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Grounding and Bonding



Copper-Bonded Ground Rods,
Pointed



Features

- One pointed end and one flat end
- 99.9% pure electrolytic copper coating
- Rods have a high carbon steel core and tip that provide superior strength when driving
- Copper coating will not crack when bent or tear when driven
- Minimum copper coating of 10mils/254µm

Material:

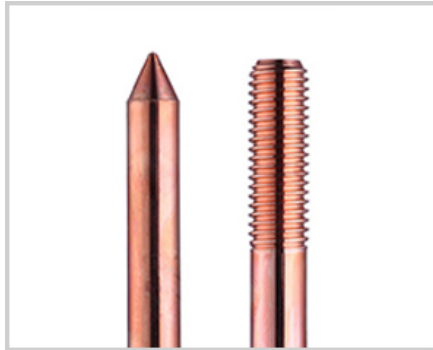
- Copper-Bonded Steel

*Also available for other dimensions or plating thickness.

| Part No. | Item | Diameter | | Length | | Plating Thickness | |
|----------|--------------|----------|-------|--------|------|-------------------|-------|
| | | Inch | mm | Feet | mm | mil | mm |
| F010101 | GRAC085-2440 | 1/3" | 8.47 | 8' | 2440 | 10 | 0.254 |
| F010102 | GRAC095-2440 | 3/8" | 9.50 | 8' | 2440 | 10 | 0.254 |
| F010103 | GRAC127-2440 | 1/2" | 12.70 | 8' | 2440 | 10 | 0.254 |
| F010104 | GRAC127-4560 | 1/2" | 12.70 | 10' | 3050 | 10 | 0.254 |
| F010105 | GRAC142-1220 | 5/8" | 14.20 | 4' | 1220 | 10 | 0.254 |
| F010106 | GRAC142-1530 | 5/8" | 14.20 | 5' | 1530 | 10 | 0.254 |
| F010107 | GRAC142-1830 | 5/8" | 14.20 | 6' | 1830 | 10 | 0.254 |
| F010108 | GRAC142-2440 | 5/8" | 14.20 | 8' | 2440 | 10 | 0.254 |
| F010109 | GRAC142-3050 | 5/8" | 14.20 | 10' | 3050 | 10 | 0.254 |
| F010110 | GRAC172-1530 | 3/4" | 17.20 | 5' | 1530 | 10 | 0.254 |
| F010111 | GRAC172-1830 | 3/4" | 17.20 | 6' | 1830 | 10 | 0.254 |
| F010112 | GRAC172-2440 | 3/4" | 17.20 | 8' | 2440 | 10 | 0.254 |
| F010113 | GRAC172-3050 | 3/4" | 17.20 | 10' | 3050 | 10 | 0.254 |
| F010114 | GRAC254-2440 | 1" | 25.40 | 8' | 2440 | 10 | 0.254 |
| F010115 | GRAC254-3050 | 1" | 25.40 | 10' | 3050 | 10 | 0.254 |



Copper-Bonded Ground Rods, Pointed/Threaded



Features

- One pointed end and one threaded end
- 99.9% pure electrolytic copper coating
- Rods have a high carbon steel core and tip that provide superior strength when driving
- Copper coating will not crack when bent or tear when driven
- Minimum copper coating of 10mils/254µm

Material:

- Copper-Bonded Steel

*Also available for other dimensions or plating thickness.

| Part No. | Item | Diameter | | Length | | Plating Thickness | |
|----------|--------------|----------|-------|--------|------|-------------------|-------|
| | | Inch | mm | Feet | mm | mil | mm |
| F010201 | GRNC085-2440 | 1/3" | 8.47 | 8' | 2440 | 10 | 0.254 |
| F010202 | GRNC095-2440 | 3/8" | 9.50 | 8' | 2440 | 10 | 0.254 |
| F010203 | GRNC127-2440 | 1/2" | 12.70 | 8' | 2440 | 10 | 0.254 |
| F010204 | GRNC127-4560 | 1/2" | 12.70 | 10' | 3050 | 10 | 0.254 |
| F010205 | GRNC142-1220 | 5/8" | 14.20 | 4' | 1220 | 10 | 0.254 |
| F010206 | GRNC142-1530 | 5/8" | 14.20 | 5' | 1530 | 10 | 0.254 |
| F010207 | GRNC142-1830 | 5/8" | 14.20 | 6' | 1830 | 10 | 0.254 |
| F010208 | GRNC142-2440 | 5/8" | 14.20 | 8' | 2440 | 10 | 0.254 |
| F010209 | GRNC142-3050 | 5/8" | 14.20 | 10' | 3050 | 10 | 0.254 |
| F010210 | GRNC172-1530 | 3/4" | 17.20 | 5' | 1530 | 10 | 0.254 |
| F010211 | GRNC172-1830 | 3/4" | 17.20 | 6' | 1830 | 10 | 0.254 |
| F010212 | GRNC172-2440 | 3/4" | 17.20 | 8' | 2440 | 10 | 0.254 |
| F010213 | GRNC172-3050 | 3/4" | 17.20 | 10' | 3050 | 10 | 0.254 |
| F010214 | GRNC254-2440 | 1" | 25.40 | 8' | 2440 | 10 | 0.254 |
| F010215 | GRNC254-3050 | 1" | 25.40 | 10' | 3050 | 10 | 0.254 |

Copper-Bonded Ground Rods,
Twist Threads

Features

- Twist threads
- 99.9% pure electrolytic copper coating
- Rods have a high carbon steel core and tip that provide superior strength when driving
- Copper coating will not crack when bent or tear when driven
- Minimum copper coating of 10mils/254µm

Material:

- Copper-Bonded Steel

*Also available for other dimensions or plating thickness.

