

Grounding

Solutions For Comm/Data Applications

CDGRD-10

COOPER B-Line



Overview & Table of Contents

Cooper B-Line's Grounding products for rack & runway provide a complete solution for grounding metal supports. The offering is designed with products that installers can use to make BICSI and ANSI/TIA/EIA-607 compliant installations.

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Legend For Typical Grounding Application *(layout on following page)*

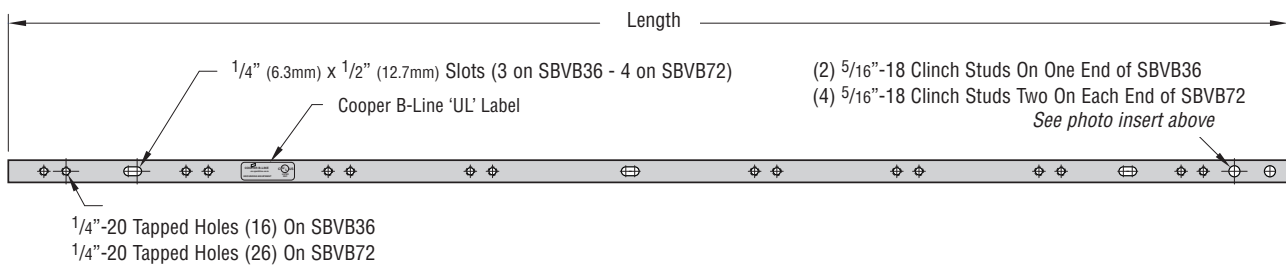
- A) Vertical Rack Ground Bar Kit (see page 4)
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- G) Unit Bonding Conductors (see page 11)



Vertical Rack Ground Bar & Kits

Features:

- Provides a vertical ground path between equipment mounted on the rack
- Typically used on 2-post or 4-post racks
- Blank end and studded end can be attached together to splice bars
- Isolators may be used to separate bar from rack (or omitted depending on application grounding scheme)
- Kit includes
 - 1 - Vertical rack ground bar
 - 3 - Insulators
 - 1 - #2 compression lug
 - 8 - 1/4"-20 x 1/2" SS4 hex bolts & lock washers
 - 4 - 5/16"-18 SS4 hex nut & lock washers
 - 3 - #12-24 x 5/8" yellow zinc hex washer bolts
- Material: 1/4" x 5/8" copper bar

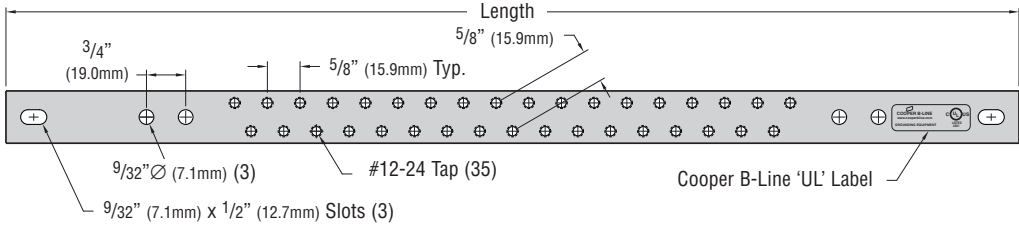
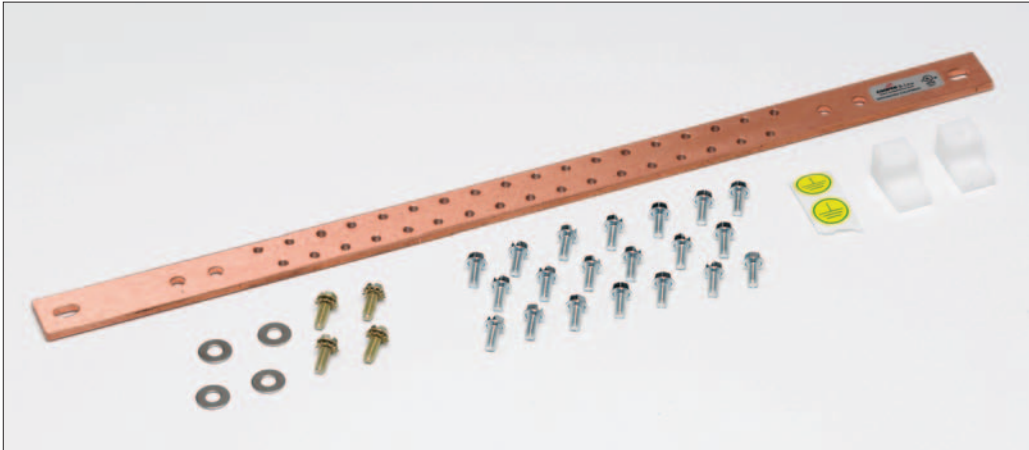


