# **PANDUIT**®

## **Product Bulletin**

#### StructuredGround<sup>™</sup> Mechanical Connectors

The ability to provide a grounding system that is both reliable and economical is dependent upon finding the right connectors for the application. Panduit offers grounding connectors for a wide variety of conductor combinations and mounting configurations in high strength electrolytic copper, aluminum and bronze alloy materials.

Globally distributed StructuredGround<sup>™</sup> Mechanical Connectors provide fast and easy terminating of ground conductors to water pipe, ground rods, conduit, iron pipe, and structural steel for highest reliability and lowest installed cost. With the addition of new ground clamps to the existing line of StructuredGround<sup>™</sup> Mechanical Connectors, Panduit delivers the breadth of line to supply the right connector for each unique job, providing maximum reliability and safety for all critical electrical connections throughout your physical infrastructure.

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Key Features	Benefits
UL/cULus Listed and CSA Certified	Satisfies grounding specification requirements for safety and reliability
Made from high strength electrolytic copper, aluminum or bronze, and available with tin-plating	Creates optimum conductivity resulting in reliable, high quality connections
Broad selection of grounding connectors	Allows consolidation to one supplier, lowering procurement costs
Local product support available on a global basis	Provides worldwide product availability and expertise for consistent, rapid deployment
Wire range-taking capability	Minimizes inventory requirements, saves cost
Installed with standard screwdrivers and hex wrenches	Saves cost on special tooling

#### Applications



Oil and Gas



Industrial Facilities







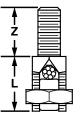
Construction



#### $\mathbb{B}_{ATFD} \xrightarrow{B} \mathbb{B}_{ATFD}$ Bronze Service Post Connector, Male Stud, Single Conductor

- 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 • cULus 467 Listed for grounding and bonding and provides high strength





#### Type SP1 – Premium Grade

• True hex design for body and nut hex provides correct fit with socket, box, or open end wrenches for easy installation process

#### Type GSP1 – Value Grade

- Incorporates longer stud length than standard SP1 stud length to accommodate a variety of mounting applications
- · Offered with standard and long stud lengths for optimized fit of the threaded stud through the mounting surface

• Pressure bar provides secure connection on a full range

of conductor combinations used with each connector

providing premium wire pull-out strength

suitable for direct burial in earth or concrete

• Greater wire range-taking capability allows one GSP1 part to substitute for up to four SP1 parts (see Table for comparatives) - reduces inventory, saves costs

	Conductor Size	Stud Size*		mensions n.)	Nut Hex	Body Hex	Std Pkg
Part Number	Range (AWG)	(UNC threads)	L	Z	(In.)	(In.)	Qty
SP1-8-C	#10.001 #0.0TD	4/4 00	0.63	0.50	0.50		100
SP1-8L-C	#12 SOL – #8 STR	1/4 – 20	0.63	1.00	0.50	0.38	100
GSP1-12-6-C1	#12 SOL - #6 STR	1/4 – 20	0.87	0.83	0.69	0.56	100
SP1-7-C	#0.001 #7.0TD	1/4 00	0.88	0.50	0.00	0.50	10
SP1-7L-C	#8 SOL - #7 STR	1/4 - 20	0.88	1.00	0.69	0.50	10
SP1-4-C	#10 SOL - #4 STR	E/10 10	0.94	0.56	0.75	0.50	10
SP1-4L-C	#10 SOL - #4 STR	5/16 - 18	0.94	1.00	0.75	0.56	10
GSP1-10-4-C <sup>2</sup>	#10 SOL - #4 STR	5/16 - 18	1.06	0.83	0.81	0.69	10
SP1-3-C	#6 COL #2 CTD	3/8 – 16	1.06	0.63	0.01	0.62	10
SP1-3L-C	#6 SOL - #3 STR	3/8 - 10	1.06	1.13	0.81	0.63	
GSP1-6-2-C3	#6 SOL - #2 STR	3/8 - 16	1.06	0.83	0.81	0.69	10
SP1-2-C	#4 STR - #2 STR	3/8 - 16	1.06	0.63	0.88	0.69	10
	#4 SIK - #2 SIK	3/8 - 10	1.06	1.13	0.00	0.69	
SP1-1/0-L	#6 SOL - 1/0 STR	1/2 - 13	1.31	0.75	1.00	0.75	5
SP1-1/0L-L	#030L - 1/03TH	1/2 - 13	1.31	1.25	1.00	0.75	5
GSP1-4-2/0-L4	#4 SOL - 2/0 STR	3/8 - 16	1.32	0.83	1.06	0.88	5
SP1-2/0-Q	#1 SOL - 2/0 STR	1/2 - 13	1.44	0.75	1.13	0.88	2
SP1-2/0L-Q	#130L-2/03TH	1/2 - 13	1.44	1.25	1.15	0.88	2.
SP1-4/0-Q	3/0 SOL - 4/0 STR	5/8 - 11	1.69	1.00	1.38	1.13	2
SP1-4/0L-Q	3/0 30L - 4/0 3TH	5/8 - 11	1.69	1.50	1.50	1.15	25
SP1-350-12	4/0 SOL - 350 kcmil	5/8 - 11	2.00	1.00	1.50	1.25	1:
SP1-350L-12	4/0 SOL - 550 Kerrin	5/0 - 11	2.00	1.50	1.50	1.20	14
SP1-500-12	250 kcmil - 500 kcmil	3/4 – 10	2.31	1.38	1.81	1.50	12
SP1-500L-12		5/4 - 10	2.31	1.75	1.01	1.50	12

<sup>\*</sup>Type GSP1 does not have a true hex body. Apply open-end wrench to body width normal to conductor slot <sup>1</sup>Alternate offering for SP1-8 and SP1-7. Review stud length (Dim. Z) for potential replacement for SP1-8L and SP1-7L <sup>2</sup>Alternate offering for SP1-3. Review stud length (Dim. Z) for potential replacement for SP1-4L <sup>3</sup>Alternate offering for SP1-3 and SP1-2. Review stud length (Dim. Z) for potential replacement for SP1-3L and SP1-2L <sup>4</sup>Alternate offering for SP1-3/L and SP1-2. Review stud length (Dim. Z) for potential replacement for SP1-3L and SP1-2L <sup>4</sup>Alternate offering for SP1-1/0 and SP1-2/L. Note stud size difference. Review stud length (Dim. Z) for potential replacement for SP1-3L and SP1-2L <sup>4</sup>Alternate offering for SP1-1/0 and SP1-2/L. Note stud size difference. Review stud length (Dim. Z) for potential replacement for SP1-3L and SP1-2L <sup>4</sup>Alternate offering for SP1-1/0 and SP1-2/L. Note stud size difference. Review stud length (Dim. Z) for potential replacement for SP1-3L and SP1-2L <sup>4</sup>Alternate offering for SP1-1/0 and SP1-2/L. Note stud size difference. Review stud length (Dim. Z) for potential replacement for SP1-3L and SP1-2L <sup>4</sup>Alternate offering for SP1-1/0 and SP1-2/L. Note stud size difference. Review stud length (Dim. Z) for potential replacement for SP1-3L and SP1-2/L. Alternate SP1-3L and SP1-2/L. Alternate SP1-3L and S