| Part No. | Item | Diameter | | Length | | Plating Thickness | |
|----------|--------------|----------|-------|--------|------|-------------------|-------|
| | | Inch | mm | Feet | mm | mil | mm |
| F010301 | GRMC085-2440 | 1/3" | 8.47 | 8 | 2440 | 10 | 0.254 |
| F010302 | GRMC095-2440 | 3/8" | 9.50 | 8 | 2440 | 10 | 0.254 |
| F010303 | GRMC127-2440 | 1/2" | 12.70 | 8 | 2440 | 10 | 0.254 |
| F010304 | GRMC127-4560 | 1/2" | 12.70 | 10 | 3050 | 10 | 0.254 |
| F010305 | GRMC142-1220 | 5/8" | 14.20 | 4 | 1220 | 10 | 0.254 |
| F010306 | GRMC142-1530 | 5/8" | 14.20 | 5 | 1530 | 10 | 0.254 |
| F010307 | GRMC142-1830 | 5/8" | 14.20 | 6 | 1830 | 10 | 0.254 |
| F010308 | GRMC142-2440 | 5/8" | 14.20 | 8 | 2440 | 10 | 0.254 |
| F010309 | GRMC142-3050 | 5/8" | 14.20 | 10 | 3050 | 10 | 0.254 |
| F010310 | GRMC172-1530 | 3/4" | 17.20 | 5 | 1530 | 10 | 0.254 |
| F010311 | GRMC172-1830 | 3/4" | 17.20 | 6 | 1830 | 10 | 0.254 |
| F010312 | GRMC172-2440 | 3/4" | 17.20 | 8 | 2440 | 10 | 0.254 |
| F010313 | GRMC172-3050 | 3/4" | 17.20 | 10 | 3050 | 10 | 0.254 |
| F010314 | GRMC254-2440 | 1" | 25.40 | 8 | 2440 | 10 | 0.254 |
| F010315 | GRMC254-3050 | 1" | 25.40 | 10 | 3050 | 10 | 0.254 |

Copper-Bonded Ground Rods,
Internal Thread

Features

- Internal thread
- 99.9% pure electrolytic copper coating
- Rods have a high carbon steel core and tip that provide superior strength when driving
- Copper coating will not crack when bent or tear when driven
- Minimum copper coating of 10mils/254µm

Material:

- Copper-Bonded Steel

*Also available for other dimensions or plating thickness.

| Part No. | Item | Diameter | | Length | | Plating Thickness | |
|----------|--------------|----------|-------|--------|------|-------------------|-------|
| | | Inch | mm | Feet | mm | mil | mm |
| F010401 | GRUC085-2440 | 1/3" | 8.47 | 8 | 2440 | 10 | 0.254 |
| F010402 | GRUC095-2440 | 3/8" | 9.50 | 8 | 2440 | 10 | 0.254 |
| F010403 | GRUC127-2440 | 1/2" | 12.70 | 8 | 2440 | 10 | 0.254 |
| F010404 | GRUC127-4560 | 1/2" | 12.70 | 10 | 3050 | 10 | 0.254 |
| F010405 | GRUC142-1220 | 5/8" | 14.20 | 4 | 1220 | 10 | 0.254 |
| F010406 | GRUC142-1530 | 5/8" | 14.20 | 5 | 1530 | 10 | 0.254 |
| F010407 | GRUC142-1830 | 5/8" | 14.20 | 6 | 1830 | 10 | 0.254 |
| F010408 | GRUC142-2440 | 5/8" | 14.20 | 8 | 2440 | 10 | 0.254 |
| F010409 | GRUC142-3050 | 5/8" | 14.20 | 10 | 3050 | 10 | 0.254 |
| F010410 | GRUC172-1530 | 3/4" | 17.20 | 5 | 1530 | 10 | 0.254 |
| F010411 | GRUC172-1830 | 3/4" | 17.20 | 6 | 1830 | 10 | 0.254 |
| F010412 | GRUC172-2440 | 3/4" | 17.20 | 8 | 2440 | 10 | 0.254 |
| F010413 | GRUC172-3050 | 3/4" | 17.20 | 10 | 3050 | 10 | 0.254 |
| F010414 | GRUC254-2440 | 1" | 25.40 | 8 | 2440 | 10 | 0.254 |
| F010415 | GRUC254-3050 | 1" | 25.40 | 10 | 3050 | 10 | 0.254 |

Solid Copper Ground Rods



Features

- Solid copper ground rods made of high conductive bare brass
- Great resistance to corrosion.
- Different types of end can be made on request.

Material:

- Brass

*Also available for other dimensions.

| Part No. | Item | Diameter | | Length | |
|----------|--------------|----------|-------|--------|------|
| | | Inch | mm | Feet | mm |
| F010701 | GRAB085-2440 | 1/3" | 8.47 | 8' | 2440 |
| F010702 | GRAB095-2440 | 3/8" | 9.50 | 8' | 2440 |
| F010703 | GRAB127-2440 | 1/2" | 12.70 | 8' | 2440 |
| F010704 | GRAB127-4560 | 1/2" | 12.70 | 10' | 3050 |
| F010705 | GRAB142-1220 | 5/8" | 14.20 | 4' | 1220 |
| F010706 | GRAB142-1530 | 5/8" | 14.20 | 5' | 1530 |
| F010707 | GRAB142-1830 | 5/8" | 14.20 | 6' | 1830 |
| F010708 | GRAB142-2440 | 5/8" | 14.20 | 8' | 2440 |
| F010709 | GRAB142-3050 | 5/8" | 14.20 | 10' | 3050 |
| F010710 | GRAB172-1530 | 3/4" | 17.20 | 5' | 1530 |
| F010711 | GRAB172-1830 | 3/4" | 17.20 | 6' | 1830 |
| F010712 | GRAB172-2440 | 3/4" | 17.20 | 8' | 2440 |
| F010713 | GRAB172-3050 | 3/4" | 17.20 | 10' | 3050 |
| F010714 | GRAB254-2440 | 1" | 25.40 | 8' | 2440 |
| F010715 | GRAB254-3050 | 1" | 25.40 | 10' | 3050 |

Stainless Steel Ground Rods



Features

- For use in highly-corrosive soils
- Different types of end can be made on request.

