

# Grounding

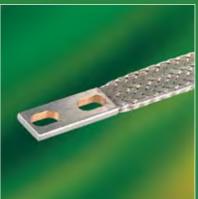


















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#### BRONZE GROUND CLAMPS (4)





Bronze ground clamp for bonding bare copper wire to water pipe or for use as a water meter shunt.

CATALOG	UPC	WATER	GROUND	PCS. PER	SHPG. WT.
NO.	CODE	PIPE SIZE	WIRE MAX.	CARTON	LBS./100
G-1-S*	01004	½ - 1	2 stranded	20	24
G-2-S*	01005	1 ¼ - 2	2 stranded	10	45
G-4-S	01031	2½ - 4	2 stranded	6	105
G-6-S	01045	4½ - 6	2 stranded	3	202
*Also c(VL)us					

#### HEAVY DUTY BRONZE GROUND CLAMPS (4) (1)



Bronze water pipe clamps with serrated head. Heavy duty construction. Cast bronze body with plated steel screws. Designed for use alone or with heavy duty bronze adapters.

CATALOG	UPC	WATER	GROUND	PCS. PER	SHPG. WT.
NO.	CODE	PIPE SIZE	WIRE MAX.	CARTON	LBS./100
		• •			
G-1	01010	<b>½</b> - 1	2 stranded	25	21
G-2	01011	1 1/4 - 2	2 stranded	15	43
G-12	01012	21/2 - 4	2 stranded	6	81
G-13	01013	4½ - 6	2 stranded	4	115

#### ALUMINUM GROUND CLAMPS (L)



Dual-rated ground clamp that grounds aluminum or copper to water pipe, galvanized pipe or steel conduit. They are constructed from high-strength, extruded aluminum alloy and are plated to provide low-contact resistance.

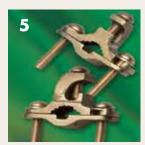
CATALOG NO.	UPC CODE	WATER PIPE SIZE	GROUND WIRE MAX.	PCS. PER CARTON	SHPG. WT. LBS./100
GCA-1	01000	½ - 1	1/0 - 14	25	19
GCA-2	01001	1 ¼ - 2	250 - 6	10	43
GCA-4	01002	2 ½ - 4	250 - 6	3	101











#### 1. DIRECT BURIAL BRONZE GROUND CLAMPS (4) us

CATALOG	UPC	WATER PIPE	GROUND	PIECES PER	SHPG. WT.
NO.	CODE	SIZE (INCHES)	WIRE MAX	CARTON	LBS./100
G-1-S-DB	01008	½ - 1	2 stranded	20	28
G-2-S-DB	01009	1¼ - 2	2 stranded	10	49

UL Listed for direct burial in earth or concrete. Screws are silicon bronze.

#### 2. HEAVY DUTY BRONZE GROUND CLAMP - DIRECT BURIAL FOR REBAR (4) US

CATALOG	UPC	WATER PIPE	GROUND	PIECES PER	SHPG. WT.
NO.	CODE.	Size (Inches)	WIRE MAX.	CARTON	LBS./100
G-1-S DBR	00533	3/8 - 1	2 AWG	20	28

Used to connect bare copper wire to water pipe, ground rods and rebar for bonding. Assembled with copper screws and UL Listed for direct burial in earth and concrete. Can accommodate ground wires up to 2 AWG.

#### 3. EXTRA HEAVY DUTY DIRECT BURIAL GROUND CLAMP (4) us

CATALOG	UPC	GROUND	PIECES PER	SHPG. WT.
NO.	CODE	WIRE RANGE	CARTON	LBS./100
G-140DB	00555	8 stranded - 4/0 stranded	10	45

Suitable for:  $\frac{1}{8}$  - 1" rebar,  $\frac{1}{2}$  - 1" water pipe,  $\frac{1}{2}$  - 1" copper water tubing,  $\frac{1}{2}$  - 1" ground rod

This incredible ground clamp can handle just about any size ground wire and just about any application. UL Listed for direct burial in earth and concrete, it can be used with rebar, water pipe, copper tubing and ground rods up to 1 inch in diameter. Assembled with tough, stainless steel screws. Will accommodate ground wires from 8 AWG to 4/0 AWG.

#### 4./5./6. HEAVY DUTY DIRECT BURIAL GROUND CLAMP WITH LAY-IN FEATURE

CATALOG NO.	UPC CODE	PIPE SIZE (INCHES)	GROUND WIRE RANGE	SCREW MATERIAL	PIECES PER CARTON	SHPG. WT. LBS./100
GLC-140DB*	00556	½ - <b>2</b> ″	8 stranded - 4/0 stranded	stainless steel	10	55
GLC-240DB	00718	1¼ - 2″	8 stranded - 4/0 stranded	stainless steel	6	67
GLC-440DB	00719	2 ½ - 4"	8 stranded - 4/0 stranded	stainless steel	3	110
GLC-12 DB*	00534	1/2 - 1"	#10 — 2 stranded	silicon bronze	25	31
GLC-12 RDB*	00535	1/2 - 1"	#10 — 2 stranded	silicon bronze	25	31

Suitable for: 3/8 - 1" rebar, 1/2 - 1" water pipe, 1/2 - 1" copper water tubing, 1/2 - 1" ground rod

The ultimate ground clamp for large ground wires. This incredible ground clamp can handle just about any size ground wire and just about any application. The lay-in feature provides for the ultimate in flexibility. UL Listed for direct burial in earth and concrete, it can be used with rebar, water pipe, copper tubing and ground rods up to 1 inch in diameter. Screws conveniently pre-assembled. Will accommodate ground wires from 8 AWG to 4/0 AWG.









