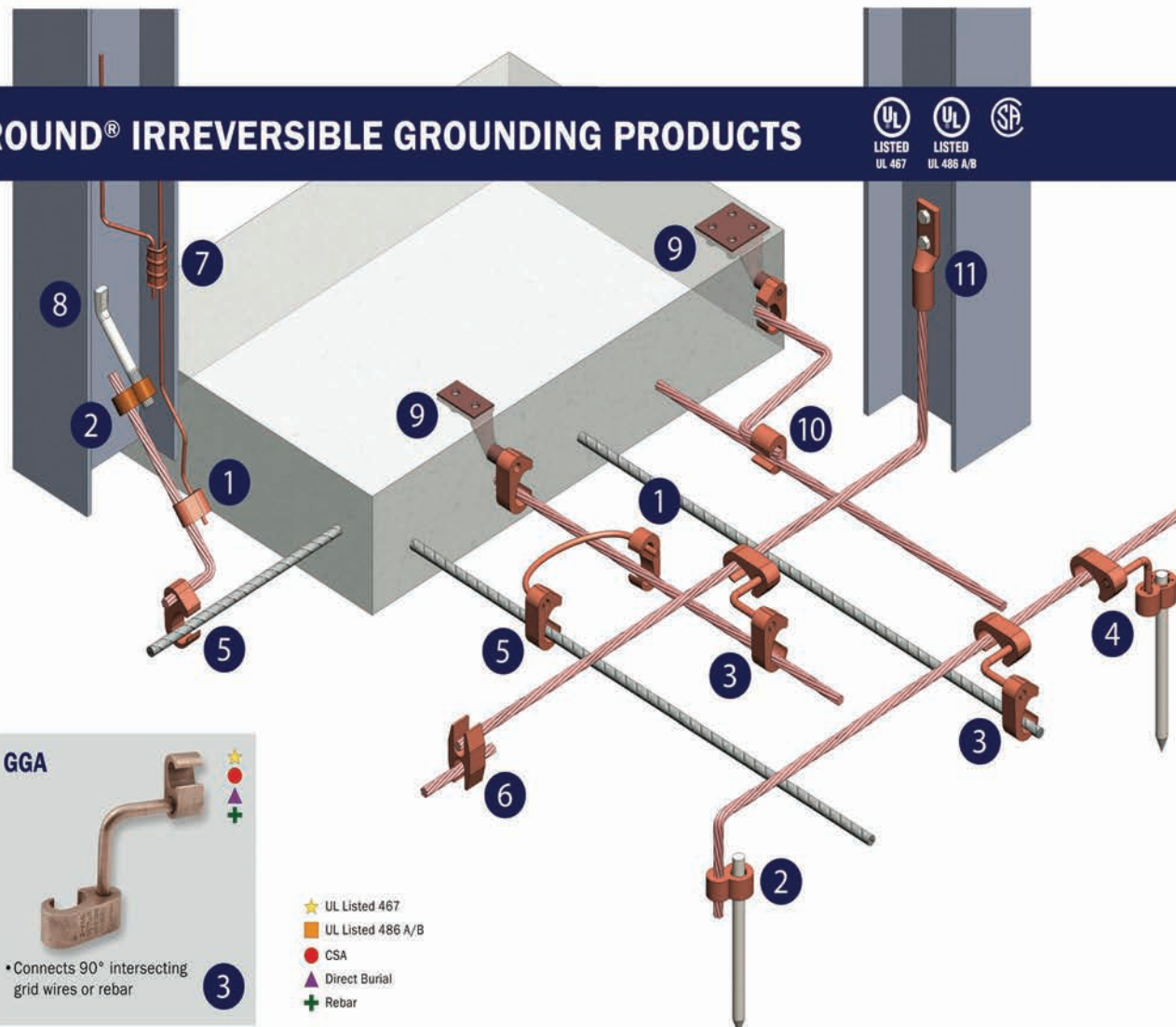


ILSCO PERMAGROUND® IRREVERSIBLE GROUNDING PRODUCTS



ELT ★●▲

• Connects main and tap up to 500 kcmil

1

RLT ★●▲

• Connects ground wire to ground rod

2

GGA ★●▲+

• Connects 90° intersecting grid wires or rebar

3

GGB ★●▲+

• Connects vertical ground rod to horizontal grid wire or rebar

4

GGC ★●▲+

• Connects ground rod or rebar to continuous run wire

5

CDT, CST (H-TAP) ★●▲

• Suitable for tap or splice applications

6

TWCT ★●

• Connects ground wire to main ground run

7

SGS ★●

• Above ground applications
• Welds to I-beam, allows RLT to be attached

8

CGP ★▲

• Cast copper plates for concrete pads

9

- ★ UL Listed 467
- UL Listed 486 A/B
- CSA
- ▲ Direct Burial
- + Rebar

SURECRIMP ★●▲

• Above ground applications
• UL 467 500 kcmil - 8 AWG; solid wire #8 - #2

11

ULT ★●▲

• Ground wire tap

10

TYPE ELT

Features

- Manufactured from copper alloy
- Clearly marked with wire size and die index
- Range taking
- UL Listed and CSA Certified for grounding and bonding
- May be used in ground grid applications

Benefits

- Provides maximum conductivity
- Provides easy identification and tooling recommendation
- Reduces inventory
- For direct burial in earth or concrete
- Flexibility in application



Catalog Number	Copper Wire Range		Width - in. (mm)	Die Index
	Main	Tap		
ELT-1	2str-6sol	2str-6sol	.750 (19.1)	C (U Type)
ELT-4	2/0str-1str	2str-6str	.750 (19.1)	O (U Type)
ELT-2	2/0str-1str	2/0str-1str	.750 (19.1)	O (U Type)
ELT-5	250kcmil-3/0str	2/0str-6sol	.750 (19.1)	997 (U Type)
ELT-3	250kcmil-3/0str	250kcmil-3/0str	.900 (22.9)	997 (U Type)
ELT-6	500kcmil-300kcmil	250kcmil-3/0str	.875 (22.2)	1011 (U Type)
ELT-7	500kcmil-300kcmil	3/0str-6sol	.875 (22.2)	1011 (U Type)
ELT-8	500kcmil-300kcmil	500kcmil-300kcmil	.875 (22.2)	1011 (U Type)