Material

- Stainless Steel 304

*Also available for other dimensions.

| Part No. | Item | Diameter | | Length | |
|----------|--------------|----------|-------|--------|------|
| | | Inch | mm | Feet | mm |
| F010501 | GRAS085-2440 | 1/3" | 8.47 | 8' | 2440 |
| F010502 | GRAS095-2440 | 3/8" | 9.50 | 8' | 2440 |
| F010503 | GRAS127-2440 | 1/2" | 12.70 | 8' | 2440 |
| F010504 | GRAS127-4560 | 1/2" | 12.70 | 10' | 3050 |
| F010505 | GRAS142-1220 | 5/8" | 14.20 | 4' | 1220 |
| F010506 | GRAS142-1530 | 5/8" | 14.20 | 5' | 1530 |
| F010507 | GRAS142-1830 | 5/8" | 14.20 | 6' | 1830 |
| F010508 | GRAS142-2440 | 5/8" | 14.20 | 8' | 2440 |
| F010509 | GRAS142-3050 | 5/8" | 14.20 | 10' | 3050 |
| F010510 | GRAS172-1530 | 3/4" | 17.20 | 5' | 1530 |
| F010511 | GRAS172-1830 | 3/4" | 17.20 | 6' | 1830 |
| F010512 | GRAS172-2440 | 3/4" | 17.20 | 8' | 2440 |
| F010513 | GRAS172-3050 | 3/4" | 17.20 | 10' | 3050 |
| F010514 | GRAS254-2440 | 1" | 25.40 | 8' | 2440 |
| F010515 | GRAS254-3050 | 1" | 25.40 | 10' | 3050 |



Galvanized Ground Rods



Features

■ Zinc-coated exteriors are hot-dip galvanized for solid protection against corrosion

Material:

■ Steel

Finish:

■ Hot-Dip Galvanized

*Also available for other dimensions.

| Part No. | Item | Diameter | | Length | |
|----------|--------------|----------|-------|--------|------|
| | | Inch | mm | Feet | mm |
| F010601 | GRAZ085-2440 | 1/3" | 8.47 | 8' | 2440 |
| F010602 | GRAZ095-2440 | 3/8" | 9.50 | 8' | 2440 |
| F010603 | GRAZ127-2440 | 1/2" | 12.70 | 8' | 2440 |
| F010604 | GRAZ127-4560 | 1/2" | 12.70 | 10' | 3050 |
| F010605 | GRAZ142-1220 | 5/8" | 14.20 | 4' | 1220 |
| F010606 | GRAZ142-1530 | 5/8" | 14.20 | 5' | 1530 |
| F010607 | GRAZ142-1830 | 5/8" | 14.20 | 6' | 1830 |
| F010608 | GRAZ142-2440 | 5/8" | 14.20 | 8' | 2440 |
| F010609 | GRAZ142-3050 | 5/8" | 14.20 | 10' | 3050 |
| F010610 | GRAZ172-1530 | 3/4" | 17.20 | 5' | 1530 |
| F010611 | GRAZ172-1830 | 3/4" | 17.20 | 6' | 1830 |
| F010612 | GRAZ172-2440 | 3/4" | 17.20 | 8' | 2440 |
| F010613 | GRAZ172-3050 | 3/4" | 17.20 | 10' | 3050 |
| F010614 | GRAZ254-2440 | 1" | 25.40 | 8' | 2440 |
| F010615 | GRAZ254-3050 | 1" | 25.40 | 10' | 3050 |



Copper-Bonded Steel Conductors



Features

- 99.9% pure electrolytic copper coating
- Copper coating will not crack when bent or tear when driven
- Minimum copper coating of 10mils/254µm

Material:

- Copper-Bonded Steel

*Also available for other dimensions or cut length.

| Part No. | Item | Diameter | Length | Plating Thickness | |
|----------|------|----------|--------|-------------------|-------|
| | | mm | | mm | mil |
| F010801 | DY08 | Φ8 | 100 | 10 | 0.254 |
| F010802 | DY10 | Φ10 | 100 | 10 | 0.254 |
| F010803 | DY12 | Φ12 | 100 | 10 | 0.254 |
| F010804 | DY14 | Φ14.2 | 100 | 10 | 0.254 |



Copper-Bonded Steel Wires



Features

- Higher mechanical strength than copper
- Lighter than solid copper of the same size, easy installation
- Same corrosion resistant properties as copper, but maintains the high strength of steel

Material:

- Copper-Bonded Steel

*Also available for other dimensions or plating thickness.

| Part No. | Item | | Cable Cross Section mm ² |
|----------|-------|------------|--|
| | Bare | Insulation | |
| F010901 | DW16 | DWI16 | 16 |
| F010902 | DW25 | DWI25 | 25 |
| F010903 | DW35 | DWI35 | 35 |
| F010904 | DW50 | DWI50 | 50 |
| F010905 | DW70 | DWI70 | 70 |
| F010906 | DW95 | DWI95 | 95 |
| F010907 | DW120 | DWI120 | 120 |
| F010908 | DW150 | DWI150 | 150 |
| F010909 | DW185 | DWI185 | 185 |
| F010910 | DW240 | DWI240 | 240 |
| F010911 | DW300 | DWI300 | 300 |
| F010912 | DW400 | DWI400 | 400 |

Copper-Bonded Flat Strip Ground Conductors



Features

- Annealed for ease of use with radiused edge.
- Most important component of any grounding or structural lightning protection system.
- Minimum copper coating of 10mils/254µm, ensures highly resistant to corrosion.

Material:

- Copper-Bonded Steel

*Also available for other dimensions, plating thickness, or cut length.

| Part No. | Item | Cable Cross Section mm ² | Dimensions(mm) | | Length m |
|----------|-------|--|----------------|-----------|-------------|
| | | | Width | Thickness | |
| F011001 | DX254 | 100 | 25 | 4 | 6 |
| F011002 | DX404 | 160 | 40 | 4 | 6 |
| F011003 | DX505 | 250 | 50 | 5 | 6 |
| F011004 | DX277 | 190 | 27 | 7 | 6 |
| F011005 | DX327 | 220 | 32 | 7 | 6 |
| F011006 | DX377 | 260 | 37 | 7 | 6 |
| F011007 | DX378 | 300 | 37 | 8 | 6 |

Galvanized Ground Conductors



Features

■ Zinc-coated exteriors are hot-dip galvanized for solid protection against corrosion

Material:

■ Steel

Finish:

■ Hot-Dip Galvanized

*Also available for other dimensions.

