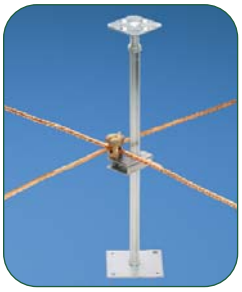
StructuredGround™ Grounding Connectors

Panduit® StructuredGround™ Grounding Connectors provide innovative solutions for joining ground conductors to water pipe, ground rods, rebar, conduit, iron pipe and structural steel. Designed with the needs of the end user in mind, StructuredGround™ Grounding Connectors feature easy installation, lowest installed cost, and long-term reliability.



- **Functional product information is marked directly on the connector, facilitating the identification, ordering, and usage of the grounding connector**
- **Compression connectors are color-coded to facilitate quick identification of the proper crimping die**
- **Mechanical connectors are designed for easy installation – no special tools required**
- **Incorporate wide wire range-taking capability to minimize inventory requirements**
- **Made from high strength, high conductivity electrolytic copper and aluminum alloy materials to provide optimum connectivity for both power and grounding applications**
- **Wide assortment of manual, controlled cycle, battery operated hydraulic and pneumatic crimping tools for reliable connections at the lowest installed cost**

Panduit® StructuredGround™ Grounding Connectors are designed for use with many different code and flex conductor types and are available in a broad range of styles and sizes. A full line of manual, controlled cycle, and battery operated hydraulic crimping tools meet application needs and provide lowest installed cost. Panduit offers a wide variety of StructuredGround™ Grounding Connectors to meet customer needs and today's application requirements.

Features and Benefits – StructuredGround™ Compression Connectors

Bolded features are unique to Panduit.

Copper HTAPs

Easy-to-read, color-coded die index number for Panduit crimping dies, legible after crimping, for selection

Part number and agency listings marked on part for easy identification

Slotted design to reduce installation time when used with Panduit cable ties (included)

Conductor sizes for each tap pocket marked on part

Made from high conductivity copper and electro tin-plated to inhibit corrosion

c UL us LISTED CSA CERTIFIED

Clear Covers for Copper HTAPs

Optically clear to allow 360° inspections

Made from high impact strength self-extinguishing plastic with UL94V-0 flammability rating and minimum oxygen index of 28

Built-in flanges retain HTAP in cover

Easy to assemble snap-on design

Molded in flash barriers protect against electrical flash over

Retainer clips to hold labels inside cover*. Retainer clips have a write-on surface for manual marking

Corresponding Panduit HTAP part number, voltage rating, and temperature rating molded into cover half for easy identification

Low profile design minimizes space requirements

Flexible fingers closely conform to conductor preventing foreign objects from entering cover

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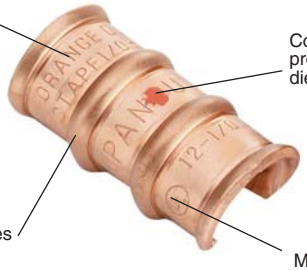
*Labels shown printed with Panduit ® PanTher™ LS8E Printer. See page E1.2.

Thin Wall Copper CTAPs



Part number and conductor size marked on part for easy identification

Color-coded for proper crimp die selection

Ribbed design provides high strength

Made from high conductivity wrought copper

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Heavy Duty Copper CTAPs

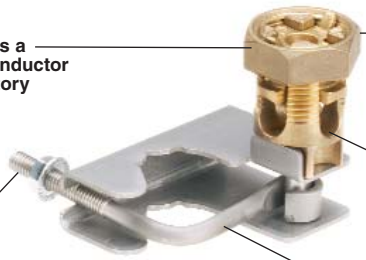
Easy-to-read die index number for selection

Made from heavy wall, extruded, high conductivity copper; provides high strength and premium electrical properties

Part number and conductor size marked on part for easy identification

c UL us LISTED

Access Floor Grounding Clamp PATENTED



Each part accommodates a wide range of copper conductor sizes – minimizes inventory

Made from high strength cast bronze

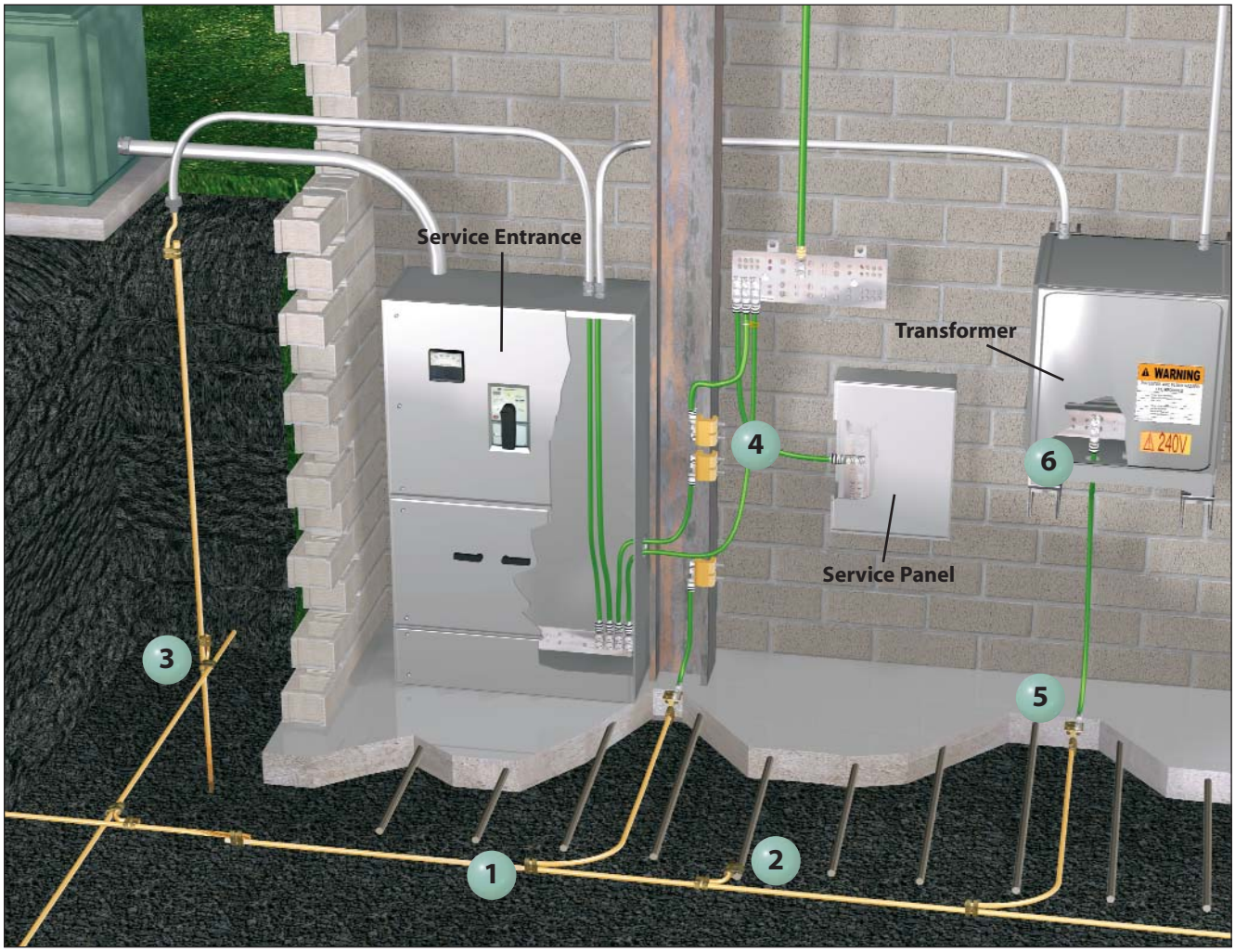
Quad bolt bonds perpendicular MCBN conductors

Bonds to the pedestal with a single bolt to simplify installation

Bonds to both square and round access floor pedestals

c UL us LISTED CSA CERTIFIED

StructuredGround™ Direct Burial Compression Grounding System Roadmap



1 Conductor to Conductor

E Style Grounding Connectors: Create bonds between parallel grounding conductors.
(see page D3.8)

2 Conductor to Rebar

E Style Grounding Connectors: Allow bonds to reinforcing bars.
(see page D3.8)

3 Conductor to Ground Rod

Grounding Cross Connectors: Create bonds between perpendicular grounding conductors.
(see page D3.9)

4 Conductor to Building Steel

Universal Beam Grounding Clamp: Bonds structural steel to grounding conductor system.
(see page D3.10)

5 Conductor to Grounding Electrodes

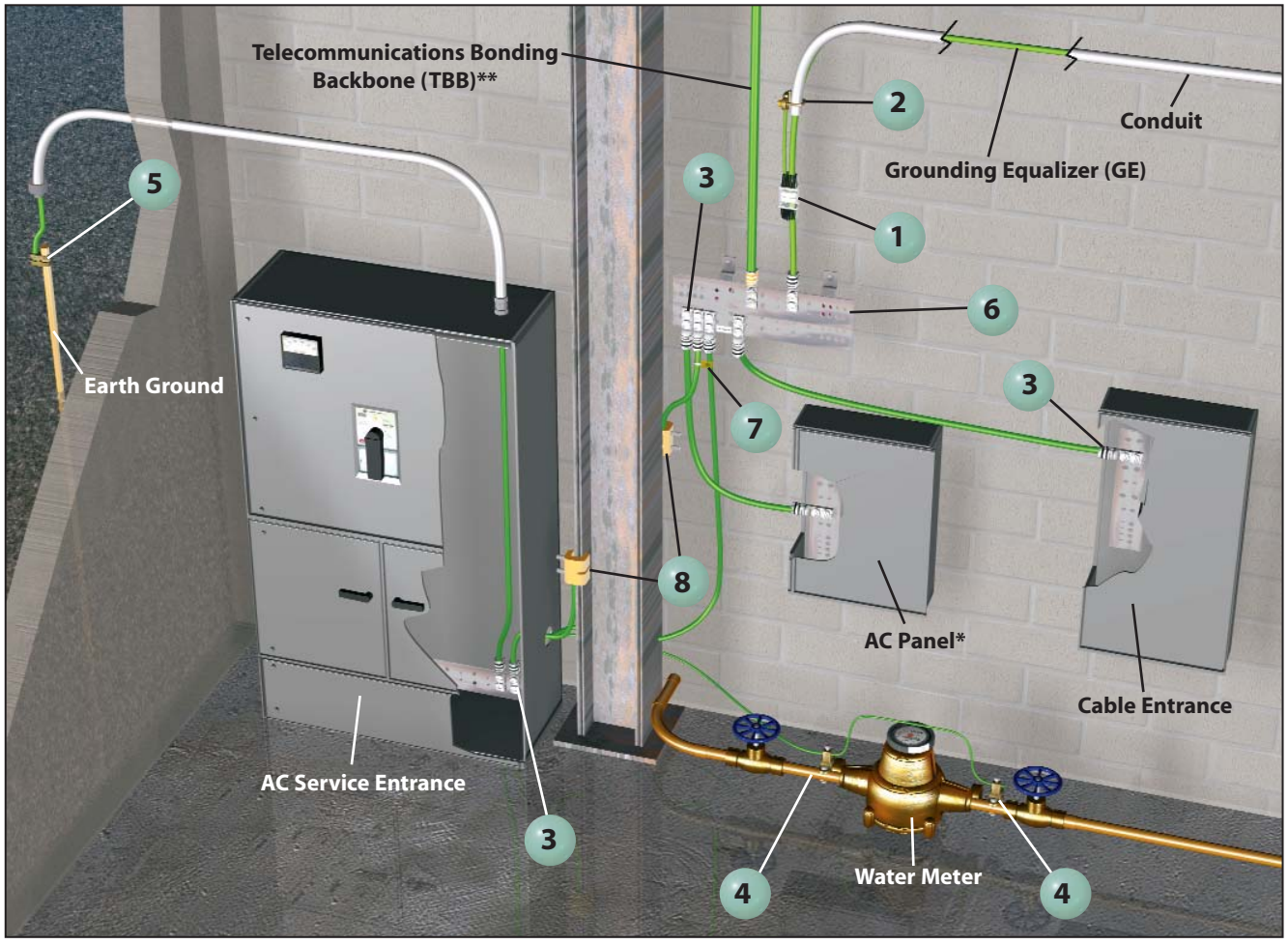
Grounding Plate Connector: Allows bonds through concrete.
(see page D3.10)

6 Related Product LCC-W

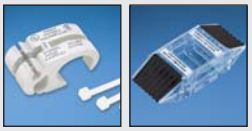
Long Barrel Two-Hole Code Conductor Lugs: For use with stranded copper conductors.
(see page D2.47 – D2.49)

Service Entrance Grounding Roadmap

- Complies with J-STD-607-A and IEEE Std 1100 (IEEE Emerald Book)
- Grounding Equalizer (GE) is required when two or more Telecommunications Bonding Backbones (TBB) are used within a multi-story building; bond TBBs together with a GE at the top floor and at a minimum of every third floor in between



1 Copper Compression HTAP and Clear Cover: HTWC (see pages D3.15)



2 Bronze, U-Bolt Grounding Clamp: GPL (see page D3.25) connected by a cable to **1** (HTAP)

3 Copper Compression, Two-Hole, Long Barrel with Window Lug: LCC-W (see pages D2.47 – D2.49)

4 Bronze, Water Pipe Grounding Clamp: KP (see page D3.26)

5 E Style Grounding Connector: GCE (see page D3.8)

6 Telecommunications Main Grounding Busbar (TMGB) and Busbar Label (see page D3.6)

7 Telecommunications Grounding and Bonding Conductor Label Kit: LTYK (see page D3.6)

8 Universal Beam Grounding Clamp: GUBC (see page D3.10)

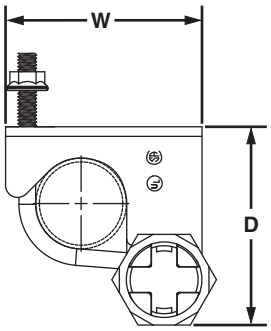
*AC Panel should be grounded per NEC standards. Enclosure should be grounded per manufacturer's specifications.
**Specification J-STD-607-A specifies different size conductors based on the length of the Telecommunications Bonding Backbone (TBB).