Tooling Information

Catalog Number	ILSCO		Burdny		
	ILC-12-N, ILC-12H-N, ILC-12, ILC-12H, ILC-14, ILC-14H, ILCB-12-N, ILCB-12-LIO Die (No. of Crimps)	ILC-15H, ILC-15 Die (No. of Crimps)	Y-35, Y-45 Die (No. of Crimps)	Y-35, Y-45 Die (No. of Crimps)	Y-46 Die (No. of Crimps)
ELT-1	ILD-C (1)	-	C (U Type) (1)	-	-
ELT-2	ILD-O (1)	-	O (U Type) (1)	-	-
ELT-3	ILD-U997 (1)	-	997 (U Type) (1)	-	-
ELT-4	ILD-O (1)	-	O (U Type) (1)	-	-
ELT-5	ILD-U997 (1)	-	997 (U Type) (1)	-	-
ELT-6	ILD-U1011 (2)	ILD-P1011 (2)	-	1011 (U Type) (2)	1011 (U Type) (1)
ELT-7	ILD-U1011 (2)	ILD-P1011 (2)	-	1011 (U Type) (2)	1011 (U Type) (1)
ELT-8	ILD-U1011 (2)	ILD-P1011 (2)	-	1011 (U Type) (2)	1011 (U Type) (1)

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG) See information sheet for complete information on tooling.
Tested to UL 467, UL File E34440

TYPE RLT

Features

- UL Listed and CSA certified for direct burial in earth or concrete
- Range taking
- Manufactured from high strength copper alloy
- Prefilled with DE-OX® oxide inhibitor compound and bagged
- Clearly marked with wire size and die index

Benefits

- Ensures reliability
- Reduces inventory
- Provides maximum conductivity and eliminates the possibility of corrosion
- Prevents oxides from forming
- Provides easy identification and tooling recommendations

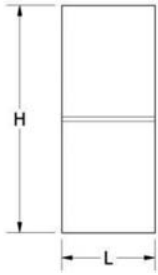


Fig. 1



Fig. 2



Fig. 3

Catalog Number	Figure Number	Ground Rod Size	Wire Range	Die Index	Dimensions - in. (mm)	
					H	L
RLT-2	1	1/2	2/0 - 2	998/1011	1.940 (49.3)	0.880 (22.4)
RLT-3	1	5/8	2/0 - 2	998/1011	1.970 (50.0)	0.880 (22.4)
RLT-4	1	3/4	2/0 - 2	998/1011	2.190 (55.6)	0.880 (22.4)
RLT-10	1	1	2/0 - 2	998/1011	2.440 (62.0)	0.880 (22.4)
RLT-5	1	1/2	250kcmil - 4/0	998/1011	1.940 (49.3)	0.880 (22.4)
RLT-6	1	5/8	250kcmil - 4/0	998/1011	2.140 (54.4)	0.880 (22.4)
RLT-7	1	3/4	250kcmil - 4/0	998/1011	2.190 (55.6)	0.880 (22.4)
RLT-11	1	1	250kcmil - 4/0	998/1011	2.570 (65.3)	0.880 (22.4)
RLT-8	1	5/8	500kcmil - 300kcmil	998/1011	2.140 (54.4)	0.880 (22.4)
RLT-9	1	3/4	500kcmil - 300kcmil	998/1011	2.440 (62.0)	0.880 (22.4)
RLT-12	1	1	500kcmil - 300kcmil	998/1011	2.680 (68.1)	0.880 (22.4)
RLT-13	2	5/8	2 SOL	998/1011	2.140 (54.4)	0.880 (22.4)
RLT-4TN*	3	3/4	2/0 - 2	998/1011	2.191 (55.7)	0.875 (22.2)
RLT-7TN*	3	3/4	250kcmil - 4/0	998/1011	2.191 (55.7)	0.875 (22.2)
RLT-8TN*	3	5/8	500kcmil - 300kcmil	998/1011	2.142 (54.4)	0.875 (22.2)
RLT-9TN*	3	3/4	500kcmil - 300kcmil	998/1011	2.432 (61.8)	0.875 (22.2)

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)

Tested to UL 467, UL File E34440

* All suffix "TN" parts electro-tin plated; to be specifically used with galvanized steel ground rod. The ground rod hole diameter is larger to suit galvanized steel.

TYPE RLT

Features

- UL Listed and CSA certified for direct burial in earth or concrete
- Range taking
- Manufactured from high strength copper alloy
- Prefilled with DE-OX® oxide inhibitor compound and bagged
- Clearly marked with wire size and die index

Benefits

- Ensures reliability
- Reduces inventory
- Provides maximum conductivity and eliminates the possibility of corrosion
- Prevents oxides from forming
- Provides easy identification and tooling recommendations

Catalog Number	ILSCO				Competitor's Tooling								
	Hydraulic Tools				Burndy				Thomas & Betts				
	12-Ton		15-Ton		12-Ton		15-Ton		12-Ton		15-Ton		
	ILC-12-N, ILC-12H-N, ILCB-12-LIO (No. of Crimps)		ILC-15-H (No. of Crimps)		Y750, PAT750XT, Y750BH (No. of Crimps)		Y46, Y46C, PAT46 (No. of Crimps)		TBM14M, TBM14MC, TBM14BSCR, BPLT14BSCR, BPLT14BSCRI, 13100A (No. of Crimps)		TBM15I, BPLT15BSCR (No. of Crimps)		
Die 998	Die 1011	Die 998	Die 1011	Die 998	Die 1011	Die 998	Die 1011	Die 998	Die 1011	Die 998	Die 1011	Die 998	Die 1011
RLT-2	(1)	-	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
RLT-3	(1)	-	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
RLT-4	(1)	-	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
RLT-5	(1)	-	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
RLT-6	(1)	-	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
RLT-7	(1)	-	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
RLT-8	(1)	-	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
RLT-9	(1)	-	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
RLT-10	(1)	-	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
RLT-11	(1)	-	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
RLT-12	(1)	-	-	(2)	(1)	(2)	-	(2)	(1)	(2)	(1)	(2)	
RLT-13	(1)	-	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
RLT-4TN	(1)	-	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
RLT-7TN	(1)	-	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
RLT-8TN	(1)	-	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
RLT-9TN	(1)	-	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	

Notes:

1. The RLT Series of compression connectors are designed to connect a copper ground conductor to a copper clad ground rod.
2. The RLT Series of compression connectors are pre-filled with inhibiting compound and are suitable for direct burial.
3. It is recommended to rough up the end of the ground rod where RLT is to be placed. This provides good rotational resistance. Perform a "pre-crimp" on ground rod prior to installing RLT connector. Use an indent type of dies such as Burndy's U2CABT (Die Index #348) or UPRECRIMP-12, -58, -34.*
4. The RLT Series may be rotated around the rod to any desired position before crimping.