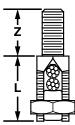


#### Bronze Service Post Connector, Male Stud, Two Conductor

- 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



- Pressure bar provides secure connection on a full range of conductor combinations used with each connector providing premium wire pull-out strength
- cULus 467 Listed for grounding and bonding and suitable for direct burial in earth or concrete



#### Type SP2 – Premium Grade

• True hex design for body and nut hex provides correct fit with socket, box, or open end wrenches for easy installation process

#### Type GSP2 – Value Grade

- Incorporates longer stud length than standard SP2 stud length to accommodate a variety of mounting applications
- Offered with standard and long stud lengths for optimized fit of the threaded stud through the mounting surface
- Greater wire range-taking capability allows one GSP2 part to substitute for up to four SP2 parts (see Table for comparatives) - reduces inventory, saves costs

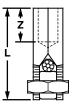
		Conductor Size	Stud Size*		mensions n.)	Nut Hex	Body Hex	Std. Pkg.
	Part Number	Range (AWG)	(UNC threads)	L	Z	(In.)	(In.)	Qty.
	SP2-8-C	#10 COL #0 CTD	1/4 00	0.75	0.50	0.50	0.00	100
	SP2-8L-C	#12 SOL – #8 STR	1/4 – 20	0.75	1.00	0.50	0.38	100
EW!	GSP2-12-6-C1	#12 SOL - #6 STR	1/4 – 20	0.94	0.83	0.69	0.56	100
	SP2-7-C	#10 SOL - #7 STR	1/4 - 20	1.00	0.50	0.60	0.50	100
	SP2-7L-C	#10 SOL - #7 STR	1/4 - 20	1.00	1.00	0.69	0.50	100
	SP2-4-C		5/16 - 18	1.16	0.56	0.75	0.56	100
	SP2-4L-C	#10 SOL - #4 STR	5/10 - 16	1.16	1.00	0.75	0.56	100
W!	GSP2-10-4-C <sup>2</sup>	#10 SOL - #4 STR	5/16 - 18	1.30	0.83	0.81	0.69	100
	SP2-3-C	#10.001 #0.0TD	3/8 – 16	1.09	0.63	0.01	0.00	100
	SP2-3L-C	#10 SOL - #3 STR	3/8 - 16	1.09	1.13	0.81	0.63	100
EW!	GSP2-10-2-C3	#10 SOL - #2 STR	3/8 - 16	1.30	0.83	0.81	0.69	100
	SP2-2-C	#10 STR - #2 STR	3/8 - 16	1.38	0.63	0.00	0.69	100
	SP2-2L-C	#1051K-#251K	3/8 - 10	1.28	1.13	0.88	0.69	100
	SP2-1/0-L	#2 SOL - 1/0 STR	1/2 - 13	1.69	0.75	1.00	0.75	50
	SP2-1/0L-L	#2 SOL - 1/0 STR	1/2 - 13	1.69	1.25	1.00	0.75	50
W!	GSP2-2-2/0-L4	#2 SOL - 2/0 STR	3/8 - 16	1.65	0.83	1.06	0.88	50
	SP2-2/0-Q	#2 SOL - 2/0 STR	1/2 - 13	1.88	0.75	1.13	0.88	25
	SP2-2/0L-Q	#2 SOL - 2/0 STR	1/2 - 13	1.88	1.25	1.13	0.00	25
	SP2-4/0-Q	#1 SOL - 4/0 STR	5/8 - 11	2.25	1.00	1.38	1.13	25
	SP2-4/0L-Q	#150L-4/051R	5/6 - 11	2.25	1.50	1.30	1.13	25
	SP2-350-12	#1 STR - 350 kcmil	5/8 - 11	2.69	1.00	1.50	1.25	12
	SP2-350L-12	#1 51K - 350 KCMII	3/0 - 11	2.69	1.50	1.50	1.20	12
	SP2-500-12		0/4 10	3.19	1.38	1 0 1	1 50	10
	SP2-500L-12	3/0 STR - 500 kcmil	3/4 – 10	3.19	1.75	1.81	1.50	12

Type GSP2 does not have a true hex body. Apply open-end wrench to body width normal to conductor slot <sup>1</sup>Alternate offering for SP2-8 and SP2-7. Review stud length (Dim. Z) for potential replacement for SP2-8L and SP2-7L <sup>2</sup>Alternate offering for SP2-3 and SP2-2. Review stud length (Dim. Z) for potential replacement for SP2-4L <sup>3</sup>Alternate offering for SP2-3 and SP2-2. Review stud length (Dim. Z) for potential replacement for SP2-3L and SP2-2L <sup>4</sup>Alternate offering for SP2-1/0 and SP2-2. Review stud size difference. Review stud length (Dim. Z) for potential replacement for SP2-3L and SP2-2L <sup>4</sup>Alternate offering for SP2-1/0 and SP2-2/0. Note stud size difference. Review stud length (Dim. Z) for potential replacement for SP2-3L and SP2-2L

## $\mathbb{E}_{\mathbb{L}} \bigoplus_{\mathsf{INTED}} \mathsf{BB} \stackrel{\bot}{=} \mathsf{Bronze}, \mathsf{Service} \mathsf{Post} \mathsf{Connector}, \mathsf{Female Thread}, \mathsf{Single Conductor}$

- 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
- 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
- Wire range-taking capability minimizes inventory requirements, saves cost
- cULus 467 Listed for grounding and bonding and suitable for direct burial in earth or concrete





	Conductor Size	Thread		mensions 1.)	Nut Hex	Body Hex	Std. Pkg.
Part Number	Range (AWG)	Size*	L	Z	(ln.)	(ln.)	Qty.
SPF1-8-C	#12 SOL – #8 STR	1/4 – 20	0.91	0.25	0.50	0.38	100
SPF1-7-C	#10 SOL – #7 STR	1/4 – 20	1.13	0.25	0.69	0.50	100
SPF1-4-C	#8 SOL – #4 STR	5/16 – 18	1.44	0.31	0.75	0.56	100
SPF1-3-C	#6 STR – #3 STR	3/8 – 16	1.50	0.38	0.81	0.63	100
SPF1-2-C	#6 STR – #2 STR	3/8 – 16	1.63	0.38	0.88	0.69	100
SPF1-1/0-L	#2 SOL - 1/0 STR	1/2 – 13	1.88	0.44	1.00	0.75	50
SPF1-2/0-Q	#1 SOL – 2/0 STR	1/2 – 13	2.06	0.50	1.13	0.88	25
SPF1-4/0-Q	1/0 STR – 4/0 STR	5/8 – 11	2.38	0.63	1.38	1.13	25
SPF1-350-12	4/0 STR – 350 kcmil	5/8 – 11	2.63	0.63	1.50	1.25	12
SPF1-500-12	300 kcmil – 500 kcmil	3/4 – 10	3.13	0.75	1.81	1.50	12

\*UNC threads.