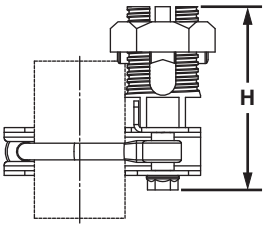
Access Floor Grounding Clamp

NEW!

Type GPQC

- Bond mesh common bonding network (MCBN) conductors to each other and bond the access floor pedestals to the conductors
- Specifically designed to bond perpendicular MCBN conductors per TIA-942
- Bond to the pedestal with a single bolt to simplify installation
- Accommodate conductors from #6 – 1/0 AWG, minimizes inventory requirements
- Bond round and square access floor pedestals for greater flexibility





Part Number	Round Pedestal (In.)	Square Pedestal (In.)	MCBN Conductor Size Range AWG (mm2)	Figure Dimensions In. (mm)			Std. Pkg. Qty.	Std. Ctn. Qty.
				D	W	H		
GPQC07-1/0	3/4 – 7/8	—	#6 SOL – 1/0 STR (16 – 50)	4.25 (108.0)	3.38 (85.9)	3.19 (81.0)	1	10
GPQC10-1/0	1 – 1 1/8	7/8	#6 SOL – 1/0 STR (16 – 50)	4.19 (106.4)	3.38 (85.9)	3.19 (81.0)	1	10
GPQC12-1/0	1 1/4	—	#6 SOL – 1/0 STR (16 – 50)	4.53 (115.1)	3.44 (87.4)	3.19 (81.0)	1	10
GPQC15-1/0	1 1/2	—	#6 SOL – 1/0 STR (16 – 50)	4.47 (113.5)	3.44 (87.4)	3.19 (81.0)	1	10
GPQC17-1/0	1 3/4	—	#6 SOL – 1/0 STR (16 – 50)	5.19 (131.8)	4.00 (101.6)	3.19 (81.0)	1	10
GPQC20-1/0	2	—	#6 SOL – 1/0 STR (16 – 50)	5.06 (128.5)	4.00 (101.6)	3.19 (81.0)	1	10

BICSI/J-STD-607-A Telecommunications Grounding Busbars

Type GB

- Meets BICSI and J-STD-607-A requirements for network systems grounding applications
- Made of high conductivity copper and tin-plated to inhibit corrosion
- Comes pre-assembled with brackets and insulators attached for quick installation
- Insulators provide 600 V of insulation
- Use Panduit self-laminating laser/ink jet labels to identify busbars to meet TIA/EIA-606-A, see chart below

TGB

TMGB

Part Number	Bar Size	No. of Mounting Positions		Std. Pkg. Qty.
		1/4"Stud Hole with 5/8" Hole Spacing	3/8" Stud Hole with 1" Hole Spacing	
Telecommunications Grounding Busbars (TGB)				
GB2B0304TPI-1	1/4" x 2" x 10"	4	3	1
GB2B0306TPI-1	1/4" x 2" x 12"	6	3	1
GB2B0312TPI-1	1/4" x 2" x 20"	12	3	1
GB2B0514TPI-1	1/4" x 2" x 24"	14	5	1
Telecommunications Main Grounding Busbars (TMGB)				
GB4B0612TPI-1	1/4" x 4" x 12"	12	6	1
GB4B0624TPI-1	1/4" x 4" x 20"	24	6	1
GB4B1028TPI-1	1/4" x 4" x 24"	28	10	1

For additional label sizes, materials, and print technologies and to see the complete line of Panduit identification products, see pages E1.1 – E2.22.

Component Labels for BICSI/J-STD-607-A Telecommunications Grounding Busbars

Suggested Label Solutions for TIA/EIA-606-A Compliance				
Telecommunications Grounding Busbar Part Number	Laser/Ink Jet Desktop Printer Label	TDP43MY Thermal Transfer Desktop Printer Label	PanTher™ LS8E Hand-Held Printer Label	Cougar™ LS9 Hand-Held Printer Label
All GB2B and GB4B Parts	C200X100FJJ	C200X100YPT	C200X100FJC	T100X000VPC-BK

For complete labeling solutions and product information, reference charts on pages E1.1 – E2.22.

Telecommunications Grounding and Bonding Conductor Label Kit

- Meets labeling requirements of J-STD-607-A; each telecommunications grounding and bonding conductor shall be labeled as close as practicable to its point of termination in a readable position
- Can be applied as a wrap-around marker (parallel to cable) or flag marker (45° or 90°) to cable
- Kit includes everything needed to properly label cables; ten flame retardant cable ties and ten rigid plastic yellow tags printed with "IF THIS CONNECTOR OR CABLE IS LOOSE OR MUST BE REMOVED, PLEASE CALL THE BUILDING TELECOMMUNICATIONS MANAGER."

Part Number	Part Description	Std. Pkg. Qty.
LTYK	Label kit includes ten printed tags and ten flame retardant cable ties.	1

NEMA Hole Pattern Grounding Busbars

NEW!

Type GBN

- Provided with standard NEMA hole pattern spacing
- Made of high conductivity copper and tin-plated to inhibit corrosion
- Come pre-assembled with brackets and insulators attached for quick installation
- Insulators provide 600 V of insulation

Part Number	Bar Size	No. of Mounting Positions: 1/2" Stud Hole with 1 3/4" Hole Spacing	Std. Pkg. Qty.
GB4N0007TPI-1	1/4" x 4" x 12"	7	1
GB4N0016TPI-1	1/4" x 4" x 24"	16	1
GB4N0024TPI-1	1/4" x 4" x 36"	24	1
GB4N0026TPI-1	1/4" x 4" x 48"	26	1
GB4N0034TPI-1	1/4" x 4" x 60"	34	1

Grounding Busbar 1" Hole Spacings

NEW!

Type GBD

- Provided with 1" hole D pattern spacing
- Made of high conductivity copper and tin-plated to inhibit corrosion
- Come pre-assembled with brackets and insulators attached for quick installation
- Insulators provide 600 V of insulation

Part Number	Bar Size	No. of Mounting Positions: 7/16" Stud Hole with 1" Hole Spacing	Std. Pkg. Qty.
GB2D0008TPI-1	1/4" x 2" x 12"	8	1
GB2D0021TPI-1	1/4" x 2" x 24"	21	1
GB2D0033TPI-1	1/4" x 2" x 36"	33	1
GB2D0044TPI-1	1/4" x 2" x 48"	44	1
GB2D0056TPI-1	1/4" x 2" x 60"	56	1

Stainless Steel Hardware for Busbars

NEW!

- Bulk hardware for attaching connectors to TMGBs and TGBs

Part Number	Part Description	Std. Pkg. Qty.
1/4" Hardware		
SSNTS1420-C	Stainless steel mounting hardware; 1/4" stainless steel bolts.	100
SSCW14-C	Stainless steel mounting hardware; 1/4" stainless steel Belleville washers (locking).	100
SSFW14-C	Stainless steel mounting hardware; 1/4" stainless steel flat washers.	100
SSN1420-C	Stainless steel mounting hardware; 1/4" stainless steel nuts.	100
3/8" Hardware		
SSNTS3816-C	Stainless steel mounting hardware; 3/8" stainless steel bolts.	100
SSCW38-C	Stainless steel mounting hardware; 3/8" stainless steel Belleville washers (locking).	100
SSFW38-C	Stainless steel mounting hardware; 3/8" stainless steel flat washers.	100
SSN3816-C	Stainless steel mounting hardware; 3/8" stainless steel nuts.	100
Hardware Kit		
GLMHK	Stainless steel hardware for use in mounting lugs for grounding plates and universal beam grounding clamps; includes: two hex head bolts 1/2-13 thread 1" long, two split lock washers for 1/2" diameter bolt, and two SAE flat washers for 1/2" diameter bolt.	1

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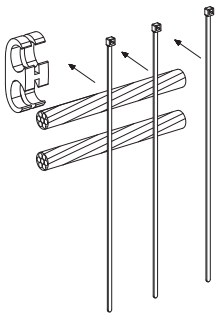
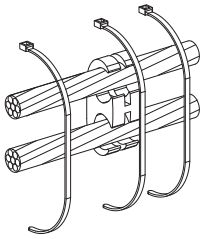
E Style Grounding Connectors

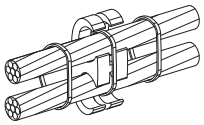
Type GCE

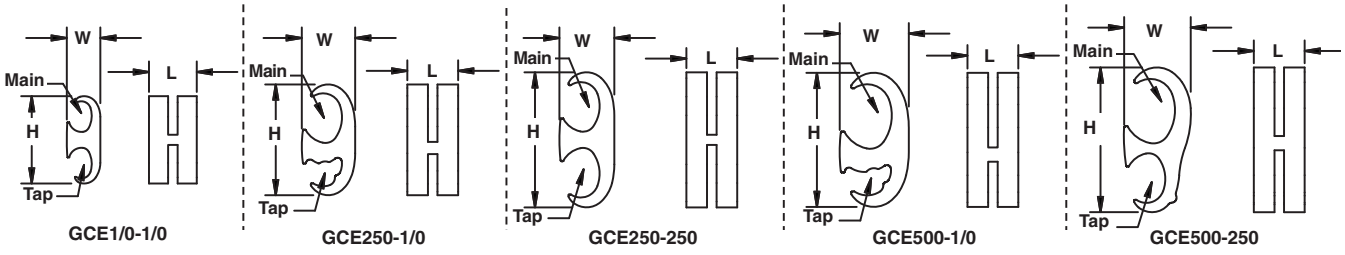
- Wide range-taking ability and multi-conductor design provide flexibility with a minimum number of parts, allowing for conductor to conductor, conductor to rebar, and conductor to ground rod applications
- Designed for the enhanced crimp process using patent pending technology meets IEEE Std 837™ – 2002
- Slotted design allows quick and easy assembly of conductor to connector using Panduit cable ties, included
- Pre-applied conductive antioxidant compound ensures a high quality mechanical and electrical bond, speeding installation
- Color-coded and marked with Panduit die index numbers for proper crimp die selection
- UL 467 Listed and CSA 22.2 Certified for grounding and bonding suitable for direct burial in earth or concrete when crimped with Panduit or industry standard crimping tools and Panduit dies
- Complies with vibration tests per MIL-STD-202G (METHOD 201A)