| Part No. | Item | Diameter mm | Length mm |
|----------|------|----------------|--------------|
| F011101 | DZ14 | 14 | 6.0 |
| F011102 | DZ16 | 16 | 6.0 |
| F011103 | DZ18 | 18 | 6.0 |
| F011104 | DZ24 | 24 | 2.5 |
| F011105 | DZ43 | 43 | 2.5 |



Couplers For Threaded Rods



Features

- High-strength couplings are threaded bronze and chamfered at both ends for easy driving
- Corrosion-resistant couplings ensure permanent, low resistance copper-to-copper connections

Material:

- Brass



| Part No. | Item | Suitable Earth Rod Diameter | |
|----------|-------|-----------------------------|-------|
| | | Inch | mm |
| F011201 | CT127 | 1/2" | 12.70 |
| F011202 | CT142 | 5/8" | 14.20 |
| F011203 | CT172 | 3/4" | 17.20 |
| F011204 | CT254 | 1" | 25.40 |

Driving Head

Features

- Protects the earth rod while hammering down

Material:

- Steel



| Part No. | Item | Suitable Earth Rod Diameter | |
|----------|-------|-----------------------------|-------|
| | | Inch | mm |
| F011301 | DH127 | 1/2" | 12.70 |
| F011302 | DH142 | 5/8" | 14.20 |
| F011303 | DH172 | 3/4" | 17.20 |
| F011304 | DH254 | 1" | 25.40 |

Spikes

Features

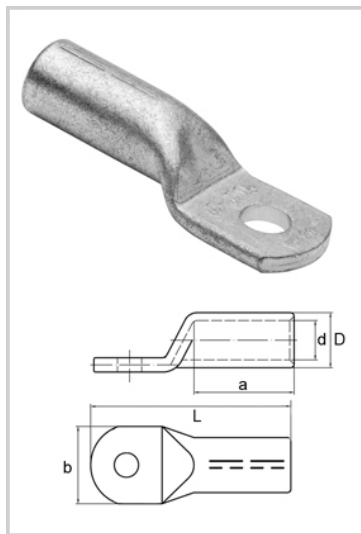
■ Enable solid copper earth rod to be easily driven.

Material:

■ Steel



| Part No. | Item | Suitable Earth Rod Diameter | |
|----------|------|-----------------------------|-------|
| | | Inch | mm |
| F011401 | S127 | 1/2" | 12.70 |
| F011402 | S142 | 5/8" | 14.20 |
| F011403 | S172 | 3/4" | 17.20 |
| F011404 | S254 | 1" | 25.40 |



Compression Cable Lugs

Features

- Used to connect the conductor with copper busbar
- Manufactured according to DIN 46235
- With marking for correct crimping

Material

- Cu 99.9%

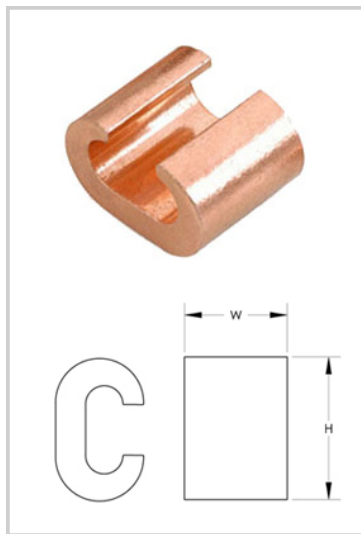
Surface

- Tin plated

| Part No. | Item | Cross Section mm ² | Size of Bolt Φ | Dimensions(mm) | | | | |
|----------|-----------|----------------------------------|-------------------|----------------|------|------|------|------|
| | | | | D | d | a | b | L |
| A010101 | DCL 6-5 | 6 | M 5 | 5.5 | 3.8 | 10.0 | 8.5 | 30.5 |
| A010102 | DCL 6-6 | | M 6 | 5.5 | 3.8 | 10.0 | 8.5 | 31.5 |
| A010103 | DCL 6-8 | | M 8 | 5.5 | 3.8 | 10.0 | 13.0 | 34.0 |
| A010104 | DCL 10-5 | 10 | M 5 | 6.0 | 4.5 | 10.0 | 9.0 | 34.0 |
| A010105 | DCL 10-6 | | M 6 | 6.0 | 4.5 | 10.0 | 9.0 | 34.5 |
| A010106 | DCL 10-8 | | M 8 | 6.0 | 4.5 | 10.0 | 13.0 | 37.0 |
| A010107 | DCL 10-10 | | M 10 | 6.0 | 4.5 | 10.0 | 15.0 | 39.0 |
| A010108 | DCL 16-6 | 16 | M 10 | 8.5 | 5.5 | 20.0 | 13.0 | 43.5 |
| A010109 | DCL 16-8 | | M 8 | 8.5 | 5.5 | 20.0 | 13.0 | 46.0 |
| A010110 | DCL 16-10 | | M 10 | 8.5 | 5.5 | 20.0 | 17.0 | 48.0 |
| A010111 | DCL 16-12 | 25 | M 12 | 8.5 | 5.5 | 20.0 | 18.0 | 49.0 |
| A010112 | DCL 25-6 | | M 6 | 10.0 | 7.0 | 20.0 | 14.0 | 45.5 |
| A010113 | DCL 25-8 | | M 8 | 10.0 | 7.0 | 20.0 | 16.0 | 48.0 |
| A010114 | DCL 25-10 | | M 10 | 10.0 | 7.0 | 20.0 | 17.0 | 50.0 |
| A010115 | DCL 25-12 | 35 | M 12 | 10.0 | 7.0 | 20.0 | 19.0 | 51.0 |
| A010116 | DCL 35-6 | | M 6 | 12.5 | 8.2 | 20.0 | 17.0 | 49.5 |
| A010117 | DCL 35-8 | | M 8 | 12.5 | 8.2 | 20.0 | 17.0 | 52.0 |
| A010118 | DCL 35-10 | 50 | M 10 | 12.5 | 8.2 | 20.0 | 19.0 | 54.0 |
| A010119 | DCL 35-12 | | M 12 | 12.5 | 8.2 | 20.0 | 21.0 | 55.0 |
| A010120 | DCL 35-14 | | M 14 | 12.5 | 8.2 | 20.0 | 21.0 | 56.5 |
| A010121 | DCL 50-8 | | M 8 | 14.5 | 10.0 | 28.0 | 20.0 | 62.0 |
| A010122 | DCL 50-10 | 70 | M 10 | 14.5 | 10.0 | 28.0 | 22.0 | 64.0 |
| A010123 | DCL 50-12 | | M 12 | 14.5 | 10.0 | 28.0 | 24.0 | 65.0 |
| A010124 | DCL 50-14 | | M 14 | 14.5 | 10.0 | 28.0 | 24.0 | 66.5 |
| A010125 | DCL 50-16 | 70 | M 16 | 14.5 | 10.0 | 28.0 | 28.0 | 68.0 |
| A010126 | DCL 70-8 | | M 8 | 16.5 | 11.5 | 28.0 | 24.0 | 65.0 |
| A010127 | DCL 70-10 | | M 10 | 16.5 | 11.5 | 28.0 | 24.0 | 67.0 |
| A010128 | DCL 70-12 | | M 12 | 16.5 | 11.5 | 28.0 | 24.0 | 68.0 |
| A010129 | DCL 70-14 | 70 | M 14 | 16.5 | 11.5 | 28.0 | 24.0 | 69.5 |
| A010130 | DCL 70-16 | | M 16 | 16.5 | 11.5 | 28.0 | 30.0 | 71.0 |

