



# FTZ PARTS CATALOG

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Electrical Products For Transportation, Marine,  
Plant Maintenance, And Custom Applications.

# FTZ NEW PRODUCTS



(see page 32)

**WIRE FERRULES (SINGLE & DOUBLE)**  
AN ERGONOMIC DESIGN THAT FACILITATES CRIMPING AND MINIMIZES HAND FATIGUE.



(see page 71)

**STAINLESS STEEL CABLE CLAMPS**  
THE WATERPROOF TERMINAL DESIGNED TO PERFORM IN THE HARSHTEST ENVIRONMENTS.



(see page 76)

**FUSES**  
UNIQUE DESIGN THAT COMBINES PURE COPPER CONSTRUCTION WITH A SEAMLESS PAD THAT PROVIDES ULTIMATE PERFORMANCE.



(see page 80)

**BATTERY POWERED CRIMP TOOL**  
THE FIRST ENVIRONMENTALLY FRIENDLY, 100% COPPER BATTERY TERMINAL.



(see page 81)

**SCISSOR/WIRE CRIMPER**  
THE PATENTED HEAT-LESS, SOLDERLESS TERMINAL THAT SAVES TIME AND MONEY.



(see page 92)

**CORDLESS HEAT GUN**  
THE LATEST ADVANCEMENT IN HEAT SHRINK CONNECTORS PROVIDING INCREASED CLARITY AND STRENGTH.

# FTZ KEY PRODUCTS

## COOL SEAL®

THE PATENTED HEAT-LESS, SOLDERLESS  
TERMINAL THAT SAVES TIME AND MONEY.



(see page 6)

## CLEAR SEAL®

THE LATEST ADVANCEMENT IN HEAT SHRINK  
CONNECTORS PROVIDING INCREASED CLARITY  
AND STRENGTH.



(see page 6)

## EXTREME SEAL®

THE WATERPROOF TERMINAL DESIGNED TO  
PERFORM IN THE HARSHTEST ENVIRONMENTS.



(see page 14)

## ECO-MAX®

THE FIRST ENVIRONMENTALLY FRIENDLY, 100%  
COPPER BATTERY TERMINAL.



(see page 50)

## SEAMLESS COPPER PLUGS

UNIQUE DESIGN THAT COMBINES PURE COPPER  
CONSTRUCTION WITH A SEAMLESS PAD THAT  
PROVIDES ULTIMATE PERFORMANCE.



(see page 58)

## MPC CRIMP TOOL

AN ERGONOMIC DESIGN THAT FACILITATES  
CRIMPING AND MINIMIZES HAND FATIGUE.



(see page 83)

## WELCOME TO FTZ INDUSTRIES

FTZ Industries is a leading manufacturer of electrical components for construction, maintenance, transportation, marine, industrial and custom applications. We have provided our customers with innovative products and unmatched service since 1977.

Based in Simpsonville, South Carolina, FTZ Industries' state of the art manufacturing facility and distribution center provides distributors the products they need, when they need them.

FTZ is owned by ILSCO Corporation, a 120 year old privately-held, American-owned electrical connector manufacturing company with facilities in:

Brownsville, Texas

Cincinnati, Ohio

Harrison, Ohio

Mississauga, Canada.

Greenville, Pennsylvania

Matamoros, Mexico

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## TERMINALS



FTZ Industries offers a comprehensive line of high quality solderless terminals and splices. Our innovative Crimp 'N Seal® connector designs include the patented Cool Seal®, Clear Seal®, and Extreme Seal terminals (the original heavy duty heat shrink connector). Additionally, FTZ has standard, non-insulated & high temperature connectors in various styles & sizes to fit your needs.

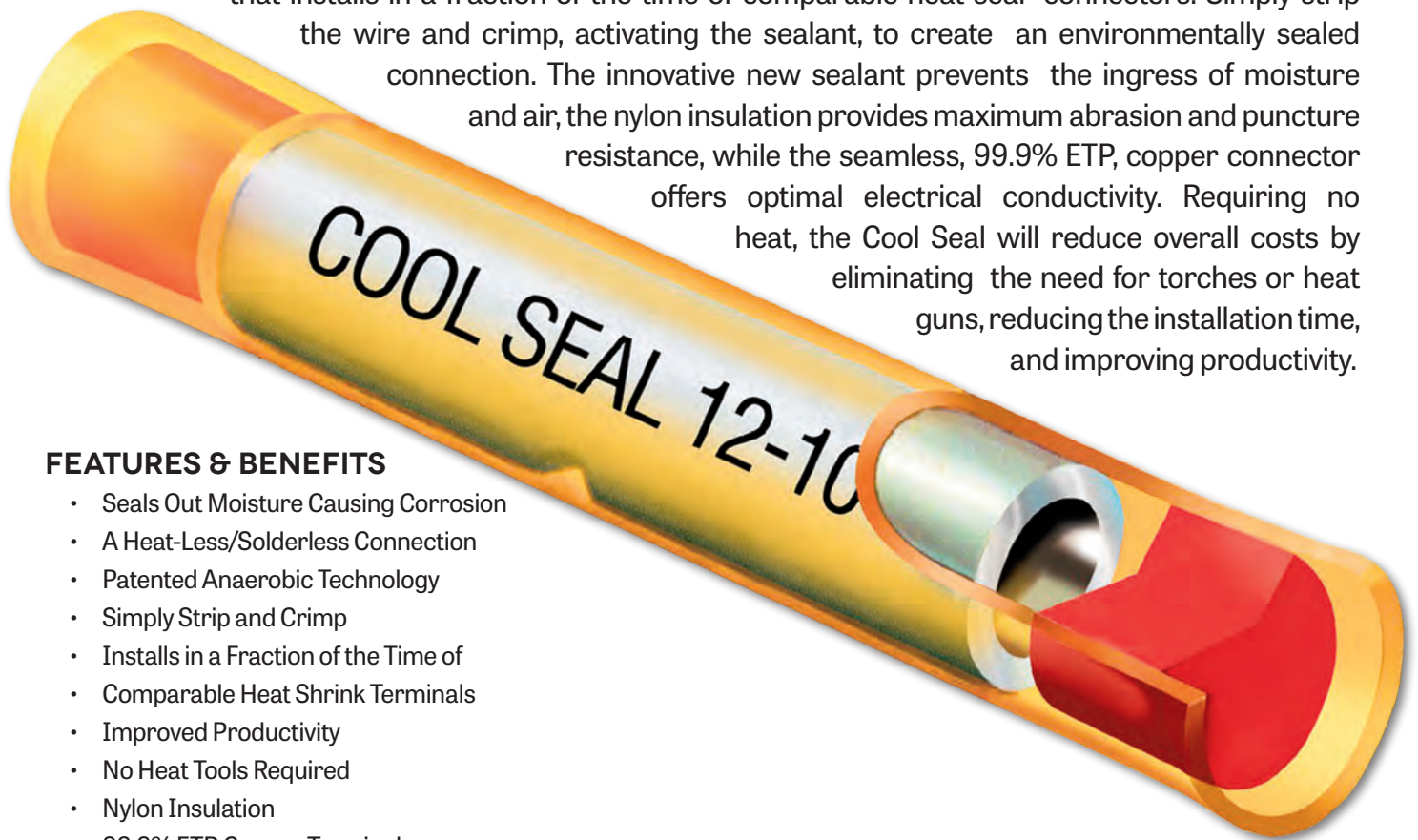
- Crimp 'N Seal® Heat Shrink Terminals & Splices
  - Cool Seal®
  - Clear Seal® Heat Shrink Connectors
  - Extreme Seal Heat Shrink Connectors
  - CNS Heat Shrink Connectors
- Standard Terminals & Splices
- Nylon Insulated
- Vinyl Insulated
- Non-Insulated
- High Temperature
- Insulation Displacement Connectors (IDC)



# COOL SEAL<sup>®</sup>

BY FTZ INDUSTRIES

FTZ's patented Cool Seal is the **most innovative and cost effective** sealed electrical connector to hit the market in 25 years. A heat-less, solderless terminal, it utilizes revolutionary anaerobic sealant technology that installs in a fraction of the time of comparable heat seal connectors. Simply strip the wire and crimp, activating the sealant, to create an environmentally sealed connection. The innovative new sealant prevents the ingress of moisture and air, the nylon insulation provides maximum abrasion and puncture resistance, while the seamless, 99.9% ETP, copper connector offers optimal electrical conductivity. Requiring no heat, the Cool Seal will reduce overall costs by eliminating the need for torches or heat guns, reducing the installation time, and improving productivity.



## FEATURES & BENEFITS

- Seals Out Moisture Causing Corrosion
- A Heat-Less/Solderless Connection
- Patented Anaerobic Technology
- Simply Strip and Crimp
- Installs in a Fraction of the Time of
- Comparable Heat Shrink Terminals
- Improved Productivity
- No Heat Tools Required
- Nylon Insulation
- 99.9% ETP Copper Terminal
- **Cool Seal<sup>®</sup> Butt Splice Part Numbers: 33130(22-18GA); 33330(16-14GA); 33430(12-10GA)**

INSTALLS WITH FTZ TOOLS:



94145



94230



# CLEAR SEAL<sup>®</sup> BY FTZ INDUSTRIES

**CLEAR SEAL<sup>®</sup>** is the latest advancement in an expanding line of patented and innovative heat shrink connectors manufactured by FTZ Industries. The Clear Seal<sup>®</sup> proprietary tubing features increased clarity, better abrasion resistance, greater tensile strength, 50% more dielectric strength and improved shrink times compared to competing nylon or polyolefin terminals. The color coded tubing offers incredible clarity for visual inspection of the wire and crimp. Tensile strength performance has been increased by 33% yielding maximum puncture resistance and shrink time has been reduced 30% providing value in both labor savings and consumables. The best choice in heat shrink connectors is now crystal clear - FTZ's Clear Seal<sup>®</sup>.



## FEATURES & BENEFITS

- Seamless 99.9% Copper Tube for Maximum Strength and Conductivity
- Proprietary Heat Shrink Tubing Offering the Best Combined Performance of Nylon and Polyolefin Technologies
- Tubing with Aggressive Sealant Keeps out Moisture Providing an Environmentally Secure Connection
- Best Clarity in Heat Shrink Connectors for Visual Checks
- 33% More Tensile Strength
- 50% Higher Dielectric Strength
- 30% Faster Shrink Times
- Available in Butt Splices, Rings, Spades and Quick Disconnects

## APPLICABLE MARKETS

- Heavy Duty
- Mining Equipment
- Transportation
- Automotive Aftermarket
- Off Road Vehicles
- Marine/Watercraft
- Construction Equipment
- Plant Maintenance



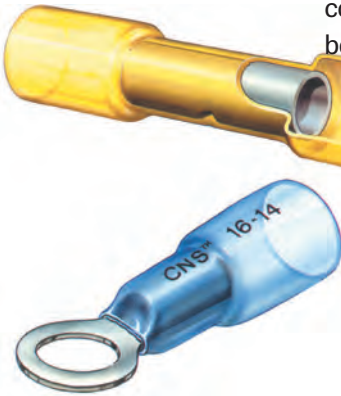
Clear Seal tubing provides maximum clarity and enhances the ease of inspection, insuring proper wire insertion into the connector. Comparable terminals are opaque which could compromise the installation and integrity of the connection.



# CRIMP 'N SEAL®

## WATERPROOF HEAT SHRINK CONNECTORS

FTZ Industries manufactures the most comprehensive and highest quality line of Crimp 'N Seal® heat shrinkable connectors on the market today. The company that first brought you heat shrinkable connectors over three decades ago has more than tripled the number of connectors available. Do not be fooled by imitations. No matter how it's spelled, if it does not say Crimp 'N Seal® it's not the original.



- **Seamless Tubular Splices** insures mechanical and electrical integrity under severe conditions and can be crimped on any side
- **Brazed Seam Terminals** brazed seam will not split open under the most extreme installation and operating conditions
- **Heat Shrinkable Tubing** 3:1 dual wall tubing with adhesive lining provides a waterproof seal with durable abrasion resistance and unequalled strain relief.
- **CNS Poly, Clear Seal or Cool Seal** the most complete heat shrinkable connector offering is now stocked in three styles
- **Packaged or Bulk** available in convenient package quantities or order in bulk and save
- **UL File #E 6207**
- **Maximum Performance** Up to 600 volts, 90°C/194°F



31330



37330



35430



31103



31304

### BUTT SPLICES



COOL SEAL®	CNS POLY	CLEAR-SEAL®	WIRE RANGE	PKG. QTY.	COOL SEAL®	CNS POLY	CLEAR-SEAL®	WIRE RANGE	PKG. QTY.
	31030-P50	37030-P50	26-24 GA	50	33330-P500	31330-P500	37330-P500	16-14 GA.	500
	31030	37030	26-24 GA	Bulk	33330-P50	31330-P50	37330-P50	16-14 GA.	50
33130	31130	37130	22-18 GA.	Bulk	33430	31430	37430	12-10 GA.	Bulk
33130-P500	31130-P500	37130-P500	22-18 GA.	500	33430-P250	31430-P250	37430-P250	12-10 GA.	250
33130-P50	31130-P50	37130-P50	22-18 GA.	50	33430-P25	31430-P25	37430-P25	12-10 GA.	25
33330	31330	37330	16-14 GA.	Bulk		31530	37530	8 GA.	Bulk

### BUTT SPLICES: STEP DOWN

CNS POLY	CLEAR-SEAL®	WIRE RANGE	COLOR	PKG. QTY.	CNS POLY	CLEAR-SEAL®	WIRE RANGE	COLOR	PKG. QTY.
35330	37333	22-18&16-14GA.	BLUE	Bulk	35430-P25	37433-P25	16-14&12-10GA.	YELLOW	25
35330-P50	37333-P50	22-18&16-14GA.	BLUE	50	35530	37533	12-10&8GA.	PINK	Bulk
35430	37433	16-14&12-10GA.	YELLOW	Bulk	35530-P25	37533-P25	12-10&8GA.	PINK	25

### BUTT SPLICES: 3 AND 4 WAY

CNS POLY	CLEAR-SEAL®	WIRE RANGE	STYLE	PKG. QTY.	CNS POLY	CLEAR-SEAL®	WIRE RANGE	STYLE	PKG. QTY.
31103	37103	22-18GA.	3 WAY	Bulk	31304	37304	16-14 GA.	4 WAY	Bulk
31104	37104	22-18GA.	4 WAY	Bulk	31403	37403	12-10 GA.	3 WAY	Bulk
31303	37303	16-14GA.	3 WAY	Bulk	31404	37404	12-10 GA.	4 WAY	Bulk

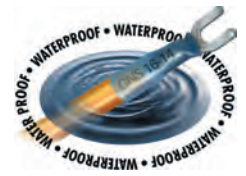
# SOLDERLESS TERMINALS

## RINGS: BRAZED SEAM



CNS POLY	CLEAR-SEAL®	WIRE RANGE	STUD SIZE	PKG. QTY.
31012		26-24 GA.	6	Bulk
31012-P50		26-24 GA.	6	50
31013		26-24 GA.	8	Bulk
31013-P50		26-24 GA.	8	50
31014		26-24 GA.	10	Bulk
31014-P50		26-24 GA.	10	50
31015		26-24 GA.	1/4	Bulk
31015-P50		26-24 GA.	1/4	50
31112	37112	22-18 GA.	6	Bulk
31112-P50	37112-P50	22-18 GA.	6	50
31113	37113	22-18 GA.	8	Bulk
31113-P50	37113-P50	22-18 GA.	8	50
31114	37114	22-18 GA.	10	Bulk
31114-P50	37114-P50	22-18 GA.	10	50
31115	37115	22-18 GA.	1/4	Bulk
31115-P50	37115-P50	22-18 GA.	1/4	50
31116	37116	22-18 GA.	5/16	Bulk
31116-P50	37116-P50	22-18 GA.	5/16	50
31117	37117	22-18 GA.	3/8	Bulk
31117-P50	37117-P50	22-18 GA.	3/8	50
31312	37312	16-14 GA.	6	Bulk
31312-P50	37312-P50	16-14 GA.	6	50
31313	37313	16-14 GA.	8	Bulk
31313-P50	37313-P50	16-14 GA.	8	50
31314	37314	16-14 GA.	10	Bulk
31314-P50	37314-P50	16-14 GA.	10	50
31315	37315	16-14 GA.	1/4	Bulk
31315-P50	37315-P50	16-14 GA.	1/4	50
31316	37316	16-14 GA.	5/16	Bulk
31316-P50	37316-P50	16-14 GA.	5/16	50

CNS POLY	CLEAR-SEAL®	WIRE RANGE	STUD SIZE	PKG. QTY.
31317	37317	16-14 GA.	3/8	Bulk
31317-P50	37317-P50	16-14 GA.	3/8	50
31412	37412	12-10 GA.	6	Bulk
31412-P25	37412-P25	12-10 GA.	6	25
31413	37413	12-10 GA.	8	Bulk
31413-P25	37413-P25	12-10 GA.	8	25
31414	37414	12-10 GA.	10	Bulk
31414-P25	37414-P25	12-10 GA.	10	25
31415	37415	12-10 GA.	1/4	Bulk
31415-P25	37415-P25	12-10 GA.	1/4	25
31416	37416	12-10 GA.	5/16	Bulk
31416-P25	37416-P25	12-10 GA.	5/16	25
31417	37417	12-10 GA.	3/8	Bulk
31417-P25	37417-P25	12-10 GA.	3/8	25
31419	37419	12-10 GA.	1/2	Bulk
31419-P25	37419-P25	12-10 GA.	1/2	25
31514	37514	8 GA.	10	Bulk
31514-P25	37514-P25	8 GA.	10	25
31515	37515	8 GA.	1/4	Bulk
31515-P25	37515-P25	8 GA.	1/4	25
31516	37516	8 GA.	5/16	Bulk
31516-P25	37516-P25	8 GA.	5/16	25
31517	37517	8 GA.	3/8	Bulk
31517-P25	37517-P25	8 GA.	3/8	25
31519	37519	8 GA.	1/2	Bulk
31519-P25	37519-P25	8 GA.	1/2	25



37112



31113



31314



37315



31414



37417



31515

# CRIMP 'N SEAL® (CONT.)



## RINGS: BRAZED SEAM MULTI-STUD



CNS POLY	CLEAR-SEAL®	WIRE RANGE	STUD SIZE	PKG. QTY.	CNS POLY	CLEAR-SEAL®	WIRE RANGE	STUD SIZE	PKG. QTY.
3111M	3711M	22-18 GA.	6,8,10	Bulk	3131M	3731M	16-14 GA.	6,8,10	Bulk
3111M-P50	3711M-P50	22-18 GA.	6,8,10	50	3131M-P50	3731M-P50	16-14 GA.	6,8,10	50
					3141M	3741M	12-10 GA.	6,8,10	Bulk
					3141M-P25	3741M-P25	12-10 GA.	6,8,10	25



3111M

## SPADES/FORKS: BRAZED SEAM



CNS POLY	CLEAR-SEAL®	WIRE RANGE	STUD SIZE	PKG. QTY.	CNS POLY	CLEAR-SEAL®	WIRE RANGE	STUD SIZE	PKG. QTY.
31122	37122	22-18 GA.	6	Bulk	31324	37324	16-14 GA.	10	Bulk
31122-P50	37122-P50	22-18 GA.	6	50	31324-P50	37324-P50	16-14 GA.	10	50
31123	37123	22-18 GA.	8	Bulk	31422	37422	12-10 GA.	6	Bulk
31123-P50	37123-P50	22-18 GA.	8	50	31422-P25	37422-P25	12-10 GA.	6	25
31124	37124	22-18 GA.	10	Bulk	31423	37423	12-10 GA.	8	Bulk
31124-P50	37124-P50	22-18 GA.	10	50	31423-P25	37423-P25	12-10 GA.	8	25
31322	37322	16-14 GA.	6	Bulk	31424	37424	12-10 GA.	10	Bulk
31322-P50	37322-P50	16-14 GA.	6	50	31424-P25	37424-P25	12-10 GA.	10	25
31323	37323	16-14 GA.	8	Bulk					
31323-P50	37323-P50	16-14 GA.	8	50					

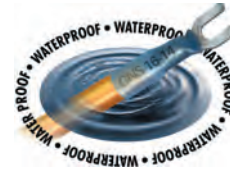


31323



STATE OF THE ART  
MANUFACTURING EQUIPMENT  
AND ENGINEERING.