View using cable ties







Part Number	Element	Copper Conductor Size Range AWG (mm²)	Ground Rod Size In. (mm)	Rebar Size In. (mm)	Figure Dimensions In. (mm) L	W	H	Panduit Color Code	Panduit Die Index No.‡	Std. Pkg. Qty.
GCE1/0-1/0	Main	#6 SOL – 1/0 STR (16 – 50)	—	—	0.94 (23.9)	0.66 (16.8)	1.72 (43.7)	Red	PG10	1
	Tap									
GCE250-1/0	Main	1/0 STR – 250 kcmil (70 – 120)	1/2 – 5/8 (12.7 – 15.9)	3/8 – 1/2, #3 – #4 (9.5 – 12.7), (#10 – #13)	1.00 (25.4)	1.05 (26.7)	2.18 (55.4)	Black	PG25	1
	Tap	#6 SOL – 1/0 STR (16 – 50)	—	—						
GCE250-250	Main	1/0 STR – 250 kcmil (70 – 120)	1/2 – 5/8 (12.7 – 15.9)	3/8 – 1/2, #3 – #4 (9.5 – 12.7), (#10 – #13)	1.00 (25.4)	1.08 (27.4)	2.66 (67.6)	Black	PG25	1
	Tap									
GCE500-1/0	Main	250 – 500 kcmil (150 – 240)	1/2 – 3/4 (12.7 – 19.1)	5/8 – 3/4, #5 – #6 (15.9 – 19.1), (#16 – #19)	1.00 (25.4)	1.36 (34.5)	2.64 (67.1)	Blue	PG50	1
	Tap	#6 SOL – 1/0 STR (16 – 50)	—	—						
GCE500-250	Main	250 – 500 kcmil (150 – 240)	1/2 – 3/4 (12.7 – 19.1)	5/8 – 3/4, #5 – #6 (15.9 – 19.1), (#16 – #19)	1.00 (25.4)	1.32 (33.4)	2.85 (72.4)	Blue	PG50	1
	Tap	1/0 STR – 250 kcmil (70 – 120)	—	—						

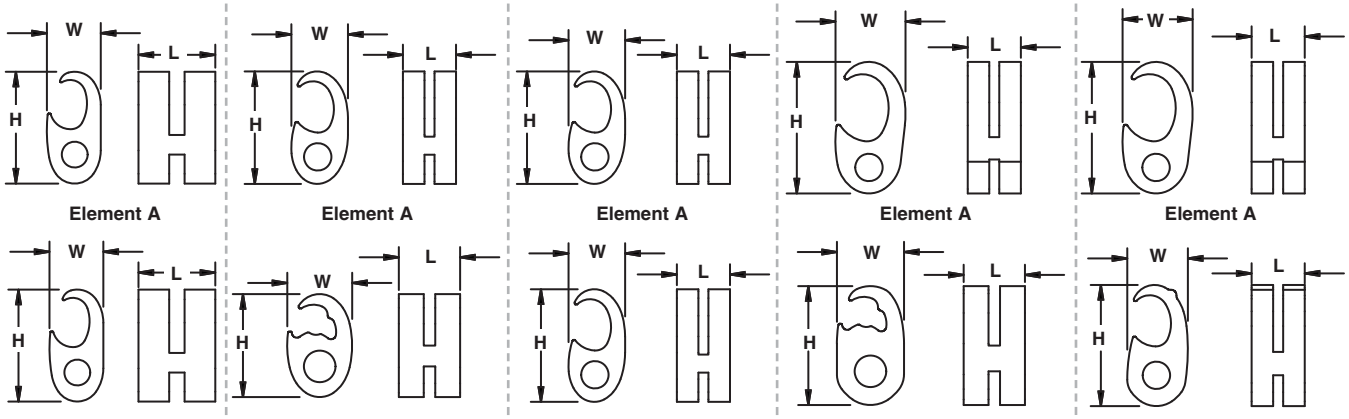
‡See page D3.90 for tool and die information.

Grounding Cross Connectors

NEW!

Type GCC

- Only a single die required to crimp each element, which speeds installation and reduces costs
- Wide range-taking ability and multi-conductor design provide flexibility with a minimum number of parts, allowing for conductor to conductor, conductor to rebar, and conductor to ground rod applications
- Designed for the enhanced crimp process using patent pending technology meets IEEE Std 837™ – 2002
- Slotted design allows quick and easy assembly of conductor to connector using Panduit cable ties, included
- Pre-applied conductive antioxidant compound ensures a high quality mechanical and electrical bond, speeding installation
- Color-coded and marked with Panduit die index numbers for proper crimp die selection
- UL 467 Listed and CSA 22.2 Certified for grounding and bonding suitable for direct burial in earth or concrete when crimped with Panduit or industry standard crimping tools and Panduit dies
- Complies with vibration tests per MIL-STD-202G (METHOD 201A)



Part Number	Element	Copper Conductor Size Range AWG (mm²)	Ground Rod Size In. (mm)	Rebar Size In. (mm)	Figure Dimensions In. (mm) L	W	H	Panduit Color Code	Panduit Die Index No.‡	Std. Pkg. Qty.
GCC6X61/0-1/0	A	#6 SOL – 1/0 STR (16 – 50)	—	—	0.94 (23.9)	0.66 (16.8)	1.37 (34.8)	Red	PG10	1
	B									
GCC6X6250-1/0	A	#2 SOL – 250 kcmil (35 – 120)	1/2 – 5/8 (12.7 – 15.9)	3/8 – 1/2, #3 – #4 (9.5 – 12.7), (#10 – #13)	1.00 (25.4)	1.06 (26.9)	2.12 (53.8)	Black	PG25	1
	B	#6 SOL – 1/0 STR (16 – 50)	—	—			1.68 (42.7)			
GCC6X6250-250	A	#2 SOL – 250 kcmil (35 – 120)	1/2 – 5/8 (12.7 – 15.9)	3/8 – 1/2, #3 – #4 (9.5 – 12.7), (#10 – #13)	1.00 (25.4)	1.06 (26.9)	2.12 (53.8)			1
	B									
GCC6X6500-1/0	A	250 – 500 kcmil (150 – 240)	1/2 – 3/4 (12.7 – 19.1)	5/8 – 3/4, #5 – #6 (15.9 – 19.1), (#16 – #19)	1.00 (25.4)	1.32 (33.5)	2.48 (63.0)	Blue	PG50	1
	B	#6 SOL – 1/0 STR (16 – 50)	—	—		1.09 (27.7)	1.94 (49.3)			
GCC6X6500-250	A	250 – 500 kcmil (150 – 240)	1/2 – 3/4 (12.7 – 19.1)	5/8 – 3/4, #5 – #6 (15.9 – 19.1), (#16 – #19)	1.00 (25.4)	1.32 (33.5)	2.48 (63.0)			1
	B	#2 SOL – 250 kcmil (35 – 120)	—	—		1.16 (29.5)	2.29 (58.2)			

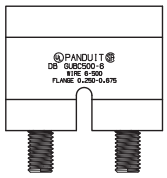
‡See page D3.90 for tool and die information.

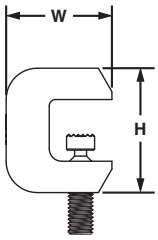
NEW! IEEE UL LISTED CSA CERTIFIED PATENT PENDING

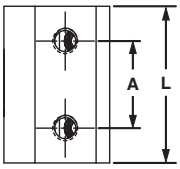
Universal Beam Grounding Clamp

Type GUBC

- Universal, fits on a wide range of standard (angled) and wide flange (parallel) structural steel beams
- Provide a mounting pad suitable for a two-hole compression lug
- Install quickly and easily with standard 1/4" key hex wrench tooling
- UL 467 Listed and CSA 22.2 Certified for grounding and bonding suitable for direct burial in earth or concrete
- Comply with vibration tests per MIL-STD-202G (METHOD 201A)







Part Number	Copper Conductor Size Range AWG (mm²)	Flange Thickness In. (mm)	Thread Size In.	Figure Dimensions In. (mm)				Std. Pkg. Qty.
				A	L	W	H	
GUBC500-6	#6 – 500 (16 – 240)	0.250 – 0.675 (6.3 – 17.1)	1/2 – 13	1.75 (44.4)	3.15 (80.0)	2.13 (54.0)	2.50 (63.5)	1

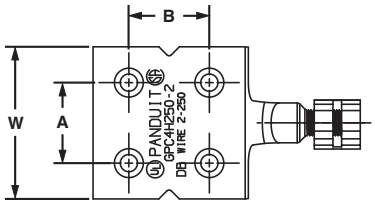
For stainless steel mounting hardware kit, see part number GLMHK on page D3.7.

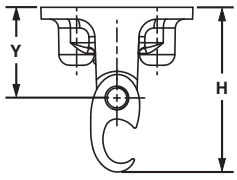
NEW! IEEE c UL us LISTED CSA CERTIFIED PATENT PENDING

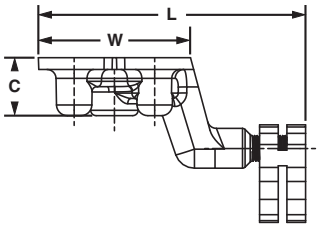
Grounding Plate Connector

Type GPC

- Slotted design allows quick and easy assembly of conductor to connector using Panduit cable ties, included
- Pre-applied conductive antioxidant compound ensures a high quality mechanical and electrical bond, speeding installation
- Complies with vibration tests per MIL-STD-202G (METHOD 201A)
- Made from high conductivity copper; provides strength and premium electrical properties
- Color-coded and marked with Panduit die index numbers for proper crimp die selection
- UL 467 Listed and CSA 22.2 Certified for grounding and bonding suitable for direct burial in earth or concrete when crimped with Panduit or industry standard crimping tools and Panduit dies







Part Number	Copper Conductor Size Range AWG (mm²)	Thread Size In.	Figure Dimensions In. (mm)							Panduit Color Code	Panduit Die Index No.‡	Std. Pkg. Qty.
			L	W	H	Y	A	B	C			
GPC4H250-2	#2 SOL – 250 kcmil (35 – 120)	1/2 – 13	5.81 (147.5)	3.31 (84.0)	3.58 (90.9)	1.97 (50.0)	1.75 (44.4)	1.75 (44.4)	1.26 (32.0)	Black	PG25	1

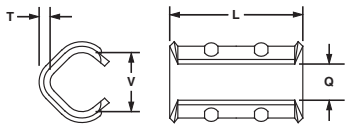
‡See page D3.90 for tool and die information.
For stainless steel mounting hardware kit, see part number GLMHK on page D3.7.

Code Conductor, Thin Wall, CTAP

For Copper Code Stranded Connections

Type CTAPF

- For copper-to-copper tapping, splicing or pigtailing
- Wide wire range-taking capability minimizes inventory requirements
- Color-coded for proper crimp die selection
- Ribbed design provides high strength
- Made from high conductivity wrought copper
- UL Listed and CSA Certified to 600 V and temperature rated to 90°C when crimped with Panduit and specified competitor crimping tools and dies^