Compression Cable Lugs

| Part No. | Item | Cross Section mm ² | Size of Bolt Φ | Dimensions(mm) | | | | |
|----------|-------------|----------------------------------|-------------------|----------------|------|-------|------|-------|
| | | | | D | d | a | b | L |
| A010131 | DCL 95-8 | 95 | M 8 | 19.0 | 13.5 | 35.0 | 28.0 | 77.0 |
| A010132 | DCL 95-10 | | M 10 | 19.0 | 13.5 | 35.0 | 28.0 | 77.0 |
| A010133 | DCL 95-12 | | M 12 | 19.0 | 13.5 | 35.0 | 28.0 | 78.0 |
| A010134 | DCL 95-14 | | M 14 | 19.0 | 13.5 | 35.0 | 28.0 | 79.5 |
| A010135 | DCL 95-16 | | M 16 | 19.0 | 13.5 | 35.0 | 32.0 | 81.0 |
| A010136 | DCL 120-10 | 120 | M 10 | 21.0 | 15.5 | 35.0 | 32.0 | 85.0 |
| A010137 | DCL 120-12 | | M 12 | 21.0 | 15.5 | 35.0 | 32.0 | 86.0 |
| A010138 | DCL 120-14 | | M 14 | 21.0 | 15.5 | 35.0 | 32.0 | 88.0 |
| A010139 | DCL 120-16 | | M 16 | 21.0 | 15.5 | 35.0 | 32.0 | 89.0 |
| A010140 | DCL 120-20 | | M 20 | 21.0 | 15.5 | 35.0 | 38.0 | 91.0 |
| A010141 | DCL 150-10 | 150 | M 10 | 23.5 | 17.0 | 35.0 | 34.0 | 93.0 |
| A010142 | DCL 150-12 | | M 12 | 23.5 | 17.0 | 35.0 | 34.0 | 94.0 |
| A010143 | DCL 150-14 | | M 14 | 23.5 | 17.0 | 35.0 | 34.0 | 97.0 |
| A010144 | DCL 150-16 | | M 16 | 23.5 | 17.0 | 35.0 | 34.0 | 97.0 |
| A010145 | DCL 150-20 | | M 20 | 23.5 | 17.0 | 35.0 | 40.0 | 99.0 |
| A010146 | DCL 185-10 | 185 | M 10 | 25.5 | 19.0 | 40.0 | 37.0 | 97.0 |
| A010147 | DCL 185-12 | | M 12 | 25.5 | 19.0 | 40.0 | 37.0 | 98.0 |
| A010148 | DCL 185-14 | | M 14 | 25.5 | 19.0 | 40.0 | 37.0 | 101.0 |
| A010149 | DCL 185-16 | | M 16 | 25.5 | 19.0 | 40.0 | 37.0 | 101.0 |
| A010150 | DCL 185-20 | | M 20 | 25.5 | 19.0 | 40.0 | 40.0 | 103.0 |
| A010151 | DCL 240-12 | 240 | M 12 | 29.0 | 21.5 | 40.0 | 42.0 | 108.0 |
| A010152 | DCL 240-14 | | M 14 | 29.0 | 21.5 | 40.0 | 42.0 | 111.0 |
| A010153 | DCL 240-16 | | M 16 | 29.0 | 21.5 | 40.0 | 42.0 | 111.0 |
| A010154 | DCL 240-20 | | M 20 | 29.0 | 21.5 | 40.0 | 45.0 | 113.0 |
| A010155 | DCL 300-12 | 300 | M 12 | 32.0 | 24.5 | 50.0 | 46.0 | 119.0 |
| A010156 | DCL 300-14 | | M 14 | 32.0 | 24.5 | 50.0 | 46.0 | 119.0 |
| A010157 | DCL 300-16 | | M 16 | 32.0 | 24.5 | 50.0 | 46.0 | 119.0 |
| A010158 | DCL 300-20 | | M 20 | 32.0 | 24.5 | 50.0 | 46.0 | 122.0 |
| A010159 | DCL 400-14 | 400 | M 14 | 38.5 | 27.5 | 70.0 | 55.0 | 140.0 |
| A010160 | DCL 400-16 | | M 16 | 38.5 | 27.5 | 70.0 | 55.0 | 140.0 |
| A010161 | DCL 400-20 | | M 20 | 38.5 | 27.5 | 70.0 | 55.0 | 140.0 |
| A010162 | DCL 500-16 | 500 | M 16 | 42.0 | 31.0 | 70.0 | 60.0 | 150.0 |
| A010163 | DCL 500-20 | | M 20 | 42.0 | 31.0 | 70.0 | 60.0 | 150.0 |
| A010164 | DCL 625-16 | 630 | M 16 | 44.0 | 34.5 | 80.0 | 64.0 | 160.0 |
| A010165 | DCL 625-20 | | M 20 | 44.0 | 34.5 | 80.0 | 64.0 | 160.0 |
| A010166 | DCL 800-16 | 800 | M 16 | 52.0 | 40.0 | 100.0 | 75.0 | 195.0 |
| A010167 | DCL 800-20 | | M 20 | 52.0 | 40.0 | 100.0 | 75.0 | 195.0 |
| A010168 | DCL 1000-16 | 1000 | M 16 | 58.0 | 44.0 | 100.0 | 85.0 | 195.0 |
| A010169 | DCL 1000-20 | | M 20 | 58.0 | 44.0 | 100.0 | 85.0 | 195.0 |