Part Number	Includes	Length		Wt./Ea.	
		in.	(mm)	lbs.	(kg)
SBVB36	Ground Bar Only	36"	(914)	2.0	(0.91)
SBVB36K	Bar & Hardware Kit	36"	(914)	2.2	(1.00)
SBVB72	Ground Bar Only	72"	(1828)	3.7	(1.69)
SBVB72K	Bar & Hardware Kit	72"	(1828)	3.9	(1.77)

Horizontal Rack Ground Bar Kit

Features:

- Used to consolidate grounds on the equipment rack
- Typically used on 2-post or 4-post racks
- Isolators may be used to separate bar from rack (or omitted depending on application grounding scheme)
- Kit includes
 - 1 - Horizontal rack ground bar
 - 2 - White insulators
 - 4 - #12-24 x 5/8" (15.9mm) zinc plated screws & flat washers
 - 20 - #12-24 x 1/2" (12.7mm) zinc plated screws
 - 2 - Ground labels
- Material: 3/16" (4.7mm) x 1" (25.4mm) copper bar

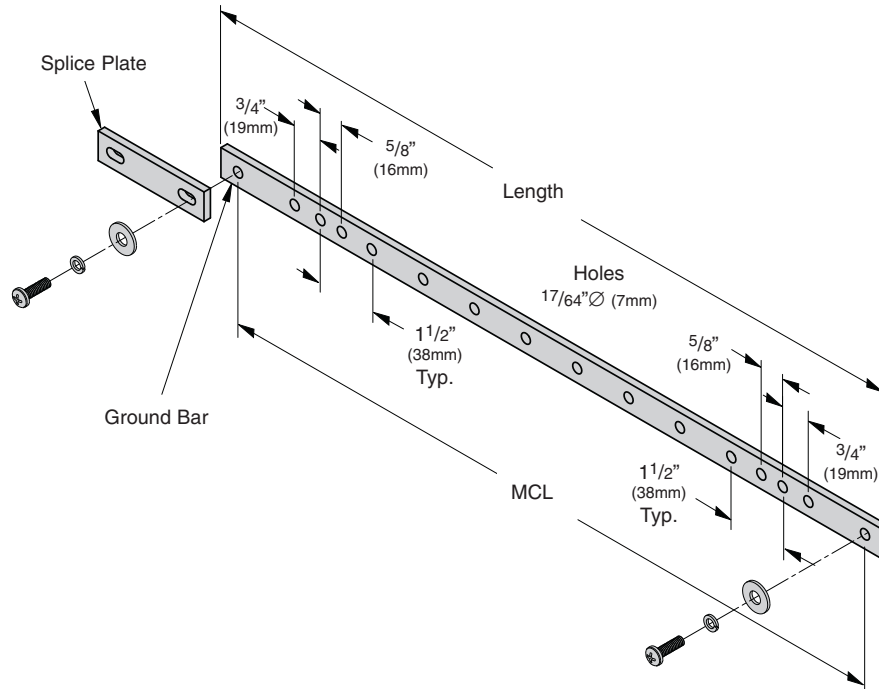
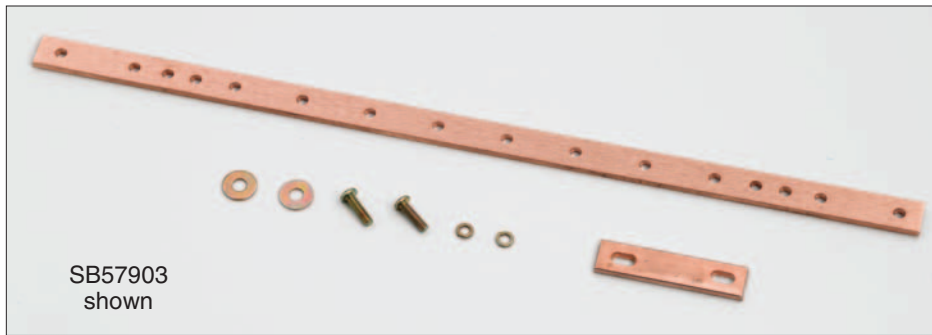