Part Number	Copper Conductor Size		Number of Ribs	Figure Dimensions In. (mm)				Panduit Color Code	Wire Strip Length In. (mm)	Std. Pkg. Qty.
	AWG Run (mm²)	AWG Tap (mm²)		L	T	V	Q			
CTAPF10-16-C*	#14 AWG (2.5)	#16 – #14 AWG (1.5 – 2.5)	0	0.41 (10.4)	0.06 (1.5)	.19 (4.8)	0.13 (3.3)	Red	1/2 (12.7)	100
	#12 AWG (4.0)	#16 – #12 AWG (1.5 – 4.0)								
	#10 AWG (6.0)	#14 AWG (2.5)								
CTAPF8-12-C‡	#10 AWG (6.0)	#10 AWG (6.0)	0	0.67 (17.0)	0.07 (1.8)	.26 (6.6)	0.19 (4.8)	Blue	11/16 (17.5)	100
	#8 AWG (10.0)	#12 AWG (4.0)								
CTAPF6-12-C‡	#8 AWG (10.0)	#10 – #8 AWG (6.0 – 10.0)	0	0.67 (17.0)	0.07 (1.8)	.32 (8.1)	0.24 (6.1)	Gray	11/16 (17.5)	100
	#6 AWG (16.0)	#12 – #10 AWG (4.0 – 6.0)								
CTAPF4-12-C‡	#6 AWG (16)	#8 – #6 AWG (10 – 16)	1	1.25 (31.8)	0.07 (1.8)	.40 (10.2)	0.28 (7.1)	Brown	1 5/16 (33.3)	100
	#5, #4 AWG (16, 25)	#12 – #8 AWG (4 – 10)								
CTAPF3-12-C‡	#5, #4 AWG (16, 25)	#6 – #5 AWG (16)	1	1.25 (31.8)	0.08 (2.0)	.46 (11.7)	0.31 (7.9)	Green	1 5/16 (33.3)	100
	#3 AWG (25)	#12 – #6 AWG (4 – 16)								
CTAPF2-12-C‡	#4 AWG (25)	#4 AWG (25)	1	1.25 (31.8)	0.08 (2.0)	.51 (13.0)	0.33 (8.4)	Pink	1 5/16 (33.3)	100
	#3 AWG (25)	#5 AWG (16)								
	#2 AWG (35)	#12 – #6 AWG (4 – 16)								
CTAPF1-12-C	#3 AWG (25)	#4 – #3 AWG (25)	2	1.82 (46.2)	0.08 (2.0)	.57 (14.5)	0.40 (10.2)	Black	1 7/8 (47.6)	100
	#2 AWG (35)	#5 – #4 AWG (16 – 25)								
	#1 AWG (35)	#12 – #5 AWG (4 – 16)								
CTAPF1/0-12-L	#2 AWG (35)	#4 – #2 AWG (25 – 35)	2	1.82 (46.2)	0.09 (2.3)	.63 (16.0)	0.42 (10.7)	Orange	1 7/8 (47.6)	50
	#1 AWG (35)	#4 – #3 AWG (25)								
	1/0 AWG (50)	#12 – #4 AWG (4 – 25)								
CTAPF2/0-12-Q	#1 AWG (35)	#2 – #1 AWG (35)	2	1.82 (46.2)	0.09 (2.3)	.71 (18.0)	0.48 (12.2)	Purple	1 7/8 (47.6)	25
	1/0 AWG (50)	#3 – #2 AWG (25 – 35)								
	2/0 AWG (70)	#12 – #3 AWG (4 – 35)								
CTAPF3/0-12-Q	1/0 AWG (50)	#1 – 1/0 AWG (50)	2	1.82 (46.2)	0.09 (2.3)	.81 (20.6)	0.55 (14.0)	Yellow	1 7/8 (47.6)	25
	2/0 AWG (70)	#2 – #1 AWG (35)								
	3/0 AWG (95)	#12 – #2 AWG (4 – 35)								

See pages D3.92 and D3.93 for tool and die information.

*CTAPF10-16-C available with square, not flared ends.

All parts available in tin-plated; add TP before packaging code – example: CTAPF6-12**TP**-C.

^Note: CTAPF parts are UL Listed and CSA Certified with AWG wire only.

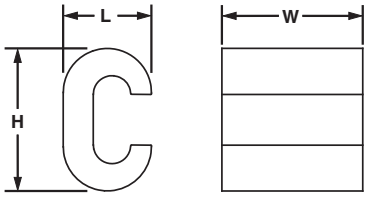
‡CSA Certified for grounding and bonding.

Code Conductor, Heavy Duty, CTAP

For Use with Solid and Stranded Copper Code Conductors

Type CTAP

- For tapping into unbroken continuous main, as a wire joint or two-way splice
- Wide wire range-taking capability minimizes inventory requirements
- Made from heavy wall, extruded, high conductivity copper; provides high strength and premium electrical properties
- UL Listed per UL 486 for use up to 35 KV** and temperature rated 90°C when crimped with Panduit and specified competitor crimping tools and dies
- UL Listed per UL 467 for grounding and bonding suitable for direct burial in earth or concrete when crimped with Panduit and specified competitor crimping tools and dies^



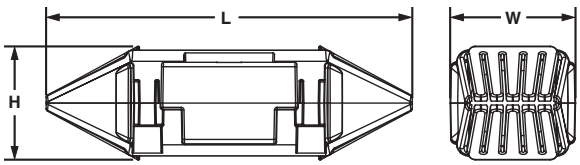
Part Number	Copper Conductor Size		Figure Dimensions In. (mm)			Panduit Die Index No.‡	Burndy Die Index No.‡	Wire Strip Length In. (mm)	Tap Cover*	Std. Pkg. Qty.
	AWG Run (mm²)	AWG Tap (mm²)	L	W	H					
CTAP4-8-L	#6 – #4 AWG SOL or STR (16 SOL or STR)	#8 AWG SOL or STR (10 SOL or STR)	0.46 (11.7)	0.63 (16.0)	0.73 (18.5)	PBG	BG	3/4 (19)	CVR6-1	50
CTAP4-6-L	#6 AWG STR, #4 AWG SOL or STR (16 SOL or STR)	#6 AWG SOL or STR (95 STR)	0.48 (12.2)	0.63 (16.0)	0.76 (19.3)	PBG	BG	3/4 (19)	CVR6-1	50
CTAP4-4-L	#4 AWG SOL or STR (16 SOL or STR)	#4 AWG STR (16 STR)	0.46 (11.7)	0.63 (16.0)	0.81 (20.6)	PBG	BG	3/4 (19)	CVR6-1	50
CTAP2-4-Q	#2 AWG SOL or STR (35 SOL or STR)	#8 – #4 AWG SOL or STR (10 – 16 SOL or STR)	0.60 (15.2)	0.76 (19.3)	0.96 (24.4)	PC	C	7/8 (22)	CVR2-1	25
CTAP2-2-X	#2 AWG SOL or STR (35 SOL or STR)	#2 AWG SOL or STR (25 SOL or STR)	0.60 (15.2)	0.75 (19.0)	1.05 (26.7)	PC	C	7/8 (22)	CVR2-1	10
CTAP2/0-2-X	1/0 – 2/0 AWG STR (70 STR)	#8 – #2 AWG SOL or STR (10 – 25 SOL or STR)	0.80 (20.3)	0.93 (23.6)	1.32 (33.5)	PO	O	1 1/16 (27)	CVR2-1	10
CTAP2/0-2/0-X	1/0 – 2/0 AWG STR (70 STR)	1/0 – 2/0 AWG STR (50 STR)	0.80 (20.3)	0.93 (23.6)	1.37 (34.8)	PO	O	1 1/16 (27)	CVR250-1	10
CTAP4/0-2-X	3/0 – 4/0 AWG STR (95 STR)	#6 – #2 AWG SOL or STR (16 – 35 SOL or STR)	0.94 (23.9)	1.08 (27.4)	1.66 (42.2)	PD3	F	1 1/4 (32)	CVR500-1	10
CTAP4/0-2/0-X	3/0 – 4/0 AWG STR (95 STR)	1/0 – 2/0 AWG STR (50 – 70 STR)	1.00 (25.4)	1.08 (27.3)	1.57 (39.9)	PD3	F	1 1/4 (32)	CVR500-1	10
CTAP4/0-4/0-X	3/0 – 4/0 AWG STR (95 STR)	3/0 – 4/0 AWG STR (95 STR)	1.00 (25.4)	1.08 (27.4)	1.57 (39.9)	PD3	F	1 1/4 (32)	CVR500-1	10

‡See page D3.91 for tool and die information.
*See page D3.13 for type CVR CTAP covers.
**Consult cable manufacturer for voltage stress relief instructions with applications greater than 2000 V.
^Note: CTAP parts are UL Listed and CSA Certified with AWG wire only.

Clear Covers for HTCT HTAPs

Type CLRCVR

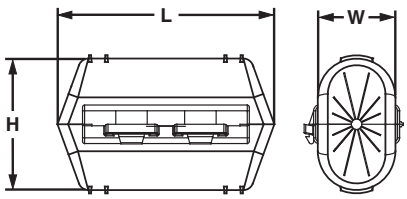
- Made of high impact plastic to provide high impact strength and 360° inspections of crimped connection to assure the crimp is complete and the correct die was used
- Incorporate dual self-latching spring loaded latches and supplied with two Panduit UL 94 V-0 cable ties to allow for easy snap-on assembly and ensure covers are secured
- Low profile design minimizes space requirements
- Each cover half supports installation information labels inside plastic retainer strips to allow labels to be viewed on either side of cover and to protect labels from being removed
- Incorporate molded in flash barriers which encompass the HTAP installation providing protection against electrical flash over
- UL 94 V-0 flame rating and oxygen index of 28 providing self-extinguishing, flame retardant properties
- Part number, voltage rating, temperature rating and HTCT part number molded into cover for easy identification
- See page D3.33 for detailed installation instructions



Part Number	Use with HTAP Part Number	Figure Dimensions In. (mm)			Std. Pkg. Qty.
		L	W	H	
CLRCVR1-1	HTCT6X-6X	4.48 (113.8)	1.41 (35.8)	1.20 (30.5)	1
CLRCVR2-1	HTCT2-2	5.10 (129.5)	1.66 (42.2)	1.40 (35.6)	1
CLRCVR3-1	HTCT250-2, HTCT250-250	5.35 (135.9)	2.16 (54.9)	1.40 (35.6)	1

Black Covers for Copper HTAPs and CTAPs

- Used to insulate connectors and protect tap connections from corrosive environments
- UL Listed and CSA Certified with approved connectors for use up to 600 V and temperature rated to 90° C
- Made of durable, weather-resistant black polypropylene
- Double locking latches provide secure cover installation



Part Number	Use with CTAP Part Number	Use with HTAP Part Number	Figure Dimensions (In.)			Std. Pkg. Qty.
			L	W	H	
CVR6-1	CTAP4-8-L, CTAP4-6-L, CTAP4-4-L	HTCT6X-6X-1	2.00	1.20	1.26	1
CVR2-1	CTAP2-4-Q, CTAP2-2-X, CTAP2/0-2-X	HTCT2-2-1	3.38	1.40	2.00	1
CVR250-1	CTAP2/0-2/0-X	HTCT250-2-1, HTCT250-250-1	3.38	1.55	2.05	1
CVR500-1*	CTAP4/0-2-X, CTAP4/0-2/0-X, CTAP4/0-4/0-X	—	3.86	1.97	2.66	1
CVR1000-1*	—	—	5.62	2.45	3.72	1

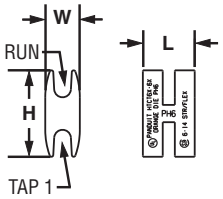
For information on copper HTAPs, see page D3.14
For information on copper CTAPs, see page D3.12
*Not CSA Certified.

Code/Flex Conductor HTAP

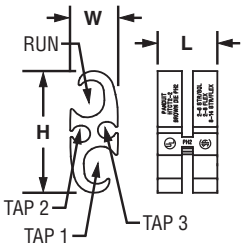
For Making Parallel and Multiple Tap Connections on Code and Flex Conductors

Type HTCT

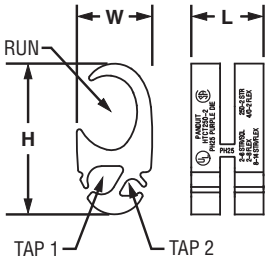
- Used to tap into continuous conductors as a splice or pigtailing
- Each HTAP terminates a wide range of conductor sizes and combinations of code and flex conductors Class G, H, I and Diesel Locomotive to suit a variety of applications
- Slotted design allows quick and easy assembly of conductor to HTAP using three Panduit 94V-0 cable ties included
- Tap grooves are separated from one another allowing them to function independently so HTAP can be used with a single or multiple taps providing maximum design and installation flexibility
- Color-coded and marked with Panduit die index numbers for proper crimp die selection
- UL Listed and CSA Certified for applications up to 600 V when crimped with Panduit and specified competitor crimping tools and Panduit crimping dies^
- Tin-plated to inhibit corrosion



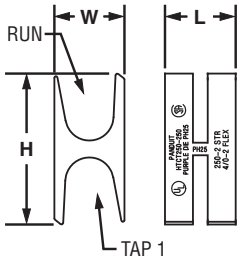
HTCT6X-6X



HTCT2-2



HTCT250-2



HTCT250-250

Part Number	Copper Conductor Size Range					Figure Dimensions In. (mm)			Panduit Die Color and Die No.‡	Wire Strip Length In. (mm)	Std. Pkg. Qty.
	Wire Strand Type	Run	Tap 1	Tap 2	Tap 3	L	W	H			
HTCT6X-6X-1	Code	#6 – #14 AWG (10 – 2.5)	#6 – #14 AWG (10 – 2.5)	— —	— —	0.60 (15.2)	0.40 (10.2)	1.00 (25.4)	Orange PH6	11/16 (18)	1
	Flex	#6 – #14 AWG (10 – 2.5)	#6 – #14 AWG (10 – 2.5)	— —	— —						
HTCT2-2-1	Code	#2 – #6 AWG STR/SOL (25 – 16)	#2 – #6 AWG STR/SOL (25 – 16)	#8 – #14 AWG (6 – 2.5)	#8 – #14 AWG (6 – 2.5)	0.76 (19.3)	0.61 (15.5)	1.55 (39.4)	Brown PH2	13/16 (21)	1
	Flex	#2 – #8 AWG (25 – 10)	#2 – #8 AWG (25 – 10)	#8 – #14 AWG (6 – 2.5)	#8 – #14 AWG (6 – 2.5)						
HTCT250-2-1	Code	250 kcmil – #2 AWG (120 – 35)	#2 – #6 AWG STR/SOL (25 – 16)	#8 – #14 AWG (6 – 2.5)	— —	0.92 (23.4)	0.96 (24.4)	1.92 (48.8)	Purple PH25	1 (25)	1
	Flex	4/0 – #2 AWG (95 – 35)	#2 – #8 AWG (25 – 10)	#8 – #14 AWG (6 – 2.5)	— —						
HTCT250-250-1	Code	250 kcmil – #2 AWG (120 – 35)	250 kcmil – #2 AWG (120 – 35)	— —	— —	0.90 (22.9)	0.89 (22.6)	1.92 (48.8)	Purple PH25	1 (25)	1
	Flex	4/0 – #2 AWG (95 – 35)	4/0 – #2 AWG (95 – 35)	— —	— —						

‡See page D3.94 for tool and die information.
^Note: HTCT parts are UL Listed and CSA Certified with AWG wire only.