## $\mathbb{C}_{\text{LINED}} \xrightarrow{\mathbb{C}} \mathbf{DB} \stackrel{\perp}{=} \mathbf{Bronze}$ , Service Post Connector, Female Thread, Two Conductor

- 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
- Pressure bar provides secure connection on a full range of conductor combinations used with each connector providing premium wire pull-out strength
- Wire range-taking capability minimizes inventory requirements, saves cost
- cULus 467 Listed for grounding and bonding and suitable for direct burial in earth or concrete

• 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

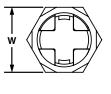
	Conductor Size	Thread		mensions n.)	Nut Hex	Body Hex	Std. Pkg
Part Number	Range (AWG)	Size*	L	Z	(In.)	(In.)	Qty.
SPF2-8-C	#12 SOL – #8 STR	1/4 – 20	1.13	0.25	0.50	0.38	100
SPF2-7-C	#10 SOL - #7 STR	1/4 – 20	1.44	0.25	0.69	0.50	100
SPF2-4-C	#10 SOL - #4 STR	5/16 – 18	1.56	0.31	0.75	0.56	100
SPF2-3-C	#10 SOL - #3 STR	3/8 – 16	1.63	0.38	0.81	0.63	100
SPF2-2-C	#10 SOL - #2 STR	3/8 – 16	1.94	0.38	0.88	0.69	100
SPF2-1/0-L	#2 SOL – 1/0 STR	1/2 – 13	2.13	0.44	1.00	0.75	50
SPF2-2/0-Q	#2 SOL - 2/0 STR	1/2 – 13	2.31	0.50	1.13	0.88	25
SPF2-4/0-Q	#1 SOL - 4/0 STR	5/8 – 11	2.50	0.63	1.38	1.13	25
SPF2-350-12	#1 STR – 350 kcmil	5/8 – 11	2.69	0.63	1.50	1.25	12
SPF2-500-12	3/0 STR – 500 kcmil	3/4 – 10	3.31	0.75	1.81	1.50	12





- · Split bolt design allows easy insertion of perpendicular conductors to speed installation
- UL 467 Listed and CSA Certified for direct burial in earth or concrete
- UL Listed and CSA Certified for use up to 600 V and temperature rated 90°C
- Each clamp accepts up to two conductors for a high performance bond with faster installation
- · Wire range-taking capability minimizes inventory requirements, saves cost
- Made from high strength, electrolytic bronze to provide reliable grounding connections





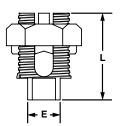


		Figure Dimensions (In.) Tight		Tightening Torque	Std. Pkg.	
Part Number	Conductor Size Range (AWG)	E	W	L	(In. – Lbs.)	Qty.
SBQC1/0-X	#6 SOL – 1/0 STR	0.75	1.50	2.00	#6 – #4 AWG – 165 #3 – #1 AWG – 275 1/0 AWG – 385	10



- Used for quick installation of a continuous grounding conductor
- UL 467 Listed for grounding and bonding; copper body lugs are UL Listed for direct burial in earth or concrete (aluminum body lugs are not direct burial rated)
- cULus Listed for use up to 600 V and temperature rated 90°C
- Wire range-taking capability minimizes inventory requirements, saves cost



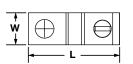
Copper

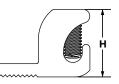




Aluminum

**Tin-Plated Copper** 





	Set Screw	Conductor Size	Figure I Stud Hole Size Hex Key Size				sions	Std. Pkg.
Part Number	Material	Range (AWG)	(In.)	(In.)	L	w	н	Qty.
Copper Body								
LICC4-22-C	Stainless Steel	#14 SOL – #4 STR	0.22	**	1.16	0.39	0.87	100
Tin-Plated Copp	ber body	J J						
LICC4-22TP-C	Stainless Steel	#14 SOL – #4 STR	0.22	**	1.16	0.39	0.87	100
Tin-Plated Alum	inum Body*	ll			1			
LIAC4-22-C*	Stainless Steel	#14 SOL – #4 STR	0.22	**	1.06	0.39	0.78	100
LIAS1/0-14-L*	Zinc Plated Steel	#14 SOL - 1/0 STR	0.27	**	1.50	0.61	1.10	50
LIAS250-56-Q*	Zinc Plated Steel	#6 SOL – 250 STR	0.33	1/4	2.20	0.80	1.70	25

\*Not DB Rated \*\*Uses slotted head set screw. The use of Panduit oxide inhibiting joint compound (CMP) is recommended for pad and conductor connections.

## $\underset{\texttt{usted}}{\bullet} \textbf{DB} \underset{\text{RATED}}{\bot} \textbf{Bronze Grounding Clamp, U-Bolt}$