#### 1. BRONZE GROUND CLAMPS WITH WIRE ADAPTERS 🕕 🚯

CATALOG	UPC	WATER PIPE	GROUND	PIECES PER	SHPG. WT.	
NO.	CODE	SIZE (INCHES)	WIRE MAX.	CARTON	LBS./100	
G-20	01032	½ - 1	4 stranded	20	31	
G-66	01048	1 ¼ - 2	4 stranded	10	52	

For connecting wire to water pipe for grounding. Special pressure bar grips cable to lessen chances of grounding conductor being pulled out. Assembled with zinc-plated steel screws.

#### 2. DIRECT BURIAL GROUND CLAMP WITH WIRE ADAPTERS (4) (1)

CATALOG	UPC	WATER PIPE	GROUND	PIECES PER	SHPG. WT.	
NO.	CODE	SIZE (INCHES)	WIRE MAX.	CARTON	LBS./100	
G-20-DB	01120	½ - 1	4 stranded	20	31	

UL Listed for direct burial in earth or concrete. For connecting wire to water pipe for grounding. Special pressure bar grips cable armor to lessen chances of grounding conductor being pulled out. Assembled with silicon bronze screws.

#### 3. BRONZE GROUND CLAMPS WITH BRASS SCREWS (4) (1)

CATALOG NO.	UPC CODE	WATER PIPE SIZE (INCHES)	GROUND WIRE MAX.	PIECES PER CARTON	SHPG. WT. LBS./100	
G-1-S-BS	01006	½ - 1	2 stranded	20	24	
G-2-S-BS	01007	1 ¼ - 2	2 stranded	10	45	
G-4-S-BS	01140	<b>2</b> ½ - 4	2 stranded	6	105	

Bronze ground clamp for bonding bare copper wire to water pipe. Assembled with brass screws.

#### 4. BRONZE GROUND CLAMPS WITH ADAPTERS AND BRASS SCREWS (1) 18 18

CATALOG	UPC	WATER PIPE	GROUND	PIECES PER	SHPG. WT.
NO.	CODE	SIZE (INCHES)	WIRE MAX.	CARTON	LBS./100
G-3-BS	01041	½ - 1	4/0 stranded	20	35

Bronze water pipe clamps with bronze adapters. Assembled with brass screws.

#### HEAVY DUTY BRONZE GROUND CLAMPS ( U) us (









Heavy duty bronze adapters have serrations that match the serrations on the ground clamp, assuring positive lock. All adapters fit all clamps – for the ultimate in flexibility.

CATALOG NO.	UPC CODE	FIG. NO.	WATER PIPE Size (Inches)	GROUND WIRE MAX.	PIECES PER CARTON	SHPG. WT. LBS./100	
G-3	01014	1	½ - 1	4/0 stranded	20	35	
G-4	01015	1	1 1⁄4 - 2	4/0 stranded	10	57	
G-15	01016	2	2½ - 4	4/0 stranded	6	95	
G-16	01017	2	4½ - 6	4/0 stranded	3	132	

#### HEAVY DUTY BRONZE GROUND CLAMPS FOR RIGID CONDUIT (1) 15 (1) 15 (1)

	DUII DK	J.17 - V.	COULD CLAM	JION KIOID		•	
CATALOG	UPC	FIG.	CONDUIT HUB	WATER PIPE	GROUND	PIECES PER	SHPG. WT.
NO.	CODE	NO.	SIZE (INCHES)	SIZE (INCHES)	WIRE MAX.	CARTON	LBS./100
G-5	01018		1∕2	1/2 - 1	2/0 stranded	15	44
G-6	01019	3	1∕2	1 ¼ - 2	2/0 stranded	10	69
G-18	01020		<b>½</b>	2 ½ - 4	2/0 stranded	6	103
G-19	01021		1∕2	4 ½ - 6	2/0 stranded	3	138
G-7	01022		3/4	½ - 1	3/0 stranded	15	48
G-8	01023		3/4	1 ¼ - 2	3/0 stranded	8	72
G-21	01024	4	3/4	2 ½ - 4	3/0 stranded	6	108
G-22	01025		3/4	4 ½ - 6	3/0 stranded	3	143
G-9	01026		1	½ - 1	3/0 stranded	12	58
G-10	01027		1	1 1⁄4 - 2	3/0 stranded	8	80
G-24	01028		1	2 ½ - 4	3/0 stranded	6	117
G-25	01029		1	4 ½ - 6	3/0 stranded	3	153

#### c (UL) us (S). **BRONZE GROUND CLAMPS WITH ADAPTERS**









Bronze water pipe clamps with bronze adapters. Excellent quality yet economical. All adapters are interchangeable. Assembled with zinc-plated steel screws. Hub swings 360° for easy alignment.

CATALOG NO.	UPC CODE	FIG. NO.	WATER PIPE SIZE (INCHES)	GROUND WIRE MAX.	PIECES PER CARTON	SHPG. WT. LBS./100
EG-3	01060	1	½ - 1	6 stranded	20	32
EG-4	01061	1	1 ¼ - 2	6 stranded	10	54
EG-15	01062	1	2 ½ - 4	6 stranded	6	90