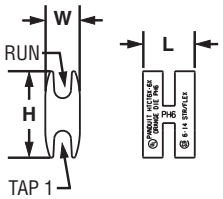
Code/Flex Conductor HTAP Kit

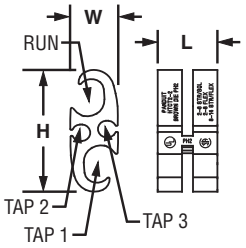
LISTED CERTIFIED

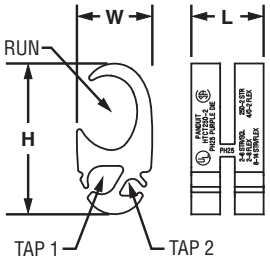
Type HTWC

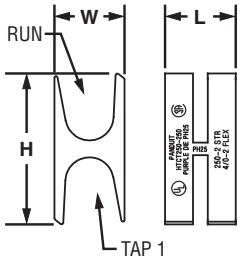
- Include all components to make a complete HTAP and cover installation: HTCT HTAP, matching CLRCVR clear cover, and cable ties
- Each HTCT HTAP designed to terminate a wide range of copper code and flex conductor combinations to accommodate a variety of applications
- HTAPs incorporate a unique slotted design that allows for quick and easy installation using supplied Panduit cable ties; saves time and cost
- Matching clear covers are made from high impact plastic and provide high impact strength and 360° viewing of installed HTAP
- Clear covers have a UL 94 V-0 flame rating and an oxygen index of 28 providing self-extinguishing, flame retardant properties
- UL Listed and CSA Certified for applications up to 600 V when crimped with Panduit and specified competitor crimping tools and Panduit crimping dies^
- See page D3.33 for detailed installation instructions







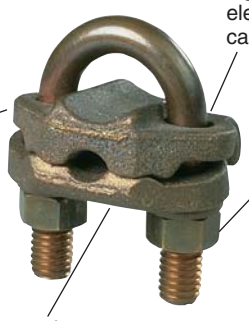


Part Number	Components		Copper Conductor Size Range AWG (mm²)					Std. Pkg. Qty.
	HTAP Part No.	Clear Cover Part No.	Wire Strand Type	Run	Tap 1	Tap 2	Tap 3	
HTWC6X-6X-1	HTCT6X-6X-1	CLRCVR1-1	Code	#6 – #14 AWG (10 – 2.5)	#6 – #14 AWG (10 – 2.5)	— —	— —	1
			Flex	#6 – #10 AWG (10 – 2.5)	#6 – #14 AWG (10 – 2.5)	— —	— —	
HTWC2-2-1	HTCT2-2-1	CLRCVR2-1	Code	#2 – #6 AWG STR/SOL (25 – 16)	#2 – #6 AWG STR/SOL (25 – 16)	#8 – #14 AWG (6 – 2.5)	#8 – #14 AWG (6 – 2.5)	1
			Flex	#2 – #8 AWG (25 – 10)	#2 – #8 AWG (25 – 10)	#8 – #14 AWG (6 – 2.5)	#8 – #14 AWG (6 – 2.5)	
HTWC250-2-1	HTCT250-2-1	CLRCVR3-1	Code	250 kcmil – #2 AWG (120 – 35)	#2 – #6 AWG STR/SOL (25 – 16)	#8 – #14 AWG (6 – 2.5)	— —	1
			Flex	4/0 – #2 AWG (95 – 35)	#2 – #8 AWG (25 – 10)	#8 – #14 AWG (6 – 2.5)	— —	
HTWC250-250-1	HTCT250-250-1	CLRCVR3-1	Code	250 kcmil – #2 AWG (120 – 35)	250 kcmil – #2 AWG (120 – 35)	— —	— —	1
			Flex	4/0 – #2 AWG (95 – 35)	4/0 – #2 AWG (95 – 35)	— —	— —	

See pages D3.13 – D3.14 for more information on HTAPs and clear covers, including tap sizes and locations.
^Note: HTCT parts are UL Listed and CSA Certified with AWG wire only.

Features and Benefits – StructuredGround™ Mechanical Connectors

Bronze Grounding Clamp



- Made from high strength, electrolytic cast bronze
- Provides two options: attachment of grounding conductor to clamp either parallel or perpendicular to axis of pipe or ground rod
- Provided with high strength, corrosion resistant silicon bronze hardware
- Part number, conductor range, rod and pipe size range and "DB" suitable for direct burial marked on part for easy identification

c UL us LISTED

Bronze Service Post Connector

- Part number, conductor range, and "DB" suitable for direct burial marked on part for easy identification
- Made from a single piece of hard drawn copper electrolytic rod – provides high strength
- Provided with high strength, corrosion resistant silicon bronze nut and pressure pad

c UL us LISTED

Available in configurations for use with one or two copper conductors with either a standard or long stud length

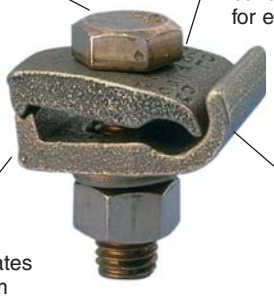
Bronze Water Pipe Clamp

- Part number, conductor range, water pipe size range and "DB" suitable for direct burial marked on part for easy identification
- Provided with high strength steel hardware plated to inhibit corrosion
- Made from high strength, electrolytic cast bronze

c UL us LISTED

Each part accommodates a wide range of copper conductor sizes and water pipe sizes – minimizes inventory

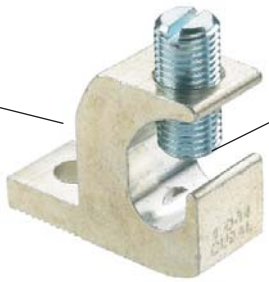
Bronze Grounding Clamp



- Provided with high strength, corrosion resistant silicon bronze hardware
- Part number, conductor range, and "DB" suitable for direct burial marked on part for easy identification
- Made from high strength, electrolytic cast bronze
- Spacer separates conductor from mounting surface

c UL us LISTED

Aluminum Lay-In Lug



- High-density aluminum alloy with tin-plating provides premium electrical and mechanical performance for long-term dependability
- Wide wire range-taking supports multiple wire sizes minimizing inventory requirements with minimum parts
- UL Listed and CSA Certified for use up to 600 V and UL temperature rated 90°C ensure a high level of safety and reliability

UL LISTED CSA CERTIFIED

Selection Guide – StructuredGround™ Mechanical Connectors

UL Listed Direct Burial	Service Post Type	Stud Size (In.)	Thread Length (In.)	Copper Code Conductor Size																	
				#12 AWG	#10 AWG	#8 AWG	#7 AWG	#6 AWG	#4 AWG	#3 AWG	#2 AWG	#1 AWG	1/0 AWG	2/0 AWG	3/0 AWG	4/0 AWG	250 kcmil	300 kcmil	350 kcmil	400 kcmil	500 kcmil
				Panduit Part Number																	
 c UL us LISTED D3.20	Bronze Service Post One Conductor SP1	1/4-20	1/2	SP1-8-C*																	
			1	SP1-8L-C*																	
			1/2			SP1-7-C*															
			1			SP1-7L-C*															
		5/16-18	9/16	SP1-4-C*																	
			1	SP1-4L-C*																	
		3/8-16	5/8					SP1-3-C*													
			1 1/8					SP1-3L-C*													
			5/8						SP1-2-C												
			1 1/8						SP1-2L-C												
		1/2-13	3/4					SP1-1/0-L*													
			1 1/4					SP1-1/0L-L*													
			3/4									SP1-2/0-Q*									
			1 1/4									SP1-2/0L-Q*									
		5/8-11	1												SP1-4/0-Q*						
			1 1/2												SP1-4/0L-Q*						
			1													SP1-350-12					
			1 1/2													SP1-350L-12					
		3/4-10	1 3/8														SP1-500-12				
			1 3/4														SP1-500L-12				
 c UL us LISTED D3.21	Bronze Service Post Two Conductors SP2	1/4-20	1/2	SP2-8-C*																	
			1	SP2-8L-C*																	
			1/2		SP2-7-C*																
			1		SP2-7L-C*																
		5/16-18	9/16		SP2-4-C*																
			1		SP2-4L-C*																
		3/8-16	5/8		SP2-3-C*																
			1 1/8		SP2-3L-C*																
			5/8		SP2-2-C*																
			1 1/8		SP2-2L-C*																
		1/2-13	3/4								SP2-1/0-L*										
			1 1/4								SP2-1/0L-L*										
			3/4								SP2-2/0-Q*										
			1 1/4								SP2-2/0L-Q*										
		5/8-11	1									SP2-4/0-Q*									
			1 1/2									SP2-4/0L-Q*									
			1									SP2-350-12									
			1 1/2									SP2-350L-12									
		3/4-10	1 3/8												SP2-500-12						
			1 3/4												SP2-500L-12						
 c UL us LISTED D3.22	Bronze Service Post One Conductor SPF1	1/4-20	1/4	SPF1-8-C*																	
					SPF1-7-C*																
		5/16-18	5/16			SPF1-4-C*															
		3/8-16	3/8					SPF1-3-C													
								SPF1-2-C													
		1/2-13	7/16								SPF1-1/0-L*										
			1/2									SPF1-2/0-Q*									
		5/8-11	5/8										SPF1-4/0-Q								
																SPF1-350-12					
		3/4-10	3/4															SPF1-500-12			
 c UL us LISTED D3.23	Bronze Service Post Two Conductors SPF2	1/4-20	1/4	SPF2-8-C*																	
					SPF2-7-C*																
		5/16-18	5/16		SPF2-4-C*																
		3/8-16	3/8		SPF2-3-C*																
					SPF2-2-C*																
		1/2-13	7/16								SPF2-1/0-L*										
			1/2								SPF2-2/0-Q*										
		5/8-11	5/8									SPF2-4/0-Q*									
												SPF2-350-12									
		3/4-10	3/4												SPF2-500-12						

*Denotes minimum conductor size is solid conductor.