- 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







	Conductor Size Range	Ground Rod	Iron Pipe Size (In)	Figur	e Dimens (In.)	ions	Bolt Dia.	Hex Size (In.)	Std. Pkg. Qty.
Part Number	(AWG)	Size (In)		L	w	н	ln.)		
GPL-4-Q	#8 SOL – #4 STR	5/8 or 3/4	3/8	2.00	1.38	2.75	3/8	9/16	25
GPL-5-Q	#4 SOL – 2/0 STR	5/8 or 3/4	3/8	2.00	1.63	2.75	3/8	9/16	25
GPL-6-Q	2/0 SOL – 250 kcmil	5/8 or 3/4	3/8	2.00	1.88	2.75	3/8	9/16	25
GPL-8-Q	#8 SOL – #4 STR	7/8 or 1	1/2 or 3/4	2.38	1.38	2.63	3/8	9/16	25
GPL-9-Q	#4 SOL – 2/0 STR	7/8 or 1	1/2 or 3/4	2.38	1.63	2.63	3/8	9/16	25
GPL-10-Q	2/0 SOL – 250 kcmil	7/8 or 1	1/2 or 3/4	2.38	1.88	3.00	3/8	9/16	25
GPL-14-X	#8 SOL – #4 STR	_	1	2.63	1.38	2.75	3/8	9/16	10
GPL-15-X	#4 SOL – 2/0 STR	_	1	2.63	1.63	2.75	3/8	9/16	10
GPL-16-X	2/0 SOL – 250 kcmil	_	1	2.63	1.88	3.25	3/8	9/16	10
GPL-20-X	#8 SOL – #4 STR	_	1 1/4	3.00	1.38	3.50	3/8	9/16	10
GPL-21-X	#4 SOL – 2/0 STR	_	1 1/4	3.00	1.63	3.50	3/8	9/16	10
GPL-22-X	2/0 SOL – 250 kcmil	_	1 1/4	3.00	1.88	3.50	3/8	9/16	10
GPL-26-X	#8 SOL – #4 STR	_	1 1/2	3.25	1.38	4.00	3/8	9/16	10
GPL-27-X	#4 SOL – 2/0 STR	_	1 1/2	3.25	1.63	4.00	3/8	9/16	10
GPL-28-X	2/0 SOL – 250 kcmil	—	1 1/2	3.25	1.88	4.00	3/8	9/16	10
GPL-32-3	#8 SOL – #4 STR	—	2	3.75	1.38	4.25	3/8	9/16	3
GPL-33-3	#4 SOL – 2/0 STR	—	2	3.75	1.63	4.25	3/8	9/16	3
GPL-34-3	2/0 SOL – 250 kcmil	—	2	3.75	1.88	4.25	3/8	9/16	3
GPL-39-3	#4 SOL – 2/0 STR	_	2 1/2	4.25	1.63	5.00	3/8	9/16	3
GPL-40-3	2/0 SOL – 250 kcmil	_	2 1/2	4.25	1.88	5.00	3/8	9/16	3
GPL-44-1	#8 SOL – #4 STR	_	3	4.75	1.38	5.50	3/8	9/16	1
GPL-45-1	#4 SOL – 2/0 STR	_	3	4.75	1.63	5.50	3/8	9/16	1
GPL-46-1	2/0 SOL – 250 kcmil	_	3	4.75	1.88	5.50	3/8	9/16	1
GPL-51-1	#4 SOL – 2/0 STR	_	3 1/2	5.25	1.63	6.25	3/8	9/16	1
GPL-52-1	2/0 SOL – 250 kcmil	_	3 1/2	5.25	1.88	6.25	3/8	9/16	1
GPL-57-1	#4 SOL – 2/0 STR	_	4	5.75	1.63	6.38	3/8	9/16	1
GPL-58-1	2/0 SOL – 250 kcmil	_	4	5.75	1.88	6.38	3/8	9/16	1
GPL-75-X	#4 SOL – 2/0 STR	_	6	7.88	1.58	7.85	3/8	1 1/4	10
GPL-76-1	2/0 SOL – 250 kcmil	—	6	7.94	1.00	6.81	3/8	9/16	1

- Accommodates a wide range of pipe, tube, rod and conductor sizes – minimizes inventory requirements, saves cost
- cULus 467 Listed for grounding and bonding and suitable for direct burial in earth or concrete



- 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, saves cost
- cULus 467 Listed for grounding and bonding and suitable for direct burial in earth or concrete

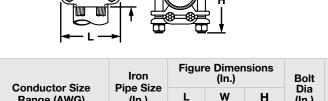
Hex

Sizo

Std.

Pka



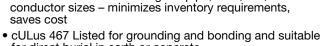


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Part Number	Range (AWG)	(In.)	L	W	н	(In.)	(In.)	Qty.
GU-2-X	#4 SOL – 2/0 STR	1	2.75	1.13	3.25	3/8	9/16	10
GU-4-X	#8 SOL – #4 STR	1 1/4	3.00	1.13	3.25	3/8	9/16	10
GU-11-X	#4 SOL – 2/0 STR	2	1.31	3.62	4.44	3/8	9/16	10
GU-13-3	300 kcmil – 500 kcmil	2	4.00	1.50	4.63	1/2	3/4	3



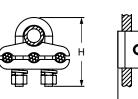
- Used to ground three equal size parallel copper conductors parallel to rod, tube, or pipe
- Made from high strength, electrolytic cast bronze
- High strength silicon bronze hardware provides long term reliable assembly

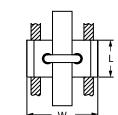


Accommodates a wide range of pipe, tube, rod, and

for direct burial in earth or concrete





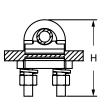


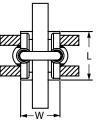
		Ground	Ground Pipe Figure Dimensions (In.)		Bolt	Hex	Std.		
Part Number	Conductor Size Range (AWG)	Rod Size (In.)	Size (In.)	L	w	н	Dia (In.)	Size (In.)	Pkg. Qty.
GPC3250-38-X	2/0 SOL-	5/8 or 3/4	3/8	3.00	1.56	2.81	3/8	9/16	10
	250 kcmil								

## CONTINUES BRATED Bronze Grounding Clamp, U-Bolt, for Two Parallel Conductors

- Used to ground two equal size parallel copper conductors perpendicular to 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, saves cost
- cULus 467 Listed for grounding and bonding and suitable for direct burial in earth or concrete





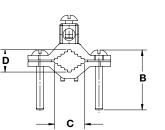


	Ground Pipe Figure Dimensions (In.)		Bolt Hex		Std.				
Part Number	Conductor Size Range (AWG)	Rod Size (In.)	Size (In.)	L	w	н	Dia (In.)	Size (In.)	Pkg. Qty.
GPC22/0-38-X	#4 SOL – 2/0 STR	5/8 or 3/4	3/8	1.62	1.38	2.8	3/8	9/16	10
GPC2250-38-X	2/0 SOL – 250 kcmil	5/8 or 3/4	3/8	1.85	1.50	2.8	3/8	9/16	10

## CUL Bronze Ground Clamp

- Bonds water pipe to copper conductors
- Made from high strength, electrolytic cast bronze
- Zinc plated steel hardware





- Wire range-taking capability minimizes inventory requirements, saves cost
- cULus 467 Listed for grounding and bonding

Part Number	Conductor Size Range	Iron Pipe Size	Figure	Std. Pkg.		
	(AWG)	(In.)	В	С	D	Qty.
Standard Dut	У					
GPC2-1-Q	#10 SOL – #2 STR	1/2 – 1	1.65	0.78	0.63	25
GPC2-2-L	#10 SOL – #2 STR	1 1/4 – 2	2.22	2.09	1.44	50
GPC2-4-X	#10 SOL – #2 STR	2 1/2 – 4	4.25	4.15	2.73	10
GPC2-6-X	#10 SOL – #2 STR	4 1/2 – 6	5.20	6.00	2.85	10
Light Duty						
GPCJ2-1-C	#10 SOL – #2 STR	1/2 – 1	1.65	0.90	0.51	100

Zinc plated steel hardware

requirements, saves cost

• Made from high strength, electrolytic cast bronze

Wire range-taking capability minimizes inventory

• cULus 467 Listed for grounding and bonding

### Bronze Ground Hubs

- Combine with bronze ground clamps to bond water pipes to rigid conduit and to copper conductors in EMT and rigid conduit
- When used with bronze ground clamps, installation flexibility is increased and inventory costs are decreased compared to stocking complete clamp assemblies