#### BRONZE GROUND CLAMPS WITH ADAPTERS FOR RIGID CONDUIT ((1)) (SA)

RUILL	KOUIID	CEAMIT 5	WIIII APAFII	LKS I OK KIOI	DUCINDUIN	**** W	
CATALOG NO.	UPC CODE	FIG. NO.	CONDUIT HUB Size (INCHES)	WATER PIPE SIZE (INCHES)	GROUND WIRE MAX.	PIECES PER CARTON	SHPG. WT. LBS./100
							· ·
EG-5	01058	2	1/2	½ - 1	6 stranded	15	41
EG-6	01063	2	⅓2	1 1⁄4 - 2	6 stranded	10	66
EG-18	01064	3	1/2	2 ½ - 4	6 stranded	6	98
EG-7	01065	(not shown)	3⁄4	½ - 1	2/0 stranded	15	45
EG-8	01066	(not shown)	3⁄4	1 ¼ - 2	2/0 stranded	8	69
EG-21	01067	4	3⁄4	<b>2</b> ½ - 4	2/0 stranded	6	104
EG-9	01068	2	1	½ - 1	3/0 stranded	12	55
EG-10	01069	(not shown)	1	1 ¼ - 2	3/0 stranded	8	76
FG-24	01059	(not shown)	1	21/2 - 4	3/0 stranded	6	111

#### ZINC DIE-CAST GROUND CLAMPS ( U) us ( )







Die cast from high-strength zinc alloy. Used to connect bare copper wire for grounding.

CATALOG NO.	UPC CODE	WATER PIPE SIZE (INCHES)	GROUND WIRE RANGE	PIECES PER CARTON	SHPG. WT. LBS./100
GZ-1	01030	½ - 1	2 - 10	25	17
GZB-1*	01039	⅓ - 1	2 - 10	25	17

\*Not UL/CSA Listed

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#### BRONZE GROUND CLAMPS FOR RIGID CONDUIT WITH FLEXIBLE COPPER STRAP . (1) 15 (1)



For connecting the grounding conductor in rigid conduit to water pipe. The copper strap allows flexibility during grounding and helps protect the conduit system from the results of vibrations in the water system. Assembled with zinc-plated steel screws.



CATALOG NO.	UPC CODE	CONDUIT HUB Size (Inches)	WATER PIPE SIZE (INCHES)	GROUND WIRE MAX.	CARTON QTY.	SHPG. WT. LBS./100
G-90	01040	<b>½</b>	½ - 1	4 stranded	15	49
G-75	01042	⅓2	½ - 1	6 stranded	12	54
G-79	01044	3/4	½ - 1	2/0 stranded	12	58
G-83	01046	1	½ - 1	3/0 stranded	12	68

#### ECONOMY CONDUIT HUBS FOR GROUND CLAMPS (1) 15 (1) 15 (1)



Threaded hub cast of high-strength, highly conductive bronze. Used with ground clamp to ground conductor to water pipe.

CATALOG NO.	UPC CODE	CONDUIT SIZE	GROUND WIRE Range	CARTON QTY.
GH-50	01033	⅓	#8 solid - #4 stranded	50
GH-75	01034	3⁄4	#8 solid - #4 stranded	25
GH-100	01035	1	#8 solid - #4 stranded	15

#### 360° SWING TYPE CONDUIT HUBS (4) us





Threaded hub cast of high-strength, highly conductive bronze. Used with ground clamp to ground conductor to water pipe. Allows entry from any direction.

CATALOG NO.	UPC CODE	FIG. NO.	CONDUIT SIZE	GROUND WIRE Range	CARTON QTY.
GHM-50	01036	1	1/2	#10 solid - #6 stranded	50
GHM-75	01037	1	3/4	#10 solid - 2/0 stranded	25
GHM-100	01038	2	1	#10 solid - 3/0 stranded	15

#### SILICON BRONZE GROUND ROD CLAMPS - STANDARD DUTY : 🖭 us





Ground rod clamps are made from silicon bronze for maximum strength. A silicon bronze screw furnishes maximum clamping force. All standard duty and heavy duty ground clamps are UL Listed for direct burial in earth or concrete.

CATALOG NO.	UPC CODE	GROUND ROD SIZE (INCHES)	GROUND WIRE MAXIMUM	CARTON QTY.
*GRC 38	01050	3/8	4 stranded	50
GRC 50	01051	1/2	2 stranded	25
GRC 58	01052	5/8	1/0 stranded	25
GRC 34	01053	3/4	1 stranded	20

<sup>\*</sup>Not UL Listed

#### SILICON BRONZE GROUND ROD CLAMPS - HEAVY DUTY (1) US

CATALOG NO.	UPC CODE	GROUND ROD SIZE (INCHES)	GROUND WIRE Maximum	CARTON QTY.
GRC 50 H	01054	<b>½</b>	1/0 stranded	25
GRC 58 H	01055	5/8	1/0 stranded	20
GRC 34 H	01056	3/4	1/0 stranded	20
GRC 100 H	01057	1	1/0 stranded	10

#### RANGE-TAKING GROUND ROD CLAMP



This heavy duty ground rod clamp replaces all existing ground rod clamps, eliminating the need to stock several different sizes and types. UL listed for direct burial in earth and concrete, the heavy duty construction enables it to handle large ground wires up to 1/0 AWG – much larger than a standard ground rod clamp. Suitable for: \%", \%", \%", \%" ground rods.

CATALOG	UPC	GROUND WIRE	GROUND ROD	SCREW	CARTON
NO.	CODE	RANGE	SIZE (INCHES)	MATERIAL	QUANTITY
GRC-3834	00557	1/0 stranded max.	3/8, 1/2, 5/8, 3/4	silicon bronze	25

#### **POLE BOTTOM GROUND PLATES**



For installation on butt end of poles for low-resistance ground. Copper terminal lug provides connection to grounding conductor.