# SOLDERLESS TERMINALS



## SNAP SPADE/LOCKING FORKS: BRAZED SEAM

CNS POLY	CLEAR-SEAL®	WIRE RANGE	STUD SIZE	PKG. QTY.
31142	37142	22-18 GA.	6	Bulk
31142-P50	37142-P50	22-18 GA.	6	50
31143	37143	22-18 GA.	8	Bulk
31143-P50	37143-P50	22-18 GA.	8	50
31144	37144	22-18 GA.	10	Bulk
31144-P50	37144-P50	22-18 GA.	10	50
31342	37342	16-14 GA.	6	Bulk
31342-P50	37342-P50	16-14 GA.	6	50
31343	37343	16-14 GA.	8	Bulk
31343-P50	37343-P50	16-14 GA.	8	50

CNS POLY	CLEAR-SEAL®	WIRE RANGE	STUD SIZE	PKG. QTY.
31344	37344	16-14 GA.	10	Bulk
31344-P50	37344-P50	16-14 GA.	10	50
31442	37442	12-10 GA.	6	Bulk
31442-P25	37442-P25	12-10 GA.	6	25
31443	37443	12-10 GA.	8	Bulk
31443-P25	37443-P25	12-10 GA.	8	25
31444	37444	12-10 GA.	10	Bulk
31444-P25	37444-P25	12-10 GA.	10	25
31445	37445	12-10 GA.	1/4	Bulk
31445-P25	37445-P25	12-10 GA.	1/4	25



31344

## FLANGED FORKS: BRAZED SEAM

CNS POLY	CLEAR-SEAL®	WIRE RANGE	STUD SIZE	PKG. QTY.
31122FL	37122FL	22-18 GA.	6	Bulk
31122FL-P50	37122FL-P50	22-18 GA.	6	50
31123FL	37123FL	22-18 GA.	8	Bulk
31123FL-P50	37123FL-P50	22-18 GA.	8	50
31124FL	37124FL	22-18 GA.	10	Bulk
31124FL-P50	37124FL-P50	22-18 GA.	10	50
31322FL		16-14 GA.	6	Bulk
31322FL-P50		16-14 GA.	6	50
31323FL	37323FL	16-14 GA.	8	Bulk
31323FL-P50	37323FL-P50	16-14 GA.	8	50

CNS POLY	CLEAR-SEAL®	WIRE RANGE	STUD SIZE	PKG. QTY.
31324FL	37324FL	16-14 GA.	10	Bulk
31324FL-P50	37324FL-P50	16-14 GA.	10	50
31423FL	37423FL	12-10 GA.	8	Bulk
31423FL-P25	37423FL-P25	12-10 GA.	8	25
31424FL	37424FL	12-10 GA.	10	Bulk
31424FL-P25	37424FL-P25	12-10 GA.	10	25



31324FL

# CRIMP 'N SEAL® (CONT.)



**Controlled Cycle Crimp Tool**  
Part No. 94230  
See Page 82

## HOOKS: BUTTED SEAM

CNS POLY	CLEAR-SEAL®	WIRE RANGE	STUD SIZE	PKG. QTY.
		22-18 GA.	6	Bulk
		22-18 GA.	6	50
		22-18 GA.	8	Bulk
		22-18 GA.	8	50
		22-18 GA.	10	Bulk
		22-18 GA.	10	50
		16-14 GA.	6	Bulk
		16-14 GA.	6	50
		16-14 GA.	8	Bulk
		16-14 GA.	8	50

CNS POLY	CLEAR-SEAL®	WIRE RANGE	STUD SIZE	PKG. QTY.
31354	37354	16-14 GA.	10	Bulk
31354-P50	37354-P50	16-14 GA.	10	50
		12-10 GA.	6	Bulk
		12-10 GA.	6	25
		12-10 GA.	8	Bulk
		12-10 GA.	8	25
		12-10 GA.	10	Bulk
		12-10 GA.	10	25

## QUICK DISCONNECTS: FULLY-INSULATED - DOUBLE HUMP



30187



30197

CNS POLY	WIRE RANGE	TAB SIZE	STYLE	PKG. QTY.
30185	22-18 GA.	0.187 X 0.02	MALE	Bulk
30185-P50	22-18 GA.	0.187 X 0.02	MALE	50
30187	22-18 GA.	0.25 X 0.032	MALE	Bulk
30187-P50	22-18 GA.	0.25 X 0.032	MALE	50
30195	22-18 GA.	0.187 X 0.02	FEMALE	Bulk
30195-P50	22-18 GA.	0.187 X 0.02	FEMALE	50
30197	22-18 GA.	0.25 X 0.032	FEMALE	Bulk
30197-P50	22-18 GA.	0.25 X 0.032	FEMALE	50
30385	16-14 GA.	0.187 X 0.02	MALE	Bulk
30385-P50	16-14 GA.	0.187 X 0.02	MALE	50

CNS POLY	WIRE RANGE	TAB SIZE	STYLE	PKG. QTY.
30387	16-14 GA.	0.25 X 0.032	MALE	Bulk
30387-P50	16-14 GA.	0.25 X 0.032	MALE	50
30395	16-14 GA.	0.187 X 0.02	FEMALE	Bulk
30395-P50	16-14 GA.	0.187 X 0.02	FEMALE	50
30397	16-14 GA.	0.25 X 0.032	FEMALE	Bulk
30397-P50	16-14 GA.	0.25 X 0.032	FEMALE	50
30487	12-10 GA.	0.25 X 0.032	MALE	Bulk
30487-P25	12-10 GA.	0.25 X 0.032	MALE	25
30497	12-10 GA.	0.25 X 0.032	FEMALE	Bulk
30497-P25	12-10 GA.	0.25 X 0.032	FEMALE	25

# SOLDERLESS TERMINALS

## QUICK DISCONNECTS: FULLY INSULATED – SINGLE HUMP



CNS POLY	WIRE RANGE	TAB SIZE	STYLE	PKG. QTY.	CNS POLY	WIRE RANGE	TAB SIZE	STYLE	PKG. QTY.
30186	22-18 GA.	.187 X .020	MALE	Bulk	30388	16-14 GA.	.250 X .032	MALE	Bulk
30186-P50	22-18 GA.	.187 X .020	MALE	50	30388-P50	16-14 GA.	.250 X .032	MALE	50
30188	22-18 GA.	.250 X .032	MALE	Bulk	30396	16-14 GA.	.187 X .020	FEMALE	Bulk
30188-P50	22-18 GA.	.250 X .032	MALE	50	30396-P50	16-14 GA.	.187 X .020	FEMALE	50
30196	22-18 GA.	.187 X .020	FEMALE	Bulk	30398	16-14 GA.	.250 X .032	FEMALE	Bulk
30196-P50	22-18 GA.	.187 X .020	FEMALE	50	30398-P50	16-14 GA.	.250 X .032	FEMALE	50
30198	22-18 GA.	.250 X .032	FEMALE	Bulk	30488	12-10 GA.	.250 X .032	MALE	Bulk
30198-P50	22-18 GA.	.250 X .032	FEMALE	50	30488-P25	12-10 GA.	.250 X .032	MALE	25
30386	16-14 GA.	.187 X .020	MALE	Bulk	30498	12-10 GA.	.250 X .032	FEMALE	Bulk
30386-P50	16-14 GA.	.187 X .020	MALE	50	30498-P25	12-10 GA.	.250 X .032	FEMALE	25



30388

## QUICK DISCONNECTS

CNS POLY	CLEAR SEAL®	WIRE RANGE	TAB SIZE	STYLE	PKG. QTY.
31184	37184	22-18 GA.	.187 X .020	MALE	Bulk
31184-P50	37184-P50	22-18 GA.	.187 X .020	MALE	50
31183	37183	22-18 GA.	.250 X .032	MALE	Bulk
31183-P50	37183-P50	22-18 GA.	.250 X .032	MALE	50
31194	37194	22-18 GA.	.187 X .020	FEMALE	Bulk
31194-P50	37194-P50	22-18 GA.	.187 X .020	FEMALE	50
31193	37193	22-18 GA.	.250 X .032	FEMALE	Bulk
31193-P50	37193-P50	22-18 GA.	.250 X .032	FEMALE	50
31384	37384	16-14 GA.	.187 X .020	MALE	Bulk
31384-P50	37384-P50	16-14 GA.	.187 X .020	MALE	50
31383	37383	16-14 GA.	.250 X .032	MALE	Bulk
31383-P50	37383-P50	16-14 GA.	.250 X .032	MALE	50
31394	37394	16-14 GA.	.187 X .020	FEMALE	Bulk
31394-P50	37394-P50	16-14 GA.	.187 X .020	FEMALE	50
31393	37393	16-14 GA.	.250 X .032	FEMALE	Bulk
31393-P50	37393-P50	16-14 GA.	.250 X .032	FEMALE	50
31483	37483	12-10 GA.	.250 X .032	MALE	Bulk
31483-P25	37483-P25	12-10 GA.	.250 X .032	MALE	25
31493	37493	12-10 GA.	.250 X .032	FEMALE	Bulk
31493-P25	37493-P25	12-10 GA.	.250 X .032	FEMALE	25



31383





## CRIMP 'N SEAL® (CONT.)

### QUICK DISCONNECTS: PIGGY-BACK

CNS POLY	CLEAR SEAL®	WIRE RANGE	PKG.	TAB SIZE	PKG. QTY.
31191	37191	22-18 GA.	GA.	.250 x .032	Bulk
31191-P50	37191-P50	22-18 GA.	GA.	.250 x .032	50
31391	37391	16-14 GA.	GA.	.250 x .032	Bulk
31391-P50	37391-P50	16-14 GA.	GA.	.250 x .032	50

### BULLETS\RECEPTACLES

CNS POLY	CLEAR SEAL®	WIRE RANGE	MATING SIZE	STYLE	PKG. QTY.
31169	37169	22-18 GA.	.156	MALE	Bulk
31169-P50	37169-P50	22-18 GA.	.156	MALE	50
31168	37168	22-18 GA.	.180	MALE	Bulk
31168-P50	37168-P50	22-18 GA.	.180	MALE	50
30179	37179	22-18 GA.	.156	FEMALE	Bulk
30179-P50	37179-P50	22-18 GA.	.156	FEMALE	50
30178	37178	22-18 GA.	.180	FEMALE	Bulk
30178-P50	37178-P50	22-18 GA.	.180	FEMALE	50
31369	37369	16-14 GA.	.156	MALE	Bulk
31369-P50	37369-P50	16-14 GA.	.156	MALE	50
31368	37368	16-14 GA.	.180	MALE	Bulk
31368-P50	37368-P50	16-14 GA.	.180	MALE	50
30379	37379	16-14 GA.	.156	FEMALE	Bulk
30379-P50	37379-P50	16-14 GA.	.156	FEMALE	50
30378	37378	16-14 GA.	.180	FEMALE	Bulk
30378-P50	37378-P50	16-14 GA.	.180	FEMALE	50
31469	37469	12-10 GA.	.156	MALE	Bulk
31469-P25	37469-P25	12-10 GA.	.156	MALE	25

### PIN TERMINALS

CNS POLY	CLEAR SEAL®	WIRE RANGE	PIN DIAMETER	PKG. QTY.
31165	37165	22-18 GA.	0.08	Bulk
31165-P50	37165-P50	22-18 GA.	0.08	50
31365	37365	16-14 GA.	0.08	Bulk
31365-P50	37365-P50	16-14 GA.	0.08	50
31465	37465	12-10 GA.	0.11	Bulk
31465-P25	37465-P25	12-10 GA.	0.11	25



31369



30379



31465







# EXTREME SEAL BY FTZ INDUSTRIES

FTZ's Crimp 'N Seal Extreme waterproof wire terminal is designed to perform in the harshest environments. A triple layer of protection around a 99.9% copper connector provides the industry's most rugged and environmentally secure design: color coded nylon insulation provides excellent puncture resistance; the adhesive lining blocks out water and adds superior tensile strength and strain relief, while the outer layer of clear polyolefin shrinks down around the wire sheathing to allow a complete environmental and abrasion resistant seal. When only the maximum protection will do, ask for Extreme....Crimp'N Seal Extreme.



## FEATURES & BENEFITS

- Seamless 99.9% Copper Tube for Maximum Strength and Conductivity
- Three Protective Insulating Layers
  1. Nylon inner layer adds mechanical strength and impact resistance.
  2. Aggressive proprietary adhesive seals out moisture and provides strain relief.
  3. Outer layer of clear polyolefin shrink tubing offers excellent abrasion resistance while allowing high visibility for inspection of the connection
- Nylon Layer Color Coded to Insure Proper Installation

## APPLICABLE MARKETS

- |                     |                          |                      |
|---------------------|--------------------------|----------------------|
| • Heavy Duty        | • Construction Equipment | • Energy Exploration |
| • Transportation    | • Plant Maintenance      | • Marine             |
| • Off Road Vehicles | • Mining Equipment       |                      |

INSTALLS WITH FTZ TOOLS:



94940



94130

# SOLDERLESS TERMINALS

## CRIMP 'N SEAL® EXTREME

Heavy Duty Waterproof Heat Shrink Terminals & Splices.

The original heat shrinkable connector that started it all, FTZ's heavy duty design combines the durable protection of a nylon insulated connector with the waterproof seal of polyolefin heat shrinkable tubing.

The nylon connector provides superior abrasion resistance and eliminates punctures during installation. The clear heat shrinkable tubing with a meltable inner-wall is installed over the nylon insulation providing the toughest, waterproof electrical connection available.

The dual protection of nylon insulation and heat shrinkable tubing makes the Crimp 'N Seal® Extreme the best option for harsh On-highway and Off-road heavy equipment applications.



## BUTT SPLICES

CAT. NO.	WIRE RANGE	PKG. QTY.
30130	22-18 GA.	Bulk
30130-P50	22-18 GA.	50
30330	16-14 GA	Bulk
30330-P50	16-14 GA	50

POLY CAT. NO.	WIRE RANGE	PKG. QTY.
30430	12-10 GA.	Bulk
30430-P25	12-10 GA.	25



30330



30430

## BUTT SPLICES WITH INSULATION GRIP

CAT. NO.	WIRE RANGE	PKG. QTY.
30133	22-18 GA.	Bulk
30133-P50	22-18 GA.	50
30333	16-14 GA	Bulk
30333-P50	16-14 GA	25

POLY CAT. NO.	WIRE RANGE	PKG. QTY.
30433	12-10 GA.	Bulk
30433-P25	12-10 GA.	25

## MULTI-STUD RINGS

CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
3011M	22-18 GA.	6,8,10	Bulk
3011M-P50	22-18 GA.	6,8,10	50

POLY CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
3031M	16-14 GA	6,8,10	Bulk
3031M-P50	16-14 GA	6,8,10	50
3041M	12-10 GA.	6,8,10	Bulk
3041M-P25	12-10 GA.	6,8,10	25



## CRIMP 'N SEAL® EXTREME

### RINGS

CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
30112	22-18 GA.	6	Bulk
30112-P50	22-18 GA.	6	50
30113	22-18 GA.	8	Bulk
30113-P50	22-18 GA.	8	50
30114	22-18 GA.	10	Bulk
30114-P50	22-18 GA.	10	50
30115	22-18 GA.	1/4	Bulk
30115-P50	22-18 GA.	1/4	50
30116	22-18 GA.	5/16	Bulk
30116-P50	22-18 GA.	5/16	50
30117	22-18 GA.	3/8	Bulk
30117-P50	22-18 GA.	3/8	50
30312	16-14 GA.	6	Bulk
30312-P50	16-14 GA.	6	50
30313	16-14 GA.	8	Bulk
30313-P50	16-14 GA.	8	50
30314	16-14 GA.	10	Bulk
30314-P50	16-14 GA.	10	50
30315	16-14 GA.	1/4	Bulk
30315-P50	16-14 GA.	1/4	50



30114



30314



30124

POLY CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
30316	16-14 GA.	5/16	Bulk
30316-P50	16-14 GA.	5/16	50
30317	16-14 GA.	3/8	Bulk
30317-P50	16-14 GA.	3/8	50
30412	12-10 GA.	6	Bulk
30412-P25	12-10 GA.	6	25
30413	12-10 GA.	8	Bulk
30413-P25	12-10 GA.	8	25
30414	12-10 GA.	10	Bulk
30414-P25	12-10 GA.	10	25
30415	12-10 GA.	1/4	Bulk
30415-P25	12-10 GA.	1/4	25
30416	12-10 GA.	5/16	Bulk
30416-P25	12-10 GA.	5/16	25
30417	12-10 GA.	3/8	Bulk
30417-P25	12-10 GA.	3/8	25
30419	12-10 GA.	1/2	Bulk
30419-P25	12-10 GA.	1/2	25

### SPADES/FORKS

CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
30122	22-18 GA.	6	Bulk
30122-P50	22-18 GA.	6	50
30123	22-18 GA.	8	Bulk
30123-P50	22-18 GA.	8	50
30124	22-18 GA.	10	Bulk
30124-P50	22-18 GA.	10	50
30322	16-14 GA.	6	Bulk
30322-P50	16-14 GA.	6	50
30323	16-14 GA.	8	Bulk
30323-P50	16-14 GA.	8	50

POLY CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
30324	16-14 GA.	10	Bulk
30324-P50	16-14 GA.	10	50
30422	12-10 GA.	6	Bulk
30422-P25	12-10 GA.	6	25
30423	12-10 GA.	8	Bulk
30423-P25	12-10 GA.	8	25
30424	12-10 GA.	10	Bulk
30424-P25	12-10 GA.	10	25

# SOLDERLESS TERMINALS



30444

## SNAP SPADES / LOCKING FORKS

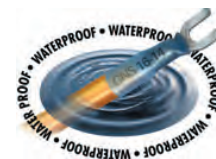
CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.	POLY CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
30142	22-18 GA.	6	Bulk	30344	16-14 GA.	10	Bulk
30142-P50	22-18 GA.	6	50	30344-P50	16-14 GA.	10	50
30143	22-18 GA.	8	Bulk	30442	12-10 GA.	6	Bulk
30143-P50	22-18 GA.	8	50	30442-P25	12-10 GA.	6	25
30144	22-18 GA.	10	Bulk	30443	12-10 GA.	8	Bulk
30144-P50	22-18 GA.	10	50	30443-P25	12-10 GA.	8	25
30342	16-14 GA.	6	Bulk	30444	12-10 GA.	10	Bulk
30342-P50	16-14 GA.	6	50	30444-P25	12-10 GA.	10	25
30343	16-14 GA.	8	Bulk		12-10 GA.	1/4	Bulk
30343-P50	16-14 GA.	8	50		12-10 GA.	1/4	25

## FLANGED FORKS

CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.	POLY CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
				30423FL	12-10 GA.	8	Bulk
				30423FL-P25	12-10 GA.	8	25
				30424FL	12-10 GA.	10	Bulk
				30424FL-P25	12-10 GA.	10	25



## CRIMP 'N SEAL® EXTREME (CONT.)



### QUICK DISCONNECTS: FULLY INSULATED—DOUBLE HUMP



30187



30197



30388

CAT. NO.	WIRE RANGE	TAB SIZE	STYLE	PKG. QTY.
30185	22-18 GA.	.187 X .020	MALE	Bulk
30185-P50	22-18 GA.	.187 X .020	MALE	50
30187	22-18 GA.	.250 X .032	MALE	Bulk
30187-P50	22-18 GA.	.250 X .032	MALE	50
30195	22-18 GA.	.187 X .020	FEMALE	Bulk
30195-P50	22-18 GA.	.187 X .020	FEMALE	50
30197	22-18 GA.	.250 X .032	FEMALE	Bulk
30197-P50	22-18 GA.	.250 X .032	FEMALE	50
30385	16-14 GA.	.187 X .020	MALE	Bulk
30385-P50	16-14 GA.	.187 X .020	MALE	50

CAT. NO.	WIRE RANGE	TAB SIZE	STYLE	PKG. QTY.
30387	16-14 GA.	.250 X .032	MALE	Bulk
30387-P50	16-14 GA.	.250 X .032	MALE	50
30395	16-14 GA.	.187 X .020	FEMALE	Bulk
30395-P50	16-14 GA.	.187 X .020	FEMALE	50
30397	16-14 GA.	.250 X .032	FEMALE	Bulk
30397-P50	16-14 GA.	.250 X .032	FEMALE	50
30487	12-10 GA.	.250 X .032	MALE	Bulk
30487-P25	12-10 GA.	.250 X .032	MALE	25
30497	12-10 GA.	.250 X .032	FEMALE	Bulk
30497-P25	12-10 GA.	.250 X .032	FEMALE	25

### QUICK DISCONNECTS: FULLY INSULATED—SINGLE HUMP

CAT. NO.	WIRE RANGE	TAB SIZE	STYLE	PKG. QTY.
30186	22-18 GA.	.187 X .020	MALE	Bulk
30186-P50	22-18 GA.	.187 X .020	MALE	50
30188	22-18 GA.	.250 X .032	MALE	Bulk
30188-P50	22-18 GA.	.250 X .032	MALE	50
30196	22-18 GA.	.187 X .020	FEMALE	Bulk
30196-P50	22-18 GA.	.187 X .020	FEMALE	50
30198	22-18 GA.	.250 X .032	FEMALE	Bulk
30198-P50	22-18 GA.	.250 X .032	FEMALE	50
30386	16-14 GA.	.187 X .020	MALE	Bulk
30386-P50	16-14 GA.	.187 X .020	MALE	50

