	-	63	-	-	-	-								



## BW CABLE GLAND (2 PART)

**Application :** For use with armour or braided cable, secures armouring & provides electrical continuity between armour & gland entry component mainly in dry and indoor condition

**Design Features :** 2 part armour lock, Knurled armour lock produces a low resistance earth clip.  
Also available in CIEL (cast integral earth lug.) for orders add "C" to prod. Code



Product Code	Size	Cable Dimensions Accomodate			Gland Dimensions				
		Under Armour Dia. A Max. mm	overall Dia. B Max. mm	Armour wire dia. C mm	ISO Entry Thread		Approx length from shoulder F mm	Hexagon Size	
					Dia. D mm	Length E mm		Across flat G mm	Across Corners H mm
SBW-16	16	8.60	13.50	0.90	16	10	23.00	20.00	23.00
SBW-20S	20S	12.30	17.00	0.90/1.25	20	10	23.00	23.00	24.00
SBW-20	20	14.30	20.00	0.90/1.25	20	10	30.00	25.00	27.00
SBW-25S	25S	18.00	23.80	1.25/1.60	25	10	30.00	31.00	32.50
SBW-25	25	20.40	27.00	1.25/1.60	25	10	32.00	30.00	38.50
SBW-32	32	26.50	33.00	1.60/2.00	32	10	36.00	41.50	45.50
SBW-40S	40S	31.00	37.00	1.60/2.00	40	15	36.00	45.00	50.00
SBW-40	40	32.50	43.00	1.60/2.00	40	15	40.00	49.00	54.00
SBW-50S	50S	37.80	48.00	2.00/2.50	50	15	40.00	58.00	65.00
SBW-50	50	44.00	53.00	2.00/2.50	50	15	45.00	62.30	69.50
SBW-63S	63S	50.50	60.50	2.50	63	15	45.00	70.00	77.00
SBW-63	63	56.50	65.50	2.50	63	15	50.00	76.30	85.00
SBW-75S	75S	62.50	72.00	2.50	75	15	50.00	85.00	95.00
SBW-75	75	67.50	78.50	2.50/3.15	75	15	75.00	90.50	99.00
SBW-90	90	80.00	93.00	3.15	90	20	75.00	112.00	125.00

## BW CABLE GLAND (3 PART)

Similar in application and design to the BW (2 part) gland. However an extra component is added, a cone ring. This prevents rotation of the wire and is used instead of a knurled cone.

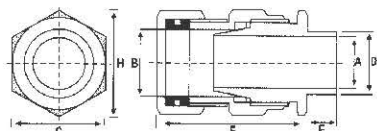


## CW CABLE GLAND (3 PART)

**Application :** For use with armoured cable, secures armouring and provides electrical continuity between armour and gland entry component. Also provides a seal on the outer sheath of the cable thus ensuring no damage to cable sheathing. These are used both indoor and outdoor, in all climatic conditions as it is weatherproof & waterproof.

**Design Features :** 2 part Armour/Earth Lock, Knurled Armour Lock produces a low resistance earth clip.

Also available in CIEL (cast integral earth lug) for orders add " C " to prod. code.