* "UPRECRIMP" and "U2CABT" are registered trademarks TM of Burndy/FCI

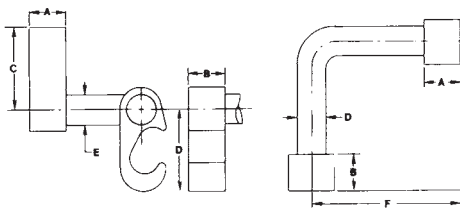
TYPE GGA

Features

- Manufactured from high strength copper alloy
- Clearly marked with wire size and die index
- Range taking
- Connector can be adjusted prior to installation
- Non-hazardous installation
- Prefilled with DE-OX® oxide inhibiting compound
- Temperature Rating 90° C
- UL Listed and CSA Certified for grounding and bonding

Benefits

- Provides maximum conductivity. Suitable for direct burial.
- Provides easy identification and tooling recommendation
- Reduces inventory. Six sizes cover a wire range from 500kcmil to #6, and 1/2" to 3/4" ground rods.
- Permits adjustments to be made for misaligned cross grids
- Can be installed in all types of weather with no need for protective equipment or clothing. Does not produce heat or dangerous particles.
- Prevents oxides from forming
- Ensures reliability
- Direct burial in earth or concrete



Catalog Number	Wire Range					Dimensions - in. (mm)					
	Cable to Cable		Cable to Ground Rod		Rebar	A	B	C	D	E	F
	Side A	Side B	Side A	Side B	Side B						
GGA-1	2str-6sol	2str-6sol	-	-	-	.750 (19.1)	.750 (19.1)	1.090 (27.7)	1.090 (27.7)	.313 (8.0)	2.500 (63.5)
GGA-2	250kcmil-1str	2str-6sol	1/2 - 5/8 Rod	2str-6sol	#3-4	.750 (19.1)	.750 (19.1)	1.660 (42.2)	1.090 (27.7)	.313 (8.0)	2.500 (63.5)
GGA-3	250kcmil-2str	250kcmil-2str	1/2 - 5/8 Rod	250kcmil-2str	#3-4	.750 (19.1)	.750 (19.1)	1.660 (42.2)	1.660 (42.2)	.500 (12.7)	2.500 (63.5)
GGA-4	500kcmil-250kcmil	2str-6sol	5/8 - 3/4 Rod	2str-6sol	#5-6	.750 (19.1)	.750 (19.1)	2.090 (53.1)	1.090 (27.7)	.313 (8.0)	2.500 (63.5)
GGA-5	500kcmil-250kcmil	250kcmil-2str	5/8 - 3/4 Rod	250kcmil-2str	#5-6	.750 (19.1)	.750 (19.1)	2.090 (53.1)	1.660 (42.2)	.500 (12.7)	2.500 (63.5)
GGA-6	500kcmil-250kcmil	500kcmil-250kcmil	5/8 - 3/4 Rod	500kcmil-250kcmil	#5-6	.750 (19.1)	.750 (19.1)	2.280 (57.9)	2.280 (57.9)	.750 (19.1)	2.500 (63.5)

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)

Tested to UL 467, UL File E34440

The GGA Series compression ground grid cross connector can be used to connect a copper ground grid system together or to connect a copper ground grid system to a copper clad ground rod. The GGA Series of compression connectors allow adjustment of each side of the connector prior to installation. The GGA Series of compression connectors are pre-filled with oxide inhibiting compound and are suitable for direct burial.

Notes:

1. ILSCO ILC-12 or ILC-15 Series Tools and ILD Series Dies may be used. Note: Adapter required when using ILC-15 Series Tool. Burndy tools and dies may also be used.
2. Perform a "pre-crimp" on ground rod prior to installing GGA connector. Use an indent type of die such as Burndy's U2CABT (Die Index #348).
3. Each side of the GGA Series may be rotated around the rod to any desired position before crimping.

* U2CABT is a registered trademark TM of Burndy/FCL

Catalog Number	ILSCO Installation Tooling	
	ILC-12-N, ILC-12H-N, ILCB-12-N, ILC-15-H Die Index (No. of Crimps)	
	Side A	Side B
GGA-1	0 (1)	0 (1)
GGA-2	997 (1)	0 (1)
GGA-3	997 (1)	997 (1)
GGA-4	998 (1)	0 (1)
GGA-5	998 (1)	997 (1)
GGA-6	999 (1), 1011 (3)	999 (1), 1011 (3)

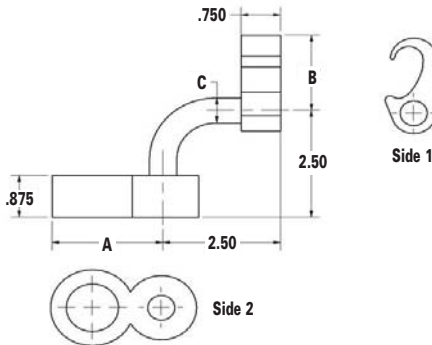
TYPE GGB

Features

- Manufactured from high strength copper alloy
- Clearly marked with wire size and die index
- Each size accepts a wide range of cable sizes
- Side 1 & Side 2 can be rotated to any position before crimping
- UL Listed and CSA Certified for grounding and bonding
- Prefilled with DE-OX® oxide inhibiting compound
- TN in catalog number designates tin plated

Benefits

- Provides maximum conductivity
- Provides easy identification and tooling recommendation
- Application flexibility and reduced inventory
- Ease of installation
- Direct burial in earth or concrete
- Prevents oxides from forming
- For use with galvanized steel ground rod