CAT. NO.	WIRE RANGE	TAB SIZE	STYLE	PKG. QTY.
30388	16-14 GA.	.250 X .032	MALE	Bulk
30388-P50	16-14 GA.	.250 X .032	MALE	50
30396	16-14 GA.	.187 X .020	FEMALE	Bulk
30396-P50	16-14 GA.	.187 X .020	FEMALE	50
30398	16-14 GA.	.250 X .032	FEMALE	Bulk
30398-P50	16-14 GA.	.250 X .032	FEMALE	50
30488	12-10 GA.	.250 X .032	MALE	Bulk
30488-P25	12-10 GA.	.250 X .032	MALE	25
30498	12-10 GA.	.250 X .032	FEMALE	Bulk
30498-P25	12-10 GA.	.250 X .032	FEMALE	25

# SOLDERLESS TERMINALS



## QUICK DISCONNECTS

CAT. NO.	WIRE RANGE	STUD SIZE	STYLE	PKG. QTY.
30184	22-18 GA.	.187 X .020	MALE	Bulk
30184-P50	22-18 GA.	.187 X .020	MALE	50
30183	22-18 GA.	.250 X .032	MALE	Bulk
30183-P50	22-18 GA.	.250 X .032	MALE	50
30194	22-18 GA.	.187 X .020	FEMALE	Bulk
30194-P50	22-18 GA.	.187 X .020	FEMALE	50
30193	22-18 GA.	.250 X .032	FEMALE	Bulk
30193-P50	22-18 GA.	.250 X .032	FEMALE	50
30384	16-14 GA.	.187 X .020	MALE	Bulk
30384-P50	16-14 GA.	.187 X .020	MALE	50

CAT. NO.	WIRE RANGE	TAB SIZE	STYLE	PKG. QTY.
30383	16-14 GA.	.250 X .032	MALE	Bulk
30383-P50	16-14 GA.	.250 X .032	MALE	50
30394	16-14 GA.	.187 X .020	FEMALE	Bulk
30394-P50	16-14 GA.	.187 X .020	FEMALE	50
30393	16-14 GA.	.250 X .032	FEMALE	Bulk
30393-P50	16-14 GA.	.250 X .032	FEMALE	50
30483	12-10 GA.	.250 X .032	MALE	Bulk
30483-P25	12-10 GA.	.250 X .032	MALE	25
30493	12-10 GA.	.250 X .032	FEMALE	Bulk
30493-P25	12-10 GA.	.250 X .032	FEMALE	25



30483



30493

## QUICK DISCONNECTS

CAT. NO.	WIRE RANGE	TAB SIZE	PKG. QTY.
30191	22-18 GA.	.250 X .032	Bulk
30191-P50	22-18 GA.	.250 X .032	50

CAT. NO.	WIRE RANGE	TAB SIZE	PKG. QTY.
30391	16-14 GA.	.250 X .032	Bulk
30391-P50	16-14 GA.	.250 X .032	50



30391

## BULLETS/RECEPTACLES

CAT. NO.	WIRE RANGE	MATING SIZE	STYLE	PKG. QTY.
30169	22-18 GA.	.156	MALE	Bulk
30169-P50	22-18 GA.	.156	MALE	50
30168	22-18 GA.	.180	MALE	Bulk
30168-P50	22-18 GA.	.180	MALE	50
30179	22-18 GA.	.156	FEMALE	Bulk
30179-P50	22-18 GA.	.156	FEMALE	50
30178	22-18 GA.	.180	FEMALE	Bulk
30178-P50	22-18 GA.	.180	FEMALE	50

CAT. NO.	WIRE RANGE	MATING SIZE	STYLE	PKG. QTY.
30369	16-14 GA.	.156	MALE	Bulk
30369-P50	16-14 GA.	.156	MALE	50
30368	16-14 GA.	.180	MALE	Bulk
30368-P50	16-14 GA.	.180	MALE	50
30379	16-14 GA.	.156	FEMALE	Bulk
30379-P50	16-14 GA.	.156	FEMALE	50
30378	16-14 GA.	.180	FEMALE	Bulk
30378-P50	16-14 GA.	.180	FEMALE	50



30369



30379

## CRIMP 'N SEAL® TERMINAL KITS WATERPROOF HEAT SHRINK CONNECTORS

Crimp 'N Seal® heat shrink connector kits provide a convenient and durable assortment of our most popular waterproof terminals. Each kit is available filled with polyolefin CNS terminals, Clear Seal® CNS terminals, or our CNS Extreme terminals.



### CRIMP 'N SEAL® TERMINAL KIT

Cat No: 99300 CNS Poly Crimp 'N Seal®

Cat No: 99305 Clear Seal®

A versatile kit with everything you need to cut, crimp, heat and seal your connection.

**Kit Includes:**

15	22-18 CNS Butt Splice	20	16-14 1/4 Stud Ring Terminal
15	16-14 CNS Butt Splice	10	16-14 Fully Insulated Male Disc.
15	12-10 CNS Butt Splice	10	16-14 Fully Insulated Female Disc.
20	22-18 #10 Stud Ring Terminal	1	94145 Multi-Purpose Crimp Tool
20	16-14 #10 Stud Ring Terminal	1	94700 Shrink Jet Butane Heat Tool
20	12-10 #10 Stud Ring Terminal		

### CRIMP 'N SEAL® SPLICE KIT

Cat No: 99102 CNS Poly Crimp 'N Seal®

Cat No: 99112 Clear Seal®

A handy kit that includes our high quality ratchet crimp tool and our three most popular splices.

**Kit Includes:**

15	22-18 CNS Butt Splice	15	12-10 CNS Butt Splice
15	16-14 CNS Butt Splice	1	94130 CNS Ratchet Crimp Tool

### CRIMP 'N SEAL® TERMINAL KIT

Cat No: 99110 CNS Poly Crimp 'N Seal®

A comprehensive kit that has the heat shrink terminals you need for almost any applicaton.

**Kit Includes:**

25	22-18 CNS Butt Splice	25	12-10 #10 Stud Locking Fork
50	16-14 CNS Butt Splice	25	16-14 1/4 Stud Ring Terminal
25	12-10 CNS Butt Splice	25	16-14 Fully Insulated Male Disc.
25	22-18 #6 Stud Ring Terminal	25	16-14 Fully Insulated Female Disc.
25	16-14 #6 Stud Ring Terminal	25	12-10 Fully Insulated Male Disc.
25	22-18 #10 Stud Ring Terminal	25	12-10 Fully Insulated Female Disc.
25	16-14 #10 Stud Ring Terminal	25	16-14 Male Bullet Terminal
25	12-10 #10 Stud Ring Terminal	25	16-14 Female Bullet Terminal
25	16-14 3/8 Stud Ring Terminal	1	94400 Cable Tie Installation Tool
25	12-10 1/4 Stud Ring Terminal	100	93230 8 50 lb UV Black Cable Tie
25	16-14 #10 Stud Locking Fork	1	94230 CNS Ratchet Crimp Tool
25	12-10 3/8 Stud Ring Terminal	1	94600 Heavy Duty Butance Torch

# SOLDERLESS TERMINALS

## CRIMP 'N SEAL® TERMINAL KITS (CONT.) WATERPROOF HEAT SHRINK CONNECTORS

### SPLICE 'N SEAL® KIT

Cat No: 99165 CNS Poly

Cat No. 99167 Clear Seal®

Our two most popular heat shrink butt splices in a soft sided zippered case for portability.

**Kit Includes:**

- 20 22-18 CNS Butt Splice
- 20 16-14 CNS Butt Splice
- 15 12-10 CNS Butt Splice
- 1 94145 Multi-Purpose Crimp Tool
- 1 94900 Turbo Lite II Mini Butane Torch
- 1 99160 Soft Sided 3 Compartment Kit



### WATERPROOF WIRING KIT

Cat No: 99166 CNS Poly Crimp 'N Seal®

Cat No: 99168 Clear Seal®

A convenient zippered soft sided carrying case featuring the most popular assortment of heat shrink wiring terminals

**Kit Includes:**

- 20 22-18 CNS Butt Splice
- 20 16-14 CNS Butt Splice
- 15 12-10 CNS Butt Splice
- 20 22-18 #10 Stud Ring Terminal
- 20 16-14 #10 Stud Ring Terminal
- 15 12-10 #10 Stud Ring Terminal
- 1 94230 Crimping Tool 22-10 CCM
- 1 94146 Wire Stripper 22-10 Ga.
- 1 94900 Turbo Lite II Mini Torch
- 1 99161 Soft Sided 6 Compartment Kit





# STANDARD SOLDERLESS TERMINALS

FTZ has expanded its line of standard solderless terminals to include non-insulated and hi temperature terminals as well as adding many new sizes and styles. All of our terminals are now available in bulk or packaged quantities for your convenience.

- High temperature terminals are nickel plated steel for operating temperatures up to 900°F.

## BUTT SPLICES

NYLON CAT. NO.	VINYL CAT. NO.	NON-INSULATED CAT. NO.	HIGH TEMP. CAT. NO.	WIRE RANGE	PKG. QTY.
45130N	45130		40130	22-18 GA.	Bulk
45130N-P1000	45130-P1000		40130-P1000	22-18 GA.	1000
45130N-P100	45130-P100		40130-P100	22-18 GA.	100
45330N	45330		40330	16-14 GA.	Bulk
45330N-P1000	45330-P1000		40330-P1000	16-14 GA.	1000
45330N-P100	45330-P100		40330-P100	16-14 GA.	100
45430N	45430		40430	12-10 GA.	Bulk
45430N-P500	45430-P500		40430-P500	12-10 GA.	500
45430N-P50	45430-P50		40430-P50	12-10 GA.	50
45530N		46530	-	8 GA.	Bulk
45530N-P50		46530-P50	-	8 GA.	50
	45630	46630	-	6 GA.	Bulk
	45630-P25	46630-P25	-	6 GA.	25
	45730	46730	-	4 GA.	BULK
	45730-P25	46730-P25	-	4 GA.	25

## BUTT SPLICES WITH INSULATION GRIP

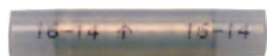
NYLON CAT. NO.	VINYL CAT. NO.	NON-INSULATED CAT. NO.	HIGH TEMP. CAT. NO.	WIRE RANGE	PKG. QTY.
45133N	-	-	-	22-18 GA.	BULK
45133N-P100	-	-	-	22-18 GA.	100
45333N	-	-	-	16-14 GA.	BULK
45333N-P100	-	-	-	16-14 GA.	50
45433N	-	-	-	12-10 GA.	BULK
45433N-P50	-	-	-	12-10 GA.	25

## BUTT SPLICES: STEP DOWN

NYLON CAT. NO.	VINYL CAT. NO.	NON-INSULATED CAT. NO.	HIGH TEMP. CAT. NO.	WIRE RANGE	PKG. QTY.
-	45333	46333	-	22-18 & 16-14 GA.	BULK
-	45333	46333-P100	-	22-18 & 16-14 GA.	100
-	45433	46433	-	16-14 & 12-10 GA.	BULK
-	45433-P50	46433-P50	-	16-14 & 12-10 GA.	50
-	45533	46533	-	12-10 & 8 GA.	BULK
-	45533-P50	46533-P50	-	12-10 & 8 GA.	50
-	45633	46633	-	8 GA. & 6 GA.	BULK
-	45633-P25	46633-P25	-	8 GA. & 6 GA.	25



45330



45330N



45333



45433



45633

# SOLDERLESS TERMINALS

## STANDARD SOLDERLESS TERMINALS (CONT.)

Multi-Purpose tool cuts, strips and crimps.

Part No. 94145  
See Page 82



### BUTT SPLICES: 3 AND 4 WAY TYPE

NYLON CAT. NO.	VINYL CAT. NO.	WIRE RANGE	STYLE	PKG. QTY.
45203N	45203	22-18 GA.	3 WAY	Bulk
45204N		22-18 GA.	4 WAY	Bulk
45303N	45303	16-14 GA.	3 WAY	Bulk
45304N	45304	16-14 GA.	4 WAY	Bulk
45403N	45403	12-10 GA.	3 WAY	Bulk
45404N	45404	12-10 GA.	4 WAY	Bulk



45203



45304N

### CLOSED END CONNECTORS/PIGTAILS

NYLON CAT. NO.	WIRE RANGE	COLOR	PKG. QTY.
45189N	22-14 GA.	CLEAR	Bulk
45389N	22-12 GA.	CLEAR	Bulk
45489N	16-10 GA.	CLEAR	Bulk
45589N	8 GA.	CLEAR	Bulk



45389N

### PARALLEL SPLICES

NYLON CAT. NO.	VINYL CAT. NO.	NON-INSULATED CAT. NO.	WIRE RANGE	PKG. QTY.
-	45131	46131	22-18 GA.	Bulk
-	45131-P100	46131-P100	22-18 GA.	100
-	45331	46331	16-14 GA.	Bulk
-	45331-P100	46331-P100	16-14 GA.	100
-	45431	46431	12-10 GA.	Bulk
-	45431-P50	46431-P50	12-10 GA.	50
-	45531	46531	8 GA.	Bulk
-	45531-P50	46531-P50	8 GA.	50
-	45631	46631	6 GA.	Bulk
-	45631-P25	46631-P25	6 GA.	25
-	45731	46731	4 GA.	Bulk
-	45731-P25	46731-P25	4 GA.	25



45331

## RINGS



45114N



45314

NYLON CAT. NO.	VINYL CAT. NO.	NON-INSULATED CAT. NO.	HIGH TEMP. CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
45112N	45112	46112	40112	22-18 GA.	6	Bulk
45112N-P100	45112-P100	46112-P100	40112-P100	22-18 GA.	6	100
45113N	45113	46113	-	22-18 GA.	8	Bulk
45113N-P100	45113-P100	46113-P100	-	22-18 GA.	8	100
45114N	45114	46114	40114	22-18 GA.	10	Bulk
45114N-P100	45114-P100	46114-P100	40114-P100	22-18 GA.	10	100
45115N	45115	46115	40115	22-18 GA.	1/4	Bulk
45115N-P100	45115-P100	46115-P100	40115-P100	22-18 GA.	1/4	100
45116N	45116	46116	-	22-18 GA.	5/16	Bulk
45116N-P100	45116-P100	46116-P100	-	22-18 GA.	5/16	100
45117N	45117	46117	-	22-18 GA.	3/8	Bulk
45117N-P100	45117-P100	46117-P100	-	22-18 GA.	3/8	100
45312N	45312	46312	40312	16-14 GA.	6	Bulk
45312N-P100	45312-P100	46312-P100	40312-P100	16-14 GA.	6	100
45313N	45313	46313	-	16-14 GA.	8	Bulk
45313N-P100	45313-P100	46313-P100	-	16-14 GA.	8	100
45314N	45314	46314	40314	16-14 GA.	10	Bulk
45314N-P100	45314-P100	46314-P100	40314-P100	16-14 GA.	10	100
45315N	45315	46315	40315	16-14 GA.	1/4	Bulk
45315N-P100	45315-P100	46315-P100	40315-P100	16-14 GA.	1/4	100
45316N	45316	46316	-	16-14 GA.	5/16	Bulk
45316N-P100	45316-P100	46316-P100	-	16-14 GA.	5/16	100
45317N	45317	46317	-	16-14 GA.	3/8	Bulk
45317N-P100	45317-P100	46317-P100	-	16-14 GA.	3/8	100
45412N	45412	46412	40412	12-10 GA.	6	Bulk
45412N-P50	45412-P50	46412-P50	40412-P50	12-10 GA.	6	50
45413N	45413	46413	-	12-10 GA.	8	Bulk
45413N-P50	45413-P50	46413-P50	-	12-10 GA.	8	50
45414N	45414	46414	40414	12-10 GA.	10	Bulk
45414N-P50	45414-P50	46414-P50	40414-P50	12-10 GA.	10	50
45415N	45415	46415	40415	12-10 GA.	1/4	Bulk
45415N-P50	45415-P50	46415-P50	40415-P50	12-10 GA.	1/4	50
45416N	45416	46416	-	12-10 GA.	5/16	Bulk
45416N-P50	45416-P50	46416-P50	-	12-10 GA.	5/16	50
45417N	45417	46417	40417	12-10 GA.	3/8	Bulk
45417N-P50	45417-P50	46417-P50	40417-P50	12-10 GA.	3/8	50
45419N	45419	46419	-	12-10 GA.	1/2	Bulk
45419N-P50	45419-P50	46419-P50	-	12-10 GA.	1/2	50
45514N	45514	46514	-	8 GA.	10	Bulk
45514N-P50	45514-P50	46514-P50	-	8 GA.	10	50
45515N	-	46515	40515	8 GA.	1/4	Bulk
45515N-P50	-	46515-P50	40515-P50	8 GA.	1/4	50
45516N	-	46516	-	8 GA.	5/16	Bulk
45516N-P50	-	46516-P50	-	8 GA.	5/16	50
45517N	-	46517	-	8 GA.	3/8	Bulk
45517N-P50	-	46517-P50	-	8 GA.	3/8	50
45519N	-	46519	-	8 GA.	1/2	Bulk
45519N-P50	-	46519-P50	-	8 GA.	1/2	50
45614N	-	46614	-	6 GA.	10	Bulk
45614N-P25	-	46614-P25	-	6 GA.	10	25
45615N	-	46615	-	6 GA.	1/4	Bulk
45615N-P25	-	46615-P25	-	6 GA.	1/4	25
45616N	-	46616	-	6 GA.	5/16	Bulk
45616N-P25	-	46616-P25	-	6 GA.	5/16	25
45617N	-	46617	40617	6 GA.	3/8	Bulk
45617N-P25	-	46617-P25	40617-P25	6 GA.	3/8	25
45619N	-	46619	-	6 GA.	1/2	Bulk
45619N-P25	-	46619-P25	-	6 GA.	1/2	25
45714N	-	46714	-	4 GA.	10	Bulk
45714N-P25	-	46714-P25	-	4 GA.	10	25
45715N	-	46715	-	4 GA.	1/4	Bulk
45715N-P25	-	46715-P25	-	4 GA.	1/4	25
45716N	-	46716	-	4 GA.	5/16	Bulk
45716N-P25	-	46716-P25	-	4 GA.	5/16	25
45717N	-	46717	40717	4 GA.	3/8	Bulk
45717N-P25	-	46717-P25	40717-P25	4 GA.	3/8	25
45719N	45719	46719	-	4 GA.	1/2	Bulk
45719N-P25	45719-P25	46719-P25	-	4 GA.	1/2	25

# SOLDERLESS TERMINALS

## STANDARD SOLDERLESS TERMINALS (CONT.)

### RINGS: MULTI-STUD

NYLON CAT. NO.	VINYL CAT. NO.	NON-INSULATED CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
4511MSN	4511MS		22-18 GA.	2,4,6	Bulk
4511MSN-P100	4511MS-P100		22-18 GA.	2,4,6	100
4511MN	4511M	4611M	22-18 GA.	6,8,10	Bulk
4511MN-P100	4511M-P100	4611M-P100	22-18 GA.	6,8,10	100
4531MSN	4531MS		16-14 GA.	2,4,6	Bulk
4531MSN-P100	4531MS-P100		16-14 GA.	2,4,6	100
4531MN	4531M	4631M	16-14 GA.	6,8,10	Bulk
4531MN-P100	4531M-P100	4631M-P100	16-14 GA.	6,8,10	100
4541MN	4541M	4641M	12-10 GA.	6,8,10	Bulk
4541MN-P50	4541M-P50	4641M-P50	12-10 GA.	6,8,10	50



4511M

### SPADES/FORKS

NYLON CAT. NO.	VINYL CAT. NO.	NON-INSULATED CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
45122N	45122	46122	22-18 GA.	6	Bulk
45122N-P100	45122-P100	46122-P100	22-18 GA.	6	100
45123N	45123	46123	22-18 GA.	8	Bulk
45123N-P100	45123-P100	46123-P100	22-18 GA.	8	100
45124N	45124	46124	22-18 GA.	10	Bulk
45124N-P100	45124-P100	46124-P100	22-18 GA.	10	100
45322N	45322	46322	16-14 GA.	6	Bulk
45322N-P100	45322-P100	46322-P100	16-14 GA.	6	100
45323N	45323	46323	16-14 GA.	8	Bulk
45323N-P100	45323-P100	46323-P100	16-14 GA.	8	100
45324N	45324	46324	16-14 GA.	10	Bulk
45324N-P100	45324-P100	46324-P100	16-14 GA.	10	100
45422N	45422	46422	12-10 GA.	6	Bulk
45422N-P50	45422-P50	46422-P50	12-10 GA.	6	50
45423N	45423	46423	12-10 GA.	8	Bulk
45423N-P50	45423-P50	46423-P50	12-10 GA.	8	50
45424N	45424	46424	12-10 GA.	10	Bulk
45424N-P50	45424-P50	46424-P50	12-10 GA.	10	50