Selection Guide – StructuredGround™ Mechanical Connectors (continued)

UL Listed Direct Burial	Ground Clamp Type	Ground Rod Size (In.)	Pipe Size (In.)	Copper Code Conductor Size																
				#14 AWG	#12 AWG	#10 AWG	#8 AWG	#7 AWG	#6 AWG	#4 AWG	#3 AWG	#2 AWG	#1 AWG	1/0 AWG	2/0 AWG	3/0 AWG	4/0 AWG	250 kcmil	300 kcmil	350 kcmil	400 kcmil	500 kcmil
				Panduit Part Number																
D3.24	One Barrel, One-Hole LI	—	—	LI-50S-C@ #10 stud hole																
				LI-112-L@ 1/4" stud hole																
									LI-252S-Q@ 5/16" stud hole											
D3.25	Bronze Ground Clamp One Conductor GPL	5/8 or 3/4	3/8				GPL-4-Q*													
										GPL-5-Q*										
															GPL-6-Q*					
		7/8 or 1	1/2 or 3/4				GPL-8-Q*													
										GPL-9-Q*										
															GPL-10-Q*					
		—	1				GPL-14-X*													
										GPL-15-X*										
															GPL-16-X*					
		—	1 1/4				GPL-20-X*													
										GPL-21-X*										
															GPL-22-X*					
		—	1 1/2				GPL-26-X*													
										GPL-27-X*										
															GPL-28-X*					
		—	2				GPL-32-3*													
										GPL-33-3*										
															GPL-34-3*					
		—	2 1/2							GPL-39-3*										
															GPL-40-3*					
		—	3				GPL-44-1*													
										GPL-45-1*										
															GPL-46-1*					
		—	3 1/2							GPL-51-1*										
															GPL-52-1*					
		—	4							GPL-57-1*										
															GPL-58-1*					
			6							GPL-75-X*										
D3.26	Bronze Ground Clamp Two Conductors GU		1							GU-2-X* ‡										
			1 1/4				GU-4-X* ‡													
			2															GU-13-3 ‡		
D3.26	Bronze Ground Clamp KP	—	1/2-#1			KP1-C* @														
			1 1/4-#2			KP2-L* @														
D3.27	Bronze Ground Clamp KLS	—	1/2-1				KLS-0-Q* ‡ 1/2" hub size													
							KLS-1-Q* ‡ 3/4" hub size													
							KLS-1A-X* ‡ 1" hub size													
D3.27	Bronze Ground Clamp KH	—	1/2-1			KH-1-L* ‡ 1/2" hub size														
			1 1/4-2			KH-2-L* ‡ 1/2" hub size														
D3.28	Aluminum Ground Clamp GC	—	1/2-3/4-1	GC-15A-Q @ *DR*																
			1 1/4-1 1/2-2						GC-18A-X @ *DR*											
			2 1/2-3-3 1/2-4						GC-22A-4 @ *DR*											
D3.28	Bronze Ground Rod Clamp WB	1/2	—			WB12-L*														
		5/8					WB34-X													
		3/4					WB34-X													
		5/8					WB58-Q													
D3.29	Bronze Ground Clamp GMS	—	—				GMS-1-X*													
										GMS-2-Q*										
															GMS-3-Q*					
D3.29	Bronze Ground Clamp GM	—	—							GM-2-Q*										
															GM-3-Q*					

*Denotes minimum conductor size is solid conductor.
DR Denotes Dual Rated for use with copper or aluminum conductors.
@Denotes not UL Listed for Direct Burial.
‡Denotes not UL Listed or CSA Certified.

Prime items appear in **BOLD**.

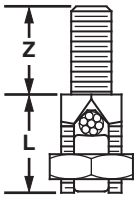
Panduit Grounding Connector Approvals

Logo (Symbol)	Agency	Spec/Approval	Applicable Products
c UL us LISTED	Underwriters Laboratories, Inc.	UL 486A Wire Connectors and Soldering Lugs for use in US and Canada	As shown on product pages.
UL LISTED	Underwriters Laboratories, Inc.	UL 486A – 486B Wire Connectors and Soldering Lugs for use in US	As shown on product pages.
c UL us LISTED	Underwriters Laboratories, Inc.	UL 467 Grounding and Bonding Equipment for use in US and Canada	As shown on product pages.
UL LISTED	Underwriters Laboratories, Inc.	UL 467 Grounding and Bonding Equipment for use in US	As shown on product pages.
CSA CERTIFIED	Canadian Standards Association	C22.2 No. 65-03 Wire Connectors	As shown on product pages.
CSA CERTIFIED	Canadian Standards Association	C22.2 No. 41-M1987 (R1999) Grounding and Bonding Equipment	As shown on product pages.
IEEE	Institute of Electrical and Electronics Engineers	IEEE Std. 837™ - 2002 IEEE Standard for Qualifying Permanent Connection used in Substation Grounding	As shown on product pages.

Service Post Connector, Male Stud, Single Conductor, Bronze

Type SP1

- For grounding one copper code conductor to steel structures, busbars, or transformers or for tapping from busbar with hex nut and washer
- Made from high copper content, hard drawn copper rod provides high strength
- Offered with standard and long stud lengths to accommodate a variety of mounting applications
- Wide wire range-taking capability minimizes inventory requirements
- True hex design for body and nut hex provides correct fit with socket, box, or open end wrenches resulting in proper torquing of electrical connection
- Pressure bar provides secure connection on a full range of conductor combinations used with each connector providing premium wire pull-out strength
- UL Listed for grounding and bonding and suitable for direct burial in earth or concrete



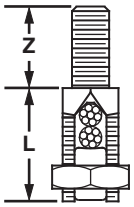
Part Number	Conductor Size Range	Stud Size*	Figure Dimensions In. (mm) L	Figure Dimensions In. (mm) Z	Nut Hex (In.)	Body Hex (In.)	Std. Pkg. Qty.
SP1-8-C	#12 SOL – #8 STR	1/4 – 20	0.63 (16.0)	0.50 (12.7)	0.50	0.38	100
SP1-8L-C			0.63 (16.0)	1.00 (25.4)			
SP1-7-C	#8 SOL – #7 STR	1/4 – 20	0.88 (22.4)	0.50 (12.7)	0.69	0.50	100
SP1-7L-C			0.88 (22.4)	1.00 (25.4)			
SP1-4-C	#10 SOL – #4 STR	5/16 – 18	0.94 (23.9)	0.56 (14.2)	0.75	0.56	100
SP1-4L-C			0.94 (23.9)	1.00 (25.4)			
SP1-3-C	#6 SOL – #3 STR	3/8 – 16	1.06 (26.9)	0.63 (16)	0.81	0.63	100
SP1-3L-C			1.06 (26.9)	1.13 (28.7)			
SP1-2-C	#4 STR – #2 STR	3/8 – 16	1.06 (26.9)	0.63 (16)	0.88	0.69	100
SP1-2L-C			1.06 (26.9)	1.13 (28.7)			
SP1-1/0-L	#6 SOL – 1/0 STR	1/2 – 13	1.31 (33.3)	0.75 (19.1)	1.00	0.75	50
SP1-1/0L-L			1.31 (33.3)	1.25 (31.8)			
SP1-2/0-Q	#1 SOL – 2/0 STR	1/2 – 13	1.44 (36.6)	0.75 (19.1)	1.13	0.88	25
SP1-2/0L-Q			1.44 (36.6)	1.25 (31.8)			
SP1-4/0-Q	3/0 SOL – 4/0 STR	5/8 – 11	1.69 (42.9)	1.00 (25.4)	1.38	1.13	25
SP1-4/0L-Q			1.69 (42.9)	1.50 (38.1)			
SP1-350-12	4/0 STR – 350 kcmil	5/8 – 11	2.00 (50.8)	1.00 (25.4)	1.50	1.25	12
SP1-350L-12			2.00 (50.8)	1.50 (38.1)			
SP1-500-12	250 kcmil – 500 kcmil	3/4 – 10	2.31 (58.7)	1.38 (35.1)	1.81	1.50	12
SP1-500L-12			2.31 (58.7)	1.75 (44.5)			

*UNC threads.

Service Post Connector, Male Stud, Two Conductor, Bronze

Type SP2

- For grounding two copper code conductors to steel structures, busbars, or transformers or for tapping from busbar with hex nut and washer
- Made from high copper content, hard drawn copper rod provides high strength
- Offered with standard and long stud lengths to accommodate a variety of mounting applications
- Wide wire range-taking capability minimizes inventory requirements
- True hex design for body and nut hex provides correct fit with socket, box, or open end wrenches resulting in proper torquing of electrical connection
- Pressure bar provides secure connection on a full range of conductor combinations used with each connector providing premium wire pull-out strength
- UL Listed for grounding and bonding and suitable for direct burial in earth or concrete



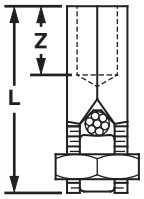
Part Number	Conductor Size Range	Stud Size*	Figure Dimensions In. (mm) L	Figure Dimensions In. (mm) Z	Nut Hex (In.)	Body Hex (In.)	Std. Pkg. Qty.
SP2-8-C	#12 SOL – #8 STR	1/4 – 20	0.75 (19.0)	0.50 (12.7)	0.50	0.38	100
SP2-8L-C			0.75 (19.0)	1.00 (25.4)			
SP2-7-C	#10 SOL – #7 STR	1/4 – 20	1.00 (25.4)	0.50 (12.7)	0.69	0.50	100
SP2-7L-C			1.00 (25.4)	1.00 (25.4)			
SP2-4-C	#10 SOL – #4 STR	5/16 – 18	1.16 (29.5)	0.56 (14.2)	0.75	0.56	100
SP2-4L-C			1.16 (29.5)	1.00 (25.4)			
SP2-3-C	#10 SOL – #3 STR	3/8 – 16	1.09 (27.7)	0.63 (16)	0.81	0.63	100
SP2-3L-C			1.09 (27.7)	1.13 (28.7)			
SP2-2-C	#10 SOL – #2 STR	3/8 – 16	1.38 (35.1)	0.63 (16)	0.88	0.69	100
SP2-2L-C			1.28 (32.5)	1.13 (28.7)			
SP2-1/0-L	#2 SOL – 1/0 STR	1/2 – 13	1.69 (42.9)	0.75 (19.1)	1.00	0.75	50
SP2-1/0L-L			1.69 (42.9)	1.25 (31.8)			
SP2-2/0-Q	#2 SOL – 2/0 STR	1/2 – 13	1.88 (47.8)	0.75 (19.1)	1.13	0.88	25
SP2-2/0L-Q			1.88 (47.8)	1.25 (31.8)			
SP2-4/0-Q	#1 SOL – 4/0 STR	5/8 – 11	2.25 (57.2)	1.00 (25.4)	1.38	1.13	25
SP2-4/0L-Q			2.25 (57.2)	1.50 (38.1)			
SP2-350-12	#1 STR – 350 kcmil	5/8 – 11	2.69 (68.3)	1.00 (25.4)	1.50	1.25	12
SP2-350L-12			2.69 (68.3)	1.50 (38.1)			
SP2-500-12	3/0 STR – 500 kcmil	3/4 – 10	3.19 (81.0)	1.38 (35.1)	1.81	1.50	12
SP2-500L-12			3.19 (81.0)	1.75 (44.5)			

*UNC threads.

Service Post Connector, Female Thread, Single Conductor, Bronze

Type SPF1

- For grounding one copper code conductor to steel structures, busbars, or transformers or for tapping from busbar using external studs, screws, or bolts
- Made from high copper content, hard drawn copper rod provides high strength
- Wide wire range-taking capability minimizes inventory requirements
- True hex design for body and nut hex provides correct fit with socket, box, or open end wrenches resulting in proper torquing of electrical connection
- Pressure bar provides secure connection on a full range of conductor combinations used with each connector providing premium wire pull-out strength
- UL Listed for grounding and bonding and suitable for direct burial in earth or concrete



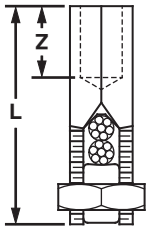
Part Number	Conductor Size Range	Thread Size*	Figure Dimensions In. (mm)		Nut Hex (In.)	Body Hex (In.)	Std. Pkg. Qty.
			L	Z			
SPF1-8-C	#12 SOL – #8 STR	1/4 – 20	0.91 (23.1)	0.25 (6.4)	0.50	0.38	100
SPF1-7-C	#10 SOL – #7 STR	1/4 – 20	1.13 (28.7)	0.25 (6.4)	0.69	0.50	100
SPF1-4-C	#8 SOL – #4 STR	5/16 – 18	1.44 (36.6)	0.31 (7.9)	0.75	0.56	100
SPF1-3-C	#6 STR – #3 STR	3/8 – 16	1.50 (38.1)	0.38 (9.7)	0.81	0.63	100
SPF1-2-C	#6 STR – #2 STR	3/8 – 16	1.63 (41.4)	0.38 (9.7)	0.88	0.69	100
SPF1-1/0-L	#2 SOL – 1/0 STR	1/2 – 13	1.88 (47.8)	0.44 (11.2)	1.00	0.75	50
SPF1-2/0-Q	#1 SOL – 2/0 STR	1/2 – 13	2.06 (52.3)	0.50 (12.7)	1.13	0.88	25
SPF1-4/0-Q	1/0 STR – 4/0 STR	5/8 – 11	2.38 (60.5)	0.63 (16)	1.38	1.13	25
SPF1-350-12	4/0 STR – 350 kcmil	5/8 – 11	2.63 (66.8)	0.63 (16)	1.50	1.25	12
SPF1-500-12	300 kcmil – 500 kcmil	3/4 – 10	3.13 (79.5)	0.75 (19.1)	1.81	1.50	12

*UNC threads.