Product Code	Size	Cable Dimensions Accomodate			Gland Dimensions				
		Under Armour Dia. A Max. mm	overall Dia. B Max. mm	Armour wire dia. C mm	ISO Entry Thread		Approx length from shoulder F mm	Hexagon Size	
					Dia. D mm	Length E mm		Across flat G mm	Across Corners H mm
SCW-16	16	8.60	13.50	0.90	16	10	40.00	20.00	23.00
SCW-20S	20S	12.50	17.00	0.90/1.25	20	10	47.00	22.00	29.00
SCW-20	20	14.40	20.50	0.90/1.25	20	10	47.00	26.00	29.00
SCW-25S	25S	17.80	23.80	1.25/1.60	25	10	50.00	31.00	34.00
SCW-25	20S	20.40	27.00	1.25/1.60	25	10	50.00	34.00	38.50
SCW-32	32	26.50	33.00	1.60/2.00	32	10	55.00	41.50	46.50
SCW-40S	40S	31.00	37.00	1.60/2.00	40	15	60.00	45.00	50.00
SCW-40	40	32.50	40.80	1.60/2.00	40	15	60.00	49.00	54.00
SCW-50S	50S	37.80	45.00	2.00/2.50	50	15	65.00	51.00	64.00
SCW-50	50	44.00	51.50	2.00/2.50	50	15	65.00	62.30	69.50
SCW-63S	63S	50.50	60.50	2.50	63	15	70.00	70.00	78.00
SCW-63	63	56.50	65.50	2.50	63	15	70.00	76.30	85.00
SCW-75S	75S	62.50	72.00	2.50	75	15	75.00	85.00	95.00
SCW-75	75	67.50	78.50	2.50/3.15	75	15	75.00	91.00	112.00
SCW-90	90	80.00	90.00	3.15	90	20	90.00	103.00	115.00

## CW CABLE GLAND (4 PART)

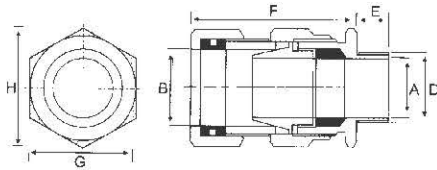
Similar in application and design to the CW (3 part) gland. However an extra component is added, a cone ring. This prevents rotation of the wire and is used instead of a knurled cone.

## E1W CABLE GLAND

**Application :** For use with all types of SWA extruded bedding cable where it is essential to produce IP 66 seal on to the outer sheath and also produce an IP 66 or explosion proof seal on inner sheath. It provides seals on to both inner sheath and outer sheath of the cable.

**Design Features :** 2 part armour / Earth Lock , Knurled Armour Lock produces a low resistance earth clip, Inner and outer displacement, Rated at IP 66 in conjunction with entry thread seal.

As available in CIEL (cast integral earth lug) for orders add" C" to prod. code.



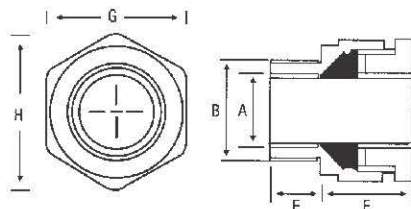
Product Code	Size	Cable Dimensions Accomodate			Gland Dimensions				
		Under Armour Dia. A Max. mm	overall Dia. B Max. mm	Armour wire dia. C mm	ISO Entry Thread		Approx length from shoulder F mm	Hexagon Size	
					Dia. D mm	Length E mm		Across flat G mm	Across Corners H mm
SETW-16	16	8.60	13.50	0.90	16	10	40.00	20.00	23.00
SETW-20S	20S	12.50	15.00	0.90/1.25	20	10	45.00	24.00	28.00
SETW-20	20	14.40	20.50	0.90/1.25	20	10	45.00	27.00	31.00
SETW-25S	25S	17.80	23.80	1.25/1.60	25	10	50.00	31.00	34.00
SETW-25	25	20.40	27.00	1.25/1.60	25	10	50.00	34.00	38.50
SETW-32	32	26.50	33.00	1.60/2.00	32	10	55.00	41.50	46.50
SETW-40S	40S	31.00	37.00	1.60/2.00	40	15	60.00	45.00	50.00
SETW-40	40	32.50	40.80	1.60/2.00	40	15	60.00	49.00	54.00
SETW-50S	50S	37.80	48.00	2.00/2.50	50	15	65.00	58.00	65.00
SETW-50	50	44.00	53.50	2.00/2.50	50	15	65.00	62.30	69.50
SETW-63S	63S	50.50	60.50	2.50	63	15	70.00	70.00	78.00
SETW-63	63	56.50	65.50	2.50	63	15	70.00	76.30	85.00
SETW-75S	75S	62.50	72.00	2.50	75	15	75.00	85.00	95.00
SETW-75	75	67.50	78.50	2.50/3.15	75	15	75.00	90.50	99.00
SETW-90	90	80.00	94.00	3.15	90	20	90.00	112.00	125.00

## A1 / A2 CABLE GLAND

**Application :** For use with armoured cable, secures armouring and provides electrical continuity between armour and gland entry component. Also provides a seal on the outer sheath of the cable thus ensuring no damage to cable sheathing. These are used both indoor and outdoor, in all climatic conditions as it is weatherproof & waterproof.