45123N

## SNAP SPADES/LOCKING FORKS

NYLON CAT. NO.	VINYL CAT. NO.	NON-INSULATED CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
45142N	45142	46142	22-18 GA.	6	Bulk
45142N-P100	45142-P100	46142-P100	22-18 GA.	6	100
45143N	45143	46143	22-18 GA.	8	Bulk
45143N-P100	45143-P100	46143-P100	22-18 GA.	8	100
45144N	45144	46144	22-18 GA.	10	Bulk
45144N-P100	45144-P100	46144-P100	22-18 GA.	10	100
45342N	45342	46342	16-14 GA.	6	Bulk
45342N-P100	45342-P100	46342-P100	16-14 GA.	6	100
45343N	45343	46343	16-14 GA.	8	Bulk
45343N-P100	45343-P100	46343-P100	16-14 GA.	8	100
45344N	45344	46344	16-14 GA.	10	Bulk
45344N-P100	45344-P100	46344-P100	16-14 GA.	10	100
45442N	45442	46442	12-10 GA.	6	Bulk
45442N-P50	45442-P50	46442-P50	12-10 GA.	6	50
45443N	45443	46443	12-10 GA.	8	Bulk
45443N-P50	45443-P50	46443-P50	12-10 GA.	8	50
45444N	45444	46444	12-10 GA.	10	Bulk
45444N-P50	45444-P50	46444-P50	12-10 GA.	10	50
45445N	45445	46445	12-10 GA.	1/4	Bulk
45445N-P50	45445-P50	46445-P50	12-10 GA.	1/4	50



45444N

## FLANGED FORKS

NYLON CAT. NO.	VINYL CAT. NO.	NON-INSULATED CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
45122FLN	45122FL	46122FL	22-18 GA.	6	Bulk
45122FLN-P100	45122FL-P100	46122FL-P100	22-18 GA.	6	100
45123FLN	45123FL	46123FL	22-18 GA.	8	Bulk
45123FLN-P100	45123FL-P100	46123FL-P100	22-18 GA.	8	100
45124FLN	45124FL	46124FL	22-18 GA.	10	Bulk
45124FLN-P100	45124FL-P100	46124FL-P100	22-18 GA.	10	100
45322FLN	45322FL	46322FL	16-14 GA.	6	Bulk
45322FLN-P100	45322FL-P100	46322FL-P100	16-14 GA.	6	100
45323FLN	45323FL	46323FL	16-14 GA.	8	Bulk
45323FLN-P100	45323FL-P100	46323FL-P100	16-14 GA.	8	100
45324FLN	45324FL	46324FL	16-14 GA.	10	Bulk
45324FLN-P100	45324FL-P100	46324FL-P100	16-14 GA.	10	100
			12-10 GA.	6	Bulk
			12-10 GA.	6	50
45423FLN	45423FL	46423FL	12-10 GA.	8	Bulk
45423FLN-P50	45423FL-P50	46423FL-P50	12-10 GA.	8	50
45424FLN	45424FL	46424FL	12-10 GA.	10	Bulk
45424FLN-P50	45424FL-P50	46424FL-P50	12-10 GA.	10	50



45424FLN

# SOLDERLESS TERMINALS

## STANDARD SOLDERLESS TERMINALS (CONT.)

### HOOKS

NYLON CAT. NO.	VINYL CAT. NO.	NON-INSULATED CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
45152N	45152		22-18 GA.	6	Bulk
45152N-P100	45152-P100		22-18 GA.	6	100
45153N	45153		22-18 GA.	8	Bulk
45153N-P100	45153-P100		22-18 GA.	8	100
45154N	45154		22-18 GA.	10	Bulk
45154N-P100	45154-P100		22-18 GA.	10	100
45352N	45352		16-14 GA.	6	Bulk
45352N-P100	45352-P100		16-14 GA.	6	100
45353N	45353		16-14 GA.	8	Bulk
45353N-P100	45353-P100		16-14 GA.	8	100
45354N	45354	46354	16-14 GA.	10	Bulk
45354N-P100	45354-P100	46354-P100	16-14 GA.	10	100
45452N	45452	46452	12-10 GA.	6	Bulk
45452N-P50	45452-P50	46452-P50	12-10 GA.	6	50
45453N	45453		12-10 GA.	8	Bulk
45453N-P50	45453-P50		12-10 GA.	8	50
45454N	45454		12-10 GA.	10	Bulk
45454N-P50	45454-P50		12-10 GA.	10	50



45354N

### QUICK DISCONNECTS: FULLY INSULATED: DOUBLE HUMP TYPE

NYLON CAT. NO.	WIRE RANGE	TAB SIZE	STYLE	PKG. QTY.	NYLON CAT. NO.	WIRE RANGE	TAB SIZE	STYLE	PKG. QTY.
45185N	22-18 GA.	.187 X .020	MALE	Bulk	45387N	16-14 GA.	.250 X .032	MALE	Bulk
45185N-P100	22-18 GA.	.187 X .020	MALE	100	45387N-P100	16-14 GA.	.250 X .032	MALE	100
45187N	22-18 GA.	.250 X .032	MALE	Bulk	45395N	16-14 GA.	.187 X .020	FEMALE	Bulk
45187N-P100	22-18 GA.	.250 X .032	MALE	100	45395N-P100	16-14 GA.	.187 X .020	FEMALE	100
45195N	22-18 GA.	.187 X .020	FEMALE	Bulk	45397N	16-14 GA.	.250 X .032	FEMALE	Bulk
45195N-P100	22-18 GA.	.187 X .020	FEMALE	100	45397N-P100	16-14 GA.	.250 X .032	FEMALE	100
45197N	22-18 GA.	.250 X .032	FEMALE	Bulk	45487N	12-10 GA.	.250 X .032	MALE	Bulk
45197N-P100	22-18 GA.	.250 X .032	FEMALE	100	45487N-P50	12-10 GA.	.250 X .032	MALE	50
45385N	16-14 GA.	.187 X .020	MALE	Bulk	45497N	12-10 GA.	.250 X .032	FEMALE	Bulk
45385N-P100	16-14 GA.	.187 X .020	MALE	100	45497N-P50	12-10 GA.	.250 X .032	FEMALE	50



45387N

### QUICK DISCONNECTS: FULLY INSULATED: SINGLE HUMP TYPE

NYLON CAT. NO.	WIRE RANGE	TAB SIZE	STYLE	PKG. QTY.	NYLON CAT. NO.	WIRE RANGE	TAB SIZE	STYLE	PKG. QTY.
45186N	22-18 GA.	.187 X .020	MALE	Bulk	45388N	16-14 GA.	.250 X .032	MALE	Bulk
45186N-P100	22-18 GA.	.187 X .020	MALE	100	45388N-P100	16-14 GA.	.250 X .032	MALE	100
45188N	22-18 GA.	.250 X .032	MALE	Bulk	45396N	16-14 GA.	.187 X .020	FEMALE	Bulk
45188N-P100	22-18 GA.	.250 X .032	MALE	100	45396N-P100	16-14 GA.	.187 X .020	FEMALE	100
45196N	22-18 GA.	.187 X .020	FEMALE	Bulk	45398N	16-14 GA.	.250 X .032	FEMALE	Bulk
45196N-P100	22-18 GA.	.187 X .020	FEMALE	100	45398N-P100	16-14 GA.	.250 X .032	FEMALE	100
45198N	22-18 GA.	.250 X .032	FEMALE	Bulk	45488N	12-10 GA.	.250 X .032	MALE	Bulk
45198N-P100	22-18 GA.	.250 X .032	FEMALE	100	45488N-P50	12-10 GA.	.250 X .032	MALE	50
45386N	16-14 GA.	.187 X .020	MALE	Bulk	45498N	12-10 GA.	.250 X .032	FEMALE	Bulk
45386N-P100	16-14 GA.	.187 X .020	MALE	100	45498N-P50	12-10 GA.	.250 X .032	FEMALE	50

## QUICK DISCONNECTS

NYLON CAT. NO.	VINYL CAT. NO.	NON-INSULATED CAT. NO.	WIRE RANGE	TAB SIZE	STYLE	PKG. QTY.
45184N	45184	46184	22-18 GA.	0.187 X 0.020	MALE	Bulk
45184N-P100	45184-P100	46184-P100	22-18 GA.	0.187 X 0.020	MALE	100
45183N	45183	46183	22-18 GA.	0.250 X 0.032	MALE	Bulk
45183N-P100	45183-P100	46183-P100	22-18 GA.	0.250 X 0.032	MALE	100
45194N	45194	46194	22-18 GA.	0.187 X 0.020	FEMALE	Bulk
45194N-P100	45194-P100	46194-P100	22-18 GA.	0.187 X 0.020	FEMALE	100
45193N	45193	46193	22-18 GA.	0.250 X 0.032	FEMALE	Bulk
45193N-P100	45193-P100	46193-P100	22-18 GA.	0.250 X 0.032	FEMALE	100
45384N	45384	46384	16-14 GA.	0.187 X 0.020	MALE	Bulk
45384N-P100	45384-P100	46384-P100	16-14 GA.	0.187 X 0.020	MALE	100
45383N	45383	46383	16-14 GA.	0.250 X 0.032	MALE	Bulk
45383N-P100	45383-P100	46383-P100	16-14 GA.	0.250 X 0.032	MALE	100
45394N	45394	46394	16-14 GA.	0.187 X 0.020	FEMALE	Bulk
45394N-P100	45394-P100	46394-P100	16-14 GA.	0.187 X 0.020	FEMALE	100
45393N	45393	46393	16-14 GA.	0.250 X 0.032	FEMALE	Bulk
45393N-P100	45393-P100	46393-P100	16-14 GA.	0.250 X 0.032	FEMALE	100
45483N	45483	46483	12-10 GA.	0.250 X 0.032	MALE	Bulk
45483N-P50	45483-P50	46483-P50	12-10 GA.	0.250 X 0.032	MALE	50
45493N	45493	46493	12-10 GA.	0.250 X 0.032	FEMALE	Bulk
45493N-P50	45493-P50	46493-P50	12-10 GA.	0.250 X 0.032	FEMALE	50



45383N



45393

## SPECIALTY QUICK DISCONNECTS

NYLON CAT. NO.	VINYL CAT. NO.	WIRE RANGE	TAB SIZE	STYLE	PKG. QTY.
45177N	-	22-18 GA.	0.250 X 0.032	FEMALE FLAG	Bulk
45177N-P100	-	22-18 GA.	0.250 X 0.032	FEMALE FLAG	100
45377N	-	16-14 GA.	0.250 X 0.032	FEMALE FLAG	Bulk
45377N-P100	-	16-14 GA.	0.250 X 0.032	FEMALE FLAG	100
45477N	-	12-10 GA.	0.250 X 0.032	FEMALE FLAG	Bulk
45477N-P50	-	12-10 GA.	0.250 X 0.032	FEMALE FLAG	50
45191N	45191	22-18 GA.	0.250 X 0.032	PIGGY BACK	Bulk
45191N-P100	45191-P100	22-18 GA.	0.250 X 0.032	PIGGY BACK	100
45391N	45391	16-14 GA.	0.250 X 0.032	PIGGY BACK	Bulk
45391N-P100	45391-P100	16-14 GA.	0.250 X 0.032	PIGGY BACK	100



45377N



45391

# SOLDERLESS TERMINALS

## STANDARD SOLDERLESS TERMINALS (CONT.)

### BULLETS/RECEPTACLES

NYLON CAT. NO.	VINYL CAT. NO.	NON-INSULATED CAT. NO.	WIRE RANGE	MATING SIZE	STYLE	PKG. QTY.
45169N	45169	46169	22-18 GA.	.156	MALE	Bulk
45169N-P100	45169-P100	46169-P100	22-18 GA.	.156	MALE	100
45168N	45168	46168	22-18 GA.	.180	MALE	Bulk
45168N-P100	45168-P100	46168-P100	22-18 GA.	.180	MALE	100
45179N	-	-	22-18 GA.	.156	FEMALE	Bulk
45179N-P100	-	-	22-18 GA.	.156	FEMALE	100
45178N	-	-	22-18 GA.	.180	FEMALE	Bulk
45178N-P100	-	-	22-18 GA.	.180	FEMALE	100
45369N	45369	46369	16-14 GA.	.156	MALE	Bulk
45369N-P100	45369-P100	46369-P100	16-14 GA.	.156	MALE	100
45368N	45368	46368	16-14 GA.	.180	MALE	Bulk
45368N-P100	45368-P100	46368-P100	16-14 GA.	.180	MALE	100
45379N	-	-	16-14 GA.	.156	FEMALE	Bulk
45379N-P100	-	-	16-14 GA.	.156	FEMALE	100
45378N	-	-	16-14 GA.	.180	FEMALE	Bulk
45378N-P100	-	-	16-14 GA.	.180	FEMALE	100



45368N



45378N

### PIN TERMINALS

NYLON CAT. NO.	VINYL CAT. NO.	NON-INSULATED CAT. NO.	WIRE RANGE	PIN DIAMETER	PKG. QTY.
45165N	45165	46165	22-18 GA.	0.08	Bulk
45165N-P100	45165-P100	46165-P100	22-18 GA.	0.08	100
45365N	45365	46365	16-14 GA.	0.08	Bulk
45365N-P100	45365-P100	46365-P100	16-14 GA.	0.08	100
45465N	45465	46465	12-10 GA.	0.11	Bulk
45465N-P50	45465-P50	46465-P50	12-10 GA.	0.11	50



45465



## WIRE TAPS & SPECIALTY CONNECTORS

CAT. NO.	WIRE RANGE	COLOR	TYPE	PKG. QTY.
45900	22-14 GA.	CLEAR AND BLUE	Moisture resistant seal	Bulk
45901	22-14 GA.	CLEAR	Dry Environment applications	Bulk
45903	22-16 GA.	RED	Dual element action	Bulk
	22-16 GA.	RED	Flame retardant tap	Bulk
45905	18-14 GA.	LIGHT BLUE	Flame retardant tap	Bulk
45906	18-14 GA.	TAN	Dry environment applications	Bulk
45908	18-14 GA.	DARK BLUE	Moisture resistant applications	Bulk
45910	18-14 GA.	BLACK	Disconnect	Bulk
45911	18-14 GA.	BROWN	Flame retardant tap	Bulk
45912	12-10 GA.	YELLOW	Tap and parallel	Bulk
45601	22-18 GA.	RED	Flame retardant tap	Bulk
45600	18-14 GA.	LIGHT BLUE	Tap and parallel	Bulk
45611	22-18 GA.	RED	T-tap disconnect	Bulk
45610	18-14 GA.	BLUE	T-tap disconnect	Bulk
45612	12 GA.	YELLOW	T-tap disconnect	Bulk
45613	18-14 GA.	BLUE	Auto fuse holder	Bulk
94147	Wire tap installation tool for all taps.			Bulk



45908



45912



45611



45610



45612

# SOLDERLESS TERMINALS

## STANDARD SOLDERLESS TERMINALS (CONT.)

### SPECIALTY CONNECTORS: VINYL HARD SHELL

CAT. NO.	WIRE RANGE	COLOR	PKG. QTY.
41101	22-16 GA.	GRAY	Bulk
41103	22-14 GA.	BLUE	Bulk
41203	18-14 GA.	ORANGE	Bulk
41205	18-10 GA.	YELLOW	Bulk
41305	18-8 GA.	RED	Bulk



### SPECIALTY CONNECTORS: VINYL WITH SKIRT

CAT. NO.	WIRE RANGE	COLOR	PKG. QTY.
	18-10 GA.	RED	Bulk
	14-8 GA.	GRAY	Bulk
	12-6 GA.	BLUE	Bulk



### SPECIALTY CONNECTORS: WINGED WIRE CONNECTORS

CAT. NO.	WIRE RANGE	COLOR	PKG. QTY.
	22-12 GA.	YELLOW	Bulk
41146	18-6 GA.	RED	Bulk
41148	GROUNDING CONNECTOR	GREEN	Bulk



### SPECIALTY CONNECTORS: COMBINATION WITH FLEXIBLE SKIRT

CAT. NO.	WIRE RANGE	COLOR	PKG. QTY.
41152	22-12 GA.	ORANGE/BLUE	Bulk
41154	18-12 GA.	RED/YELLOW	BULK
41156	14-6 GA.	BLUE/GRAY	Bulk



## WIRE FERRULES/CORD END TERMINALS

- Temperature Range -40F to 221F
- Maximum Voltage rating 600Volts
- Tin plated Copper Pin, Nylon insulated
- Ideal for use where stranded wire is frequently connected and disconnected
- 22-12 AWG use tool number 94147



94147

### SINGLE WIRE PIN TERMINALS (FERRULES)

CAT NO.	WIRE SIZE (AWG)	WIRE SIZE (METRIC)	PIN LENGTH	COLOR	DIE CAVITY	QTY/PACK
41602	28 AWG	0.19 mm <sup>2</sup>	0.315	GREY		500
41604	26 AWG	0.25 mm <sup>2</sup>	0.315	LIGHT BLUE	0.25	500
41606	24 AWG	0.39 mm <sup>2</sup>	0.315	TURQUOISE	0.34	500
41608	22 AWG	0.5 mm <sup>2</sup>	0.315	ORANGE	0.50	500
41611	20 AWG	0.75 mm <sup>2</sup>	0.315	WHITE	0.75	500
41615	18 AWG	1.0 mm <sup>2</sup>	0.315	YELLOW	1.0	500
41618	16 AWG	1.5 mm <sup>2</sup>	0.315	RED	1.5	500
41622	14 AWG	2.5 mm <sup>2</sup>	0.315	BLUE	2.5	500
41627	12 AWG	4.0 mm <sup>2</sup>	0.472	GREY	4.0	500
41629	10 AWG	6.0 mm <sup>2</sup>	0.472	BLACK	6.0	500
41631	8 AWG	10 mm <sup>2</sup>	0.472	IVORY	10.0	500
41633	6 AWG	16 mm <sup>2</sup>	0.472	GREEN	16.0	500
41635	4 AWG	25 mm <sup>2</sup>	0.630	BROWN	25.0	500
41638	2 AWG	35 mm <sup>2</sup>	0.709	BEIGE	35.0	500
41640	1/0 AWG	50 mm <sup>2</sup>	0.787	OLIVE	50.0	500
41642	2/0 AWG	70 mm <sup>2</sup>	0.827	YELLOW		100
41643	3/0 AWG	95 mm <sup>2</sup>	0.984	RED		100
41644	4/0 AWG	120 mm <sup>2</sup>	1.063	BLUE		100
41645	250/300 AWG	150 mm <sup>2</sup>	1.260	YELLOW		100

### TWIN WIRE PIN TERMINALS (FERRULES)

CAT NO.	WIRE SIZE (AWG)	WIRE SIZE (METRIC)	PIN LENGTH	COLOR	DIE CAVITY	QTY/PACK
41701	2*22 AWG	2*0.5 mm <sup>2</sup>	0.315	ORANGE	1.0	500
41702	2*20 AWG	2*0.75 mm <sup>2</sup>	0.315	WHITE	1.5	500
41703	2*20 AWG	2*0.75 mm <sup>2</sup>	0.394	WHITE	1.5	500
41704	2*18 AWG	2*1.0 mm <sup>2</sup>	0.315	YELLOW	2.5	500
41705	2*18 AWG	2*1.0 mm <sup>2</sup>	0.394	YELLOW	2.5	500
41706	2*16 AWG	2*1.5 mm <sup>2</sup>	0.315	RED	2.5	500
41707	2*16 AWG	2*1.5 mm <sup>2</sup>	0.472	RED	2.5	500
41708	2*14 AWG	2*2.5 mm <sup>2</sup>	0.394	BLUE	4.0	500
41709	2*14 AWG	2*2.5 mm <sup>2</sup>	0.512	BLUE	4.0	500
41710	2*12 AWG	2*4.0 mm <sup>2</sup>	0.472	GREY	6.0	500
41711	2*10 AWG	2*6.0 mm <sup>2</sup>	0.551	BLACK	10.0	500
41712	2*8 AWG	2*10.0 mm <sup>2</sup>	0.551	IVORY	16.0	500
41713	2*6 AWG	2*16.0 mm <sup>2</sup>	0.551	GREEN	35.0	500

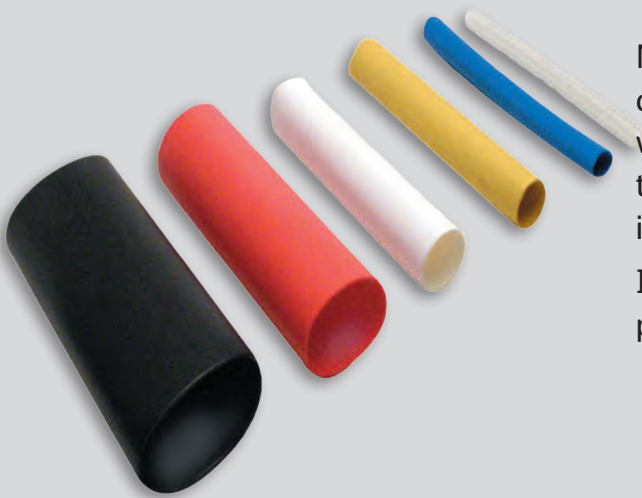


## HEAT SHRINK TUBING

No matter what the application, FTZ's comprehensive line of heat shrink tubing has you covered. From our heavy wall tubing for the harshest environments to our low temperature thin wall for sensitive electronics, FTZ has it in stock in a variety of colors and sizes.