CATALOG	UPC	CONDUCTO	OR RANGE	DIAMETER	CARTON	SHPG. WT.
NO.	CODE	MAX.	MIN.		QTY.	LBS/100
GP100	08330	2 solid	14 solid	7.5	40	48

#### HEAVY DUTY GROUND CONNECTORS FOR PARALLEL OR 90° COPPER CABLES (%)

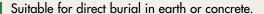


Made of high-copper-content alloy for grounding to  $\frac{1}{2}$ " - 1" ground rods and ground pipes from  $\frac{1}{4}$ " -  $\frac{3}{2}$ " in parallel or 90° position. Suitable for direct burial in earth and concrete. Nuts and lockwashers are silicon bronze.

CATALOG	UPC	ROD	PIPE	CABLE	CARTON
NO.	CODE	SIZE (INCHES)	SIZE (INCHES)	RANGE	QTY.
UC-101	10800	1∕2	1/4	2/0 - 4	12
UC-102*	10801	⅓	1/4	250-2/0	12
UC-103	10802	5/8 - 3/4	3/8	4 - 8	12
UC-104	10803	5/8 - 3/4	3/8	2/0 - 4	12
UC-105	10804	5/8 - 3/4	3/8	250 - 2/0	12
UC-108	10805	7/8 - 1	1/2 - 3/4	2/0 - 4	12
UC-109	10806	7/8 - 1	1/2 - 3/4	250 - 2/0	12
UC-110*	10807	7⁄ <sub>8</sub> - 1	1/2 - 3/4	500 - 250	6
UC-114	10808	-	1	2/0 - 4	12
UC-115	10809	-	1	250 - 2/0	12
UC-120	10810	-	1 1/4	2/0 - 4	12
UC-121	10811	-	1 1/4	250 - 2/0	12
UC-126	10812	-	11/2	2/0 - 4	12
UC-127	10813	-	1½	250 - 2/0	12
UC-132	10814	-	2	2/0 - 4	12
UC-133	10815	-	2	250 - 2/0	6
UC-137	10816	-	21⁄2	2/0 - 4	6
UC-138	10817	-	21/2	250 - 2/0	6
UC-142	10818	-	3	2/0 - 4	6
UC-143	10819	-	3	250 - 2/0	6
UC-147	10820	_	3⅓	2/0 - 4	3
UC-148*	10821	-	31/2	250 - 2/0	3

<sup>\*</sup>Not UL Listed

#### HEAVY DUTY GROUND CONNECTORS FOR TWO PARALLEL COPPER CABLES



CATALOG	IIDC	PIPE	CABLE	CARTON
CATALOG	UPC			CARTON
NO.	CODE	SIZE (INCHES)	RANGE	QTY.
UC-214	10828	1	2/0 - 4	6
UC-215	10829	1	250 - 2/0	6
UC-220	10840	11⁄4	2/0 - 4	6
UC-221	10841	11/4	250 - 2/0	6
UC-226	10842	1 ½	2/0 - 4	6
UC-227	10843	1½	250 - 2/0	6
UC-232	10844	2	2/0 - 4	6
UC-233	10845	2	250 - 2/0	3
UC-237	10846	2 1/2	2/0 - 4	3
UC-238	10847	2 ⅓	250 - 2/0	3
UC-242	10848	3	2/0 - 4	3
UC-243	10849	3	250 - 2/0	3

#### HEAVY DUTY GROUND CONNECTORS FOR THREE PARALLEL COPPER CABLES

Suitable for direct burial in earth or concrete.

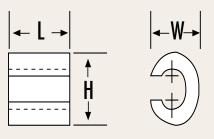


CATALOG NO.	UPC CODE	PIPE SIZE (INCHES)	CABLE RANGE	CARTON QTY.
UC-314	10860	1	2/0 - 4	6
UC-315	10861	1	250 - 2/0	6
UC-320	10862	1 ¼	2/0 - 4	6
UC-321	10863	1 ¼	250 - 2/0	6
UC-326	10864	1 ½	2/0 - 4	6
UC-327	10865	1 ½	250 - 2/0	6
UC-332	10866	2	2/0 - 4	6
UC-333	10867	2	250 - 2/0	3
UC-337	10868	21/2	2/0 - 4	3
UC-338	10869	21⁄2	250 - 2/0	3
UC-342	10870	3	2/0 - 4	3
UC-343	10871	3	250 - 2/0	3

#### COPPER 'C' TAPS ( L) US ( )



Copper "C"-Taps are range-taking compression connectors made from high conductivity copper alloy. They are used for making tap or parallel copper connections from 8 SOL to 4/0 STR conductors. C-Tap conectors provide consistent reliability with heavy wall construction that prevents relaxation of the joint after installation. Installation time is reduced because of its "C" shape. UL CU486A, 467 suitable for direct burial and CSA rated Electrical and Grounding.



CATALOG	BAR	CONDL RAN		n	APPROX	IM\	TP <sup>I</sup> DIE	INST U-12B NO.	ALLATION T DIELESS PRESS.		STRIP
NO.	CODE	RUN	TAP	L	н Сиотемания Н	W W	INDEX	CRIMPS	SETTING	CRIMPS	LENGTH
	1051					•••	DEA		01111110		
CTH-46	02214	6 sol - 4 str	6 sol - 6 str	5/8	3/4	7/16	BG	1	2	1	3/4
CTH-44	02215	6 sol - 4 str	4 sol - 4 str	5/8	<sup>13</sup> /16	<i>7</i> ∕16	BG	1	2	1	3⁄4
CTH-24	02216	2 sol - 2 str	8 sol - 4 str	3/4	1	5/8	C	1	4	1	7/8
CTH-22	02217	2 sol - 2 str	2 sol - 2 str	3/4	1	5/8	(	1	4	1	7/8
CTH-2020	02218	1/0 str - 2/0 str	1/0 str - 2/0 str	15/16	13/8	13/16	0	1	5	1	11/16
CTH-4020	02219	3/0 str - 4/0 str	1/0 str - 2/0 str	11/16	15/8	1	D3	1	5	1	13/6
CTH-4040	02220	3/0 str - 4/0 str	3/0 str - 4/0 str	11/16	1%16	1	D3	1	5	1	13/6

#### C TAPS (VL) us (S).



These taps ensure positive, all-around compression with low resistance and high pull-out values. Made of high conductivity copper, they satisfy the requirements of NEC250-81 and 250-91 for connecting to the grounding electrode system. Rated for 600 V applications.