Figure 1



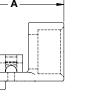




Figure 2

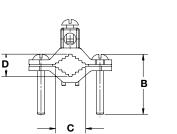
		Conductor Size Range	Conduit Hub Size	Figure Dimensions (In.)	Std. Pkg.	
Part Number	Figure No.	(AWG)	(In.)	Α	Qty.	
GHC4-12-T	1	#8 SOL – #4 STR	1/2	1.27	200	
GHC4-34-C	1	#8 SOL – #4 STR	3/4	1.51	100	
GHC4-1-C	1	#8 SOL – #4 STR	1	1.61	100	
GHC2/0-12-C	2	#10 SOL - 2/0 STR	1/2	1.98	100	
GHC2/0-34-L	2	#10 SOL - 2/0 STR	3/4	2.14	50	
GHC3/0-1-L	2	#10 SOL - 3/0 STR	1	2.16	50	



#### **Bronze Ground Clamp, Direct Burial**

- · Bonds water pipe to copper conductors
- Made from high strength, electrolytic cast bronze
- High strength phos bronze hardware provides long term reliable assembly
- Wire range-taking capability minimizes inventory requirements, saves cost
- cULus 467 Listed for grounding and bonding and suitable for direct burial in earth or concrete





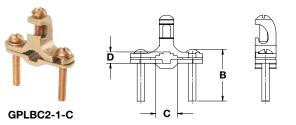
	Conductor Size Range	Iron Pipe Size	Figur	Pkg.		
Part Number	(AWG)	(In.)	В	С	D	Qty.
GPC2-1D-C	#10 SOL – #2 STR	1/2 – 1	1.65	0.78	0.63	100
GPC2-2D-L	#10 SOL – #2 STR	1 1/4 – 2	2.22	2.09	1.44	50
GPC2-4D-E	#10 SOL – #2 STR	2 1/2 – 4	4.25	4.15	2.73	20

0.1



- Bonds water pipe to copper conductors
- Used for quick installation of a continuous grounding conductor
- Made from high strength, electrolytic cast bronze
  High strength phos bronze hardware provides long term reliable assembly
  - GPLAC2-1-C

- Wire range-taking capability minimizes inventory requirements, saves cost
- cULus 467 Listed for grounding and bonding and suitable for direct burial in earth or concrete



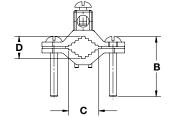
	Conductor Size Range Iron Pipe Size	Figur	Std. Pkg.							
Part Number	(AWG)	(In.)	В	С	D	Qty.				
Conductor Parallel to Pipe										
GPLAC2-1-C	#10 SOL – #2 STR	1/2 – 1	1.65	0.68	0.36	100				
Conductor Perpendicular to Pipe										
GPLBC2-1-C	#10 SOL – #2 STR	1/2 – 1	1.65	0.68	0.36	100				



- Bonds steel and aluminum pipe to aluminum conductors
- Made from die cast zinc
- Zinc plated steel hardware



GPCZ2-1-C



- Wire range-taking capability minimizes inventory requirements, saves cost
- cULus 467 Listed for grounding and bonding

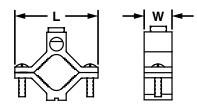
Conductor Size Range	Iron Pipe Size	Figure	Std. Pkg.			
Part Number	(AWG)	(In.)	В	С	D	Qty.
GPCZ2-1-C	#10 SOL – #2 STR	1/2 – 1	1.65	0.81	0.55	100



- 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



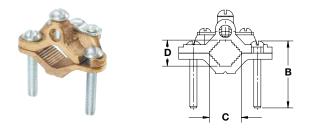
- Plated steel screws provide high strength and inhibit corrosion
- Accommodates a wide range of pipe, tube, and conductor sizes – minimizes inventory requirements, saves cost
- UL 467 Listed for grounding and bonding



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



- Bonds water pipe to copper conductors in armored cables
- Made from high strength, electrolytic cast bronze
- Wire range-taking capability minimizes inventory requirements, saves cost
- cULus 467 Listed for grounding and bonding; GPCA2-1D-C is suitable for direct burial in earth or concrete

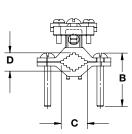


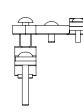
Part Number	Conductor Size Range	Iven Dine Size	Figur	Std. Pkg.		
	(AWG)	Iron Pipe Size (In.)	В	С	D	Qty.
Phos Bronze H	lardware					
GPCA2-1D-C	#8 SOL – #4 STR	1/2 – 1	1.65	1.00	0.59	100
Zinc Plated St	eel Hardware*					
GPCA2-1-C*	#8 SOL – #4 STR	1/2 – 1	1.65	1.00	0.59	100
GPCA2-2-L*	#8 SOL – #4 STR	1 1/4 – 2	2.22	2.22	1.19	50
GPCA2-4-X*	#8 SOL – #4 STR	2 1/2 – 4	4.25	3.83	2.70	10
GPCA2-6-X*	#8 SOL – #4 STR	4 1/2 – 6	5.20	5.96	4.50	10



- Bonds water pipe to copper conductors in armored cables
- Swivel feature provides easy alignment of conductor to clamp
- Made from high strength, electrolytic cast bronze







Zinc plated steel hardware

requirements, saves cost

Wire range-taking capability minimizes inventory

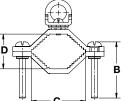
cULus 467 Listed for grounding and bonding

	Conductor Size Range	Iron Pipe Size	Figure Dimensions (In.)			Std. Pkg.
Part Number	(AWG)	(In.)	В	С	D	Qty.
GPCWA6-1-L	#10 SOL - #6 STR	1/2 – 1	1.65	0.78	0.63	50
GPCWA6-2-L	#10 SOL – #6 STR	1 1/4 – 2	2.22	2.09	1.44	50
GPCWA6-4-X	#10 SOL – #6 STR	2 1/2 – 4	4.25	4.15	2.73	10



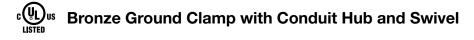
- Bonds water pipe to rigid conduit and to copper conductors in EMT and rigid conduit
- Includes high strength bronze conduit hub to ensure a durable connection to conduit
- Made from high strength, electrolytic cast bronze





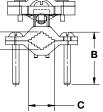
- · Zinc plated steel hardware
- Wire range-taking capability minimizes inventory requirements, saves cost
- cULus 467 Listed for grounding and bonding