If custom work is what you need we offer private labeling, printing and special cut lengths to your specifications.

- Heavy Wall MIL-SPEC Heat Shrink Tubing
- High Ratio Heavy Wall Heat Shrink Tubing
- Heavy Wall Repair Sleeves
- Heavy Wall End Caps
- Dual Wall Heat Shrink Tubing
- High Ratio Dual Wall Heat Shrink Tubing
- Translucent Dual Wall Heat Shrink Tubing
- Semi-Rigid Heat Shrink Tubing
- Kynar Heat Shrink Tubing
- Thin Wall Heat Shrink Tubing
- Low Temperature Thin Wall Heat Shrink Tubing
- Thin Wall Disk Packs
- Heat Shrink Tubing Specifications



# HEAT SHRINK TUBING GUIDE

	THIN WALL	LOW TEMP. THIN WALL	DUAL WALL
<b>MATERIAL</b>	Polyolefin	Polyolefin	Polyolefin
<b>SHRINK RATIO</b>	2:1	2:1	3:1
<b>DESCRIPTION</b>	A flexible, non-adhesive lined general purpose tubing	A flexible non-adhesive lined general purpose tubing with a lower pshrink temperature Ideal for sesitive electronic applications.	A flexible adhesive lined tubing that provides a water-tight gas-tight seal for connectors and splices.
<b>COLORS AVAILABLE</b>	Black, Red, Clear, Blue, Green, White, Yellow	Black	Black, Red, Clear, Blue Green, White, Yellow
<b>DIAMETERS AVAILABLE</b>	3/64-4	3/64-1	1/8-1 1/2
<b>LENGTHS AVAILABLE</b>	Bulk Spools, Small Spool, 48, 12, 6, 8 Disk Packs, & Special Lengths	Bulk Spools, Small Spool, 48, 12, 6 & Special Lengths	48, 12, 6 & Special Lengths
<b>MIL-SPEC</b>	MIL-DTL-23053/5C	AMS-DTL-23053/5 Class 1 & 3	OEM Approvals
<b>UL LISTED</b>	UL224-VW-1 (Except Clear)	UL224-VW-1	



# HEAT SHRINK TUBING

HIGH RATIO DUAL WALL	SEMI-RIGID DUAL WALL	MIL-SPEC HEAVY WALL	HIGH RATIO HEAVY WALL	KYNAR
Polyolefin	Polyolefin	Polyolefin	Polyolefin	Polyvinylidene Fluoride
4:1	2.5:1	3:1	6:1	2:1
A semi-rigid adhesive lined tubing that accommodates a wide variety of connector shapes and configurations.	A semi-rigid adhesive lined tubing that provides a water-tight gas-tight seal for connectors and splices.	A rigid adhesive lined tubing with high flame resistance suitable for direct burial. Ideal for heavy duty applications.	A rigid, adhesive lined tubing with high shrink ratio to accommodate a wide variety of connector shapes and configurations.	A semi-rigid adhesive lined tubing that is ideal for applications requiring superior chemical solvent resistance.
Black & Clear	Black & Red Color- Coded By Size	Black & Red	Black	Clear
.225, .293, .427, .700	1/8 -1, 1.5, 2	.30, .40, .50, 1.75, 2.75, 3.5	.75, 1.3	1.125-1
48, 12, 6 & Special Lengths	48, 12, 6 & Special Lengths	48, 12, 6, 1.5 & Special Lengths	48, 12, 6 & Special Lengths	48, 12, 6 & Special Lengths
MIL-DTL-23053/4 Class 3	AMS-DTL-23053/4 Class 1	AMS-DTL-23053/15 Class 1		AMS-DTL-23053/8 Class 1
UL File E-85381	UL File E157227	UL 486 B&D		UL File E-39100

# HEAT SHRINK TUBING SPECIFICATIONS

SPECIFICATION	HEAVY WALL (3:1)	HIGH RATIO (6:1)
UL MIL SPEC. CSA	UL 486D MIL-DTL-23053/15 Class 1 C22.2 NO. 198.2	- MIL-DTL 24053/15 -
Continuous Operating Temperature Minimum Shrink Temperature	-55° C to 110° C 120° C	-55° C to 110° C 120° C
Tensile Strength Heat Shock (No Cracking or Flowing) Elongation	2100 psi 4 Hours @ 225° C 600%	2100 psi 4 Hours @ 225° C 600%
Low Temp. Flexibility (No Cracking) Longitudinal Change Flame Retardant	4 hours @ -55° C +1% to -10% Yes	4 hours @ -55° C +1% to -10% Yes
Dielectric Strength Volume Resistivity	500 V/Mil 10 <sup>16</sup> ohm-cm	500 V/Mil 10 <sup>16</sup> ohm-cm
Corrosion Resistance Fungus Resistance Fluid Resistance	Non-Corrosive No Growth Good to Excellent	Non-Corrosive No Growth Excellent

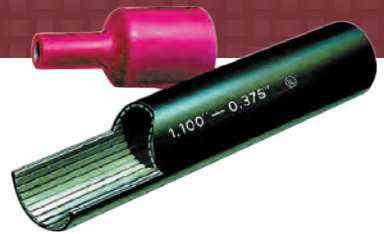
SPECIFICATION	REPAIR SLEEVES (3:1)	END CAPS (3:1)
UL MIL SPEC. CSA	- - -	- - -
Continuous Operating Temperature Minimum Shrink Temperature	-55° C to 110° C 120° C	-55° C to 110° C 120° C
Tensile Strength Heat Shock (No Cracking or Flowing) Elongation	2700 psi 4 Hours @ 225° C 600%	2100 psi 4 Hours @ 225° C 600%
Low Temp. Flexibility (No Cracking) Longitudinal Change Flame Retardant	- - No	4 hours @ -55° C - Yes
Dielectric Strength Volume Resistivity	700 V/Mil 1.9E18 ohm-cm	500 V/Mil 10 <sup>16</sup> ohm-cm
Corrosion Resistance Fungus Resistance Fluid Resistance	Non-Corrosive No Growth Excellent	Non-Corrosive No Growth Good to Excellent

# HEAT SHRINK TUBING

SPECIFICATION	DUAL WALL (3:1)	HIGH RATIO DUAL WALL	SEMI-RIGID DUAL WALL
UL MIL SPEC. CSA	Industrial, electronic and automotive OEM approvals	UL FILE-E85381 - -	UL FILE-EI57227 AMS-DTL-23053/4, Class 1
Continuous Operating Temperature Minimum Shrink Temperature	-55° C to 110° C 120° C	-40° C to 130° C 135° C	-55° C to 110° C 135° C
Tensile Strength Heat Shock (No Cracking or Flowing) Elongation	2200 psi 4 Hours @ 250° C 400%	1300 psi 4 Hours @ 225° C 200%	2200 psi 4 Hours @ 250° C 400%
Low Temp. Flexibility (No Cracking) Longitudinal Change Flame Retardant	4 hours @ -55° C +1% to -15% Jacket Only (Except Clear)	4 hours @ -40° C +0% to -10% Yes	4 hours @ -55° C - No
Dielectric Strength Volume Resistivity	600 V/Mil 10 <sup>16</sup> ohm-cm	350 V/Mil 10 <sup>12</sup> ohm-cm	900 V/Mil 10 <sup>15</sup> ohm-cm
Corrosion Resistance Fungus Resistance Fluid Resistance	Non-Corrosive No Growth Good to Excellent	Non-Corrosive Non-Nutrient Excellent	No Corrosive Non-Nutrient Excellent

SPECIFICATION	KYNAR	THIN WALL (2:1)	
UL MIL SPEC. CSA	UL224-VW-1 AMS-DTL-23053/18 Class 1; AMS-DTL-23053/8 CSA FILE LR38227 OFT	UL224 125° C, 600V, VW-1 MIL-DTL-23053/5 Class 1 & 3 CSA C22.2 No. 198.1	
Continuous Operating Temperature Minimum Shrink Temperature	-55° C to 170° C 175° C	-55° C to 135° C 90° C	
Tensile Strength Heat Shock (No Cracking or Flowing) Elongation	5500 psi 4 Hours @ 250° C 350%	1500 psi 4 Hours @ 250° C 400%	
Low Temp. Flexibility (No Cracking) Longitudinal Change Flame Retarded	4 hours @ -55° C +0% to -10% YES (UL224-VW-1)	4 hours @ -55° C +5% to -5% Colors Only	
Dielectric Strength Volume Resistivity	900 V/Mil 10 <sup>14</sup> ohm-cm	600 V/Mil 10 <sup>14</sup> ohm-cm	
Corrosion Resistance Fungus Resistance Fluid Resistance	Non-Corrosive No Growth Excellent	Non-Corrosive No Growth Excellent	





# HEAVY WALL HEAT SHRINK TUBING

## HEAVY WALL MIL-SPEC HEAT SHRINK TUBING WITH SEALANT

- For maximum protection in the harshest environments
- Rigid heavy wall polyolefin with a 3:1 shrink ratio provides the highest strain relief, abrasion and corrosion resistance
- Flame retardant heavy wall tubing meets MIL Spec 23053/15 Class 1 requirements for flame retardancy
- UL listed 486 D Standard, and CSA certified for direct burial applications

48"	12"	6"	1-1/2"	ID EXP.	ID REC.	COLOR	WIRE RANGE	MAX WALL THICKNESS
21948	21912	21906		0.300	0.100	BLACK	18-14 GA.	.060
21048	21012	21006		0.300	0.100	RED	18-14 GA.	.060
21148	21112	21106		0.400	0.150	BLACK	14-6 GA.	.070
21848	21812	21806		0.400	0.150	RED	14-6 GA.	.070
20548	20512	20506	20501	0.510	0.160	BLACK	12-4 GA.	.080
20548R	20512R	20506R	20501R	0.510	0.160	RED	12-4 GA.	.080
21248	21212	21206	21201	0.750	0.220	BLACK	8-1 GA.	.090
21348	21312	21306	21301	0.750	0.220	RED	8-1 GA.	.090
21448	21412	21406	21401	1.10	0.375	BLACK	2-4/0	.120
21548	21512	21506	21501	1.10	0.375	RED	2-4/0	.120
21648	21612	21606		1.50	0.500	BLACK	4/0-400MCM	.160
20648	20612	20606		1.50	0.500	RED	4/0-400MCM	.160
21748	21712	21706		2.00	0.750	BLACK	500-1000MCM	.160
20748	20712	20706		2.00	0.750	RED	500-1000MCM	.160
20148	20112			2.70	0.870	BLACK	600-1000MCM	.160
20248	20212			3.50	1.20	BLACK	800-1300MCM	.160
20348	20312			4.70	1.60	BLACK	1300-2300MCM	.170

## HEAVY WALL HEAT SHRINK TUBING KIT

- Assortment of our most popular MIL-SPEC heavy wall sizes and colors
- Handy plastic case keeps your tubing organized and stores easily



CATALOG NO: 27095  
 KIT CONSISTS OF THE FOLLOWING 6 LENGTHS

QUANTITY	ITEM	COLOR	ID EXP.	ID REC.
10	21106	BLACK	0.400	0.150
10	21806	RED	0.400	0.150
4	21206	BLACK	0.750	0.220
4	21306	RED	0.750	0.220
4	21406	BLACK	1.10	0.375
4	21506	RED	1.10	0.375

# HEAT SHRINK TUBING

## HIGH-RATIO HEAVY WALL HEAT SHRINK TUBING WITH SEALANT

- Extremely versatile 6:1 shrink ratio polyolefin tubing can accommodate a wide variety of connector shapes and configurations
- Rigid heavy wall and thermoplastic adhesive lining provides a gas-tight, water-tight seal for the toughest applications



48"	12"	6"	ID EXP.	ID REC.	COLOR	WIRE RANGE	MAX WALL THICKNESS
27100-48	27100-12	27100-6	.750	0.125	BLACK	14-1 GA.	.123
27101-48	27101-12	27101-6	1.30	.220	BLACK	8-4/0	.135
27102-48	27102-12	27102-6	1.75	.290	BLACK	2-750MCM	.140
27103-48	27103-12	27103-6	2.00	.330	BLACK	1/0-1000MCM	.170
27104-48	27104-12	27104-6	2.75	.460	BLACK	3/0-1200MCM	.190
27105-48	27105-12	27105-6	3.50	0.673	BLACK	500-1300MCM	.170

Please contact factory for additional cut lengths in any size.

## HEAVY WALL HEAT SHRINK TUBING – RAILESS REPAIR SLEEVES WITH SEALANT

- A wraparound 3:1 shrink ratio insulation polyolefin tubing that easily installs in repair and splice applications
- No need to shut down equipment or disconnect electrical connection to environmentally protect application



36"	12"	ID EXP.	ID REC.	COLOR	WIRE RANGE	MAX WALL THICKNESS
27201-36	27201-12	1.20	.240	BLACK	8-3/0	.080
27202-36	27202-12	1.80	.600	BLACK	2/0-400MCM	.080
27203-36	27203-12	2.70	.950	BLACK	400-1000MCM	.080
27204-36	27204-12	3.60	1.30	BLACK	1000-2000MCM	.080
27205-36	27205-12	4.95	1.65	BLACK	Multi-Conductor	.080
27206-36	27206-12	6.75	2.50	BLACK	Multi-Conductor	.080

## HEAVY WALL HEAT SHRINK TUBING – END CAPS WITH SEALANT

- Quick and effective method for sealing cable, pipe and conduit ends
- Superior resistance to weathering and moisture contamination
- 3:1 shrink ratio polyolefin tubing



CAT NO.	LENGTH	ID EXP.	ID REC.	COLOR	WIRE RANGE	MAX WALL THICKNESS
21268	3.50	.750	.220	BLACK	8-4/0	.135
21468	4.00	1.30	.430	BLACK	4/0-500MCM	.140
21768	4.50	2.05	.750	BLACK	400-1000MCM	.170

# DUAL WALL HEAT SHRINK TUBING

## DUAL WALL HEAT SHRINK TUBING WITH SEALANT

- A flexible alternative to heavy wall tubing for light duty applications
- Provides environmental and flame retardant protection for electrical and electronic connections
- Ideal for a variety of applications including automotive, truck, and marine harnesses
- Polyolefin Material

### BLACK

48"	12"	6"	ID EXP.	ID REC.	WIRE RANGE	MAX WALL THICKNESS
29004-48	29004-12	29004-6	1/8 (.125)	0.040	30-18 GA.	.040
29005-48	29005-12	29005-6	3/16 (.187)	0.060	20-14 GA.	.040
29006-48	29006-12	29006-6	1/4 (.25)	0.080	18-10 GA.	.040
29008-48	29008-12	29008-6	3/8 (.375)	0.125	12-6 GA.	.060
29009-48	29009-12	29009-6	1/2 (.500)	0.160	8-4 GA.	.070
29010-48	29010-12	29010-6	3/4 (.750)	0.250	4-2/0	.070
29011-48	29011-12	29011-6	1 (1.00)	0.320	2-4/0	.100
29012-48	29012-12	29012-6	1 1/4 (1.25)	0.416	1-250MCM	.100
29013-48	29013-12	29013-6	1 1/2 (1.50)	0.510	2/0-350MCM	.100

Additional cut lengths are available in all sizes. Consult factory for details.

## DUAL WALL HEAT SHRINK TUBING WITH SEALANT

- Clear polyolefin tubing allows for visual inspection of underlying material

### CLEAR

48"	12"	6"	ID EXP.	ID REC.	WIRE RANGE	MAX WALL THICKNESS
29004C-48	29004C-12	29004C-6	1/8 (.125)	0.040	30-18 GA.	.040
29005C-48	29005C-12	29005C-6	3/16 (.187)	0.060	20-14 GA.	.040
29006C-48	29006C-12	29006C-6	1/4 (.25)	0.080	18-10 GA.	.040
29008C-48	29008C-12	29008C-6	3/8 (.375)	0.125	12-6 GA.	.060
29009C-48	29009C-12	29009C-6	1/2 (.500)	0.160	8-4 GA.	.070
29010C-48	29010C-12	29010C-6	3/4 (.750)	0.250	4-2/0	.070
29011C-48	29011C-12	29011C-6	1 (1.00)	0.320	2-4/0	.100
29012C-48	29012C-12	29012C-6	1 1/4 (1.25)	0.416	1-250MCM	.100
29013C-48	29013C-12	29013C-6	1 1/2 (1.50)	0.510	2/0-350MCM	.100

Additional cut lengths are available in all sizes. Consult factory for details.

# HEAT SHRINK TUBING

## DUAL WALL HEAT SHRINK TUBING WITH SEALANT

- Provides effective method for color-coding electrical harnesses
- Polyolefin Material

### COLORS

48"	12"	6"	ID EXP.	ID REC.	COLOR	WIRE RANGE	MAX WALL THICKNESS
29004(cc)-48	29004(cc)-12	29004(cc)-6	1/8 (.125)	0.040	Specify	30-18 GA.	.040
29005(cc)-48	29005(cc)-12	29005(cc)-6	3/16 (.187)	0.060	Specify	20-14 GA.	.040
29006(cc)-48	29006(cc)-12	29006(cc)-6	1/4 (.25)	0.080	Specify	18-10 GA.	.040
29008(cc)-48	29008(cc)-12	29008(cc)-6	3/8 (.375)	0.125	Specify	12-6 GA.	.060
29009(cc)-48	29009(cc)-12	29009(cc)-6	1/2 (.500)	0.160	Specify	8-4 GA.	.070
29010(cc)-48	29010(cc)-12	29010(cc)-6	3/4 (.750)	0.250	Specify	4-2/0	.070
29011(cc)-48	29011(cc)-12	29011(cc)-6	1 (1.00)	0.320	Specify	2-4/0	.100
29012(cc)-48	29012(cc)-12	29012(cc)-6	1 1/4 (1.25)	0.416	Specify	1-250MCM	.100
29013(cc)-48	29013-12	29013-6	1 1/2 (1.50)	0.510	Specify	2/0-350MCM	.100

To determine color, replace (cc) with color suffix listed below:

R	RED	BL	BLUE	Y	YELLOW	W	WHITE	G	GREEN
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(example: For Blue 1/4 Exp. ID. 6 Length; catalog number is 29006BL-6)

Additional cut lengths are available in all sizes and colors. Consult factory for details.

## HIGH-RATIO DUAL WALL HEAT SHRINK TUBING WITH SEALANT

- Extremely versatile 4:1 shrink ratio can accommodate a wide variety of connector shapes and configurations
- Semi-rigid flame retardant polyolefin tubing that shrinks to 25% of it's original size

### BLACK

48"	12"	6"	ID EXP.	ID REC.	WIRE RANGE	MAX WALL THICKNESS
27601-48	27601-12	27601-6	0.225	0.050	28-12 GA.	.047
27602-48			0.293	0.065	20-8 GA.	.060
			0.427	0.095	14-4 GA.	.075
			0.700	0.175	12-1/0	.095

Additional cut lengths are available in all sizes. Consult factory for details.

## HIGH-RATIO DUAL WALL HEAT SHRINK TUBING WITH SEALANT

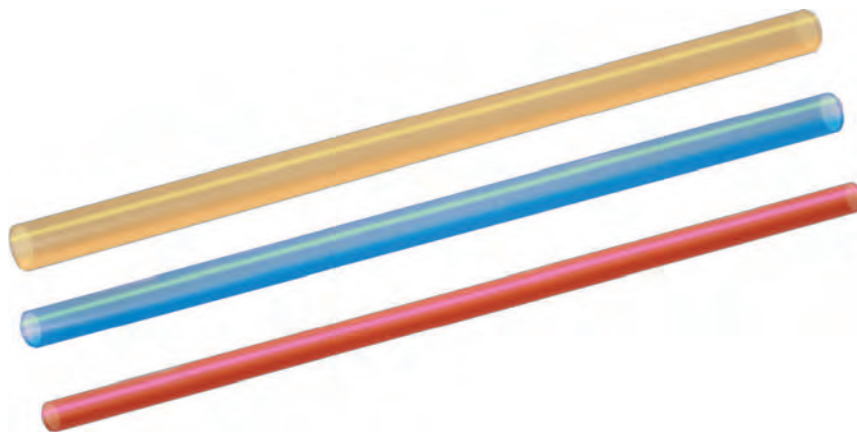
- Extremely versatile 4:1 shrink ratio can accommodate a wide variety of connector shapes and configurations
- Clear semi-rigid polyolefin tubing allows for visual inspection of underlying material

### CLEAR

48"	12"	6"	ID EXP.	ID REC.	WIRE RANGE	MAX WALL THICKNESS
27601C-48			0.225	0.050	28-12 GA.	.047
27602C-48	27602C-12	27602C-6	0.293	0.065	20-8 GA.	.060
27603C-48		27603C-6	0.427	0.095	14-4 GA.	.075
27604C-48		27604C-6	0.700	0.175	12-1/0	.095

Additional cut lengths are available in all sizes. Consult factory for details.