Catalog Number	Commercial Copper Cable Range Side 1	Metric Copper Cable Range Side 1	Copper Weld Cable Range Side 1	Ground Rod Diameter Side 2	Rebar Side 2	Dimensions - in. (mm)		
						A	B	C
GGB-1	250kcmil (.575 dia.) thru 2str (.292 dia.)	120mm ² (14.40mm dia.) thru 35mm ² (7.62mm dia.)	248.8kcmil (.572 dia.) thru 91.65kcmil (.343 dia.)	1/2"	#3	1.390 (35.3)	1.660 (42.2)	0.312 (7.9)
GGB-2	250kcmil (.575 dia.) thru 2str (.292 dia.)	120mm ² (14.40mm dia.) thru 35mm ² (7.62mm dia.)	248.8kcmil (.572 dia.) thru 91.65kcmil (.343 dia.)	5/8"	#4	1.455 (37.0)	1.660 (42.2)	0.312 (7.9)
GGB-3	250kcmil (.575 dia.) thru 2str (.292 dia.)	120mm ² (14.40mm dia.) thru 35mm ² (7.62mm dia.)	248.8kcmil (.572 dia.) thru 91.65kcmil (.343 dia.)	3/4"	#5	1.644 (41.8)	1.660 (42.2)	0.500 (12.7)
GGB-4	250kcmil (.575 dia.) thru 2str (.292 dia.)	120mm ² (14.40mm dia.) thru 35mm ² (7.62mm dia.)	248.8kcmil (.572 dia.) thru 91.65kcmil (.343 dia.)	1"	#6-7	2.025 (51.4)	1.677 (42.6)	0.500 (12.7)
GGB-5	500kcmil (.813 dia.) thru 250kcmil (.575 dia.)	240mm ² (20.35mm dia.) thru 120mm ² (14.40mm dia.)	498.8kcmil (.810 dia.) thru 248.8kcmil (.572 dia.)	1/2"	#3	1.390 (35.3)	2.075 (52.7)	0.312 (7.9)
GGB-6	500kcmil (.813 dia.) thru 250kcmil (.575 dia.)	240mm ² (20.35mm dia.) thru 120mm ² (14.40mm dia.)	498.8kcmil (.810 dia.) thru 248.8kcmil (.572 dia.)	5/8"	#4	1.455 (37.0)	2.075 (52.7)	0.312 (7.9)
GGB-7	500kcmil (.813 dia.) thru 250kcmil (.575 dia.)	240mm ² (20.35mm dia.) thru 120mm ² (14.40mm dia.)	498.8kcmil (.810 dia.) thru 248.8kcmil (.572 dia.)	3/4"	#5	1.644 (41.8)	2.075 (52.7)	0.500 (12.7)
GGB-8	500kcmil (.813 dia.) thru 250kcmil (.575 dia.)	240mm ² (20.35mm dia.) thru 120mm ² (14.40mm dia.)	498.8kcmil (.810 dia.) thru 248.8kcmil (.572 dia.)	1"	#6-7	2.025 (51.4)	2.075 (52.7)	0.500 (12.7)
GGB-3TN	250kcmil (.575 dia.) thru 2str (.292 dia.)	120mm ² (14.40mm dia.) thru 35mm ² (7.62mm dia.)	248.8kcmil (.572 dia.) thru 91.65kcmil (.343 dia.)	3/4"	N/A	1.644 (41.8)	1.660 (42.2)	0.500 (12.7)
GGB-6TN	500kcmil (.813 dia.) thru 250kcmil (.575 dia.)	240mm ² (20.35mm dia.) thru 120mm ² (14.40mm dia.)	498.8kcmil (.810 dia.) thru 248.8kcmil (.572 dia.)	5/8"	N/A	1.455 (37.0)	2.075 (52.7)	0.312 (7.9)

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)
Tested to UL467, UL File E34440

Notes:

1. When used with ground rods, it is recommended to rough up the end of ground rod where GGB is to be placed. This provides good rotational resistance. **Perform a "pre-crimp" on ground rod prior to installing GGB connector. Use an indent type of die such as Burndy's U2CABT (Die Index #348) or UPRECRIMP-12, -58, -34.**
2. UPRECRIMP and U2CABT are registered trademarks of Burndy/FCI

Compression Grounding Figure 6 - 8 Grounding Grid Tooling

TYPE GGB

Features

- Manufactured from high strength copper alloy
- Clearly marked with wire size and die index
- Each size accepts a wide range of cable sizes
- Side 1 & Side 2 can be rotated to any position before crimping
- UL Listed and CSA Certified for grounding and bonding
- Prefilled with DE-OX® oxide inhibiting compound
- TN in catalog number designates tin plated

Benefits

- Provides maximum conductivity
- Provides easy identification and tooling recommendation
- Application flexibility and reduced inventory
- Ease of installation
- Direct burial in earth or concrete
- Prevents oxides from forming
- For use with galvanized steel ground rod

Catalog Number	INSTALLATION TOOLING					
	ILSCO		Burdny		Thomas & Betts (w/Burdny Dies)	
	ILC-12-N, ILC-12H-N, ILCB-12-N & ILC-15 Series† Die (No. of Crimps)		Y35, Y39, Y46, Y750, PAT750 & PAT46 Series Die (No. of Crimps)		TBM14, TBM15, BPLT14 & BPLT15 Series, 1300A Die (No. of Crimps)	
	Side 1	Side 2	Side 1	Side 2	Side 1	Side 2
GGB-1	997 (1)	998 (1)	997 (1)	998 (1)	997 (1)	998 (1)
GGB-2	997 (1)	998 (1)	997 (1)	998 (1)	997 (1)	998 (1)
GGB-3	997 (1)	998 (1)	997 (1)	998 (1)	997 (1)	998 (1)
GGB-4	997 (1)	998 (1)	997 (1)	998 (1)	997 (1)	998 (1)
GGB-5	998 (1)	998 (1)	998 (1)	998 (1)	998 (1)	998 (1)
GGB-6	998 (1)	998 (1)	998 (1)	998 (1)	998 (1)	998 (1)
GGB-7	998 (1)	998 (1)	998 (1)	998 (1)	998 (1)	998 (1)
GGB-8	998 (1)	998 (1)	998 (1)	998 (1)	998 (1)	998 (1)
GGB-3TN	997 (1)	998 (1)	997 (1)	998 (1)	997 (1)	998 (1)
GGB-6TN	998 (1)	998 (1)	998 (1)	998 (1)	998 (1)	998 (1)

997 and 998 are Burdny die indexes

† Adaptor required when using ILC-15 Series tools

TYPE GGC

Features

- Manufactured from high strength copper alloy
- Clearly marked with wire size and die index
- Range taking
- Versatile
- Non-hazardous installation
- Prefilled with DE-OX® oxide inhibiting compound
- Temperature Rating 90° C
- UL Listed and CSA Certified for grounding and bonding