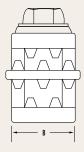


CATALOG	UPC	FIG.	WIR	E SIZE	COLOR	INSTALLING		CARTON	SHPG. WT.	
NO.	CODE	NO.	MAIN	BRANCH	CODE	DIES	TOOL	QTY.	LBS./100	
CT-101	09800	1	14 12	16 14	red	-	hand	100	1.0	
CT-102	09801	1	10	10	blue	-	hand	100	1.0	
CT-103	09802	1	6	10-12 8-10	gray	-	hand	100	1.2	
CT-104	09803	1	4 or 5	8-10-12 6-8	brown	-	hand	100	2.8	
CT-105	09804	1	3 4 or 5	6-8-10-12 6-5	green	-	hand	100	3.8	
CT-106	09805	1	3 4	5 4	pink	-	hand	100	4.1	
СТ-107	09806	1	1 2 3	- 4-5 3-4	black	-	hand	50	7.0	
CT-108	09807	1	1/0 1 2	4 3-4 2-3	orange	-	hand	50	9.1	
CT-109	09808	1	2/0 1/0 –	3-4 2-3 1-2	purple	-	hand	50	9.5	
СТ-110	09809	1	3/0 2/0 1/0	2-3-4 1-2 1/0-1	yellow	-	hand	25	10.4	
CTH-111	09810	2	1 1/0 2/0 3/0 4/0	1 1/0-2 2/0-4 1/0-6 1-8	blue	14,19,76	hydr.	25	9.6	
CTH-112	09811	2	2/0 3/0 4/0 250	2/0-1 3/0-3 4/0-4 1/0-8	brown	15,20,87H	hydr.	25	1.8	
CTH-113	09812	2	2/0 3/0 4/0 250 300	2/0-1 3/0-2 4/0-4 3/0-6 2/0-8	pink	—,300,99H	hydr.	12	22	
CTH-114	09813	2	4/0 250 300 350	4/0-2/0 250-1 4/0-4 3/0-6	black	17,24,106H	hydr.	6	18	
СТН-115	09814	2	250 300 350 400 450 500	250 300-3/0 350-1/0 300-2 250-4 250-6	yellow	-,936, 115H	15 Ton Tool	6	27	
CTH-116	09815	2	350 400 450 500	350-4/0 400-2/0 450-1 500-2	white	19,27,125H	15 Ton Tool	3	34	
CTH-117	09816	2	750-500 750	4/0-6 750-4/0	-	19,27,125H	15 Ton Tool	3	37	

#### SILICON BRONZE INSULATION PIERCING VISE GRIP CONNECTORS TIN PLATED FOR MESSENGER CABLE



This clamp is specifically designed for use on self-supporting rural, figure 8 or IM type telephone cable when connecting the messenger to the ground wire. As the clamp is tightened it's insulation piercing teeth puncture the insulation of the messenger, eliminating the need for wire stripping and forms a positive ground connection. The bolt is made of stainless steel.



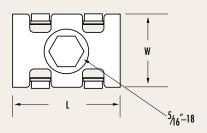


		CONDUCTOR	R RANGE	APPROX. DIMENSIONS						
CATALOG	UPC	MESSENGER		ı	4		В	(	:	BOLT
NO.	CODE	CABLE DIA.	TAP	IN	MM	IN	MM	IN	MM	SIZE
IPVG-412	02744	.146312	8 str- 4 str .146232 3.7-5.9mm2)	1- 5/8	41.3	1- 1⁄4	31.8	1	25.4	5∕16 -18, 1⁄2 hex
IPVG-496	02745		8 str-4str .146232 3.7-5.9mm2)	1- 5/8	41.3	1- 1/4	31.8	1	25.4	<sup>5</sup> / <sub>16</sub> -24, %6 hex

#### COPPER JUMPER CLAMP ( U) US



Jumper clamp cast from high copper content alloy. CUS/UL 467 for Grounding and Bonding.



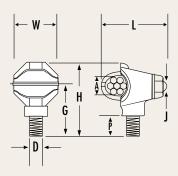
							APPROX	DIMENSIONS	
CATALOG	UPC	FINISH OF		CONDUCTOR	WIRE DIA.		l	W	'
NO.	CODE	GROOVES	BOLT	RANGE	IN	IN	MM	IN	MM
JC-1*	02485	1 groove, tin plated	steel	6 sol-1/0 str	.162/.373	1 - 1/8	29	1 - 5/16	33
JC-1-SB	02486	1 groove, bronze	silicon bronze	6 sol, 1/4, 5/16 guy	.162/.312	1 - 1/8	29	1 - <sup>5</sup> /16	33
JC-2*	02487	tin plated	steel	6 sol-1/0 str	.162/.373	1 - 1/8	29	1 - <sup>5</sup> /16	33
JC-2-SB	02488	tin plated	silicon bronze	6 sol, 1/4, 5/16 guy	.162/.312	1 - 1/8	29	1 - 5/16	33
JC-3*	02489	bronze	steel	6 sol-1/0 str	.162/.373	1 - 1/8	29	1 - <sup>5</sup> /16	33
JC-3-SB	02490	bronze	silicon bronze	6 sol, 1/4, 5/16 guy	.162/.312	1 - 1/8	29	1 - <sup>5</sup> /16	33

<sup>\*</sup>not UL Listed

#### TRANSFORMER GROUND CLAMPS - EYE BOLT STYLE



Transformer ground clamp bodies are cast from high conductivity, high strength copper alloy with cast high strength bronze eyebolts. Stainless steel nuts and lockwashers are standard on all clamps. For silicon bronze hardware, suffix catalog number with "-SB. The HTGE provides a hex or square shoulder for wrench tightening. The flat surface also acts as a seal to the tank. The TGE may be tightened by using a wrench on the body.