## DUAL WALL HEAT SHRINK TUBING



### DUAL WALL HEAT SHRINK TUBING WITH SEALANT

( TRANSLUCENT )

- Translucent polyolefin tubing allows for visual inspection of underlying material
- Color-coded to industry standard
- Semi-rigid 3:1 shrink ratio

#### NEMA COLOR CODED – TRANSLUCENT

48"	12"	6"	ID EXP.	ID REC.	COLOR	WIRE RANGE	MAX WALL THICKNESS
		24106	.187 (3/16)	0.075	RED	22-18 GA.	.047
24248	24212	24206	.250 (1/4)	0.100	BLUE	16-14 GA.	.047
24348	24312	24306	.312 (5/16)	0.125	YELLOW	12-10 GA.	.050

### SEMI-RIGID DUAL WALL HEAT SHRINK TUBING WITH MELTABLE INNER WALL: BLACK

- Semi-rigid 2.5:1 shrink ratio
- Polyolefin material

#### BLACK

48"	12"	6"	ID EXP.	ID REC.	WIRE RANGE	MAX WALL THICKNESS
27804-48	27804-12	27804-6	1/8 (.125)	0.030	26-18 GA.	.036
27805-48	27805-12	27805-6	3/16 (.187)	0.060	22-16 GA.	.043
27806-48	27806-12	27806-6	1/4 (.25)	0.080	16-12 GA.	.047
27808-48	27808-12	27808-6	3/8 (.375)	0.130	12-8 GA.	.050
27809-48	27809-12	27809-6	1/2 (.500)	0.195	8-4 GA.	.055
27810-48	27810-12	27810-6	3/4 (.750)	0.313	4-1/0	.065
27811-48	27811-12	27811-6	1 (1.00)	0.400	2-4/0	.075

Additional cut lengths are available in all sizes. Consult factory for details.

# HEAT SHRINK TUBING

## SEMI-RIGID DUAL WALL HEAT SHRINK TUBING WITH SEALANT (COLOR-CODED)

- Provides effective method for color-coding electrical harnesses to industry standard
- Semi-rigid 2.5:1 shrink ratio
- Polyolefin Material

### COLOR-CODED BY SIZE

48"	12"	6"	I.D. IN INCHES		COLOR	WIRE RANGE	MAX WALL THICKNESS
			EXP.	REC.			
27804BR-48	27804BR-12	27804BR-6	1/8	0.030	BROWN	26-18 GA.	.036
27805GY-48	27805GY-12	27805GY-6	3/16	0.060	GRAY	22-16 GA.	.043
27806W-48	27806W-12	27806W-6	1/4	0.080	WHITE	16-12 GA.	.047
27808R-48	27808R-12	27808R-6	3/8	0.130	RED	12-8 GA.	.050
27809BL-48	27809BL-12	27809BL-6	1/2	0.195	BLUE	8-4 GA.	.055
27810Y-48	27810Y-12	27810Y-6	3/4	0.313	YELLOW	4-1/0	.065
27811-48	27811-12	27811-6	1	0.400	BLACK	2-4/0	.075

Additional cut lengths are available in all sizes. Consult factory for details.

## DUAL WALL HEAT SHRINK TUBING KIT

- Assortment of our most popular dual wall sizes and colors
- Handy plastic case keeps your tubing organized and stores easily

### CATALOG NO: 29095 | KIT CONSISTS OF THE FOLLOWING 6 LENGTHS

QUANTITY	ITEM	COLOR	ID EXP.	ID REC.
25	29006-6	BLACK	0.250	0.080
25	29006R-6	RED	0.250	0.080
15	29008-6	BLACK	0.375	0.125
15	29008R-6	RED	0.375	0.125
10	29009-6	BLACK	0.500	0.160
10	29009R-6	RED	0.500	0.160
5	29010-6	BLACK	0.750	0.320
5	29010R-6	RED	0.750	0.320



# THIN WALL HEAT SHRINK TUBING



## THIN WALL HEAT SHRINK TUBING: BLACK

- Outstanding polyolefin tubing for light duty applications
- Effective for wire bundling, abrasion resistance, and strain relief
- Bulk Spools are sold in 200 foot lengths.

BULK SPOOL	SMALL SPOOL	48"	12"	6"	ID EXP.	ID REC.	MAX WALL THICKNESS
26001-BRL	26001-600 (50')	26001-48	26001-12	26001-6	3/64	0.023	.016
26002-BRL	26002-600 (50')	26002-48	26002-12	26002-6	1/16	0.031	.017
26003-BRL	26003-600 (50')	26003-48	26003-12	26003-6	3/32	0.046	.020
26004-BRL	26004-600 (50')	26004-48	26004-12	26004-6	1/8	0.062	.020
26005-BRL	26005-600 (50')	26005-48	26005-12	26005-6	3/16	0.093	.020
26006-BRL	26006-600 (50')	26006-48	26006-12	26006-6	1/4	0.125	.025
26007-BRL	26007-600 (50')	26007-48	26007-12	26007-6	5/16	0.156	.025
26008-BRL	26008-600 (50')	26008-48	26008-12	26008-6	3/8	0.187	.025
26009-BRL	26009-600 (50')	26009-48	26009-12	26009-6	1/2	0.250	.025
26010-BRL	26010-300 (25')	26010-48	26010-12	26010-6	3/4	0.375	.030
26011-BRL	26011-300 (25')	26011-48	26011-12	26011-6	1	0.500	.035
26013-BRL	26013-300 (25')	26013-48	26013-12	26013-6	1 1/2	0.750	.040
26014-BRL	26014-300 (25')	26014-48	26014-12	26014-6	2	1.00	.045
26015-BRL		26015-48	26015-12	26015-6	3	1.50	.050
26016-BRL		26016-48	26016-12	26016-6	4	2.00	.055

Additional cut lengths are available in all sizes. Consult factory for details and bulk spool put-ups.

## THIN WALL HEAT SHRINK TUBING: CLEAR

- Clear polyolefin tubing allows for visual inspection of underlying material
- Bulk Spools are sold in 200 foot lengths

BULK SPOOL	SMALL SPOOL	48"	12"	6"	ID EXP.	ID REC.	MAX WALL THICKNESS
26001C-BRL	26001-600 (50')	26001C-48	26001C-12	26001C-6	3/64	0.023	.016
26002C-BRL	26002-600 (50')	26002C-48	26002C-12	26002C-6	1/16	0.031	.017
26003C-BRL	26003-600 (50')	26003C-48	26003C-12	26003C-6	3/32	0.046	.020
26004C-BRL	26004-600 (50')	26004C-48	26004C-12	26004C-6	1/8	0.062	.020
26005C-BRL	26005-600 (50')	26005C-48	26005C-12	26005C-6	3/16	0.093	.020
26006C-BRL	26006-600 (50')	26006C-48	26006C-12	26006C-6	1/4	0.125	.025
26007C-BRL	26007-600 (50')	26007C-48	26007C-12	26007C-6	5/16	0.156	.025
26008C-BRL	26008-600 (50')	26008C-48	26008C-12	26008C-6	3/8	0.187	.025
26009C-BRL	26009-600 (50')	26009C-48	26009C-12	26009C-6	1/2	0.250	.025
26010C-BRL	26010-300 (25')	26010C-48	26010C-12	26010C-6	3/4	0.375	.030
26011C-BRL	26011-300 (25')	26011C-48	26011C-12	26011C-6	1	0.500	.035
26013C-BRL	26013-300 (25')	26013C-48	26013C-12	26013C-6	1 1/2	0.750	.040
26014C-BRL	26014-300 (25')	26014C-48	26014C-12	26014C-6	2	1.00	.045
26015C-BRL		26015C-48	26015C-12	26015C-6	3	1.50	.050
26016C-BRL		26016C-48	26016C-12	26016C-6	4	2.00	.055

Additional cut lengths are available in all sizes. Consult factory for details and bulk spool put-ups.

# HEAT SHRINK TUBING

## THIN WALL HEAT SHRINK TUBING: COLORS

- Polyolefin heat shrink provides a flexible method for color-coding electrical harnesses.
- Bulk Spools are sold in 200 foot lengths.



BULK SPOOL	SMALL SPOOL	48"	12"	6"	ID EXP.	ID REC.	MAX WALL THICKNESS
26001(cc)-BRL	26001 (cc)-600 (50')	26001(cc)-48	26001(cc)-12	26001(cc)-6	3/64	0.023	.016
26002(cc)-BRL	26002 (cc)-600 (50')	26002(cc)-48	26002(cc)-12	26002(cc)-6	1/16	0.031	.017
26003(cc)-BRL	26003 (cc)-600 (50')	26003(cc)-48	26003(cc)-12	26003(cc)-6	3/32	0.046	.020
26004(cc)-BRL	26004 (cc)-600 (50')	26004(cc)-48	26004(cc)-12	26004(cc)-6	1/8	0.062	.020
26005(cc)-BRL	26005 (cc)-600 (50')	26005(cc)-48	26005(cc)-12	26005(cc)-6	3/16	0.093	.020
26006(cc)-BRL	26006 (cc)-600 (50')	26006(cc)-48	26006(cc)-12	26006(cc)-6	1/4	0.125	.025
26007(cc)-BRL	26007 (cc)-600 (50')	26007(cc)-48	26007(cc)-12	26007(cc)-6	5/16	0.156	.025
26008(cc)-BRL	26008 (cc)-600 (50')	26008(cc)-48	26008(cc)-12	26008(cc)-6	3/8	0.187	.025
26009(cc)-BRL	26009 (cc)-600 (50')	26009(cc)-48	26009(cc)-12	26009(cc)-6	1/2	0.250	.025
26010(cc)-BRL	26010 (cc)-300 (25')	26010(cc)-48	26010(cc)-12	26010(cc)-6	3/4	0.375	.030
26011(cc)-BRL	26011 (cc)-300 (25')	26011(cc)-48	26011(cc)-12	26011(cc)-6	1	0.500	.035
26013(cc)-BRL	26013 (cc)-300 (25')	26013(cc)-48	26013(cc)-12	26013(cc)-6	1 1/2	0.750	.040
26014(cc)-BRL	26014 (cc)-300 (25')	26014(cc)-48	26014(cc)-12	26014(cc)-6	2	1.00	.045
26015(cc)-BRL		26015(cc)-48	26015(cc)-12	26015(cc)-6		1.50	.050
26016(cc)-BRL		26016(cc)-48	26016(cc)-12	26016(cc)-6	4	2.00	.055

To determine color, replace (cc) with color suffix listed below:

R	RED	BL	BLUE	Y	YELLOW	W	WHITE	G	GREEN	C	CLEAR
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(example: For Blue 1/4" Exp. ID. 6" Length; catalog number is 29006BL-6)

Additional cut lengths are available in all sizes and colors. Consult factory for details.





28106



28115



28116



28117

## THIN WALL HEAT SHRINK TUBING: 8' DISK PACKS

- Convenient dispenser pack allows for easy storage and cutting eliminating waste
- Attractive packaging and descriptive labels perfect for showroom displays

### BLACK

CAT. NO.	ID EXP.	ID REC.	MAX WALL THICKNESS
28101	3/64	0.023	.016
28102	1/16	0.031	.017
28103	3/32	0.046	.020
28104	1/8	0.062	.020
28105	3/16	0.093	.020
28106	1/4	0.125	.025
28107	5/16	0.156	.025
28108	3/8	0.187	.025
28109	1/2	0.250	.025
28110	3/4	0.375	.030
28111	1	0.500	.035

## THIN WALL HEAT SHRINK TUBING: 8' DISK PACKS

- Available in three colors to NEMA color-code standard to easily and correctly identify connections

### NEMA COLOR CODED

CAT. NO.	COLOR	ID EXP.	ID REC.	MAX WALL THICKNESS
28115	RED	3/16	0.093	.020
28116	BLUE	1/4	0.125	.025
28117	YELLOW	5/16	0.156	.025

## THIN WALL HEAT SHRINK TUBING KIT

- Assortment of our most popular thin wall sizes and colors
- Handy plastic case keeps your tubing organized and stores easily

### CATALOG NO: 28005

### KIT CONSISTS OF THE FOLLOWING 6 LENGTHS

QUANTITY	ITEM	COLOR	ID EXP.	ID REC.	MAX WALL THICKNESS
30	26005-6	BLACK	3/16	0.093	.020
28	26006W-6	WHITE	1/4	0.125	.025
20	26008R-6	RED	3/8	0.125	.025
14	26009-6	BLACK	1/2	0.250	.025
6	26010W-6	WHITE	3/4	0.375	.030
4	26011R-6	RED	1	0.500	.035









## BATTERY TERMINALS AND ACCESSORIES

FTZ offers a complete line of high quality battery terminals and accessories for all of your terminal requirements. From our exclusive line of pure copper **ECO-MAX** battery terminals to our high quality seamless copper lugs and splices, we have the connectors and accessories you need in stock.

- **ECO-MAX** Battery Terminals
- Post Top Battery Terminals
- Stud Top Battery Terminals
- Heavy Duty Lugs & Splices
- Extreme Duty Lugs & Splices
- Yellow Brass Terminals
- Solder Accessories
- Cast Lead Terminals
- Safe-Mate Industrial Battery Connectors
- Battery Accessories





BY FTZ INDUSTRIES

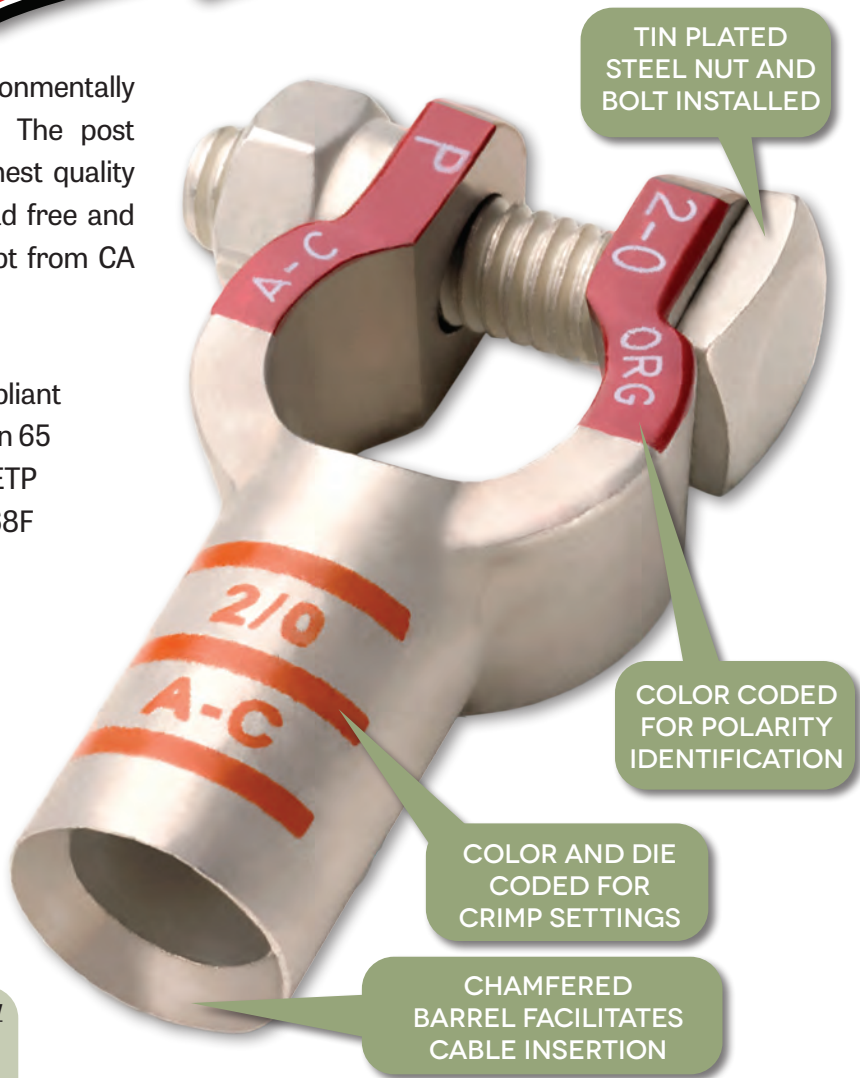
**FTZ introduces ECO-MAX:** the first environmentally friendly, 100% copper battery terminal. The post top design is manufactured with the highest quality C11000 ETP copper and is completely lead free and Reach/RoHS compliant – making it exempt from CA Proposition 65 requirements.

**ECO-MAX FEATURES:**

- Environmentally Friendly – RoHS Compliant
- Lead Free-Exempt from CA Proposition 65
- 100% Copper Construction – C11000 ETP
- Maximum Conductivity 101% IACS at 68F
- Tin Plated for Corrosion Resistance
- Provided with Nut and Bolt Installed
- Exceeds SAE Standard J-1811
- Color Coded, Die Coded

FTZ's C11000 ETP (Electrolytic Tough Pitch) Copper Battery Terminals Provide the Highest Conductivity Rating Compared to Any Competing Copper Design. Conductivity Performance Ratings for Typical Designs are Provided below:

Common Battery Terminal Alloys	Electrical Conductivity
ECO-MAX C11000 (ETP)	101% IACS at 68 F
C83300 (131 Contact Cu)	32% IACS at 68 F
C85400 (Yellow Brass)	20% IACS at 68 F



FTZ HAS THE PROFESSIONAL TOOLS YOU NEED TO MAKE A CORRECT CONNECTION



# BATTERY TERMINALS & ACCESSORIES



## STRAIGHTS

CAT. NO.	SIZE	POLARITY	TOOL DIE
18120	6	NEGATIVE	BLUE J-H
18121	6	POSITIVE	BLUE J-H
18123	4	NEGATIVE	GRAY J-H
18124	4	POSITIVE	GRAY J-H
18128	4	UNIVERSAL	GRAY J-H
18143	1-2	NEGATIVE	PINK H-H
18144	1-2	POSITIVE	PINK H-H

CAT. NO.	SIZE	POLARITY	TOOL DIE
18163	1/0	NEGATIVE	BLACK E-A
18164	1/0	POSITIVE	BLACK E-A
18173	2/0	NEGATIVE	ORANGE A-C
18174	2/0	POSITIVE	ORANGE A-C
18183	3/0	NEGATIVE	PURPLE A-B
18184	3/0	POSITIVE	PURPLE A-B
18193	4/0	NEGATIVE	YELLOW A-A
18194	4/0	POSITIVE	YELLOW A-A



Straight



Right Elbow



Left Elbow



Flag



101% Copper Conductivity

## RIGHT ELBOWS

CAT. NO.	SIZE	POLARITY	TOOL DIE
18263	1/0	NEGATIVE	BLACK E-A
18264	1/0	POSITIVE	BLACK E-A
18273	2/0	NEGATIVE	ORANGE A-C
18274	2/0	POSITIVE	ORANGE A-C

CAT. NO.	SIZE	POLARITY	TOOL DIE
18283	3/0	NEGATIVE	PURPLE A-B
18284	3/0	POSITIVE	PURPLE A-B
18293	4/0	NEGATIVE	YELLOW A-A
18294	4/0	POSITIVE	YELLOW A-A

## LEFT ELBOWS

CAT. NO.	SIZE	POLARITY	TOOL DIE
18363	1/0	NEGATIVE	BLACK E-A
18364	1/0	POSITIVE	BLACK E-A
18373	2/0	NEGATIVE	ORANGE A-C
18374	2/0	POSITIVE	ORANGE A-C

CAT. NO.	SIZE	POLARITY	TOOL DIE
18383	3/0	NEGATIVE	PURPLE A-B
18384	3/0	POSITIVE	PURPLE A-B
18393	4/0	NEGATIVE	YELLOW A-A
18394	4/0	POSITIVE	YELLOW A-A

## FLAGS

CAT. NO.	SIZE	POLARITY	TOOL DIE
18463	1/0	NEGATIVE	BLACK E-A
18464	1/0	POSITIVE	BLACK E-A
18473	2/0	NEGATIVE	ORANGE A-C
18474	2/0	POSITIVE	ORANGE A-C

CAT. NO.	SIZE	POLARITY	TOOL DIE
18483	3/0	NEGATIVE	PURPLE A-B
18484	3/0	POSITIVE	PURPLE A-B
18493	4/0	NEGATIVE	YELLOW A-A
18494	4/0	POSITIVE	YELLOW A-A

# SAND CAST POST TOP BATTERY TERMINALS

A complete line of battery terminals and accessories designed for fast, easy installation and dependable performance. All terminals are not created equal! 93% copper terminals are the most conductive sand cast terminals available. Nuts & bolts are not installed on sand cast terminals.