**Design Features :** 2 part Armour/Earth Lock, Knurled Armour Lock produces a low resistance earth clip.

Also available in CIEL (cast integral earth lug) for orders add " C " to prod. code.



Product Code	Size	Cable Dimensions Accomodate		Gland Dimensions				
		Overall Diameter A		ISO Entry Thread		Approx length from shoulder F mm	Hexagon Size	
		Min. mm	Max. mm	Dia. D mm	Length E mm		Across flat G mm	Across Corners H mm
SA2-16	16	4.50	8.50	16	10	20.00	20.00	23.00
SA2-20S	20S	8.00	11.50	20	10	22.00	22.00	25.00
SA2-20	20	11.00	14.00	20	10	22.00	22.00	25.00
SA2-25S	25S	14.00	17.50	20	10	25.00	30.00	34.00
SA2-25	25	17.50	20.40	25	10	26.00	30.00	34.00
SA2-32	32	20.00	26.00	32	10	30.00	36.00	40.00
SA2-40S	40S	26.00	30.00	40	10	31.00	46.00	52.00
SA2-40	40	30.00	33.00	40	15	31.00	46.00	52.00
SA2-50S	50S	33.00	38.00	50	15	33.00	55.00	61.00
SA2-50	50	38.00	44.00	50	15	33.00	56.00	62.00
SA2-63S	63S	44.00	50.50	63	15	35.00	70.00	77.50
SA2-63	63	50	56.00	63	15	35.00	70.00	77.50
SA2-75S	75S	56.50	62.00	75	15	35.00	80.00	89.00
SA2-75	75	62.00	68.00	75	15	40.00	80.00	89.00
SA2-90	90	68.00	78.00	90	20	45.00	100.00	112.00
SA2-100	100	78.00	88.00	100	20	45.00	112.00	125.00

## GLAND KIT

### Kit Packing :

#### 16/20 -32 inclusive

- 2-Brass glands
- 2-Black PVC shrouds
- 2-Galv, steel locknuts
- 2-Brass Earth tags

### Kit Packing :

#### 40-90 inclusive

- 1-Brass gland
- 1-Black PVC shrouds
- 1-Galv, steel locknuts
- 1-Brass Earth tags



## PVC SHROUD

**Material :** High Grade Polyvinylchloride

### Features :

- Provides additional protection & enhances IP rating of the Gland Termination.
- Effective solution to weather and corrosion protection of a cable gland.
- Available in same gland size compatible to each size of the cable gland.
- The arrow end of the sleeves is readily cut with a knife, enabling it to be slipped over a wide range of cable diameters and assists ease of installations.



## LOCK NUT

**Material :** Brass, Aluminium & Galvanized Steel

### Features :

- Used in fastening glands to the gland plate.
- Available in Metric, Imperial, NPT, BSPT, BSP, & PG.

**Sizes :** 16mm to 75m

Prod. Code	Size mm or inch.
SGALN-16	16mm or 5/8"
SGALN-20S	20mm or 3/4"
SGALN-25S	25mm or 1"
SGALN-32	32mm or 1.1/4"
SGALN-40S	40mm or 1.1/2"

Prod. Code	Size mm or inch.
SGALN-50	50mm or 2"
SGALN-63	63mm or 2.1/2"
SGALN-75	75mm or 3"
SGALN-90	90mm or 3.1/2"



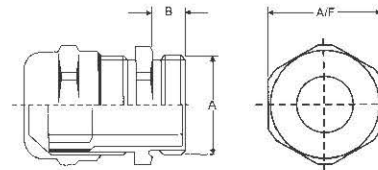
## PLATED BRASS GLAND - IP68 RATING - METRIC THREAD

This Metal Gland is a new unique product that is very different from traditional metal glands.