	Conductor Size Range	Iron Pipe Size (In.)	Conduit Hub Size (In.)	Figure	e Dimension	s (In.)	Std. Pkg.
Part Number	(AWG)			В	С	D	Qty.
GPC4-1-12-Q	#8 SOL – #4 STR	1/2 – 1	1/2	1.65	1.00	0.56	25
GPC4-1-34-L	#8 SOL – #4 STR	1/2 – 1	3/4	1.65	1.00	0.56	50
GPC4-1-1-L	#8 SOL – #4 STR	1/2 – 1	1	1.65	1.00	0.56	50
GPC4-2-12-L	#8 SOL – #4 STR	1 1/4 – 2	1/2	2.22	2.08	1.33	50
GPC4-2-34-Q	#8 SOL – #4 STR	1 1/4 – 2	3/4	2.22	2.08	1.33	25
GPC4-2-1-Q	#8 SOL – #4 STR	1 1/4 – 2	1	2.22	2.08	1.33	25
GPC4-4-12-X	#8 SOL – #4 STR	2 1/2 – 4	1/2	4.25	3.81	2.75	10
GPC4-4-34-X	#8 SOL – #4 STR	2 1/2 – 4	3/4	4.25	3.81	2.75	10
GPC4-4-1-X	#8 SOL – #4 STR	2 1/2 – 4	1	4.25	3.81	2.75	10
GPC4-6-12-X	#8 SOL – #4 STR	4 1/2 – 6	1/2	5.20	6.00	2.90	10
GPC4-6-34-5	#8 SOL – #4 STR	4 1/2 – 6	3/4	5.20	6.00	2.90	5
GPC4-6-1-X	#8 SOL – #4 STR	4 1/2 – 6	1	5.20	6.00	2.90	10

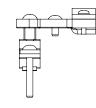


- Bonds water pipe to rigid conduit and to copper conductors in EMT and rigid conduit
- Split hub design provides conduit range-taking capability to minimize inventory requirements, saves cost
- Made from high strength, electrolytic cast bronze





- Zinc plated steel hardware
- Wire range-taking capability minimizes inventory requirements, saves cost
- cULus 467 Listed for grounding and bonding

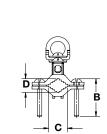


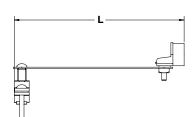
Part Number	Conductor Size Range (AWG)	Iron Pipe Size (In.)	Conduit Hub Size (In.)	Figure	Std.		
				В	С	D	Pkg. Qty.
GPCW6-1-12-L	#10 SOL – #6 STR	1/2 – 1	1/2 – 3/4 EMT 1/2 Rigid	1.65	0.78	0.63	50
GPCW6-2-12-Q	#10 SOL – #6 STR	1 1/4 – 2	1/2 – 3/4 EMT 1/2 Rigid	2.22	2.09	1.44	25
GPCW6-4-12-X	#10 SOL – #6 STR	2 1/2 – 4	1/2 – 3/4 EMT 1/2 Rigid	4.25	4.15	2.73	10



- Bonds water pipe to rigid conduit and to copper conductors in EMT and rigid conduit
- Copper contact strip included to isolate conduit system from water pipe vibrations
- Includes high strength bronze conduit hub to ensure a durable connection to conduit
- Made from high strength, electrolytic cast bronze
- Zinc plated steel hardware
- Wire range-taking capability minimizes inventory requirements, saves cost
- cULus 467 Listed for grounding and bonding







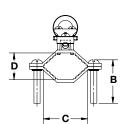
	Conductor Size Range	Iron Pipe Size	Conduit Hub Size	Figure Dimensions (In.)		ı.)	Std. Pkg.	
Part Number	(AWG)	(In.)	(In.)	В	С	D	L	Qty.
GPCS4-1-12-L	#8 SOL – #4 STR	1/2 – 1	1/2	1.65	0.78	0.63	7.25	50
GPCS4-2-12-L	#8 SOL – #4 STR	1/2 – 1	3/4	1.65	0.78	0.63	7.50	50
GPCS4-4-12-L	#8 SOL – #4 STR	1/2 – 1	1	1.65	0.78	0.63	7.75	50

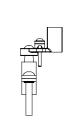


#### Bronze Ground Clamp for Conduit with Guillotine

- · Bonds water pipe to rigid conduit and to copper conductors in EMT and rigid conduit
- Includes high strength bronze conduit hub to ensure a durable connection to conduit
- Guillotine feature provides high clamping force on grounding conductor







· Made from high strength, electrolytic cast bronze

· Wire range-taking capability minimizes inventory

Made from high strength, electrolytic cast bronze

• Wire range-taking capability minimizes inventory

cULus 467 Listed for grounding and bonding

cULus 467 Listed for grounding and bonding

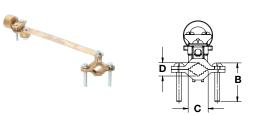
Zinc plated steel hardware

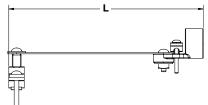
requirements, saves cost

	Conductor Size Range	Iron Pipe Size	Conduit Hub Size	Figure	e Dimensions	s (In.)	Std. Pkg.
Part Number	(AWG) (In.)		(ln.)	В	С	D	Qty.
GPCG2/0-1-12-L	#10 SOL – 2/0 STR	1/2 – 1	1/2	1.65	0.78	0.63	50
GPCG2/0-1-34-L	#10 SOL – 2/0 STR	1/2 – 1	3/4	1.65	0.78	0.63	50
GPCG3/0-1-1-L	#10 SOL – 3/0 STR	1/2 – 1	1	1.65	0.78	0.63	50
GPCG2/0-2-12-Q	#10 SOL – 2/0 STR	1 1/4 – 2	1/2	2.22	2.09	1.44	25
GPCG2/0-2-34-Q	#10 SOL – 2/0 STR	1 1/4 – 2	3/4	2.22	2.09	1.44	25
GPCG3/0-2-1-Q	#10 SOL – 3/0 STR	1 1/4 – 2	1	2.22	2.09	1.44	25
GPCG2/0-4-12-E	#10 SOL – 2/0 STR	2 1/2 – 4	1/2	4.25	4.15	2.73	20
GPCG2/0-4-34-E	#10 SOL – 2/0 STR	2 1/2 – 4	3/4	4.25	4.15	2.73	20
GPCG3/0-4-1-X	#10 SOL – 3/0 STR	2 1/2 – 4	1	4.25	4.15	2.73	10

#### c(Nr Bronze Ground Clamp for Conduit with Strap and Guillotine US

- · Bonds water pipe to rigid conduit and to copper conductors in EMT and rigid conduit
- · Copper contact strip included to isolate conduit system from water pipe vibrations
- Includes high strength bronze conduit hub to ensure a durable connection to conduit
- Guillotine feature provides high clamping force on grounding conductor