## STRAIGHTS

CAT. NO. LEAD PLATED		CAT. NO. TIN PLATED		CABLE SIZE	POLARITY	TOOL DIE CODES
STANDARD	COLOR CODED	STANDARD	COLOR CODED			
		12520	12523	4	NEGATIVE	GREEN J-H
		12521	12524	4	POSITIVE	GREEN J-H
12140	12143	12540	12543	1-2	NEGATIVE	PINK H-H
12141	12144	12541	12544	1-2	POSITIVE	PINK H-H
12160	12163	12560	12563	1/0	NEGATIVE	BLACK E-A
12161	12164	12561	12564	1/0	POSITIVE	BLACK E-A
12170	12173	12570	12573	2/0	NEGATIVE	ORANGE A-C
12171	12174	12571	12574	2/0	POSITIVE	ORANGE A-C
12180	12183	12580	12583	3/0	NEGATIVE	PURPLE A-B
12181	12184	12581	12584	3/0	POSITIVE	PURPLE A-B
12190	12193	12590	12593	4/0	NEGATIVE	YELLOW A-A
12191	12194		12594	4/0	POSITIVE	YELLOW A-A



12570

## RIGHT ELBOWS

CAT. NO. LEAD PLATED		CAT. NO. TIN PLATED		CABLE SIZE	POLARITY	TOOL DIE CODES
STANDARD	COLOR CODED	STANDARD	COLOR CODED			
12260	12263	12760	12763	1/0	NEGATIVE	BLACK E-A
12261	12264	12761	12764	1/0	POSITIVE	BLACK E-A
12270	12273	12770	12773	2/0	NEGATIVE	ORANGE A-C
12271	12274	12771	12774	2/0	POSITIVE	ORANGE A-C
12280	12283	12780	12783	3/0	NEGATIVE	PURPLE A-B
12281	12284	12781	12784	3/0	POSITIVE	PURPLE A-B
		12790	12793	4/0	NEGATIVE	YELLOW A-A
12291		12791	12794	4/0	POSITIVE	YELLOW A-A



12770

## LEFT ELBOWS

CAT. NO. LEAD PLATED		CAT. NO. TIN PLATED		CABLE SIZE	POLARITY	TOOL DIE CODES
STANDARD	COLOR CODED	STANDARD	COLOR CODED			
	12363	12860	12863	1/0	NEGATIVE	BLACK E-A
12361	12364		12864	1/0	POSITIVE	BLACK E-A
12370	12373	12870	12873	2/0	NEGATIVE	ORANGE A-C
12371	12374	12871	12874	2/0	POSITIVE	ORANGE A-C
12380	12383	12880	12883	3/0	NEGATIVE	PURPLE A-B
12381	12384	12881	12884	3/0	POSITIVE	PURPLE A-B
12390		12890	12893	4/0	NEGATIVE	YELLOW A-A
12391		12891	12894	4/0	POSITIVE	YELLOW A-A



12870

## FLAGS

CAT. NO. LEAD PLATED		CAT. NO. TIN PLATED		CABLE SIZE	POLARITY	TOOL DIE CODES
STANDARD	COLOR CODED	STANDARD	COLOR CODED			
12460	12463	12960	12963	1/0	NEGATIVE	BLACK E-A
12461	12464	12961	12964	1/0	POSITIVE	BLACK E-A
12470	12473	12970	12973	2/0	NEGATIVE	ORANGE A-C
12471	12474	12971	12974	2/0	POSITIVE	ORANGE A-C
12480	12483	12980	12983	3/0	NEGATIVE	PURPLE A-B
12481	12484	12981	12984	3/0	POSITIVE	PURPLE A-B
12490	12493	12990	12993	4/0	NEGATIVE	YELLOW A-A
12491	12494	12991	12994	4/0	POSITIVE	YELLOW A-A



12970

# BATTERY TERMINALS & ACCESSORIES

## GROUP 31 STUD TOP BATTERY TERMINALS

- For heavy duty truck, tractor trailer fleet applications with top stud batteries
- Terminals are designed to fit 3/8 stud holes on Group 31 batteries
- Power terminals are indented with notches for optimal stack-ability
- Terminals are tin-plated for superior corrosion resistance
- Power terminals are 99.9% copper construction
- Cast terminals are 93% copper construction

Professional Crimp  
Tools  
(94284-BM Page 78)



### POWER TERMINALS – TIN PLATED

STANDARD	COLOR CODED	CABLE SIZE	POLARITY	TOOL DIE CODES
	13928	4	UNIVERSAL	GRAY J-H
	13958	1-2	UNIVERSAL	PINK H-H
	13968	1/0	UNIVERSAL	BLACK E-A
	13978	2/0	UNIVERSAL	ORANGE A-C
	13988	3/0	UNIVERSAL	PURPLE A-B
	13998	4/0	UNIVERSAL	YELLOW A-A



13978

### POWER SPLICE (FLAG) – TIN PLATED

STANDARD	COLOR CODED	CABLE SIZE	POLARITY	TOOL DIE CODES
	13568	1/0	UNIVERSAL	BLACK E-A
	13578	2/0	UNIVERSAL	ORANGE A-C
	13588	3/0	UNIVERSAL	PURPLE A-B
	13598	4/0	UNIVERSAL	YELLOW A-A



13578

### CAST TERMINALS – STRAIGHTS – TIN PLATED

STANDARD	COLOR CODED	CABLE SIZE	POLARITY	TOOL DIE CODES
13122	13128	4	UNIVERSAL	GREEN J-H
13152	13158	1-2	UNIVERSAL	PINK H-H
13162	13168	1/0	UNIVERSAL	BLACK E-A
13172	13178	2/0	UNIVERSAL	ORANGE A-C
13182	13188	3/0	UNIVERSAL	PURPLE A-B
13192	13198	4/0	UNIVERSAL	YELLOW A-A



13172

### CAST TERMINALS – SPLICES – TIN PLATED

STANDARD	COLOR CODED	CABLE SIZE	POLARITY	TOOL DIE CODES
13262	13268	1/0	YELLOW A-A	BLACK E-A
13272	13278	2/0	YELLOW A-A	ORANGE A-C
13282	13288	3/0	YELLOW A-A	PURPLE A-B
13292	13298	4/0	YELLOW A-A	YELLOW A-A



13272



# YELLOW BRASS TERMINALS

## STRAIGHTS



17180



17129

CAT. NO	CABLE SIZE	PLATING	POLARITY	STUD SIZE
17112	6	LEAD	UNIVERSAL	
	3-4	LEAD	UNIVERSAL	
17122	1-2	LEAD	UNIVERSAL	
17162	1/0	LEAD	UNIVERSAL	
17133	1/0	LEAD	NEGATIVE	
17132	1/0	LEAD	POSITIVE	
17180	2/0-3/0	LEAD	NEGATIVE	
17181	2/0-3/0	LEAD	POSITIVE	
17028	MARINE TERMINAL	TIN	NEGATIVE	5/16
17029	MARINE TERMINAL	TIN	POSITIVE	3/8
17128	MARINE TERMINAL	LEAD	NEGATIVE	5/16
17129	MARINE TERMINAL	LEAD	POSITIVE	3/18

## LEAD PLATED FLAGS: SPLIT BARRELS



CAT. NO	CABLE SIZE	POLARITY
17120	4	UNIVERSAL
17101	1-2	UNIVERSAL
17126	1/0	NEGATIVE
17125	1/0	POSITIVE
17472	2/0	UNIVERSL
17480	2/0-3/0	NEGATIVE
17481	2/0-3/0	POSITIVE

# BATTERY TERMINALS & ACCESSORIES

## CAST LEAD TERMINALS

### EMERGENCY STYLE TERMINALS

- Quick and simple way to repair battery cable ends
- No crimping tool needed



16012



16022



16032



17138



16035



16052

CAT. NO	DESCRIPTION	CABLE SIZE	POLARITY
16012	STANDARD DUTY	6 GA. - 1 GA.	UNIVERSAL
16060	STANDARD DUTY- BLACK	6 GA. - 1 GA.	UNIVERSAL
16061	STANDARD DUTY- RED	6 GA. - 1 GA.	UNIVERSAL
16022	HEAVY DUTY	1 GA.- 4/0	UNIVERSAL

### SIDE POST TERMINAL

- Universal connector for side terminal batteries

CAT. NO	DESCRIPTION	CABLE SIZE	POLARITY
16032	SIDE POST TERMINAL	6-2/0	UNIVERSAL

### MARINE TERMINAL

- Converts standard battery post terminals to a marine stud connector
- Allows for easy removal of connector from battery

CAT. NO	DESCRIPTION	POLARITY
17138	MARINE TERMINAL	UNIVERSAL
17139	MARINE TERMINAL	POSITIVE
17140	MARINE TERMINAL	NEGATIVE

### 3-WAY FLEET TERMINAL

- Allows for multiple cable configurations

CAT. NO	DESCRIPTION	CABLE SIZE	POLARITY
16035	3-WAY FLEET TERMINAL	6-4/0	NEGATIVE
16036	3-WAY FLEET TERMINAL	6-4/0	POSITIVE

### SIDE TERMINAL ADAPTOR

- Converts top terminal battery posts to accept side terminal cables
- Available separately or as a pair

CAT. NO	DESCRIPTION	POLARITY
16050	SIDE TERMINAL ADAPTOR	NEGATIVE
16051	SIDE TERMINAL ADAPTOR	POSITIVE
16052	SIDE TERMINAL ADAPTOR SET	NEGATIVE & POSITIVE

## BATTERY ACCESSORIES

### STUD TOP: CROSS-OVER CABLE ASSEMBLIES



CAT. NO.	LENGTH	CABLE SIZE	POLARITY
95242	8"	1/0	NEGATIVE
95243	8"	1/0	POSITIVE
95262	16"	1/0	NEGATIVE
95263	16"	1/0	POSITIVE
95246	8"	2/0	NEGATIVE
95247	8"	2/0	POSITIVE
95266	16"	2/0	NEGATIVE
95267	16"	2/0	POSITIVE

### POST TOP: CROSS-OVER CABLE ASSEMBLIES, CAST LEAD TERMINALS



CAT. NO.	LENGTH	CABLE SIZE	POLARITY
95342	8"	2/0	UNIVERSAL
95352	12"	2/0	UNIVERSAL

### GROUND STRAPS



CAT. NO.	DESCRIPTION
95901	4 GA. GROUND STRAP 12" LENGTH
95902	4 GA. GROUND STRAP 18" LENGTH

### SIDE MOUNT BATTERY TERMINALS: TIN PLATED COPPER TERMINAL



CAT. NO.	CABLE SIZE	POLARITY	PKG. QTY	TOOL DIE CODES
14022	4	UNIVERSAL	10	GRAY K-K
14032	2	UNIVERSAL	10	BROWN J-H
14052	1	UNIVERSAL	10	GREEN J-H
14062	1/0	UNIVERSAL	10	PINK H-H

### SIDE MOUNT BOLTS



CAT. NO.	DESCRIPTION
99001	SIDE-MOUNT BOLT, OEM, STEEL, ZINC-PLATED
99001L	SIDE-MOUNT BOLT, OEM, STEEL, ZINC-PLATED-LONG
99002	SIDE-MOUNT BOLT LONG WITH SCREW, STEEL, ZINC-PLATED

# BATTERY TERMINALS & ACCESSORIES

## NUT AND BOLT

CAT. NO. NUT & BOLT	CAT. NO. NUT ONLY	CAT. NO. BOLT ONLY	DESCRIPTION
99051	99053	99055	5/16-18 X 1 1/4" BOLT & SHOULDER NUT, STEEL, TIN PLATED
99052	99054	99056	5/16-18 X 1 1/4" BOLT & SHOULDER NUT, STEEL, ZINC PLATED
99057	99053	99058	5/16-18 X 1 1/2" BOLT & SHOULDER NUT, STEEL, TIN PLATED
99513	99054	99052	5/16-18 X 1 1/4" BOLT & SHOULDER NUT, STEEL, ZINC PLATED



99051



99052



99057



99513

## STUD NUTS GROUP 31 BATTERIES

CAT. NO.	DESCRIPTION	POLARITY
99003	BLACK AMODEL	NEGATIVE
99004	RED AMODEL	POSITIVE
99005	STAINLESS STEEL	UNIVERSAL



99003



99004



99005

## STUD TO POST CONVERTER

CAT. NO.	DESCRIPTION	POLARITY
99010	LEAD, UNIVERSAL	UNIVERSAL
99007	LEAD, 1 SET: 1 NEGATIVE & 1 POSITIVE	
99008N	PURE COPPER, NEGATIVE	NEGATIVE
99008P	PURE COPPER, POSITIVE	POSITIVE



99010



99007

## ANTI-CORROSION RINGS

CAT. NO.	DESCRIPTION	POLARITY
99015	POST TOP	RED/POSITIVE
99015S	STUD TOP	GRAY/UNIVERSAL
99018	SIDE MOUNT	BLACK/UNIVERSAL



99018

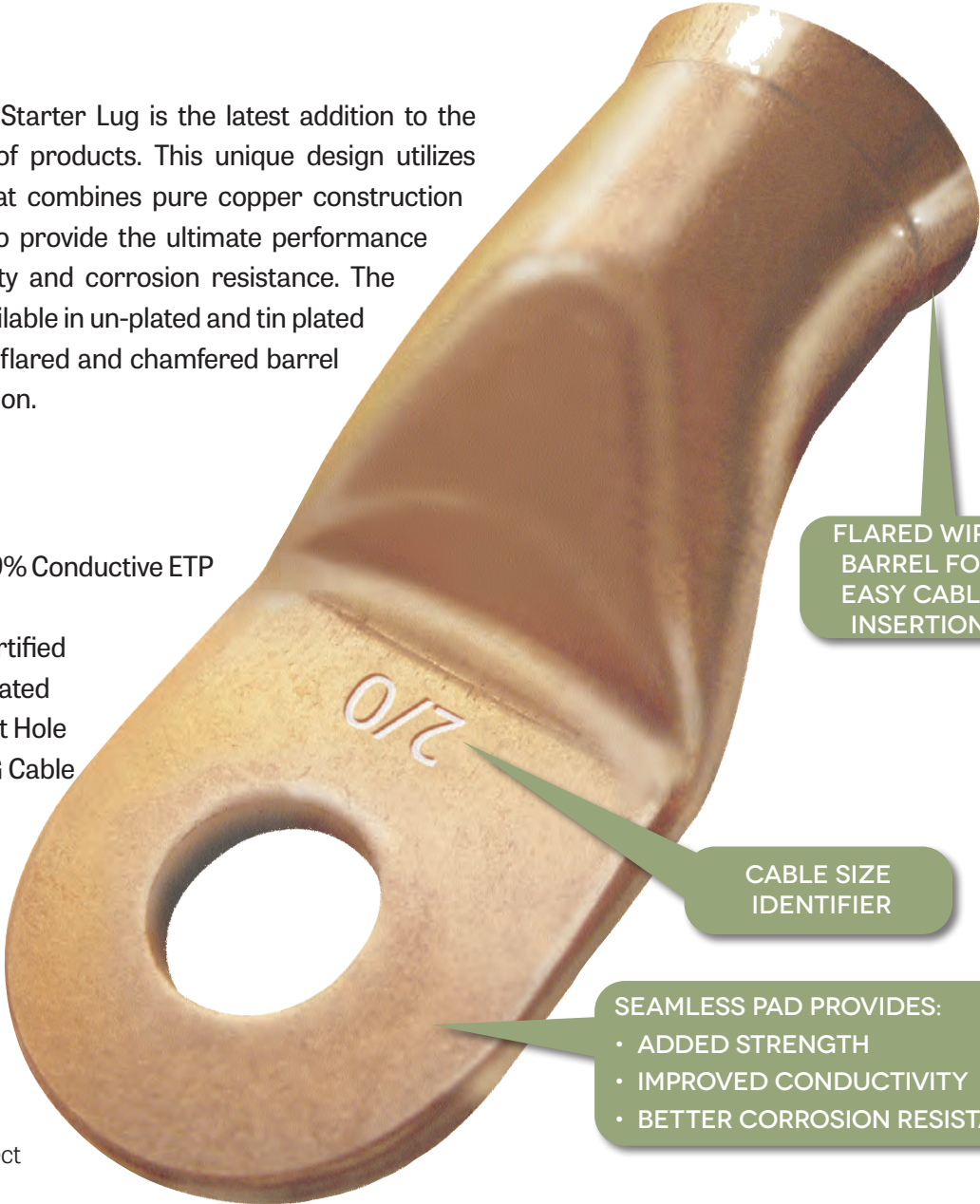
# HEAVY DUTY

## SEAMLESS COPPER STARTER LUGS

The Seamless Copper Starter Lug is the latest addition to the Correct Connect line of products. This unique design utilizes new C2 technology that combines pure copper construction with a seamless pad to provide the ultimate performance in strength, conductivity and corrosion resistance. The innovative design is available in un-plated and tin plated options and features a flared and chamfered barrel to facilitate cable insertion.

**FEATURES:**

- Seamless Pad
- Pure Copper - 99.9% Conductive ETP Copper
- UL Listed / CSA Certified
- Tin Plated or Un-Plated
- Available with Sight Hole
- 8 AWG to 4/0 AWG Cable



We offer a complete line of professional tools and products to enable a correct connection every time.

### HEAT SHRINK TUBING



### PROFESSIONAL HEAT TOOLS



### PROFESSIONAL CRIMP TOOLS



# BATTERY TERMINALS & ACCESSORIES

## HEAVY DUTY LUGS AND SPLICES

### STARTER LUGS



CAT. NO. UNPLATED	CAT. NO. TIN PLATED	45 DEGREE TIN PLATED	90 DEGREE TIN PLATED	CABLE SIZE	STUD SIZE	TOOL DIE CODES
91104	91004		91004-90D	8	#10	RED
91105	91005		91005-90D	8	1/4	RED
91106	91006		91006-90D	8	5/16	RED
91107	91007		91007-90D	8	3/8	RED
91109	91009		91009-90D	8	1/2	RED
91114	91014		91014-90D	6	#10	BLUE M-K
91115	91015		91015-90D	6	1/4	BLUE M-K
91116	91016	91016-45D	91016-90D	6	5/16	BLUE M-K
91117	91017		91017-90D	6	3/8	BLUE M-K
91119	91019	91019-45D	91019-90D	6	1/2	BLUE M-K
91124	91024		91024-90D	4	#10	GRAY K-K
91125	91025		91025-90D	4	1/4	GRAY K-K
91126	91026	91026-45D	91026-90D	4	5/16	GRAY K-K
91127	91027	91027-45D	91027-90D	4	3/8	GRAY K-K
91129	91029		91029-90D	4	1/2	GRAY K-K
91135	91035	91035-45D	91035-90D	2	1/4	BROWN J-H
91136	91036	91036-45D	91036-90D	2	5/16	BROWN J-H
91137	91037	91037-45D	91037-90D	2	3/8	BROWN J-H
91139	91039	91039-45D	91039-90D	2	1/2	BROWN J-H
91145	91045	91045-45D	91045-90D	1	1/4	GREEN J-H
91146	91046	91046-45D	91046-90D	1	5/16	GREEN J-H
91147	91047	91047-45D	91047-90D	1	3/8	GREEN J-H
91149	91049	91055-45D		1	1/2	GREEN J-H
91155	91055	91056-45D	91055-90D	1/0	1/4	PINK H-H
91156	91056		91056-90D	1/0	5/16	PINK H-H
91157	91057	91057-45D	91057-90D	1/0	3/8	PINK H-H
91159	91059		91059-90D	1/0	1/2	PINK H-H
91165	91065		91065-90D	2/0	1/4	BLACK E-A
91166	91066	91066-45D	91066-90D	2/0	5/16	BLACK E-A
91167	91067	91067-45D	91067-90D	2/0	3/8	BLACK E-A
91169	91069	91069-45D	91069-90D	2/0	1/2	BLACK E-A
91175	91075			3/0	1/4	ORANGE A-C
91176	91076	91076-45D	91076-90D	3/0	5/16	ORANGE A-C
91177	91077	91077-45D	91077-90D	3/0	3/8	ORANGE A-C
91179	91079		91079-90D	3/0	1/2	ORANGE A-C
91185	91085		91085-90D	4/0	1/4	PURPLE A-B
91186	91086	91086-45D	91086-90D	4/0	5/16	PURPLE A-B
91187	91087	91087-45D	91087-90D	4/0	3/8	PURPLE A-B
91189	91089	91089-45D	91089-90D	4/0	1/2	PURPLE A-B



Bare Copper



Tin Plated

Available with sight holes, different angles, wide pads and color coding.  
Please contact FTZ for more information.



45  
DEGREE



Rated for 600 volt applications.