Part Number	Rack Width		Includes	Length		Wt./Ea.	
	in.	(mm)		in.	(mm)	lbs.	(kg)
SBHB119K	19"	(482)	Bar & Hardware Kit	19 3/8"	(492)	3.0	(1.36)

Universal Grounding Bar

Features:

- Used as a rack mounted equipment grounding bus
- Kit includes
 - 1 - Ground bar
 - 1 - Splice plate
 - 2 - #12-24 x 3/4" (19.0mm) yellow zinc plated screws
 - 2 - #12 yellow zinc plated lock washers
 - 2 - 1/4" yellow zinc plated flat washers
- Material: 3/16" (4.7mm) x 3/4" (19.0mm) copper bar

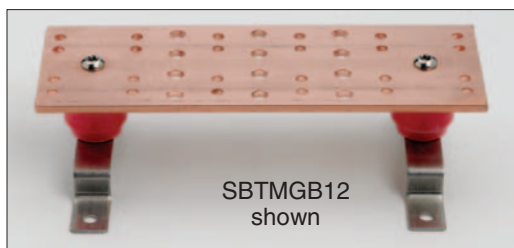
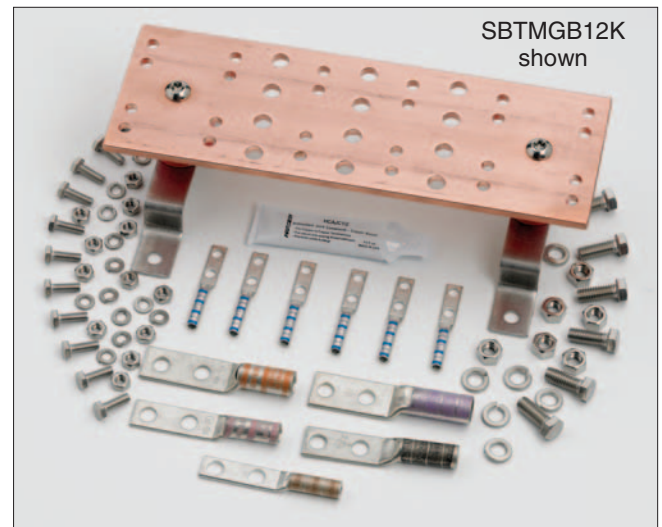


Part Number	Rack Width		Length (overall)		MC (mtg. centers)		Holes	Wt./Ea.	
	in.	(mm)	in.	(mm)	in.	(mm)		lbs.	(kg)
SB57903	19"	(482)	19 ⁵ / ₁₆ "	(490)	18 ⁵ / ₁₆ "	(465)	16	1.0	(0.04)
SB57904	23"	(584)	23 ⁵ / ₁₆ "	(592)	22 ⁵ / ₁₆ "	(567)	18	1.2	(0.05)