Benefits

- Provides maximum conductivity
- Provides easy identification and tooling recommendation
- Reduces inventory. Eight sizes cover a wire range from 500kcmil to #6, and 1/2" to 3/4" ground rods.
- Can be used as a tap connector or as a lap splice connector
- Can be installed in all types of weather with no need for protective equipment or clothing. Does not produce heat or dangerous particles.
- Prevents oxides from forming
- Ensures reliability
- For direct burial in earth or concrete

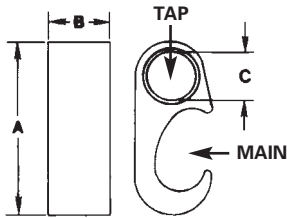


Fig. 1



Fig. 2

Catalog Number	Figure Number	Wire Range		Main Rebar	Main Ground Rod	Dimensions - in. (mm)			Die Index Number
		Main	Tap			A	B	C	
GGC-1	1	2str-6sol	2str-6sol	-	-	1.40 (35.6)	.75 (19.1)	.33 (8.4)	0
GGC-2	1	250kcmil-1/0str 1/2 - 5/8 Rod	2str-4sol	#3-4	1/2 - 5/8	2.10 (53.3)	.75 (19.1)	.33 (8.4)	997
GGC-3	1	250kcmil-1/0str 1/2 - 5/8 Rod	2/0str-1/0str	#3-4	1/2 - 5/8	2.10 (53.3)	.75 (19.1)	.44 (11.2)	997
GGC-4	1	250kcmil-1/0str 1/2 - 5/8 Rod	250kcmil-3/0str	#3-4	1/2 - 5/8	2.10 (53.3)	.75 (19.1)	.61 (15.5)	997
GGC-5	1	500kcmil-250kcmil 5/8 - 3/4 Rod	2str-4sol	#5-6	5/8 - 3/4	2.60 (66.0)	.75 (19.1)	.33 (8.4)	998
GGC-6	1	500kcmil-250kcmil 5/8 - 3/4 Rod	2/0str-1/0str	#5-6	5/8 - 3/4	2.60 (66.0)	.75 (19.1)	.44 (11.2)	998
GGC-7	1	500kcmil-250kcmil 5/8 - 3/4 Rod	250kcmil-3/0str	#5-6	5/8 - 3/4	2.60 (66.0)	.75 (19.1)	.61 (15.5)	998
GGC-8	1	500kcmil-250kcmil 5/8 - 3/4 Rod	500kcmil-350kcmil	#5-6	5/8 - 3/4	2.90 (73.7)	.75 (19.1)	.84 (21.3)	999/1011
GGC-9	2	250kcmil-1/0str 1/2 - 5/8 Rod	6str-8sol	#3-4	1/2 - 5/8	2.60 (66.0)	.75 (19.1)	-	997

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)
Tested to UL 467, UL File E34440

NOTE: Hydraulic tools required on all sizes except GGC-1 Dieless tools can not be used

The GGC Series compression ground tap connector can be used as a tap connector to connect copper ground wire to a copper clad ground rod or as a lap splice connector splicing copper conductors together. The GGC Series of compression connectors are pre-filled with inhibiting compound and are suitable for direct burial.

Notes:

1. ILSCO ILC-12 or ILC-15 Series Tools and ILD Series Dies may be used. Note: Adapter required when using ILC-15 Series Tool. Burndy tools and dies may also be used.
2. Perform a "pre-crimp" on ground rod prior to installing GGC connector. Use an indent type of die such as Burndy's U2CABT* (Die Index #348).
3. When using #6 AWG solid wire in the tap side, fold conductor double prior to crimping.
4. When using GGC-4, if 3/0 conductor is used in the tap side, use a minimum of 2/0 conductor in the run side.

* U2CABT is a registered trademark TM of Burndy/FCI

TYPE CST CDT

Features

- Made of high conductivity copper
- Metal barrier separates conductor
- Generous chamfer
- UL Listed for grounding and bonding
- UL 467 Listed
- UL 486A/B Listed

Benefits

- Provides maximum conductivity
- Eliminating strand cutting
- Protects cable
- Direct burial in earth or concrete

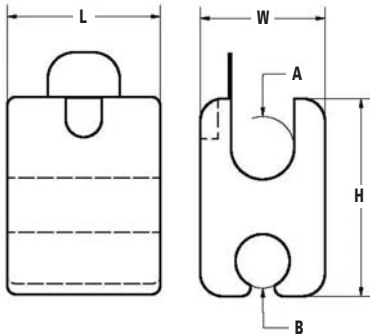
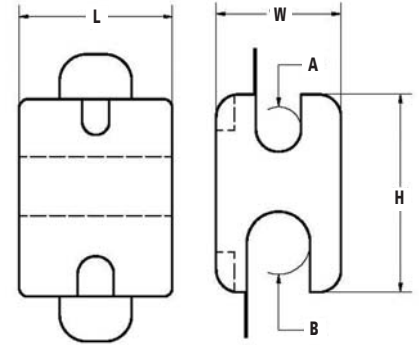


Fig. 1



Fig. 2



SINGLE TAB

Catalog Number	Figure Number	Side A Main	Wire Diameter Range in. (mm)	Side B Tap	Wire Diameter Range in. (mm)	Dimensions - in. (mm)		
						W	H	L
CST-301	1	6sol., 6str., 4sol.	.162-.204 (4.1 - 5.2)	8sol., 8str., 6sol., 6str., 4sol.	.128-.204 (3.3 - 5.2)	.469 (11.9)	.734 (18.6)	.812 (20.6)
CST-302	1	4sol., 4str., 2sol.	.204-.258 (5.2 - 6.6)	6sol., 6str., 4sol., 4str., 2sol.	.162-.258 (4.1 - 6.6)	.547 (13.9)	.823 (20.9)	.812 (20.6)