**C Clamps****Features**

- Connect conductor with conductor

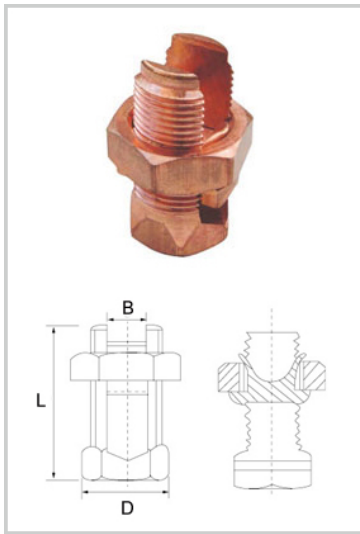
Material

- Cu 99.9%

Surface

- Bright or Tin plated

| Part No. | Item | Cross Section (Main + Tap) mm ² | H | Main Dimensions (mm) | | | | |
|----------|--------|---|------|----------------------|------|------|------|------|
| | | | | A | B | L | C | T |
| A020701 | CC-10 | 7.5-14 | 9.5 | 6.3 | 6.2 | 12.0 | 4.0 | 1.6 |
| A020702 | CC-16 | 14.5-16 | 11.8 | 7.8 | 7.8 | 13.0 | 5.0 | 2.0 |
| A020703 | CC-20 | 16.5-20 | 12.8 | 8.6 | 9.7 | 13.0 | 5.4 | 2.9 |
| A020704 | CC-26 | 21-26 | 14.7 | 10.2 | 10.0 | 16.0 | 6.5 | 3.2 |
| A020705 | CC-44 | 27-44 | 19.0 | 13.4 | 14.4 | 20.0 | 8.5 | 4.0 |
| A020706 | CC-60 | 45-60 | 21.0 | 15.4 | 15.4 | 22.0 | 9.7 | 4.0 |
| A020707 | CC-76 | 61-76 | 24.4 | 17.3 | 17.6 | 22.0 | 10.8 | 5.0 |
| A020708 | CC-98 | 77-98 | 27.8 | 20.8 | 18.8 | 25.0 | 12.8 | 5.0 |
| A020709 | CC-122 | 99-122 | 29.8 | 22.1 | 21.2 | 26.0 | 13.5 | 5.5 |
| A020710 | CC-154 | 123-154 | 34.0 | 25.7 | 24.4 | 28.0 | 17.0 | 6.0 |
| A020711 | CC-190 | 155-154 | 37.0 | 28.5 | 25.4 | 35.0 | 17.4 | 6.0 |
| A020712 | CC-240 | 191-240 | 40.0 | 30.2 | 28.5 | 40.0 | 19.0 | 7.0 |
| A020713 | CC-288 | 141-288 | 44.5 | 34.7 | 34.1 | 45.0 | 22.3 | 7.0 |
| A020714 | CC-365 | 189-365 | 47.5 | 37.7 | 34.0 | 50.0 | 24.8 | 7.0 |
| A020715 | CC-450 | 366-450 | 57.0 | 42.5 | 41.0 | 60.0 | 28.0 | 10.0 |
| A020716 | CC-560 | 451-560 | 62.0 | 46.0 | 44.0 | 65.0 | 31.0 | 11.0 |
| A020717 | CC-700 | 561-700 | 68.0 | 54.0 | 49.5 | 70.0 | 44.0 | 12.0 |



Split Bolts

Features

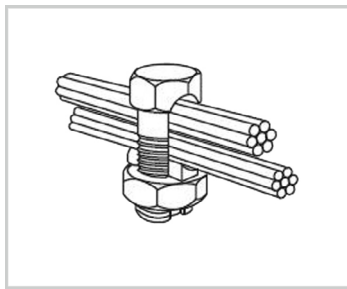
- Connect conductor with conductor

Material

- Brass

Surface

- Copper or Tin plated



| Part No. | Item | Dimensions (mm) | | |
|----------|-------|-----------------|----|------|
| | | L | D | B |
| A020801 | SB10 | 27 | 13 | 5.0 |
| A020802 | SB16 | 30 | 14 | 6.0 |
| A020803 | SB25 | 32 | 17 | 7.0 |
| A020804 | SB35 | 38 | 17 | 8.5 |
| A020805 | SB50 | 42 | 19 | 10.0 |
| A020806 | SB70 | 46 | 21 | 11.0 |
| A020807 | SB95 | 46 | 26 | 13.3 |
| A020808 | SB120 | 50 | 26 | 14.5 |
| A020809 | SB150 | 55 | 30 | 16.5 |
| A020810 | SB185 | 60 | 30 | 17.2 |
| A020811 | SB240 | 65 | 32 | 19.3 |



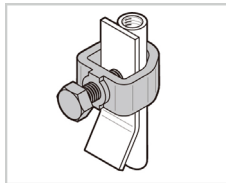
Rod To Tape Clamp

Features

- Connect flat tape conductor with an earth rod

Material:

- Brass



| Part No. | Item | Suitable Earth Rod Diameter | | Max. Conductor mm |
|----------|------|-----------------------------|------|----------------------|
| | | Inch | mm | |
| F011501 | EA1 | 1/2" | 12.7 | 26 x 12 |
| F011502 | EA2 | 5/8" | 16 | 26 x 12 |
| F011503 | EA3 | 3/4" | 20 | 26 x 10 |
| F011504 | EA4 | 5/8" | 16 | 30 x 2 |
| F011505 | EA5 | 3/4" | 20 | 30 x 2 |
| F011506 | EA6 | 5/8" | 16 | 40 x 12 |
| F011507 | EA7 | 5/8" | 16 | 51 x 8 |
| F011508 | EA8 | 3/4" | 20 | 51 x 12 |
| F011509 | EA9 | 1/2" | 12.7 | 26 x 20 |
| F011510 | EA10 | 5/8" | 16 | 26 x 18 |
| F011511 | EA11 | 3/4" | 20 | 26 x 10 |
| F011512 | EA12 | 1" | 25 | 26 x 10 |



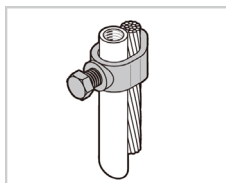
Rod To Cable Clamp

Features

- Connect solid circular or stranded conductor with an earth rod.