Telecommunications Main Grounding Bar

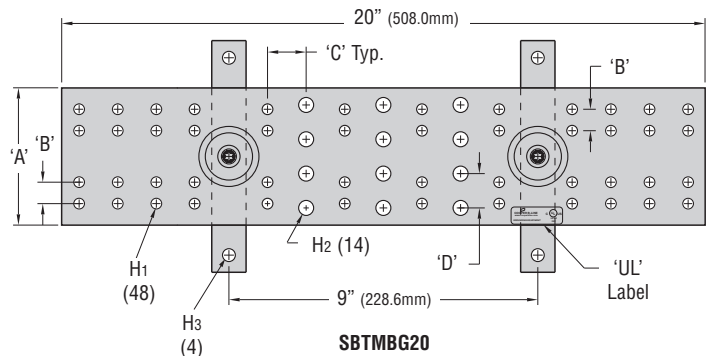
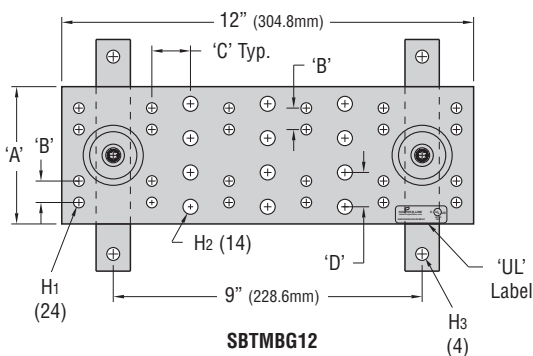
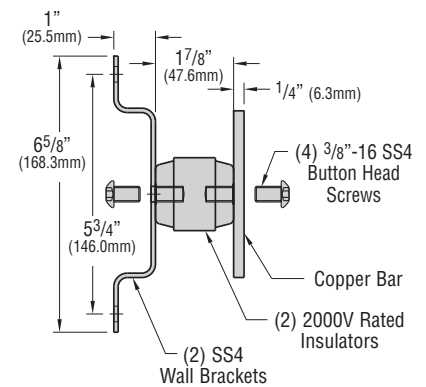
Features:

- Used as a central consolidation point for telecommunications and other low voltage systems within the room
- Typically located on wall or entry room where exterior ground enters building
- Kit includes
 - 1 - Grounding bar assembly
 - 6 - #6 compression lugs
 - 1 each - #2, 1/0, 2/0, 3/0 compression lugs
 - 12 each - 1/4"-20 x 3/4" (19.0mm) SS4 hex bolts, hex nuts & lock washers
 - 6 each - 3/8"-16 x 1" (25.4mm) SS4 hex bolts, hex nuts & lock washers



Dimensional Data

- A = 4" (101.6mm)
- B = 5/8" (15.8mm)
- C = 1 1/4" (31.7mm)
- D = 1" (25.4mm)
- H1 = 5/16"Ø (7.9mm)
- H2 = 7/16"Ø (11.1mm)
- H3 = 3/8"Ø (9.5mm)

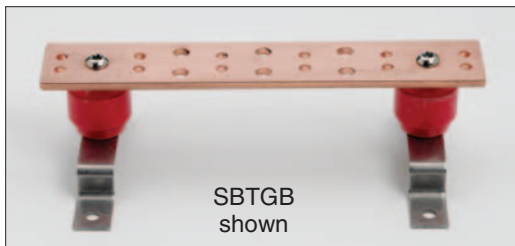
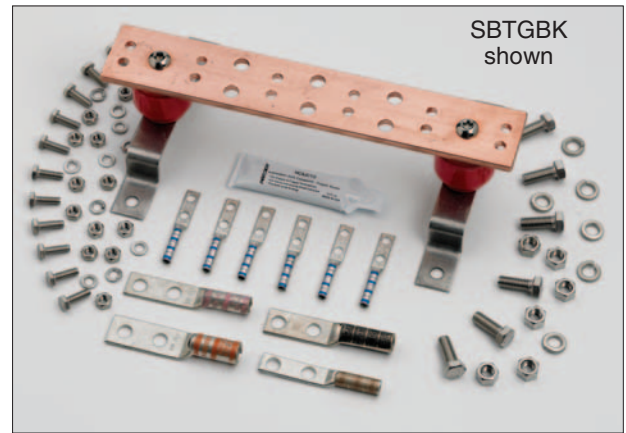