DOUBLE TAB

Catalog Number	Figure Number	Side A Main	Wire Diameter Range in. (mm)	Side B Tap	Wire Diameter Range in. (mm)	Dimensions - in. (mm)		
						W	H	L
CDT-399-8	2	6sol., 6str., 4sol.	.162-.204 (4.1 - 5.2)	8sol., 6str., 4sol.	.128-.204 (3.3 - 5.2)	.484 (12.3)	.750 (19.1)	.812 (20.6)
CDT-398-8	2	4sol., 4str., 2sol.	.204-.258 (5.2 - 6.6)	4sol., 4str., 2sol.	.204-.258 (5.2 - 6.6)	.547 (13.9)	.797 (20.2)	.812 (20.6)
CDT-304-8	2	2str., 1str., 1/0str.	.292-.375 (7.4 - 9.5)	6sol., 4sol., 4str., 2sol.	.162-.258 (4.1 - 6.6)	.641 (16.3)	1.120 (28.4)	.859 (21.8)
CDT-303-8	2	2str., 1str., 1/0str.	.292-.375 (7.4 - 9.5)	2str., 1str., 1/0str.	.292-.375 (7.4 - 9.5)	.719 (18.3)	1.120 (28.4)	.828 (21.0)
CDT-308-8	2	2/0str., 4/0str.	.419-.528 (10.6 - 13.4)	2str., 1str., 1/0str.	.292-.375 (7.4 - 9.5)	.906 (23.0)	1.406 (35.7)	1.062 (27.0)
CDT-307-8	2	2/0str., 4/0str.	.419-.528 (10.6 - 13.4)	2/0str., 4/0str.	.419-.528 (10.6 - 13.4)	.906 (23.0)	1.375 (34.9)	1.062 (27.0)

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)

Tooling Information

Catalog Number	Burndy		Kearney	
	Y35, Y35-2, BAT35, BAT35C, Y35BH, Y35BH-4, Y35L, Y39, Y38BH, Y750, Y750-2, BAT750, BAT750C, Y750BH, Y46, YA46C Die (No. of Crimps)	MD-6 Die (No. of Crimps)	WH-1, WH-2 Die (No. of Crimps)	O-52 Die (No. of Crimps)
CST-301	U-BG (1); U-243 (1)	W-BG (1)	B-K-T (1)	T (1)
CST-302	U-BG (1); U-243 (1)	W-KK (1)	B-K-T (1)	K (1)
CDT-399-8	U-BG (1); U-243 (1)	W-BG (1)	B-K-T (1)	T (1)
CDT-398-8	U-BG (1); U-243 (1)	W-KK (1)	B-K-T (1)	K (1)
CDT-304-8	U-O (1)	-	O (1)	-
CDT-303-8	U-O (1)	-	O (1)	-
CDT-308-8	U-D3 (1)	-	D (1)	-
CDT-307-8	U-D3 (1)	-	D (1)	-

TYPE TWCT

Features

- Manufactured from high conductivity copper
- Marked with wire size, die index and part number
- Range taking
- Suitable for use in circuits rated 35KV or less, proper high voltage spacing and insulation techniques must be used
- UL and CUL Listed for grounding, bonding and power
- Bright dip finish

Benefits

- Provides maximum conductivity and low contact resistance
- Clear and easy identification
- Reduces stocking inventory
- Application versatility
- Direct burial in earth or concrete
- Resist corrosion and oxidization

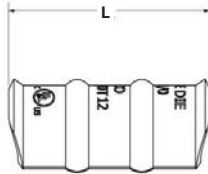
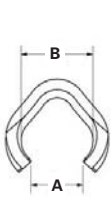


Fig. 1



Fig. 2



Fig. 3

Catalog Number	Figure Number	Accommodates		Dimensions - in. (mm)			Die Color Code
		Run	Tap	A	B	L	
TWCTR10T16	1	14	16-14	0.130 (3.3)	0.190 (4.8)	0.420 (10.7)	Red
		12	16-14				
		10	14				
TWCTR8T12	1	10	10	0.155 (3.9)	0.250 (6.4)	0.620 (15.7)	Blue
		8	12				
TWCTR6T12	1	8	10-8	0.235 (6.0)	0.325 (8.3)	0.620 (15.7)	Gray
		6	12-10				
TWCTR4T12	2	6	8-6	0.235 (6.0)	0.405 (10.3)	1.210 (30.7)	Brown
		5,4	12-8				
TWCTR3T12	2	5,4	6-5	0.260 (6.6)	0.487 (12.4)	1.206 (30.6)	Green
		3	12-6				
TWCTR2T12	2	4	4	0.297 (7.5)	0.515 (13.1)	1.210 (30.7)	Pink
		3	5				
		2	12-6				
TWCTR1T12	3	3	4-3	0.339 (8.6)	0.568 (14.4)	1.750 (44.5)	Black
		2	5-4				
		1	12-5				
TWCTR1/0T12	3	2str. 2sol.	2str. 2sol.	0.375 (9.5)	0.645 (16.4)	1.750 (44.5)	Orange
		1str. 1sol.	4str. 4sol.				
		1/0str. 1/0sol.	3str. 3sol.				
TWCTR2/0T12	3	1	2-1	0.420 (10.7)	0.755 (19.2)	1.750 (44.5)	Purple
		1/0	3-2				
		2/0	12-3				
TWCTR3/0T12	3	1/0	1-1/0	0.470 (11.9)	0.830 (21.1)	1.750 (44.5)	Yellow
		2/0	2-1				
		3/0	12-2				

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)

Tested to UL 486A/B, UL File E6207

Tested to UL 467, UL File E6207

Tin plated versions can be made available. Contact Customer Care for price and availability

Compression Grounding Structural Ground Stud

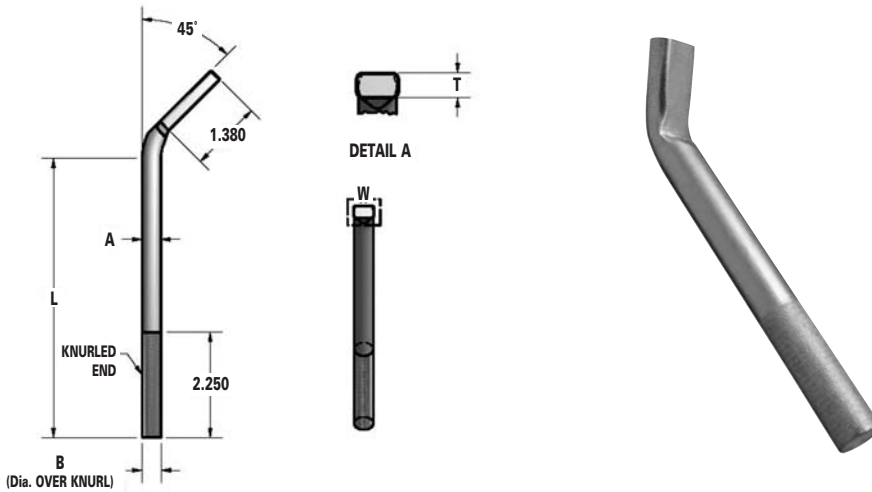
TYPE SGS

Features

- Heavy duty steel
- Tin plated
- Knurled mounting tip

Benefits

- Can be welded to steel beam
- Low resistance ground
- Excellent gripping strength