Material:

- Brass



| Part No. | Item | Suitable Earth Rod Diameter | | Conductor mm ² |
|----------|------|-----------------------------|------|------------------------------|
| | | Inch | mm | |
| F011601 | EG1 | 3/8" | 9.5 | 6-35 |
| F011602 | EG2 | 1/2" | 12.5 | 16-50 |
| F011603 | EG3 | 5/8" | 16 | 16-70 |
| F011604 | EG4 | 3/4" | 20 | 35-95 |
| F011605 | EG5 | 1" | 25 | 70-150 |



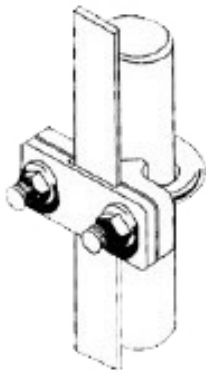
'U' Bolt Rod Clamp

Features

- Connect flat tape or stranded conductor with earth rod or rebar.

Material:

- Brass



| Part No. | Item | Suitable Earth Rod Diameter | | Conductor mm |
|----------|------|-----------------------------|----|-----------------|
| | | Inch | mm | |
| F011701 | EE1 | 5/8" | 16 | - |
| F011702 | EE2 | 3/4" | 20 | - |
| F011703 | EE3 | 1" | 25 | - |
| F011704 | EE4 | 5/8" | 16 | 25 |
| F011705 | EE5 | 1 1/2" | 38 | - |
| F011706 | EE6 | 2" | 50 | - |



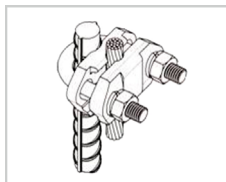
'U' Bolt Rod Clamp

Features

- Connect solid circular or stranded conductor with earth rod or rebar.

Material:

- Brass



| Part No. | Item | Suitable Earth Rod Diameter | | Conductor mm ² |
|----------|------|-----------------------------|----|------------------------------|
| | | Inch | mm | |
| F011801 | EGU1 | 5/8" | 16 | 16-95 |
| F011802 | EGU2 | 3/4" | 20 | 16-70 |
| F011803 | EGU3 | 5/8" | 16 | 70-185 |
| F011804 | EGU4 | 3/4" | 20 | 70-150 |
| F011805 | EGU5 | 5/8" | 16 | 150-300 |
| F011806 | EGU6 | 3/4" | 20 | 150-300 |
| F011807 | EGU7 | 1" | 25 | 16-70 |
| F011808 | EGU8 | 1" | 25 | 70-150 |



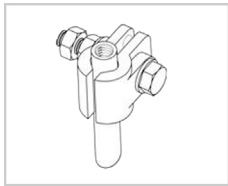
Rod To Cable Lug Clamp

Features

- Connect stranded conductor with an earth rod

Material:

- Brass



| Part No. | Item | Suitable Earth Rod Diameter | | Rod Type | Bolt Size |
|----------|------|-----------------------------|-----|---------------|-----------|
| | | Inch | mm | | |
| F011901 | EB1 | 3/8" | 9.5 | Copper Bonded | M8 |
| F011902 | EB2 | 5/8" | 16 | Copper Bonded | M10 |
| F011903 | EB3 | 5/8" | 15 | Solid Copper | M10 |
| F011904 | EB4 | 3/4" | 20 | Copper Bonded | M10 |
| F011905 | EB5 | 3/4" | 20 | Solid Copper | M10 |



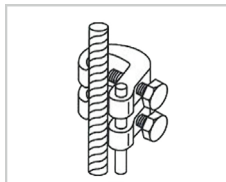
Rebar Clamp

Features

- Bond reinforcing bars, steam pipes, handrails etc.

Material:

- Brass



| Part No. | Item | Conductor Diameter mm | Rebar Diameter mm | Conductor Material |
|----------|------|-----------------------|-------------------|--------------------|
| F012001 | EBN1 | 8 | 8-18 | Brass |
| F012001 | EBN2 | 8 | 18-38 | Brass |



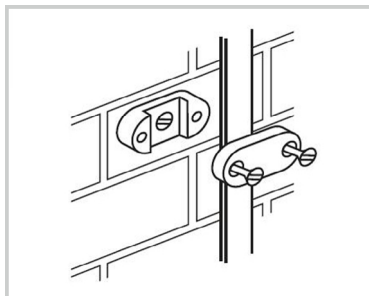
DC Tape Clip

Features

- Fix flat tape

Material:

- Brass



| Part No. | Item | Conductor mm |
|----------|-------|-----------------|
| F012101 | ETC1 | 20 x 3 |
| F012102 | ETC2 | 25 x 3 |
| F012103 | ETC3 | 25 x 4 |
| F012104 | ETC4 | 25 x 6 |
| F012105 | ETC5 | 31 x 3 |
| F012106 | ETC6 | 31 x 6 |
| F012107 | ETC7 | 38 x 3 |
| F012108 | ETC8 | 38 x 5 |
| F012109 | ETC9 | 38 x 6 |
| F012110 | ETC10 | 40 x 4 |
| F012111 | ETC11 | 40 x 6 |
| F012112 | ETC12 | 50 x 3 |
| F012113 | ETC13 | 50 x 4 |
| F012114 | ETC14 | 50 x 6 |