Zinc plated steel hardware

requirements, saves cost

	Conductor Size Range	Iron Pipe Size	Conduit Hub Size	Fig	ure Dime	nsions (In	ı.)	Std. Pkg.
Part Number	(AWG)	(In.)	(In.)	В	С	D	L	Qty.
GPCSG4-1-12-X	#8 SOL – #4 STR	1/2 – 1	1/2	1.65	0.78	0.63	8.12	10
GPCSG4-2-12-Q	#8 SOL – #4 STR	1/2 – 1	3/4	1.65	0.78	0.63	8.25	25
GPCSG4-4-12-Q	#8 SOL – #4 STR	1/2 – 1	1	1.65	0.78	0.63	8.37	25

14



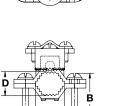
- Bonds water pipe to copper conductors
- Heavy duty construction for increased durability
- Made from high strength, electrolytic cast bronze
- Zinc plated steel hardware
- Wire range-taking capability minimizes inventory requirements, saves cost
- cULus 467 Listed for grounding and bonding

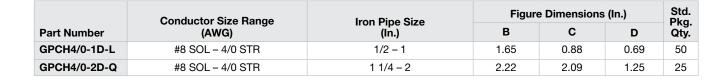
Part Number (AWG)	Conductor Size Bange	Iron Pipe Size		Figure Dimensions (In.)				
	(in.)	В	С	D	Pkg. Qty.			
GPCH4/0-1-L	#8 SOL – 4/0 STR	1/2 – 1	1.65	0.88	0.69	50		
GPCH4/0-2-Q	#8 SOL – 4/0 STR	1 1/4 – 2	2.22	2.09	1.25	25		
GPCH4/0-4-E	#8 SOL – 4/0 STR	2 1/2 – 4	4.25	4.19	2.59	20		
GPCH4/0-6-X	#8 SOL – 4/0 STR	4 1/2 – 6	5.20	5.94	2.64	10		

## $\mathbb{C}_{Listed} \mathbb{D} \mathbb{B} \stackrel{}{=} \mathbb{B}$ Bronze Ground Clamp, Heavy Duty, Direct Burial

- Bonds water pipe to copper conductors
- Heavy duty construction for increased durability
- Made from high strength, electrolytic cast bronze
- High strength phos bronze hardware provides long term reliable assembly
- Wire range-taking capability minimizes inventory requirements, saves cost
   of II us 467 Listed for grounding and bonding and
- cULus 467 Listed for grounding and bonding and suitable for direct burial in earth or concrete





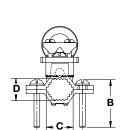




#### Bronze Ground Clamp for Conduit with Guillotine, Heavy Duty

- · Bonds water pipe to rigid conduit and to copper conductors in EMT and rigid conduit
- · Heavy duty construction for increased durability
- Includes high strength bronze conduit hub to ensure a durable connection to conduit





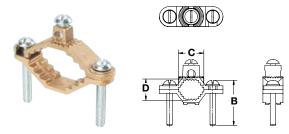
- · Guillotine feature provides high clamping force on grounding conductor
- Made from high strength, electrolytic cast bronze
- · Zinc plated steel hardware
- · Wire range-taking capability minimizes inventory requirements, saves cost
- cULus 467 Listed for grounding and bonding

	Conductor Size Range	Iron Pipe Size	Conduit Hub Size	Figure	e Dimensions	s (In.)	Std. Pkg.
Part Number	(AWG)	(In.)	(In.)	В	С	D	Qty.
GPCH2/0-1-12-Q	#10 SOL – 2/0 STR	1/2 – 1	1/2	1.65	0.88	0.69	25
GPCH3/0-1-34-Q	#10 SOL – 3/0 STR	1/2 – 1	3/4	1.65	0.88	0.69	25
GPCH3/0-1-1-Q	#10 SOL – 3/0 STR	1/2 – 1	1	1.65	0.88	0.69	25
GPCH2/0-2-12-Q	#10 SOL – 2/0 STR	1 1/4 – 2	1/2	2.22	2.09	1.25	25
GPCH3/0-2-34-Q	#10 SOL – 3/0 STR	1 1/4 – 2	3/4	2.22	2.09	1.25	25
GPCH3/0-2-1-Q	#10 SOL – 3/0 STR	1 1/4 – 2	1	2.22	2.09	1.25	25
GPCH2/0-4-12-X	#10 SOL - 2/0 STR	2 1/2 – 4	1/2	4.25	4.19	2.59	10
GPCH3/0-4-34-X	#10 SOL – 3/0 STR	2 1/2 – 4	3/4	4.25	4.19	2.59	10
GPCH3/0-4-1-X	#10 SOL – 3/0 STR	2 1/2 – 4	1	4.25	4.19	2.59	10
GPCH2/0-6-12-X	#10 SOL – 2/0 STR	4 1/2 – 6	1/2	5.20	5.94	2.64	10
GPCH3/0-6-34-X	#10 SOL – 3/0 STR	4 1/2 – 6	3/4	5.20	5.94	2.64	10
GPCH3/0-6-1-X	#10 SOL – 3/0 STR	4 1/2 – 6	1	5.20	5.94	2.64	10



#### Bronze Ground Clamp, Heavy Duty Base

- Use alone to bond water pipes to copper conductors
- When combined with heavy duty bronze ground hubs, bonds water pipes to conductors and conduits
- · When used with heavy duty bronze ground hubs installation flexibility is increased, and inventory costs are decreased compared to stocking complete clamp assemblies

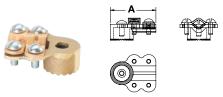


- Heavy duty construction for increased durability
- Made from high strength, electrolytic cast bronze
- Zinc plated steel hardware
- Wire range-taking capability minimizes inventory requirements, saves cost
- cULus 467 Listed for grounding and bonding

	Conductor Size Range	Iron Pipe Size	Figure	Figure Dimensions (In.)				
Part Number	(AWG)	(In.)	В	С	D	Pkg. Qty.		
GPCH2-1-C	#10 SOL – #2 STR	1/2 – 1	1.65	0.88	0.69	100		
GPCH2-2-L	#10 SOL – #2 STR	1 1/4 – 2	2.22	2.09	1.25	50		
GPCH2-4-E	#10 SOL – #2 STR	2 1/2 – 4	4.25	4.19	2.59	20		
GPCH2-6-X	#10 SOL - #2 STR	4 1/2 – 6	5.20	5.94	2.64	10		



- Combine with heavy duty bronze ground clamp bases to bond water pipes to rigid conduits and to copper conductors in EMT and rigid conduit
- When used with heavy duty bronze ground clamp bases, installation flexibility is increased, while inventory costs are decreased when compared with stocking complete clamp assemblies



- Heavy duty construction for increased durability
- Made from high strength, electrolytic cast bronze
- Zinc plated steel hardware
- Wire range-taking capability minimizes inventory requirements, saves cost
- cULus 467 Listed for grounding and bonding

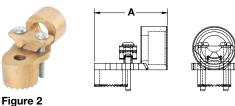
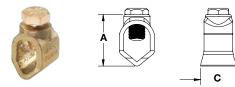