- IP 68 rating the highest possible
- Superior strain relief
- Nickel plated brass for corrosion protection.
- Incorporates a unique camera shutter principle which protects the cable.
- Fully insulated by plastic insert.
- Neoprene seal for fluid tightness.



The perfect gland for unarmoured PVC, XLPE and other synthetic cables.



Product Code	Mounting Thread		Min. Cab. Ran. (mm)	Max. Cab. Ran. (mm)	Width A/F (mm)	Pack Code
	A Dia. (mm)	B Leng. (mm)				
SIP68-12	12	5	3	6	14	40
SIP68-16	16	5	5	10	17	20
SIP68-20	20	6	8	13	22	20
SIP68-25	25	7	11	17	27	10
SIP68-32	32	8	15	21	34	5
SIP68-40	40	8	19	28	43	3
SIP68-50	50	9	26	35	55	1
SIP68-63	63	10	32	42	65	1

### Material :

- Brass nickel plated
- Polyamide 6 insert (self extinguishing)
- Neoprene seal (self extinguishing)
- Neoprene O-Ring (self extinguishing)

### Continuous operating temperature:

-20 to + 100°C

### Chemical resistance:

Resistant to normal organic solvents, mineral, animal and vegetable oils and fat, petrol

### Threading :

According to IEC 423, EC 423A and EN 60423

### IP rating :

IP68

## EARTHING TAG

**Material :** Brass, Aluminium & Copper

### Features :

- Means of connection or an earth bond around the cable gland.
- Available in various shapes and in all sizes.
- Ensures earth continuity between the electrical equipment & gland.
- Can be coated or plated as per Customer Specification.

Prod. Code	Metric / Size
SGAET-16	M16
SGAET-20	M20
SGAET-25	M25
SGAET-32	M32
SGAET-40	M40

Prod. Code	Metric / Size
SGAET-50	M50
SGAET-63	M63
SGAET-75	M75
SGAET-80	M80
SGAET-90	M90



## ROLLER BALL TYPE STAINLESS STEEL CABLE TIES

**Features :**

This roller ball design tie are self locking and very easy to install. Fixing can be done by hand, tool & both.

**Specification:**

Min. loop tensile strength - 4.6mm width (44.5kg) 100 lbs  
 Min. loop tensile strength - 7.9mm width (113.6kg) 250 lbs

**Operating Temperature:**

80°C to +150°C (Coated)  
 80°C to +538°C (UnCoated)

**Applications:**

Construction, Automobile, Offshore, Petro-Chemical Industries, Fire Protection, Aerospace, Flame Proof Installation etc.

**Material :** Stainless Steel Grade 316 / 304



Product Code	Length mm	Width mm	Max. Bundle dia mm
SH100	100	4.6	16
SH150	150	4.6	32
SH200	200	4.6	50
SH360	360	4.6	101
SH520	520	4.6	152
SH680	680	4.6	203
SH840	840	4.6	254
SH1000	1000	4.6	298
SH200H	200	7.9	50
SH360H	360	7.9	101
SH520H	520	7.9	152
SH680H	680	7.9	203
SH840H	840	7.9	254
SH1000H	1000	7.9	298

## RELEASABLE TYPE STAINLESS STEEL CABLE TIES

**Features:**

These ties have greater flexibility as it can Fasten-Unfasten-Refasten as per usage. Coated ties use or add resistance to corrosion and weathering effect.

**Operating Temperature:**

80°C to +150°C (Coated)

**Material :** Stainless Steel Grade 316 / 304

Product Code	Length mm	Width mm	Max. Bundle dia mm
SRT1505	150	5	36
SRT2305	230	5	60
SHRT3305	330	5	95
SRT4505	450	5	130
SRT1501	150	10	36
SRT2301	230	10	60
SRT3301	330	10	95
SRT4501	450	10	130





# STM | SMART TECH METAL



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