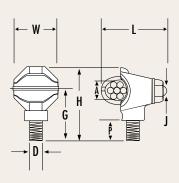


				APPROX DIMENSIONS												
CATALOG	UPC	COPPER CONDUCTOR		WIRE DIA.	STUD	(	G	ŀ	1	J (EYEBOLT)				P	V	V
NO.	CODE	RANGE (A)	FINISH	IN	SIZE (D)	IN	MM	IN	MM	IN	IN	MM	IN	MM	IN	WW
TGE-1	02491	10 sol - 1 str	plain	.102/.332	½ - 13	13/16	21	1- 1/4	32	3/8 -16	1-1/2	38	7/16	11	7,8	22
TGE-2/0	02492	8 sol -2/0 str	plain	.128/.419	1/2 - 13	1	25	1-7/16	37	3/8 -16	1-31/32	50	7/16	11	7/8	22
TGE-250	02493	6 sol - 250MCM	plain	.162/.575	1⁄2 - 13	1-11/16	43	1-15/16	49	1/2 -13	<b>2</b> - <sup>9</sup> /16	65	5/16	8	1-1/4	32
TGE-1TN	02494	10 sol - 1 str	tin plated	.102/.332	1⁄2 - 13	13/16	21	1- 1/4	32	3/8 -16	1-1/2	38	7/16	11	7/8	22
TGE-2/OTN	02495	8 sol -2/0 str	tin plated	.128/.419	1/2 - 13	1	25	1-7/16	37	3/8 -16	1-31/32	50	7/16	11	7,8	22
TGE-250TN	02496	6 sol - 250MCM	tin plated	.162/.575	½ - 13	1-11/16	43	1-15/16	49	1/2 -13	<b>2</b> -%16	65	5/16	8	1-1/4	32

#### TWO-WAY BASKET



Transformer ground clamp bodies are cast from high conductivity, high strength copper alloy with cast high strength bronze eyebolts. Stainless steel nuts and lockwashers are standard on all clamps. For silicon bronze hardware, suffix catalog number with "-SB. The HTGE provides a hex or square shoulder for wrench tightening. The flat surface also acts as a seal to the tank. The TGE may be tightened by using a wrench on the body.



						APPROX DIMENSIONS										
CATALOG	UPC	COPPER CONDUCTOR		WIRE DIA.	STUD		G	Н		J (EYEBOLT)	L		P	•	V	V
NO.	CODE	RANGE (A)	FINISH	IN	SIZE (D)	IN	MM	IN	MM	IN	IN	MM	IN	MM	IN	MM
HTGE-1	02497	10 sol - 1 str	plain	.102/.332	1/2-13	1-3/16	30	1-¾	44	3/8 -16	1- <sup>31</sup> / <sub>3</sub>	2 50	7/16	11	1-1/8	28
HTGE-2/0	02498	8 sol -2/0 str	plain	.128/.419	1∕2-13	1-5/16	33	<b>1</b> - <sup>15</sup> /16	49	3/8 -16	2	51	7/16	-11	1-1/4	32
HTGE-250	02499	6 sol - 250MCM	plain	.162/.575	1∕2-13	1-3/16	30	2-1/8	54	½ -13	<b>2</b> - 5/8	67	15/32	12	1-7/8	48
HTGE-1TN	02500	10 sol - 1 str	tin plated	.102/.332	1⁄2-13	1-3/16	30	1-¾	44	3/8 -16	1- <sup>31</sup> / <sub>3</sub>	2 50	7/16	11	1-1/8	28
HTGE-2/OTN	02501	8 sol -2/0 str	tin plated	.128/.419	1/2-13	1-5/16	33	1- <sup>15</sup> /16	49	3/8 -16	2	51	7/16	11	1-1/4	32
HTGE-250TN	02502	6 sol - 250MCM	tin plated	.162/.575	1/2-13	1-3/16	30	2-1/8	54	1/2 -13	<b>2</b> - 5/8	67	15/32	12	1-7/8	48

#### COPPER LAY-IN CONNECTORS (4)









Lay-in lugs are used for grounding or in continuous loop bonding and are available in several variations, depending on the application. GLC-4 has a copper body with a steel screw and is used for general grounding applications with copper wire. GLC-4 DB and GLC-4 DBP have copper bodies with stainless steel screws and are UL Listed for direct burial in earth or concrete with copper wire.

CATALOG	UPC		WIRE				MTG.	CTN.
NO.	CODE	MATERIAL	RANGE	USE	LENGTH HEIGHT	WIDTH	HOLE	QTY.
GLC-4	00530	copper with	4 -14 AWG	general use for	0.968 0.687	0.375	0.218	100
		steel screws		CU wire only				
GLC-4 DB	00531	copper with stainless	4 -14 AWG	direct burial for	0.968 0.687	0.375	0.218	100
020 1 00	00501	steel screws		CU wire only	0.700 0.007	0.075	0.210	
016 4 000	00500		4 14 11110	•	0.040 0.407	0.075	0.010	100
GLC-4 DBP	00532	tin-plated copper with	4 -14 AWG	direct burial for	0.968 0.687	0.375	0.218	100
		stainless steel screws		CU wire only				

#### **ISOLATED GROUND BARS**





Made from either high-strength aluminum alloy 6061-T6 or highconductivity copper as indicated below. The base is made from high-strength glass-filled polyester. Aluminum connectors are dual-rated for use with aluminum or copper cables.