Service Post Connector, Female Thread, Two Conductor, Bronze

Type SPF2

- For grounding two copper code conductors to steel structures, busbars, or transformers or for tapping from busbar using external threaded studs, screws, or bolts
- Made from high copper content, hard drawn copper rod provides high strength
- Wide wire range-taking capability minimizes inventory requirements
- True hex design for body and nut hex provides correct fit with socket, box, or open end wrenches resulting in proper torquing of electrical connection
- Pressure bar provides secure connection on a full range of conductor combinations used with each connector providing premium wire pull-out strength
- UL Listed for grounding and bonding and suitable for direct burial in earth or concrete



Part Number	Conductor Size Range	Thread Size*	Figure Dimensions In. (mm)		Nut Hex (In.)	Body Hex (In.)	Std. Pkg. Qty.
			L	Z			
SPF2-8-C	#12 SOL – #8 STR	1/4 – 20	1.13 (28.7)	0.25 (6.4)	0.50	0.38	100
SPF2-7-C	#10 SOL – #7 STR	1/4 – 20	1.44 (36.6)	0.25 (6.4)	0.69	0.50	100
SPF2-4-C	#10 SOL – #4 STR	5/16 – 18	1.56 (39.6)	0.31 (7.9)	0.75	0.56	100
SPF2-3-C	#10 SOL – #3 STR	3/8 – 16	1.63 (41.4)	0.38 (9.7)	0.81	0.63	100
SPF2-2-C	#10 SOL – #2 STR	3/8 – 16	1.94 (49.3)	0.38 (9.7)	0.88	0.69	100
SPF2-1/0-L	#2 SOL – 1/0 STR	1/2 – 13	2.13 (54.1)	0.44 (11.2)	1.00	0.75	50
SPF2-2/0-Q	#2 SOL – 2/0 STR	1/2 – 13	2.31 (58.7)	0.50 (12.7)	1.13	0.88	25
SPF2-4/0-Q	#1 SOL – 4/0 STR	5/8 – 11	2.50 (63.5)	0.63 (16)	1.38	1.13	25
SPF2-350-12	#1 STR – 350 kcmil	5/8 – 11	2.69 (68.3)	0.63 (16)	1.50	1.25	12
SPF2-500-12	3/0 STR – 500 kcmil	3/4 – 10	3.31 (84.1)	0.75 (19.1)	1.81	1.50	12

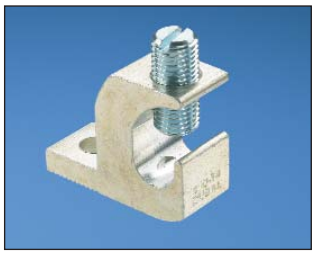
*UNC threads.

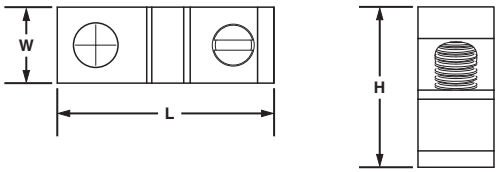
NEW! UL LISTED CSA CERTIFIED

One-Hole Aluminum Lay-In Lug

Type LI

- Used for quick installation of a continuous grounding conductor
- Made from high strength, extruded aluminum alloy to provide premium electrical and mechanical performance
- Tin-plated to inhibit corrosion
- Wide wire range-taking capability minimizes inventory requirements
- UL Listed and CSA Certified for use up to 600 V and UL temperature rated 90°C





Part Number	Conductor Size Range	Stud Hole Size (In.)	Hex Key Size (In.)	Figure Dimensions In. (mm)			Std. Pkg. Qty.
				L	W	H	
LI-50S-C	#14 – #4 AWG	0.22	**	1.07 (27.2)	0.38 (9.7)	0.78 (19.8)	100
LI-112S-L	#14 – 1/0 AWG	0.27	**	1.50 (38.1)	0.60 (15.2)	1.17 (29.7)	50
LI-252S-Q	#6 AWG – 250 kcmil	0.33	9/16	2.20 (55.9)	0.80 (20.3)	1.79 (45.5)	25

The use of Panduit oxide inhibiting joint compound (CMP) is recommended for pad to pad and conductor connections. See below.
**Uses slotted head set screw.

Joint Compounds

Type CMP

- Oxide inhibitor for compression conductor connections lowers electrical resistance of compression joint while sealing out air and moisture to prevent the formation of surface oxides
- Wide operating temperature range; can be used in a wide range of electrical and environmental conditions
- Packaged in convenient dispenser bottles

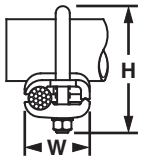
Part Number	Part Description	Std. Pkg. Qty.
CMP-100-1	Contact aid for pad-to-pad or thread-to-thread aluminum connections, 8 oz. Operating temperature range -60°F (-51°C) to 400°F (204°C).	1
CMP-200-1	Contact aid for cable connections with compression connections made on aluminum conductor, 8 oz. Operating temperature range -40°F (-40°C) to 400°F (204°C). Compatible with all insulating materials.	1
CMP-300-1	Contact aid for copper-to-copper and copper-to-steel connections, 8 oz. Operating temperature range -40°F (-40°C) to 350°F (177°C). Good for all voltages and suitable for grounding. Also used for anti-seizing thread lubricant.	1
CMP-300-4-1	Contact aid for copper-to-copper and copper-to-steel connections, 4 oz. Operating temperature range -40°F (-40°C) to 350°F (177°C). Good for all voltages and suitable for grounding. Also used for anti-seizing thread lubricant.	1

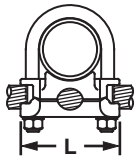
Grounding Clamp, U-Bolt, Bronze

c UL us LISTED

Type GPL

- Used to ground copper conductor parallel or at a right angle to a rod, tube, or pipe
- Made from high strength, electrolytic cast bronze
- High strength silicon bronze hardware provides long term reliable assembly
- Accommodates a wide range of pipe, tube, rod and conductor sizes – minimizes inventory requirements
- UL Listed for grounding and bonding and suitable for direct burial in earth or concrete



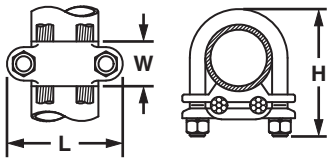


Part Number	Ground Rod Size (In.)	Iron Pipe Size (In.)	Conductor Size Range	Figure Dimensions In. (mm) L	W	H	Bolt Dia. (In.)	Hex Size (In.)	Std. Pkg. Qty.
GPL-4-Q	5/8 or 3/4	3/8	#8 SOL – #4 STR	2.00 (50.8)	1.38 (35.1)	2.75 (69.9)	3/8	9/16	25
GPL-5-Q	5/8 or 3/4	3/8	#4 SOL – 2/0 STR	2.00 (50.8)	1.63 (41.4)	2.75 (69.9)	3/8	9/16	25
GPL-6-Q	5/8 or 3/4	3/8	2/0 SOL – 250 kcmil	2.00 (50.8)	1.88 (47.8)	2.75 (69.9)	3/8	9/16	25
GPL-8-Q	7/8 or 1	1/2 or 3/4	#8 SOL – #4 STR	2.38 (60.5)	1.38 (35.1)	2.63 (66.8)	3/8	9/16	25
GPL-9-Q	7/8 or 1	1/2 or 3/4	#4 SOL – 2/0 STR	2.38 (60.5)	1.63 (41.4)	2.63 (66.8)	3/8	9/16	25
GPL-10-Q	7/8 or 1	1/2 or 3/4	2/0 SOL – 250 kcmil	2.38 (60.5)	1.88 (47.8)	3.00 (76.2)	3/8	9/16	25
GPL-14-X	—	1	#8 SOL – #4 STR	2.63 (66.8)	1.38 (35.1)	2.75 (69.9)	3/8	9/16	10
GPL-15-X	—	1	#4 SOL – 2/0 STR	2.63 (66.8)	1.63 (41.4)	2.75 (69.9)	3/8	9/16	10
GPL-16-X	—	1	2/0 SOL – 250 kcmil	2.63 (66.8)	1.88 (47.8)	3.25 (82)	3/8	9/16	10
GPL-20-X	—	1 1/4	#8 SOL – #4 STR	3.00 (76.2)	1.38 (35.1)	3.50 (88.9)	3/8	9/16	10
GPL-21-X	—	1 1/4	#4 SOL – 2/0 STR	3.00 (76.2)	1.63 (41.4)	3.50 (88.9)	3/8	9/16	10
GPL-22-X	—	1 1/4	2/0 SOL – 250 kcmil	3.00 (76.2)	1.88 (47.8)	3.50 (88.9)	3/8	9/16	10
GPL-26-X	—	1 1/2	#8 SOL – #4 STR	3.25 (82.6)	1.38 (35.1)	4.00 (101.6)	3/8	9/16	10
GPL-27-X	—	1 1/2	#4 SOL – 2/0 STR	3.25 (82.6)	1.63 (41.4)	4.00 (101.6)	3/8	9/16	10
GPL-28-X	—	1 1/2	2/0 SOL – 250 kcmil	3.25 (82.6)	1.88 (47.8)	4.00 (101.6)	3/8	9/16	10
GPL-32-3	—	2	#8 SOL – #4 STR	3.75 (95.3)	1.38 (35.1)	4.25 (107.9)	3/8	9/16	3
GPL-33-3	—	2	#4 SOL – 2/0 STR	3.75 (95.3)	1.63 (41.4)	4.25 (107.9)	3/8	9/16	3
GPL-34-3	—	2	2/0 SOL – 250 kcmil	3.75 (95.3)	1.88 (47.8)	4.25 (107.9)	3/8	9/16	3
GPL-39-3	—	2 1/2	#4 SOL – 2/0 STR	4.25 (107.9)	1.63 (41.4)	5.00 (127)	3/8	9/16	3
GPL-40-3	—	2 1/2	2/0 SOL – 250 kcmil	4.25 (107.9)	1.88 (47.8)	5.00 (127)	3/8	9/16	3
GPL-44-1	—	3	#8 SOL – #4 STR	4.75 (120.6)	1.38 (35.1)	5.50 (140)	3/8	9/16	1
GPL-45-1	—	3	#4 SOL – 2/0 STR	4.75 (120.6)	1.63 (41.4)	5.50 (139.7)	3/8	9/16	1
GPL-46-1	—	3	2/0 SOL – 250 kcmil	4.75 (120.6)	1.88 (47.8)	5.50 (139.7)	3/8	9/16	1
GPL-51-1	—	3 1/2	#4 SOL – 2/0 STR	5.25 (133.4)	1.63 (41.4)	6.25 (158.8)	3/8	9/16	1
GPL-52-1	—	3 1/2	2/0 SOL – 250 kcmil	5.25 (133.4)	1.88 (47.8)	6.25 (158)	3/8	9/16	1
GPL-57-1	—	4	#4 SOL – 2/0 STR	5.75 (146.0)	1.63 (41.4)	6.38 (162.1)	3/8	9/16	1
GPL-58-1	—	4	2/0 SOL – 250 kcmil	5.75 (146.0)	1.88 (47.8)	6.38 (162.1)	3/8	9/16	1
GPL-75-X	—	6	#4 SOL – 2/0 STR	7.88 (200.2)	1.58 (40.1)	7.85 (199.4)	3/8	1 1/4	10

Grounding Clamp, U-Bolt, for Two Cables, Bronze

Type GU

- Used to ground two copper code conductors parallel to a rod, tube, or pipe
- Made from high strength, electrolytic cast bronze
- High strength silicon bronze hardware provides long term reliable assembly
- Accommodates a wide range of pipe, tube, rod and conductor sizes – minimizes inventory requirements
- UL Listed for grounding and bonding and suitable for direct burial in earth or concrete