Figure 1

Part Number	Conductor Size Range	Conduit Hub Size	Eigure No	Figure Dimensions (In.)	Std. Pkg. Qty.
Part Number	(AWG)	(In.)	Figure No.	A	QLY.
GHCH4/0-C	#8 SOL – 4/0 STR	-	1	1.89	100
GHCH2/0-12-L	#10 SOL – 2/0 STR	1/2	2	2.30	50
GHCH3/0-34-L	#10 SOL – 3/0 STR	3/4	2	2.42	50
GHCH3/0-1-L	#10 SOL – 3/0 STR	1	2	2.39	50



- Used for grounding copper conductor parallel to ground rods
- Made from high strength, seamless electrolytic bronze to provide long term durability



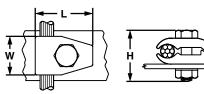
- High strength phos bronze hardware provides long term reliable assembly
- cULus 467 Listed for grounding and bonding and suitable for direct burial in earth or concrete for type GRC and GRCH
- UL Listed and CSA Certified for grounding and bonding and suitable for direct burial in earth or concrete - for Type WB

		Ground	Figure Dim	ensions (In.)		Std.
Part Number	Conductor Size Range (AWG)	Rod Size (In.)	Α	С	Hex Head Size (In.)	Pkg. Qty.
Standard Duty				1		
GRC4-38-TL	#10 SOL – #4 STR	3/8	1.00	0.82	1/2	250
GRC2-12-TL	#10 SOL – #2 STR	1/2	1.19	0.68	1/2	250
GRC2-58-TL	#10 SOL - #2 STR	5/8	1.34	0.64	1/2	250
GRC2-34-T	#10 SOL – #2 STR	3/4	1.48	0.71	1/2	200
WB12-L	#10 SOL - #2 STR	1/2	1.28	0.88	1/2	50
WB34-X	#8 STR – 1/0 STR #8 STR – #2 STR	5/8 3/4	1.54	1.03	1/2	10
WB58-Q	#8 STR – 1/0 STR	5/8	1.40	1.04	1/2	25
Heavy Duty						
GRCH2-12-T	#10 SOL – #2 STR	1/2	1.25	0.82	1/2	200
GRCH1/0-58-T	#8 SOL – 1/0 STR	5/8	1.42	0.99	1/2	200
GRCH1/0-34-E	#8 SOL – 1/0 STR	3/4	1.60	0.97	1/2	20

#### $\mathbb{C}_{\text{used}} \xrightarrow{\mathbf{DB}} = \mathbf{B}_{\text{RATED}}$ Bronze Grounding Clamp with Spacer for Flat Surfaces

- 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, saves cost
- Incorporates spacer plate to separate conductor from mounting surface
- cULus 467 Listed for grounding and bonding and suitable for direct burial in earth or concrete





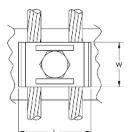
	Ormalization Gine Demos	Figure Dimensions (In.)			Hex (li	Std.	
Part Number	Conductor Size Range (AWG)	L	w	н	Bolt	Nut	Pkg. Qty.
GM-2-Q	#4 SOL – 2/0 STR	1.63	1.13	1.75	9/16	9/16	25
GM-3-Q	2/0 SOL – 250 kcmil	2.13	1.50	2.00	3/4	3/4	25



## $\mathbb{C}_{\text{LISTED}} Bronze Ground Bar Clamp with Spacer for Flat Surfaces, Two Conductor$

- Used to ground two copper code conductors to flat surfaces
- Cast from high strength, electrolytic bronze
- Cast body includes anti-rotational flanges to keep hex head bolt from spinning
- High strength silicon bronze hardware for long term reliable assembly
- Incorporates spacer plate to separate conductors from mounting surface
- cULus 467 Listed for grounding and bonding and suitable for direct burial in earth or concrete





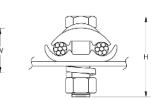
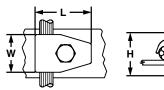


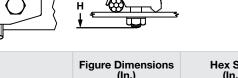
			Figure	e Dimeı (In.)	nsions	Hex (lı	Size ı.)	Std.
	Part Number	Conductor Size Range (AWG)	L	w	н	Bolt*	Nut	Pkg. Qty.
NEW!	GBC2250-12-X	2/0 SOL - 250 kcmil	2.04	1.25	2.27	3/4	3/4	10

\*Bolt head will be contained within the anti-rotational flanges of cast body

#### $\mathbb{B}_{Listed} \to \mathbb{B}_{RATED}$ Bronze Grounding Clamp with Spacer for Flat Surfaces, One Conductor

- 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
  - Ţ





 Accommodates a wide range of conductor sizes – minimizes inventory requirements, saves cost

for direct burial in earth or concrete

• cULus 467 Listed for grounding and bonding and suitable

	Oranduster Circ Downs	Figure Dimensions (In.)			Hex (I	Std.	
Part Number	Conductor Size Range (AWG)	L	w	н	Bolt	Nut	Pkg. Qty.
GMS-1-X	#8 SOL – #4 STR	1.25	1.00	1.63	9/16	9/16	10
GMS-2-Q	#4 SOL – 2/0 STR	1.63	1.13	1.75	9/16	9/16	25
GMS-3-Q	2/0 SOL – 250 kcmil	2.13	1.50	2.00	3/4	3/4	25



- 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
- cULus 467 Listed



One Hole, Insulated

One Hole, Non-Insulated

Two-Hole, Non-Insulated

Part Number	Conductor Size (AWG)	Length (In.)	Width (In.)	Thickness (In.)	Ferrule Length (In.)	Stud Hole Size (In.)	Stud Hole Spacing (In.)	Std. Pkg. Qty.
One-Hole, Insu	ated							
BS100445	#4	4.00	1.06	0.13	1.00	3/8	-	1
BS100645	#4	6.00	1.06	0.13	1.00	3/8	-	1
BS100845	#4	8.00	1.06	0.13	1.00	3/8	-	1
BS101245	#4	12.00	1.06	0.13	1.00	3/8	-	1
One-Hole, Non-	Insulated				1	1		
BS100445U	#4	4.00	1.06	0.13	1.00	3/8	_	1
BS100645U	#4	6.00	1.06	0.13	1.00	3/8	-	1
BS100845U	#4	8.00	1.06	0.13	1.00	3/8	_	1
BS101245U	#4	12.00	1.06	0.13	1.00	3/8	-	1
Two-Hole, Non-	Insulated				1			
BS201246EU	#4	12.00	1.06	0.13	2.50	3/8	1.25	1
BS201846EU	#4	18.00	1.06	0.13	2.50	3/8	1.25	1
BS202446EU	#4	24.00	1.06	0.13	2.50	3/8	1.25	1

19

#### Joint Compounds

- 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
СМР-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

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