CATALOG	UPC		WIRE	NO. OF				CTN.	SHPG. WT.
NO.	CODE	MATERIAL	RANGE	CIRCUITS	LENGTH	HEIGHT	WIDTH	QTY.	LBS/100
GBA2-7	01070	aluminum	AL/CU 2 - 14	7	2.88	2.31	1.88	3	1.0
GBC2-7	01071	copper	CU 2 - 14	7	2.88	2.31	1.75	3	1.3
GBA2-10	01072	aluminum	AL/CU 2 - 14	10	4.07	2.31	1.88	3	1.1
GBC2-10	01073	copper	CU 2 - 14	10	4.07	2.31	1.75	3	1.4
GBA2-14	01074	aluminum	AL/CU 2- 14	14	5.56	2.31	1.88	2	1.0
GBC2-14	01075	copper	CU 2 - 14	14	5.56	2.31	1.75	2	1.3
GBA2-20	01076	aluminum	AL/CU 2- 14	20	8.04	2.31	1.88	2	1.1
GBC2-20	01077	copper	CU 2 - 14	20	8.04	2.31	1.75	2	1.4
GBA20-7	01078	aluminum	AL/CU 2/0 - 14	7	4.61	2.31	2.13	3	1.2
GBA20-10	01080	aluminum	AL/CU 2/0 - 14	10	6.41	2.31	2.13	3	1.3
GBA20-14	01082	aluminum	CL/CU 2/0 - 14	14	8.81	2.31	2.13	2	1.4

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#### SOLID WIRE GROUNDING PIGTAILS AND SCREWS (4)





Pigtails are insulated conductors supplied with an attached ground screw on one end and the insulation stripped back one inch on the other end. Meets requirements of NEC. A great labor saver.



CATALOG NO.	UPC CODE	DESCRIPTION	SHPG. WT. LBS./100	STANDARD PACKAGE
PG 14 H	11100	6.5 inch 14 AWG solid with hex screw - green	2	50
PG 12 H	11101	6.5 inch 12 AWG solid with hex screw - green	3	50
PG 14 C	11108	6.5 inch 14 AWG solid with combo screw - green	2	50
PG 12 C	11109	6.5 inch 12 AWG solid with combo screw - green	3	50
PG 12 C-8	14328	8 inch 12 AWG solid wtih combo screw - green	3	50
PG 12 CB	11121	6.5 inch 12 AWG solid with combo screw - black	3	50
PG 12 CW	11122	6.5 inch 12 AWG solid with combo screw - white	3	50
GSH	11106	hex head green grounding screw	1	100
GSC	11107	combo slotted hex screw	1	100

#### STRANDED WIRE GROUNDING PIGTAILS COMPLETE WITH RING AND SPADE TERMINAL (4)





Green insulated conductors supplied with a spade terminal on one end and a ring terminal with a captive green-dyed screw on the other end. 65 strand #12 awg and 41 strand #14 awg for maximum flexibility. Available with round, hex head or combo screw.

CATALOG	UPC		SHPG. WT.	STANDARD
NO.	CODE	DESCRIPTION	LBS./100	PACKAGE
PG 14 SR	11102	8 inch 14 AWG (41W) stranded with round screw	3	50
PG 12 SR	11103	8 inch 12 AWG (65W) stranded with round screw	4	50
PG 14 SC	11110	8 inch 14 AWG (41W) stranded with combo slotted screw	3	50
PG 12 SC	11111	8 inch 12 AWG (65W) stranded with combo slotted screw	4	50
PG 14 SH	11112	8 inch 14 AWG (41W) stranded with hex screw	3	50
PG 12 SH	11113	8 inch 12 AWG (65W) stranded with hex screw	4	50

#### GREEN GROUNDING CLIPS 31



CATALOG	UPC		SHPG. WT.	PACKAGING
NO.	CODE	DESCRIPTION	LBS./100	CARTON CASE
GGC-1000	11125	green grounding clips	3	100 1200

#### FLEXIBLE BRAID JUMPER STRAPS - FS SERIES



"FS" flexible braid jumper straps are recommended to compensate for motion due to expansion, contraction, vibration and operational movement of current carrying members. Manufactured from flat, extra-flexible tinned braid, they are available in a wide variety of sizes and amperages. The ferrules are made from pure electrolytic copper and are tin-plated. Standard mounting holes are %/16" NEMA spaded holes. Other sizes and styles are available. We can also provide the flexible strap, without the end ferrules, on a price per inch basis. Please contact NSi for price and availability information.