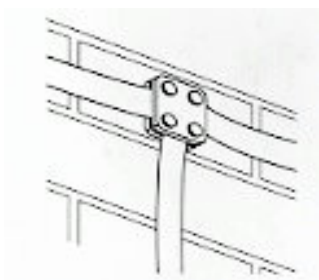
Square Tape Clamp

Features

- Connect flat tape

Material:

- Brass



| Part No. | Item | Conductor mm |
|----------|------|-----------------|
| F012201 | ESC1 | 25 x 3 |
| F012202 | ESC2 | 25 x 6 |
| F012203 | ESC3 | 31 x 3 |
| F012204 | ESC4 | 50 x 6 |
| F012205 | ESC5 | 7 x 27 |
| F012206 | ESC6 | 8 x 26/40 x 4 |



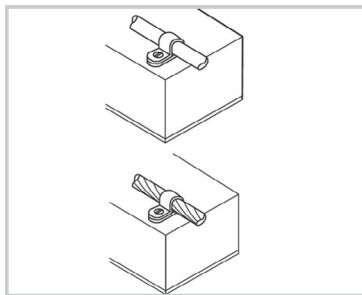
One Hole Cable Clips

Features

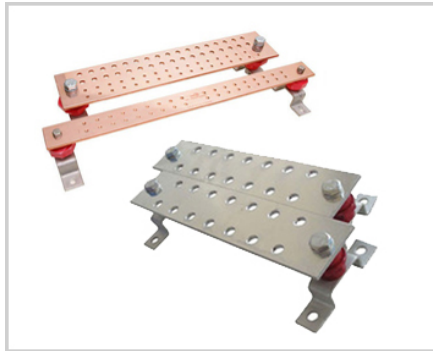
- Provide an easy method of fixing stranded copper conductors to surfaces

Material:

- Copper



| Part No. | Conductor Cross Section mm ² |
|----------|--|
| F012301 | 6 |
| F012302 | 10 |
| F012303 | 16 |
| F012304 | 25 |
| F012305 | 35 |
| F012306 | 50 |
| F012307 | 70 |
| F012308 | 95 |
| F012309 | 120 |
| F012310 | 150 |
| F012311 | 185 |
| F012312 | 240 |
| F012313 | 300 |

**Grounding Busbar**

Material:

■ Copper

Surface

■ Bright or Tin plated

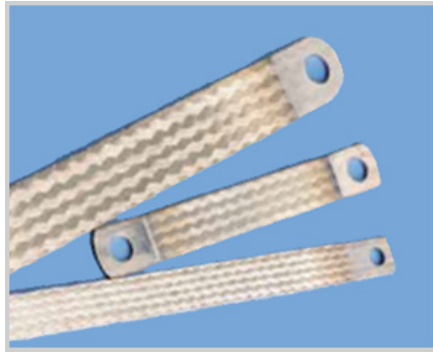
| Part No. | Item | Thickness | | Width | | Length | |
|----------|---------|-----------|------|-------|-------|--------|-------|
| | | Inch | mm | Inch | mm | Inch | mm |
| F012401 | BA14112 | 1/4" | 6.35 | 1" | 25.4 | 12 | 304.8 |
| F012402 | BA14212 | 1/4" | 6.35 | 2" | 50.8 | 12 | 304.8 |
| F012403 | BA14215 | 1/4" | 6.35 | 2" | 50.8 | 15 | 381.0 |
| F012404 | BA14224 | 1/4" | 6.35 | 2" | 50.8 | 24 | 609.6 |
| F012405 | BA14410 | 1/4" | 6.35 | 4" | 101.6 | 10 | 254.0 |
| F012406 | BA14412 | 1/4" | 6.35 | 4" | 101.6 | 12 | 304.8 |
| F012407 | BA14420 | 1/4" | 6.35 | 4" | 101.6 | 20 | 508.0 |
| F012408 | BA14424 | 1/4" | 6.35 | 4" | 101.6 | 24 | 609.6 |

**Bus Bar Insulators**

Features

- Made of bulk molding compound, unsaturated polymer with fiber glass
- Good electrical resistance, heat resistance, fire resistance, low shrinkage and water resistance properties

| Part No. | Item | Tensile Strength | Torgue Strength | Voltage Withstand | Screw | Weight |
|----------|------|------------------|-----------------|-------------------|-------|--------|
| | | LBS | FT LBS | kV | mm | g |
| F012501 | SM25 | 500 | 6 | 6 | 6 | 28 |
| F012502 | SM30 | 550 | 8 | 8 | 6/8 | 44 |
| F012503 | SM35 | 600 | 10 | 10 | 6/8 | 50 |
| F012504 | SM40 | 650 | 10 | 12 | 6/8 | 86 |
| F012505 | SM45 | 1000 | 20 | 15 | 8/10 | 70 |
| F012506 | SM51 | 1000 | 20 | 15 | 8/10 | 83 |
| F012507 | SM60 | 1500 | 40 | 25 | 10/12 | 170 |
| F012508 | SM76 | 1500 | 40 | 25 | 10/12 | 233 |



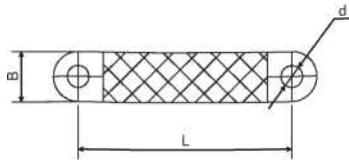
Earthing Tapes with Solderless Pressed Contact Areas

Features

- Suitable as earthing tapes as well as components for current transfer.

Material

- Cu 99.9% with Tin-plated



| Part No. | Item | Conductor Cross Section mm ² | Dimensions (mm) | | |
|----------|------|--|-----------------|---|---|
| | | | B | d | L |
| F020101 | ET04 | 4 | 8 | | |
| F020102 | ET06 | 6 | 10 | | |
| F020103 | ET08 | 8 | 12 | | |
| F020104 | ET10 | 10 | 14 | | |
| F020105 | ET14 | 14 | 18 | | |
| F020106 | ET16 | 16 | 20 | | |
| F020107 | ET25 | 25 | 22 | | |
| F020108 | ET35 | 35 | 25 | | |
| F020109 | ET50 | 50 | 33 | | |
| F020110 | ET70 | 70 | 35 | | |

As Request