Catalog Number	Nom. Rod Size	Dimensions - in. (mm)					Electrical Equivalent Copper Conductor Size*
		A	W	B	L	T	
SGS-14	1/4	.250 (6.3)	.280 (7.1)	.26 (6.6)	5.650 (143.5)	.210 (5.3)	#6
SGS-38	3/8	.375 (9.5)	.450 (11.4)	.39 (9.9)	5.650 (143.5)	.265 (6.7)	#3
SGS-916	5/8	.560 (14.2)	.680 (17.3)	.57 (14.5)	5.650 (143.5)	.410 (10.4)	1/0
SGS-34	3/4	.750 (19.0)	.905 (23.0)	.76 (19.3)	5.650 (143.5)	.530 (13.5)	4/0

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)

* This is the equivalent rating for continuous service. Larger conductors may be connected using both compression and bolted connectors in potential ground fault applications.

TYPE CGP

Features

- Cast copper alloy body
- Available in two and four hole NEMA spacing
- Underside tapped hole
- Pre-filled with De-Ox Oxide Inhibitor
- UL Listed for grounding and bonding

Benefits

- High strength, high conductivity
- Industry standard
- Ease of positioning
- Direct burial in earth or concrete

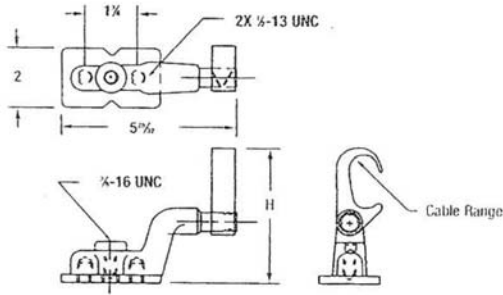


Fig. 1

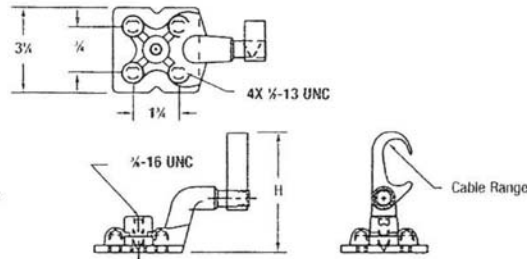


Fig. 2



Catalog Number	Figure Number	Cable Range	H - in. (mm)	Dies
CGP2-2250	1	250kcmil-2	3-5/8 (92.1)	*15G86R
CGP4-2250	2	250kcmil-2	4-1/32 (102.4)	*15G86R
CGP2-250500	1	500kcmil-250kcmil	3-5/8 (92.1)	*15G126R
CGP4-250500	2	500kcmil-250kcmil	4-1/32 (102.4)	*15G126R

All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)

*T&B Dies

UL File E158587

Tooling Information:

*T&B Dies can be used in the following Thomas & Betts tools:

- TBM14M
- TBM14MC
- TBM14BSCR
- BPLT14BSCR
- BPLT14BSCRI
- 13100A
- TBM15I

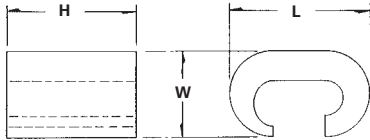
TYPE ULT

Features

- Manufactured from high conductivity copper alloy
- Clearly marked with wire size and die index
- Range taking
- Suitable for use in circuits rated 35KV or less, proper high voltage spacing and insulation techniques must be used
- Rated to 90° C
- UL Listed and CSA Certified for grounding, bonding and power

Benefits

- Provides maximum conductivity and eliminates the possibility of corrosion
- Provides easy identification and tooling recommendation
- Reduces inventory
- Application versatility
- Direct Burial in earth or concrete



Catalog Number	Copper Wire Range		Die Index	Dimensions - in. (mm)		
	Main	Tap		L	W	H
ULT-1-Z	10str-12sol	10str-12sol	238	.366 (9.3)	.279 (7.1)	.320 (8.1)
ULT-2-Z	8str-8sol	8str-10sol	162	.486 (12.3)	.353 (9.0)	.500 (12.7)
ULT-3-Z	4str-6sol	8str-8sol	BG or 5/8	.735 (18.7)	.470 (11.9)	.615 (15.6)
ULT-4-Z	4str-6sol	6str-6sol	BG or 5/8	.765 (19.4)	.460 (11.7)	.700 (17.8)
ULT-5-Z	4str-6sol	4str-4sol	BG or 5/8	.830 (21.1)	.470 (11.9)	.700 (17.8)
ULT-6-Z	2str-2sol	4str-8sol	C	.990 (25.1)	.614 (15.6)	.830 (21.1)
ULT-7-Z	2str-2sol	2str-2sol	C	1.047 (26.6)	.614 (15.6)	.826 (21.0)
ULT-8-Z	2/0str-1/0sol	2str-8sol	O	1.350 (34.3)	.812 (20.6)	.925 (23.5)
ULT-9-Z	2/0str-1/0sol	2/0str-1/0sol	O	1.350 (34.3)	.812 (20.6)	.925 (23.5)
ULT-10-Z	4/0str-3/0sol	2str-6sol	D3	1.628 (41.4)	1.000 (25.4)	1.075 (27.3)
ULT-11-Z	4/0str-3/0sol	2/0str-1/0sol	D3	1.628 (41.4)	1.000 (25.4)	1.075 (27.3)
ULT-12-Z	4/0str-3/0str	4/0str-3/0str	D3	1.610 (40.9)	1.000 (25.4)	1.200 (30.5)