Part Number	Includes	Length		Wt./Ea.	
		in.	(mm)	lbs.	(kg)
SBTMGB12	Grounding Bar Assy	12"	(305)	4.7	(2.13)
SBTMGB12K	Bar Assy & Hardware Kit	12"	(305)	7.7	(3.49)
SBTMGB20	Grounding Bar Assy	20"	(508)	7.1	(3.22)
SBTMGB20K	Bar Assy & Hardware Kit	20"	(508)	10.1	(4.58)

Telecommunications Grounding Bar Kit

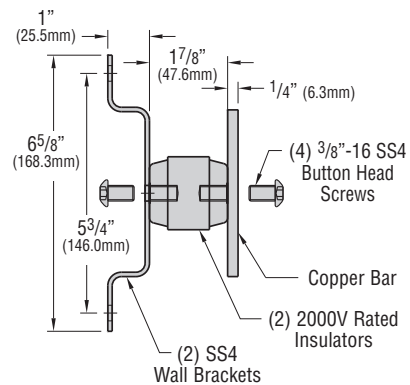
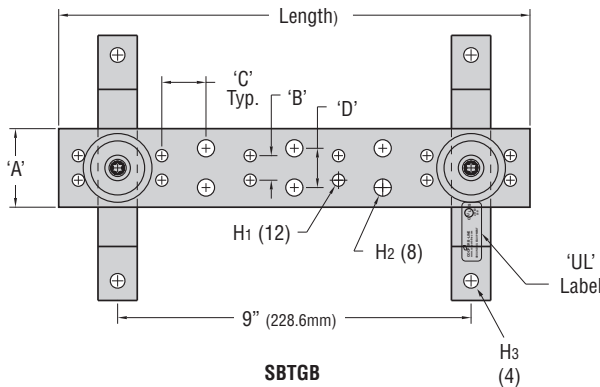
Features:

- Provides a common grounding point within the telecommunications room
- Typically is located on wall of data room
- Kit includes
 - 1 - Grounding bar assembly
 - 6 - #6 compression lugs
 - 1 each - #2, 1/0, 2/0, 3/0 compression lugs
 - 12 each - 1/4"-20 x 3/4" (19.0mm) SS4 hex bolts, hex nuts & lock washers
 - 6 each - 3/8"-16 x 1" (25.4mm) SS4 hex bolts, hex nuts & lock washers
- Material: Copper bar & SS4 wall brackets



Dimensional Data

- A = 2" (50.8mm)
- B = 5/8" (15.8mm)
- C = 1 1/4" (31.7mm)
- D = 1" (25.4mm)
- H1 = 5/16"Ø (7.9mm)
- H2 = 7/16"Ø (11.1mm)
- H3 = 3/8"Ø (9.5mm)

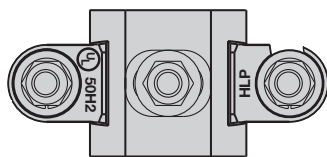
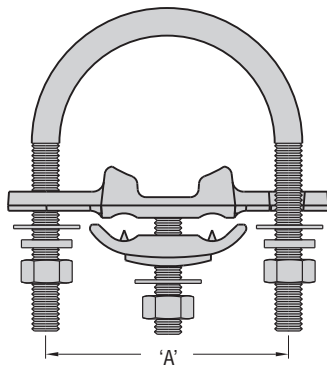


Part Number	Includes	Length		Wt./Ea.	
		in.	(mm)	lbs.	(kg)
SBTGB	Grounding Bar Assy	12"	(305)	2.91	(1.32)
SBTGBK	Bar & Hardware Kit	12"	(305)	4.91	(2.23)

Ground Rod / Pipe Clamps

Features:

- Used to attach ground wire to raised floor pedestals
- Ground wire system inside floor can be used to ground Flextray™ F.A.S.T. System trays
- Sized for ground wires 6 AWG stranded through 250MCM
- 5/16" hardware included
- Material: SS4 U-bolt and hardware - tinned bronze casting

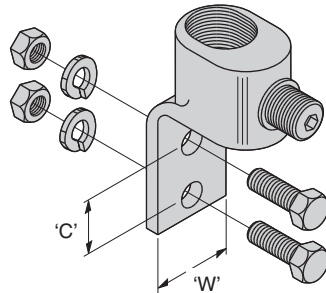
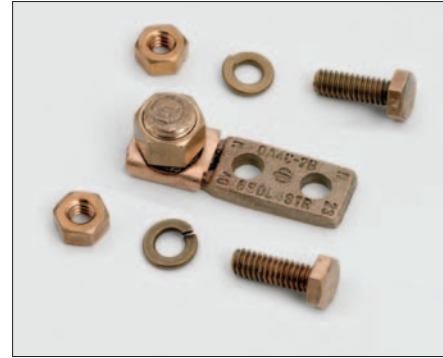


Part Number	Pipe Size (nominal)		A		Wt./Ea.	
	in.	(mm)	in.	(mm)	lbs.	(kg)
SBPC050075	1/2" - 3/4"	(15 - 20)	1.57"	(39.9)	0.47	(0.21)
SBPC100125	1" - 1 1/4"	(25 - 32)	2.03"	(51.5)	0.79	(0.36)
SBPC150200	1 1/2" - 2"	(40 - 50)	2.75"	(69.8)	0.75	(0.34)
SBPC250300	2 1/2" - 3"	(65 - 80)	3.87"	(98.3)	0.95	(0.43)
SBPC350400	3 1/2" - 4"	(90 - 100)	4.87"	(123.7)	1.21	(0.55)
SBPC500600	5" - 6"	(125 - 150)	7.00"	(177.8)	1.70	(0.77)

Two-Hole Mechanical Lug

Features:

- Use for connection of electric wire to grounding bus
- Setscrew may be either allen head or hex head
- Includes: silicon bronze hardware
- Additional sizes available
- Sold individually
- Material: Copper alloy

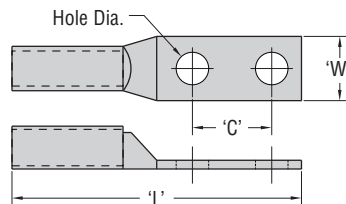


Part Number	Wire Size	'C'		'W'		Bolt Size	Wt./Ea.	
		in.	(mm)	in.	(mm)		Lbs.	(kg)
SB47801	#14 to #8	5/8"	(16)	1/2"	(13)	#10-24	0.05	(0.02)
SB47802	#8 to #4	5/8"	(16)	1/2"	(13)	1/4"-20	0.07	(0.03)
SB47803	#4 to #1	3/4"	(19)	5/8"	(16)	1/4"-20	0.14	(0.06)
SB47804	#1 to 2/0	1"	(25)	13/16"	(20)	3/8"-16	0.23	(0.10)

Compression Lugs (Long Barrel)

Features:

- Use for connection of electric grounding wire to grounding bus
- Sold in package of 10 pcs.
- Material: Tinned Copper

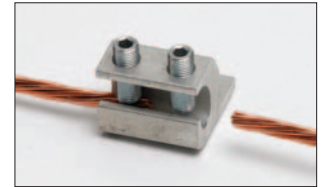
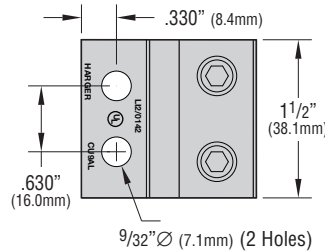
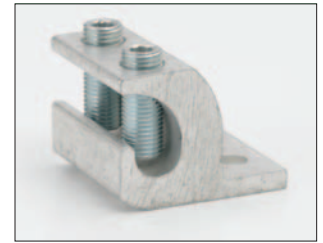
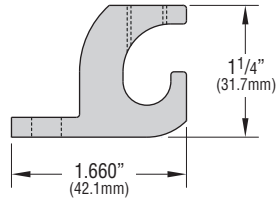