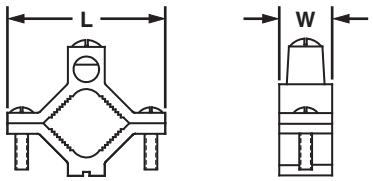


Part Number	Iron Pipe Size (In.)	Conductor Size Range	Figure Dimensions In. (mm)			Bolt Dia. (In.)	Hex Size (In.)	Std. Pkg. Qty.
			L	W	H			
GU-2-X	1	#4 SOL – 2/0 STR	2.75 (70.0)	1.13 (28.6)	3.25 (82.6)	3/8	9/16	10
GU-4-X	1 1/4	#8 SOL – #4 STR	3.00 (76.2)	1.13 (28.6)	3.25 (82.6)	3/8	9/16	10
GU-13-3	2	300 kcmil – 500 kcmil	4.00 (102.0)	1.50 (38.1)	4.63 (118.0)	1/2	3/4	3

Grounding Clamp for Water Pipes, Bronze

Type KP

- Used to ground copper code conductor to water pipe or copper tube
- Cast from high strength, electrolytic bronze to provide reliable grounding connections
- Plated steel screws provide high strength and inhibit corrosion
- Accommodates a wide range of pipe, tube, rod and conductor sizes – minimizes inventory requirements
- UL Listed for grounding and bonding and suitable for direct burial in earth or concrete

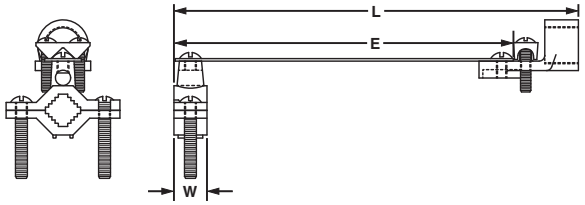


Part Number	Water Pipe Range (In.)	Conductor Size Range	Figure Dimensions In. (mm)		Std. Pkg. Qty.
			L	W	
KP1-C	1/2 – 1	#10 SOL – #2 STR	2.28 (57.9)	0.66 (16.8)	100
KP2-L	1 1/4 – 2	#10 SOL – #2 STR	3.58 (90.9)	0.73 (18.5)	50

Grounding Clamp for Water Pipe with Copper Strap, Bronze

Type KLS

- Used to ground copper code conductor to rigid conduit systems
- Cast from high strength, electrolytic bronze to provide reliable grounding connections
- Plated steel screws provide high strength and inhibit corrosion
- Pure copper contact strip included to isolate conduit system from water pipe vibrations
- High strength bronze conduit hub also included to provide durable connection of conduit to copper strap
- Accommodates a wide range of pipe, tube, and conductor sizes – minimizes inventory requirements
- UL Listed for grounding and bonding and suitable for direct burial in earth or concrete

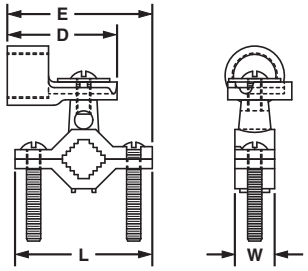


Part Number	Conduit Hub Size	Water Pipe Range (In.)	Conductor Size Range	Figure Dimensions In. (mm)			Std. Pkg. Qty.
				L	W	E	
KLS-0-Q	1/2	1/2 – 1	#8 SOL – #4 STR	8.22 (58.7)	0.66 (16.8)	6.88 (174.8)	25
KLS-1-Q	3/4	1/2 – 1	#8 SOL – #4 STR	8.22 (58.7)	0.66 (16.8)	6.88 (174.8)	25
KLS-1A-X	1	1/2 – 1	#8 SOL – #4 STR	8.38 (58.7)	0.66 (16.8)	6.88 (174.8)	10

Grounding Clamp for Conduit, Bronze

Type KH

- Used to ground copper code conductor to rigid conduit systems
- Cast from high strength, electrolytic bronze to provide reliable grounding connections
- Plated steel screws provide high strength and inhibit corrosion
- Includes high strength bronze conduit hub to ensure a durable connection of conduit to copper strap
- Accommodates a wide range of pipe, tube, and conductor sizes – minimizes inventory requirements
- UL Listed for grounding and bonding and suitable for direct burial in earth or concrete



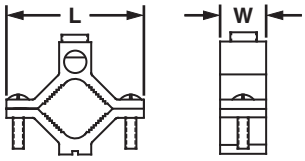
Part Number	Conduit Hub Size	Water Pipe Range (In.)	Conductor Size Range	Figure Dimensions In. (mm)				Std. Pkg. Qty.
				L	W	E	D	
KH-1-L	1/2	1/2 – 1	#10 SOL – #4 STR	2.31 (58.7)	0.66 (16.8)	2.54 (64.5)	1.85 (47)	50
KH-2-L	1/2	1 1/4 – 2	#10 SOL – #4 STR	3.60 (91.4)	0.79 (20.1)	3.02 (76.7)	1.85 (47)	50

Grounding Clamp for Water Pipes, Aluminum

LISTED

Type GC

- Dual-rated for grounding aluminum or copper code conductors to copper water pipe, galvanized pipe, or steel conduit
- Made from high strength, extruded aluminum alloy to provide long term durability
- Tin-plated to inhibit corrosion and oxidation and for low contact resistance
- Plated steel screws provide high strength and inhibit corrosion
- Accommodates a wide range of pipe, tube, and conductor sizes – minimizes inventory requirements
- UL Listed for grounding and bonding



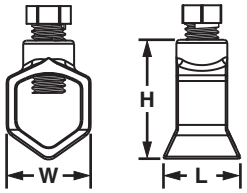
Part Number	Conduit Pipe or Water Tube Size	Conductor Size Range	Figure Dimensions In. (mm)		Std. Pkg. Qty.
			L	W	
GC-15A-Q	1/2 – 3/4 – 1	#14 AWG – 1/0 AWG	2.25 (57.2)	0.69 (17.5)	25
GC-18A-X	1 1/4 – 1, 1/2 – 2	#6 AWG – 250 kcmil	3.75 (95.3)	0.81 (20.6)	10
GC-22A-4	2 1/2 – 3 – 3 1/2 – 4	#6 AWG – 250 kcmil	6.31 (95.3)	1.00 (25.4)	4

Grounding Rod Clamp, Bronze

LISTED CERTIFIED

Type WB

- Used for grounding copper conductor parallel to ground rods
- Made from high strength, seamless electrolytic bronze to provide long term durability
- High strength silicon bronze hardware provides long term reliable assembly
- Accommodates a wide range of rod and conductor sizes – minimizes inventory requirements
- UL Listed and CSA Certified for grounding and bonding and suitable for direct burial in earth and concrete

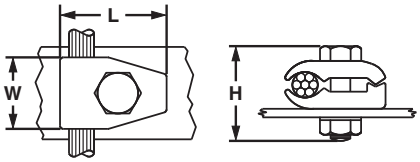


Part Number	Ground Rod Size	Conductor Size Range	Figure Dimensions In. (mm)			Hex Size In.	Std. Pkg. Qty.
			L	W	H		
WB12-L	1/2	#2 – #10 STR, #10 SOL	0.88 (22.4)	0.84 (21.3)	1.28 (32.5)	1/2	50
WB34-X	5/8 3/4	1/0 – #8 STR, #2 – #8 STR	1.03 (26.2)	1.06 (26.9)	1.54 (39.1)	1/2	10
WB58-Q	5/8	1/0 – #8 STR	1.04 (26.4)	0.92 (23.4)	1.40 (35.6)	1/2	25

Grounding Clamp with Spacer for Flat Surfaces, Bronze

Type GM

- Used to ground copper code conductor to flat surfaces
- Cast from high strength, electrolytic bronze to provide reliable grounding connections
- High strength silicon bronze hardware for long term reliable assembly
- Accommodates a wide range of conductor sizes – minimizes inventory requirements
- Incorporates spacer plate to separate conductor from mounting surface
- UL Listed for grounding and bonding and suitable for direct burial in earth or concrete

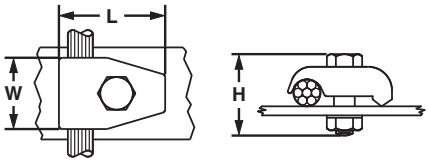


Part Number	Conductor Size Range	Figure Dimensions In. (mm)			Hex Size (In.)		Std. Pkg. Qty.
		L	W	H	Bolt	Nut	
GM-2-Q	#4 SOL – 2/0 STR	1.63 (41.4)	1.13 (28.7)	1.75 (44.5)	9/16	9/16	25
GM-3-Q	2/0 SOL – 250 kcmil	2.13 (54.1)	1.50 (38.1)	2.00 (50.8)	3/4	3/4	25

Grounding Clamp for Flat Surfaces, Bronze

Type GMS

- Used to ground copper code conductor to flat surfaces
- Cast from high strength, electrolytic bronze to provide reliable grounding connections
- High strength silicon bronze hardware for long term reliable assembly
- Accommodates a wide range of conductor sizes – minimizes inventory requirements
- UL Listed for grounding and bonding and suitable for direct burial in earth or concrete



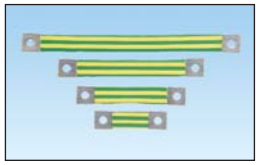
Part Number	Conductor Size Range	Figure Dimensions In. (mm)			Hex Size (In.)		Std. Pkg. Qty.
		L	W	H	Bolt	Nut	
GMS-1-X	#8 SOL – #4 STR	1.25 (31.8)	1.00 (25.4)	1.63 (41.4)	9/16	9/16	10
GMS-2-Q	#4 SOL – 2/0 STR	1.63 (41.4)	1.13 (28.7)	1.75 (44.5)	9/16	9/16	25
GMS-3-Q	2/0 SOL – 250 kcmil	2.13 (54.1)	1.50 (38.1)	2.00 (50.8)	3/4	3/4	25

NEW! c UL us LISTED

Flat Braided Bonding Straps

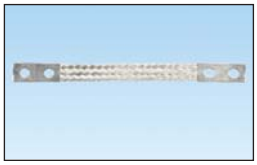
Type BS

- Used to electrically bond enclosure doors, motors, and machine frames in the construction of control panels or machine structures
- Flat ferrule end design helps to reduce the effects of EMI (Electromagnetic Interference)
- Available with internationally recognized green and yellow insulation for grounding application
- Made of high conductivity copper and tin-plated to inhibit corrosion
- Seamless ferrule ends provide mechanical strength for improved reliability
- UL 467 Listed and CSA Certified



One Hole, Insulated

One-Hole, Non-Insulated



Two-Hole, Non-Insulated

Part Number	Conductor Size	Length In. (mm)	Width In. (mm)	Thickness In. (mm)	Ferrule Length In. (mm)	Stud Hole Size In. (mm)	Stud Hole Spacing In. (mm)	Std. Pkg. Qty.
One-Hole, Insulated								
BS100445	#4 AWG	4.00 (101.6)	1.06 (27.0)	0.13 (3.3)	1.00 (25.4)	3/8 (M10)	—	1
BS100645	#4 AWG	6.00 (152.4)	1.06 (27.0)	0.13 (3.3)	1.00 (25.4)	3/8 (M10)	—	1
BS100845	#4 AWG	8.00 (203.2)	1.06 (27.0)	0.13 (3.3)	1.00 (25.4)	3/8 (M10)	—	1
BS101245	#4 AWG	12.00 (304.8)	1.06 (27.0)	0.13 (3.3)	1.00 (25.4)	3/8 (M10)	—	1
One-Hole, Non-Insulated								
BS100445U	#4 AWG	4.00 (101.6)	1.06 (27.0)	0.13 (3.3)	1.00 (25.4)	3/8 (M10)	—	1
BS100645U	#4 AWG	6.00 (152.4)	1.06 (27.0)	0.13 (3.3)	1.00 (25.4)	3/8 (M10)	—	1
BS100845U	#4 AWG	8.00 (203.2)	1.06 (27.0)	0.13 (3.3)	1.00 (25.4)	3/8 (M10)	—	1
BS101245U	#4 AWG	12.00 (304.8)	1.06 (27.0)	0.13 (3.3)	1.00 (25.4)	3/8 (M10)	—	1
Two-Hole, Non-Insulated								
BS201246EU	#4 AWG	12.00 (304.8)	1.06 (27.0)	0.13 (3.3)	2.50 (36.5)	3/8 (M10)	1.25 (31.8)	1
BS201846EU	#4 AWG	18.00 (457.2)	1.06 (27.0)	0.13 (3.3)	2.50 (36.5)	3/8 (M10)	1.25 (31.8)	1
BS202446EU	#4 AWG	24.00 (609.6)	1.06 (27.0)	0.13 (3.3)	2.50 (36.5)	3/8 (M10)	1.25 (31.8)	1