CATALOG NO.	UPC CODE	FIG.	LENGTH		RATING OUTDOORS	APPROX. CIRCULAR MILS	T	W (2 HOLE Pad only)	CARTON QTY.	SHPG. WT. LBS./100
FS1-19-8N	03350	1	12	190	225	77,000	1/4	1 1/16	1	64
FS1-19-8N-18	03375	1	18	190	225	77,000	1/4	1 1/16	1	92
FS1-19-8N-24	03376	1	24	190	225	77,000	1/4	1 1/16	1	120
FS1-33-8N	03351	1	12	330	400	154,500	1/4	1 ½	1	72
FS1-33-8N-18	03380	1	18	330	400	154,500	1/4	1 ½	1	103
FS1-33-8N-24	03381	1	24	330	400	154,000	1/4	1 ½	1	134
FS1-36-8N	03352	1	12	360	430	231,500	1/4	1 3/16	1	81
FS2-60-8N	03356	2	12	600	720	463,000	7/16	1 3/16	1	179

	/A\V/A\\/A\\/A\\	//A\V/A\V/A\V	<b>Z</b>	1
	//////////////////////////////////////	ZALVZALYZALYZALYZALYZALYZALYZALYZALYZALYZALY	<b>₹</b>	2

#### FLEXIBLE GROUND STRAP



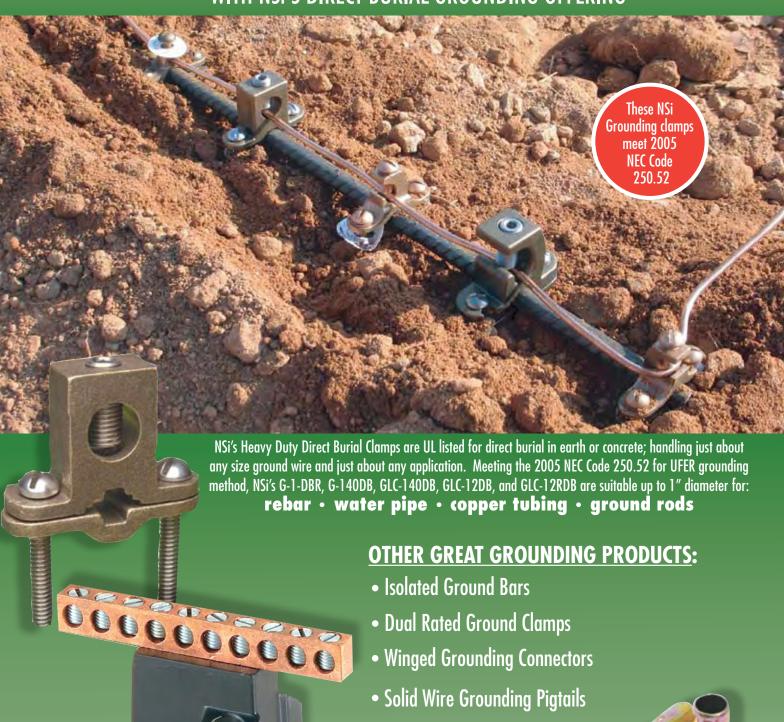
Woven of high conductivity, annealed, tinned copper wire, this braided ground strap provides maximum flexibility and ease of handling when installing ground or shield continuity. This braid is used for shield and lead-sheath grounding and is easily soldered to lead, copper and tinned metals. It is also used for continuing the fault-carrying capacity of the cable shield as a jumper braid.

CATALOG NO.	UPC CODE	WIDTH	LENGTH	EQUIVALENT AWG SIZE	CARTON QTY.
SA 382B	01130	3/8	25 ft.	9 AWG	1
SA 382C	01131	3/8	100 ft.	9 AWG	1
SA 582B	01132	1∕2	25 ft.	6 AWG	1
SA 582C	01133	<b>⅓</b>	100 ft.	6 AWG	1



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- Flexible Braid Jumper Straps



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#### TORK

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Phone Toll Free: 800.321.5847



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#### **Terms of Sale**

Vendor Number: 662381

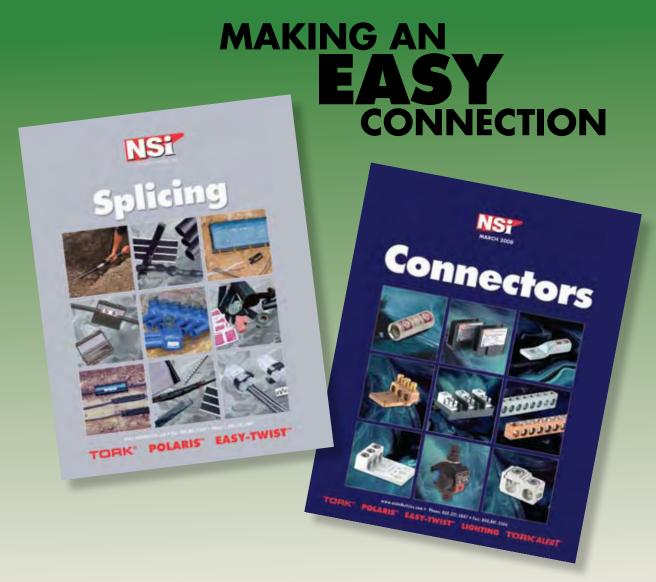
- 1. Prices are F.O.B. our plant.
- 2. Prices do not include any sales tax.
- 3. Freight charges will be prepaid on all orders \$250.00 and over shipping within continental USA using standard shipping methods and service.
- 4. Minimum order \$100.00.
- Claims for shortage, erroneous charges or price corrections shall be deemed waived unless made in writing, delivered to NSi within 30 days of invoice.
- 6. Terms of payment 2% 10<sup>th</sup> prox. net 25<sup>th</sup> following.
- 7. Warranties NSi guarantees all products to be free of defects in material and workmanship for a period of 90 days from date of sale. Any claims for defective material must be agreed to in writing by NSi. Defective material will be replaced on an F.O.B. our factory basis. NSi disclaims the implied warranty of fitness for a particular application.

## Other Products Available

NSi can provide many other products for special applications which are not listed in this catalog. If you require an item which you do not find listed, please contact us. We would be pleased to provide a quotation upon receipt of a drawing or a sample.

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It is our goal to provide extraordinary products and service on a daily basis. If our products or service do not meet with your satisfaction, please let us know immediately and we promise to make every reasonable effort to remedy the situation.



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