Part Number	Lug Size & # of Holes	Hole Dia.		'W'		'L'		'C'		Wt./Pkg.	
		in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	lbs.	(kg)
SBCL 1	2/0 - 2 Hole	13/32"	(10.3)	13/16"	(20.6)	3 21/32"	(92.8)	1"	(25.4)	6.0	(2.72)
SBCL 2	2/0 - 2 Hole	17/32"	(13.5)	13/16"	(20.6)	4 7/8"	(123.8)	1 3/4"	(44.4)	14.0	(6.35)
SBCL 3	3/0 - 2 Hole	9/16"	(14.3)	15/16"	(23.8)	3 3/4"	(95.2)	1"	(25.4)	20.0	(9.07)
SBCL 4	4/0 - 2 Hole	9/16"	(14.3)	1"	(25.4)	3 29/32"	(99.2)	1"	(25.4)	20.0	(9.07)

Lay-In Lug

Features:

- Used to attach ground wires to racks or cabinets
- Sold in package of 10 pcs.
- Setscrews (2): 3/8"-24 Hex Head Oval Point
- Material: Aluminum - tin plated

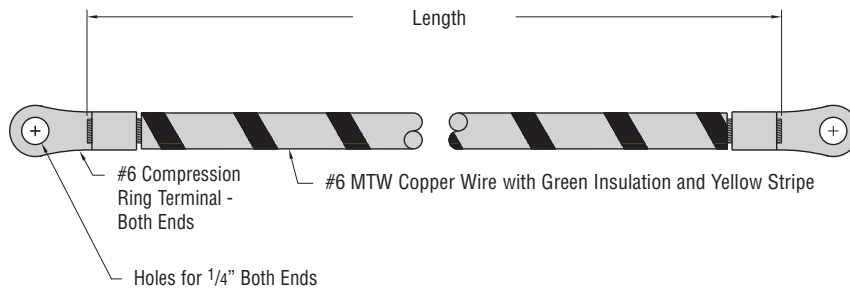


Part Number	Lug Size	Wt./Pkg.	
		lbs.	(kg)
SBLL 1	2/0 - #14AWG	2.40	(1.09)

Unit Bonding Conductor

Features:

- Used to bond electronic equipment to vertical or horizontal rack mount busbars
- Sold in packages of 5 with aluminum joint compound
- Material: Copper wire

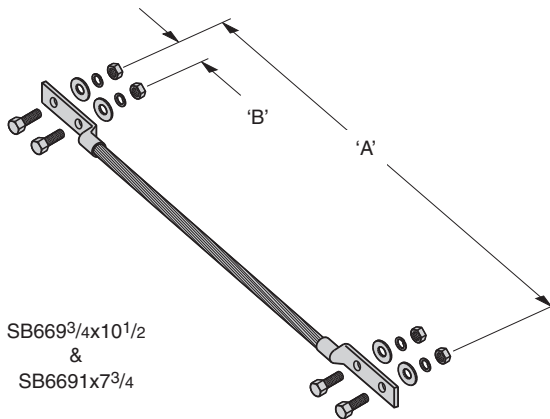
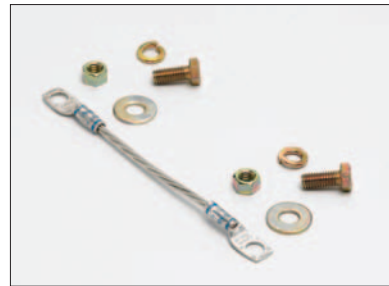
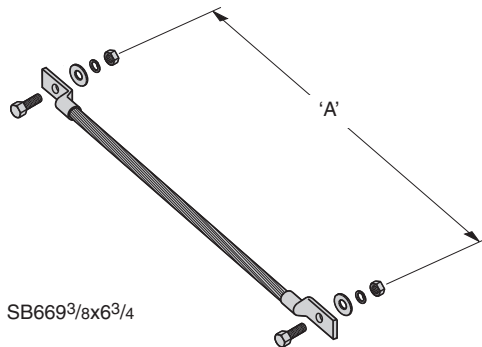