Tooling Information



Catalog Number	ILSCO	Burndy
	ILC-12-N Die (No. of Crimps)	Y35, Y39, Y750 Series Y46/PAT46, PAT 750 Series Die (No. of Crimps)
ULT-1-Z	238 (1)	238 (1)
ULT-2-Z	162 (1)	162 (1)
ULT-3-Z	BG or 5/8 (1)	BG or 5/8 (1)
ULT-4-Z	BG or 5/8 (1)	BG or 5/8 (1)
ULT-5-Z	BG or 5/8 (1)	BG or 5/8 (1)
ULT-6-Z	C (1)	C (1)
ULT-7-Z	C (1)	C (1)
ULT-8-Z	O (1)	O (1)
ULT-9-Z	O (1)	O (1)
ULT-10-Z	D3 (1)	D3 (1)
ULT-11-Z	D3 (1)	D3 (1)
ULT-12-Z	D3 (1)	D3 (1)





All wire sizes, unless noted otherwise, are American Wire Gauge (AWG)


Tested to UL 486A/B, UL File E6207

Tested to UL 467, UL File E6207

GROUNDING CROSS REFERENCE

Description	Std Pkg	Part #	Burndy	T&B	Panduit
Copper Grd - ELT		ELT-1	YGHC2C2	CPT22	
Figure "E"		ELT-2	YGHC26C26	CPT2020	GCE-1/0-1/0
		ELT-3	YGHC29C29	CPT250250	GCE250-250
		ELT-4	YGHC26C2	CPT202	
		ELT-5	YGHC29C26	CPT25020	GCE250-1/0
		ELT-6	YGHC34C29	CPT500250	GCE500-250
		ELT-7	YGHC34C26	CPT50020	GCE500-1/0
		ELT-8	YGHC34C34	CPT500500	
Copper Grd - RLT		RLT-2	YGHR26C12	GR12-202	
Figure "8"		RLT-3	YGHR26C58	GR58-202	
		RLT-4	YGHR26C34	GR34-202	
		RLT-5	YGHR29C12	GR12-40250	
		RLT-6	YGHR29C58	GR58-40250	
		RLT-7	YGHR29C34	GR34-40250	
		RLT-8	YGHR34C58	GR58-300500	
		RLT-9	YGHR34C34	GR34-300500	
		RLT-10	YGHR26C100	GR1-202	
		RLT-11	YGHR29C100	GR1-40250	
		RLT-12	YGHR34C100	GR1-300500	
		RLT-13	YGHR58C2W-3	n/a	

Copper Grd - ULT (CCT)		ULT-3	YC4C8	BC48	CTAP4-8-L
Figure "C"		ULT-4	YC4C6	BC46-BB	CTAP4-6-L
		ULT-5	YC4C4	BC44	CTAP4-4-L
		ULT-6	YC2C4	BC24	CTAP2-4-Q
		ULT-7	YC2C2	BC22	CTAP2-2-X
		ULT-8	YC26C2	BC202	CTAP2/0-2-X
CCT-2020		ULT-9	YC26C26	BC2020-BB	CTAP2/0-2/0-X
		ULT-10	YC28C2	BC402	CTAP4/0-2-X
CCT-4020		ULT-11	YC28C26	BC4020	CTAP4/0-2/0-X
CCT-4040		ULT-12	YC28C28	BC4040	CTAP4/0-4/0-X
Grding Cross Grid Conn. GGA			GGA-1	YGL2C2	54855L
Figure 6 to Figure 6	GGA-2		YGL29C2	54865L	GCC6X6250-1/0
	GGA-3		YGL29C29	54875L	GCC6X6250-250
	GGA-4		YGL34C2	54885L	GCC6X6500-1/0
	GGA-5		YGL34C29	54895L	GCC6X6500-250
	GGA-6		YGL34C34	54900L	n/a
Grding Cross Grid Conn. GGC		GGB-1	YGLR29C12	54855LR12	
Figure 6 to Figure 8		GGB-2	YGLR29C58	54865LR58	
		GGB-3	YGLR29C34	54875LR34	
		GGB-4	YGLR29C100	54910LR100	
		GGB-5	YGLR34C12	54885LR12	
		GGB-6	YGLR34C58	54895LR58	
		GGB-7	YGLR34C34	54900LR34	
		GGB-8	YGLR34C100	54920LR100	
Grding Grid Conn. GGC		GGC-1	YGHP2C2	54875	
		GGC-2	YGHP29C2	54855	
		GGC-3	YGHP29C26	54860	
		GGC-4	YGHP29C29	54865-CK	
		GGC-5	YGHP34C2	54885	
		GGC-6	YGHP34C26	54890	
		GGC-7	YGHP34C29	54895	
		GGC-8	YGHP34C34	54900	
		GGC-9	YGHP29C6W6W	n/a	

Grding Lugs		GPL-15	GAR1526	GUV11821	GPL-15-X
		GPL-16	GAR1529		GPL-16-X
		GPL-21	GAR1626		GPL-21-X
		GPL-22	GAR1629	GUV13825	GPL-22-X
		GPL-27	GAR1726	GUV15821	GPL-27-X
		GPL-28	GAR1729	GUV15825	GPL-28-X
		GPL-33	GAR1826	GUV2021	GPL-33-3
		GPL-34	GAR1829	GUV2025	GPL-34-3
		GPL-39	GAR1926	GUV21221	GPL-39-3
		GPL-40	GAR1929	GUV21225	GPL-40-3
		GPL-51	GAR2126	GUV31221	GPL-51-1
		GPL-52	GAR2129		GPL-52-1
		GPL-57	GAR2226	GUV4021	GPL-57-1
		GPL-58	GAR2229	GUV4025	GPL-58-1
		GPL-69	GAR2426		
	GPL-70	GAR2429		GPL-75-X	
TYPE GPL-BU grd. clamp		GPL3902BU	GAR3902BU	3902BU	
Pipe size 1/2" - 1" #4-4/0AWG		GPL3903BU	GAR3903BU	3903BU	
Pipe size 1 1/4" - 2" #4-4/0AWG		GPL3904BU	GAR3904BU	3904BU	
Pipe size 2 1/2" - 3 1/2" #4-4/0AWG		GPL3905BU	GAR3905BU	3905BU	
Pipe size 4" - 5" #4-4/0AWG		GPL3906BU	GAR3906BU	3906BU	
Pipe size 6" #4-4/0AWG		GPL3907BU	GAR3907BU	3907BU	
Pipe size 8" #4-4/0AWG		GPL3908BU	GAR3908BU	3908BU	
Pipe size 10" #4-4/0AWG		GPL3909BU	GAR3909BU	3909BU	
Pipe size 12" #4-4/0AWG					

1-Jan-16