Part Number	Length		Wt./Ea.	
	in.	(mm)	lbs.	(kg)
SBUBC614K	14"	(355)	1.45	(0.66)
SBUBC618K	18"	(457)	1.45	(0.66)
SBUBC632K	32"	(813)	2.54	(1.15)

Grounding Strap

Features:

- Use to provide grounding path
- SB669^{3/4}x10^{1/2} and SB6691x7^{3/4} includes: (1) cable with crimped lugs and 1/4"-20 hardware
- SB669^{3/8}x6^{3/4} includes: (1) cable with crimped lugs and 3/8"-16 hardware
- Material: #6 flexible tin plated copper wire

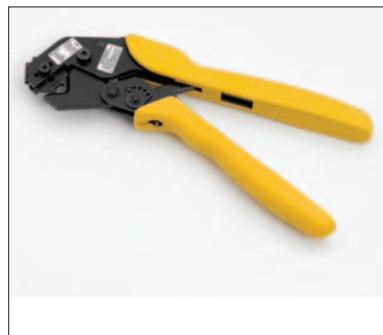


Part Number	'A'		'B'		Wt./Ea.	
	In.	(mm)	In.	(mm)	Lbs.	(kg)
SB669 ^{3/4} x10 ^{1/2}	10 ^{1/2} "	(267)	3/4"	(19)	.36	(0.16)
SB6691x7 ^{3/4}	7 ^{3/4} "	(197)	1"	(25)	.27	(0.12)
SB669 ^{3/8} x6 ^{3/4}	6 ^{3/4} "	(171)	N/A	N/A	.20	(0.09)

Crimp Tool

Features:

- Used to attach ground lugs to electrical wire
- Sold per piece
- 10¹/₂" (266mm) in length



Part Number	Wt./Ea.	
	lbs.	(kg)
SBTCR	2.00	(0.91)

Dieless Compression Tool

Features:

- Used to attach ground lugs to electrical wire
- Sold per piece
- 24" (609mm) in length



Part Number	Wt./Ea.	
	lbs.	(kg)
SBTCO	5.00	(2.27)

Joint Compound

Features:

- Improves electrical continuity at a grounding or bonding connection
- Sold in packages of 12
- 1/2 ounce per package



Part Number	Material	Wt./Pkg.	
		lbs.	(kg)
SBJCA	Aluminum	0.37	(0.17)
SBJCC	Copper	0.37	(0.17)

Cross Reference

Cooper B-Line	CPI	Panduit
SBCL1	40162-959	LCC2/0-38DW-X
SBCL2	40162-960	LCCX2/0-12-X
SBCL4	40162-961	LCCX4/0-38D-X
SBJCA	40166-812	CMP-300-1
SBJCC	40168-812	CMP-200-1
SBPC050075	40170-001	GPL series
SBPC100125	40170-002	GPL series
SBPC150200	40170-003	GPL series
SBPC250300	40170-004	GPL series
SBPC350400	40170-005	GPL series
SBPC500600	40170-006	GPL series
SBTCO	40165-001	CT-930
SBTCR	40165-002	CT-1700
SBTGB	40156-012	
SBTMGB12	40153-012	GB2B0306TPI-1
SBTMGB12K	40158-012	
SBTMGB20	40153-020	GB4B0624TPI-1
SBTMGB20K	40158-020	
SBVB36	40160-036	
SBVB36K	40161-036	
SBVB72	40160-072	
SBVB72K	40161-072	RGS134-1Y



Access Cabinet



**Rack & Runway
RCM+ Rack**



E2 Zone 4 Cabinets



Value Wall Mount Cabinets



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CDGRD-10

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