## EXTREME DUTY LUGS

### EXTREME DUTY POWER LUGS & HEAT SHRINK

CATALOG NO.	CABLE SIZE	STUD SIZE	TOOL DIE CODES	HEAT SHRINK	
				BLACK	RED
91704	8	#10	RED M-K	21201	21301
91705	8	1/4	RED M-K	21201	21301
91706	8	5/16	RED M-K	21201	21301
91707	8	3/8	RED M-K	21201	21301
91709	8	1/2	RED M-K	21201	21301
91714	6	#10	BLUE K-K	21201	21301
91715	6	1/4	BLUE K-K	21201	21301
91716	6	5/16	BLUE K-K	21201	21301
91717	6	3/8	BLUE K-K	21201	21301
91719	6	1/2	BLUE K-K	21201	21301
91724	4	#10	GRAY J-H	21201	21301
91725	4	1/4	GRAY J-H	21201	21301
91726	4	5/16	GRAY J-H	21201	21301
91727	4	3/8	GRAY J-H	21201	21301
91729	4	1/2	GRAY J-H	21201	21301
91735	2	1/4	GREEN J-H	21201	21301
91736	2	5/16	GREEN J-H	21201	21301
91737	2	3/8	GREEN J-H	21201	21301
91739	2	1/2	GREEN J-H	21201	21301
91745	1-2	1/4	PINK H-H	21201	21301
91746	1-2	5/16	PINK H-H	21201	21301
91747	1-2	3/8	PINK H-H	21201	21301
91749	1-2	1/2	PINK H-H	21201	21301
91755	1/0	1/4	BLACK E-A	21401	21501
91756	1/0	5/16	BLACK E-A	21401	21501
91757	1/0	3/8	BLACK E-A	21401	21501
91759	1/0	1/2	BLACK E-A	21401	21501
91765	2/0	1/4	ORANGE A-C	21401	21501
91766	2/0	5/16	ORANGE A-C	21401	21501
91767	2/0	3/8	ORANGE A-C	21401	21501
91769	2/0	1/2	ORANGE A-C	21401	21501
91775	3/0	1/4	PURPLE A-B	21401	21501
91776	3/0	5/16	PURPLE A-B	21401	21501
91777	3/0	3/8	PURPLE A-B	21401	21501
91779	3/0	1/2	PURPLE A-B	21401	21501
91785	4/0	1/4	YELLOW A-A	21401	21501
91786	4/0	5/16	YELLOW A-A	21401	21501
91787	4/0	3/8	YELLOW A-A	21401	21501
91789	4/0	1/2	YELLOW A-A	21401	21501

## HEAVY DUTY SPLICES

### EXTREME DUTY POWER SPLICES & HEAT SHRINK

CATALOG NO.	CABLE SIZE	TOOL DIE CODES	HEAT SHRINK	
			BLACK	RED
91200	8	RED	21201	21301
91210	6	BLUE M-K	21201	21301
91220	4	GRAY K-K	21201	21301
91230	2	BROWN J-H	21201	21301
91240	1	GREEN J-H	21201	21301
91250	1/0	PINK H-H	21401	21501
91260	2/0	BLACK E-A	21401	21501
91270	3/0	ORANGE A-C	21401	21501
91280	4/0	PURPLE A-B	21401	21501



91260

## EXTREME DUTY SPLICES

### EXTREME DUTY POWER SPLICES & HEAT SHRINK

CATALOG NO.	CABLE SIZE	TOOL DIE CODES	HEAT SHRINK	
			BLACK	RED
91800	8	RED M-K	21201	21301
91810	6	BLUE K-K	21201	21301
91820	4	GRAY J-H	21201	21301
91830	2	GREEN J-H	21201	21301
91840	1-2	PINK H-H	21201	21301
91850	1/0	BLACK E-A	21401	21501
91860	2/0	ORANGE A-C	21401	21501
91870	3/0	PURPLE A-B	21401	21501
91880	4/0	YELLOW A-A	21401	21501



91870



## SOLDER ACCESSORIES

### SOLDER SLUGS PELLETS

CAT. NO.	WIRE SIZE	COLOR	PKG. QTY.
17908	6	GRAY	25
17901	2	GREEN	25
17902	1	PINK	25
17903	1/0	BLACK	25
17904	2/0	ORANGE	25
17905	3/0	PURPLE	25
17906	4/0	YELLOW	25
17907	Flux for use with solder slugs		1



17901



17902



17903



17904



17905



17906

### SOLDER-IT PASTE

CAT. NO.	DESCRIPTION	CONTENTS	PKG. QTY.
17999	SILVER BEARING SOLDER PASTE	7.1 GRAMS	1
17998	ALUMINUM SOLDER PASTE	7.1 GRAMS	1



# BATTERY TERMINALS & ACCESSORIES

## SAFE-MATE™ BATTERY CONNECTORS

- Heavy duty connectors for battery powered equipment.
- For use on service vehicles, battery operated fork lift, pallet jacks, sweepers, golf carts, etc.
- Used on charging equipment.
- Self-mating design, two of the same connectors mate together.
- High impact polycarbonate housing resists breakage.
- Silver plated copper contacts provide maximum current flow.
- Stainless locking springs secure contacts in place.
- U.L. listed for 600 volts.



63243

## SAFE-MATE™ INDUSTRIAL BATTERY CONNECTORS

CAT. NO. COMPLETE UNIT	CAT. NO. HOUSING	CAT. NO. CONTACT	AMPERAGE RATING	HOUSING COLOR	CABLE SIZE	I.D. CONTACT	COMPLETE UNIT OR HOUSING QTY.	CONTACT QTY.
61813	61811	61812	50	GRAY	6	0.221	1	10
61823	61811	61822	50	GRAY	12-10	0.136	1	10
62803	62831	62802	175	GRAY	4	0.297	1	10
62813	62831	62812	175	GRAY	1-2	0.340	1	10
62233	62231	62832	175	RED	1/0	0.437	1	10
62333	62331	62832	175	ORANGE	1/0	0.437	1	10
62433	62431	62832	175	YELLOW	1/0	0.437	1	10
62633	62631	62832	175	BLUE	1/0	0.437	1	10
62833	62831	62832	175	GRAY	1/0	0.437	1	10
63243	63241	63842	350	RED	2/0	0.484	1	10
63443	63441	63842	350	YELLOW	2/0	0.484	1	10
63643	63641	63842	350	BLUE	2/0	0.484	1	10
63843	63841	63842	350	GRAY	2/0	0.484	1	10
63853	63841	63852	350	GRAY	3/0	0.578	1	10
63863	63841	63862	350	GRAY	4/0	0.641	1	10

## SAFE-MATE™ ACCESSORIES

CAT. NO.	DESCRIPTION	AMPERAGE	COLOR	PKG. QTY.
62004	MOUNTING HANDLE	175	RED	1
61007	DUST COVER	50	BLACK	1
62007	DUST COVER	175	BLACK	1
63007	DUST COVER	350	BLACK	1



61007



62004

# BATTERY TERMINAL BRUSHES

Clean and polish corroded battery terminals & posts with FTZ's complete line of battery brushes



94071

## POST & TERMINAL BRUSHES

94071	<b>Steel</b>	<ul style="list-style-type: none"> <li>• Inner circular bristles clean all sides of battery posts</li> <li>• Tapered top brush cleans battery terminal barrels and clamps</li> </ul>
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## 3-WAY POST & TERMINAL BRUSH



94072

94072		<ul style="list-style-type: none"> <li>• Three-piece corrosion-resistant brush provides three tools in one</li> <li>• Inner circular bristles clean battery posts</li> <li>• Tapered brush cleans battery terminal barrels and clamps</li> <li>• Large rectangular brush ideal for terminals, cables, and fasteners</li> </ul>
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## POWER DRILL POST & TERMINAL BRUSH



94073



94074

94073	<b>Battery Post Brush</b>	
94074	<b>Terminal &amp; Clamp Brush</b>	
94077	<b>Plug Cleaner</b>	<ul style="list-style-type: none"> <li>• Brushes securely fit in all standard power drills for fast cleaning</li> <li>• Made with a heavy duty durable injection molded housing</li> </ul>

## BATTERY CARRIERS

FTZ battery carriers make the removal, installation, and transport of batteries quick and easy



94078

94078	<b>Adjustable Battery Carrier</b>	<ul style="list-style-type: none"> <li>• High quality battery carrier for all battery types and sizes</li> <li>• Comfort grip handles and sidewall pads provide secure and easy battery removal</li> <li>• Adjustable notch system guarantees proper fit</li> </ul>
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## AEROSOLS



99011



99012

CAT. NO.	DESCRIPTION	PKG. QTY.
99011	TERMINAL CLEANER AND ACID DETECTOR	6
99012	TERMINAL PROTECTOR	6

## WIRE, CABLE AND WIRE MANAGEMENT

FTZ has expanded its offering for wire and cable management to include the products you need to bundle, secure, and protect your wire and cable. Some of the new products included are seven new colors of our versatile Wrap 'N Seal silicone tape, heavy duty and colored cable ties, polyethylene split loom, and a variety of cable clamps.

- Battery Cable
- Welding Cable
- Multi-Conductor Cable
- GXL Wire
- Cable Ties
- Cable Clamps
- Split Loom
- Electrical Tape
- Wrap 'N Seal Silicone Tape



Our copper battery cable and welding cable offer highly conductive flexible connections even in extreme conditions. Our welding cable's extra stranding provides superior flexibility. The battery cable is color-coded for easy identification and selection.

To simplify measuring and cutting, the cable size repeats at one foot intervals.



## BATTERY CABLE

- Conforms to SAE J1127 specifications and meets the battery cable requirements for UL558 and UL583
- Highly flexible EPDM jacket and paper insulation rated at 105°C
- Voltage Rating DC: 60V
- Insulation is color-coded to match correct die code
- SGR Cable

CAT. NO. BLACK	CAT. NO. RED	CABLE SIZE	# STRANDS / STRAND SIZE	O.D.	AMPERAGE	LENGTH
92121	92121R	4	133/.017	0.270"	120	50'
92131	92131R	2	133/.023	0.345"	240	50'
92141	92141R	1	247/.018	0.385"	300	50'
92151	92151R	1/0	247/.020	0.430"	360	50'
92161	92161R	2/0	333/.020	0.500"	450	50'
92171	92171R	3/0	259/.022	0.545"	540	50'
92181	92181R	4/0	361/.024	0.601"	540	50'

## WELDING CABLE

- Conforms to SAE J1127, UL Recognized and CSA approved.
- RoHS Compliant
- TPE insulation with an operating range of -55°C and 105°C
- Specially-formulated insulation protects even in the most extreme temperatures and provides superior solvent resistance. Super-fine stranding ensures maximum flexibility.
- Voltage Rating: 600 Volts



CAT. NO. BLACK	CAT. NO. RED	CABLE SIZE	# STRANDS / STRAND SIZE	LENGTH
92105	92105R	8	168/.010	50'
92115	92115R	6	266/.010	50'
92125	92125R	4	420/.010	50'
92135	92135R	2	665/.010	50'
92145	92145R	1	836/.010	50'
92155	92155R	1/0	1064/.010	50'
92165	92165R	2/0	1330/.010	50'
92175	92175R	3/0	1666/.010	50'
92185	92185R	4/0	2107/.010	50'

# WIRE AND CABLE

## MULTI-CONDUCTOR TRUCK AND TRAILER CABLE

- Conforms to SAE J1128 type GPT specifications
- Voltage Rating DC (AC): 60V (25 V)
- RoHS Compliant
- Insulation Materials: Polyvinylchloride (PVC)
- Temperature Rating: -40°C to 105°C

CAT. NO.	CONDUCTOR	WIRE SIZE	COLOR	LENGTH
92400	2	14 GA.	GRAY	100'
92401	2	14 GA.	WHITE	100'
92402	2	16 GA.	GRAY	100'
92403	2	16 GA.	WHITE	100'
92404	2	10 GA.	GRAY	100'
92405	2	12 GA.	GRAY	100'
92406	2	12 GA.	WHITE	100'
92407	3	14 GA.	WHITE	100'
92408	3	12 GA.	WHITE	100'
92409	4	14 GA.	BLACK	100'
92410	6	14 GA.	BLACK	100'
92412	7	6/12 GA., 1/10 GA.	BLACK	100'
92413	ABS 7	4/12 GA., 2/10 GA., 1/8 GA.	GREEN	100'



## CABLE TIES

FTZ offers a new complete line of Nylon 6/6 cable ties in lengths CABLE TIES from 4"to 48" and are available in natural, UV Black and assorted colors

in select sizes. Our wide range of cable ties can accommodate bundle diameters from .75 to 15 and provides loop tensile strengths from 18 lbs. to 250 lbs. MIL Spec# 3367



### STANDARD CABLE TIES

CAT. NO.	PKG. QTY.	COLOR	TENSILE STRENGTH	LENGTH	WIDTH	BUNDLE DIAMETER
93110-P100	100	NATURAL	18LBS	4.0	0.10	0.75
93110-P1000	1000	NATURAL	18 LBS	4.0	0.10	0.75
93210-P100	100	UV BLACK	18 LBS	4.0	0.10	0.75
93210-P1000	1000	UV BLACK	18 LBS	4.0	0.10	0.75
93120-P100	100	NATURAL	40 LBS	5.7	0.14	1.25
93120-P1000	1000	NATURAL	40 LBS	5.7	0.14	1.25
93220-P100	100	UV BLACK	40 LBS	5.7	0.14	1.25
93220-P1000	1000	UV BLACK	40 LBS	5.7	0.14	1.25
93130-P100	100	NATURAL	50 LBS	7.562	0.18	1.87
93130-P1000	1000	NATURAL	50 LBS	7.562	0.18	1.87
93230-P100	100	UV BLACK	50 LBS	7.562	0.18	1.87
93230-P1000	1000	UV BLACK	50 LBS	7.562	0.18	1.87
93150-P100	100	NATURAL	50 LBS	11.25	0.18	3.06
93150-P1000	1000	NATURAL	50 LBS	11.25	0.18	3.06
93250-P100	100	UV BLACK	50 LBS	11.25	0.18	3.06
93250-P1000	1000	UV BLACK	50 LBS	11.25	0.18	3.06
93160-P100	100	NATURAL	50 LBS	14.35	0.18	4.00
93160-P1000	1000	NATURAL	50 LBS	14.35	0.18	4.00
93260-P100	100	UV BLACK	50 LBS	14.35	0.18	4.00
93260-P1000	1000	UV BLACK	50 LBS	14.35	0.18	4.00
93170-P100	100	NATURAL	120 LBS	14.5	0.30	4.00
93170-P1000	1000	NATURAL	120 LBS	14.5	0.30	4.00
93270-P100	100	UV BLACK	120 LBS	14.5	0.30	4.00
93270-P500	500	UV BLACK	120 LBS	14.5	0.30	4.00
93185-P50	50	NATURAL	120 LBS	28.0	0.30	8.00
93285-P50	50	UV BLACK	120 LBS	28.0	0.30	8.00

### HEAVY DUTY CABLE TIES

CAT. NO.	PKG. QTY.	COLOR	TENSILE STRENGTH	LENGTH	WIDTH	BUNDLE DIAMETER
93180-P50	50	NATURAL	175 LBS.	25.0	0.35	7.0
93280-P50	50	UV BLACK	175 LBS.	25.0	0.35	7.0
93195-P50	50	NATURAL	175 LBS.	36.5	0.35	10.7
93295-P50	50	UV BLACK	175 LBS.	36.5	0.35	10.7
93199-P50	50	NATURAL	175 LBS.	48.0	0.35	15.0
93299-P50	50	UV BLACK	175 LBS.	48.0	0.35	15.0

### SUPER HEAVY DUTY CABLE TIES

CAT. NO.	PKG. QTY.	COLOR	TENSILE STRENGTH	LENGTH	WIDTH	BUNDLE DIAMETER
93190-P100	100	NATURAL	250 LBS.	22.0	0.50	6.0
93290-P100	100	UV BLACK	250 LBS.	22.0	0.50	6.0
93196-P50	50	NATURAL	250 LBS.	34.0	0.50	10.1

# WIRE AND CABLE

## COLORED CABLE TIES

CAT. NO.	PKG. QTY.	COLOR	TENSILE STRENGTH	LENGTH	WIDTH	BUNDLE DIAMETER
93110-R	100	RED	18 LBS.	4.0	0.10	.75
93230-R	100	RED	50 LBS.	8	0.19	2.0
93110-GR	100	GREEN	18 LBS.	4.0	0.10	.75
93230-GR	100	GREEN	50 LBS.	8	0.19	2.0
93110-Y	100	YELLOW	18 LBS.	4.0	0.10	.75
93230-Y	100	YELLOW	50 LBS.	8	0.19	2.0
93110-BL	100	BLUE	18 LBS.	4.0	0.10	.75
93230-BL	100	BLUE	50 LBS.	8	0.19	2.0
93110-OR	100	ORANGE	18 LBS.	4.0	0.10	.75
93230-OR	100	ORANGE	50 LBS.	8	0.19	2.0

## MOUNTING HEAD CABLE TIES

CAT. NO.	PKG. QTY.	COLOR	TENSILE STRENGTH	LENGTH	WIDTH	BUNDLE DIAMETER	HOLE
93320-P100	100	NATURAL	40 LBS.	5.9	.14	1.25	#8
93420-P100	100	UV BLACK	40 LBS.	5.9	.14	1.25	#8
93340-P100	100	NATURAL	50 LBS.	8	.19	2.00	#10
93440-P100	100	UV BLACK	50 LBS.	8	.19	2.00	#10
93350-P100	100	NATURAL	50 LBS.	12.6	.19	3.00	#10
93450-P100	100	UV BLACK	50 LBS.	12.6	.19	3.00	#10
93380-P100	100	NATURAL	50 LBS.	15	.19	4.00	#10
93480-P100	100	UV BLACK	50 LBS.	15	.19	4.00	#10
93390-P100	100	NATURAL	120 LBS.	15	.30	4.00	#10
93490-P100	100	UV BLACK	120 LBS.	15	.30	4.00	#10



## PUSH MOUNT CABLE TIES

CAT. NO.	PKG. QTY.	COLOR	TENSILE STRENGTH	LENGTH	WIDTH	BUNDLE DIAMETER
93345	100	NATURAL	50 LBS.	7.9	.19	2.0
93445	100	UV BLACK	50 LBS.	7.9	.19	2.0



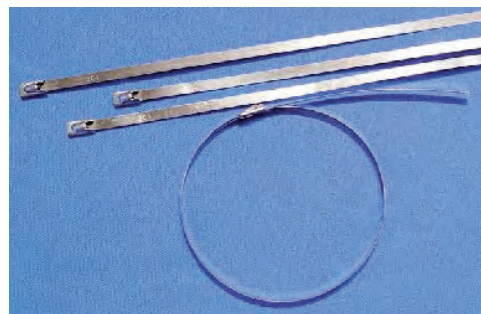
## RELEASABLE CABLE TIES

CAT. NO.	PKG. QTY.	COLOR	TENSILE STRENGTH	LENGTH	WIDTH	BUNDLE DIA
93620-P100	100	NATURAL	50 LBS.	5.9	.30	1.2
93720-P100	100	UV BLACK	50 LBS.	5.9	.30	1.2
93640-P100	100	NATURAL	50 LBS.	7.8	.30	2.0
93740-P100	100	UV BLACK	50 LBS.	7.8	.30	2.0
93650-P100	100	NATURAL	50 LBS.	10.5	.30	3.0
93750-P100	100	UV BLACK	50 LBS.	10.5	.30	2.0





## CABLE TIES (CONT.)



### STAINLESS STEEL CABLE TIES

CAT. NO.	PKG. QTY.	COLOR	TENSILE STRENGTH	LENGTH	WIDTH	BUNDLE DIAMETER
93804-SS-P100	100	SS STEEL (302/304)	100	8	.18	2
93808-SS-P100	100	SS STEEL (302/304)	100	14	.18	4
93812-SS-P100	100	SS STEEL (302/304)	100	20	.18	6
93805-SS-P100	100	SS STEEL (302/304)	250	8	.30	2
93809-SS-P100	100	SS STEEL (302/304)	250	14	.30	4
93813-SS-P100	100	SS STEEL(302/304)	250	26	.30	8

### ADHESIVE BACK MOUNTING BASES

CAT. NO.	COLOR	LENGTH	WIDTH	HEIGHT	HOLE SIZE	SLOT SIZE	PKG. QTY.
93511	NATURAL	.75	.75	.205	#6	.05	100
93513	UV BLACK	.75	.75	.205	#6	.05	100
93510	NATURAL	1.0	1.0	.215	#8	.07	100
93512	UV BLACK	1.0	1.0	.215	#8	.07	100
93514	NATURAL	2.0	2.0	300	#6 & #8	.30	100
93515	UV BLACK	2.0	2.0	300	#6 & #8	.30	100

### CABLE TIE INSTALLATION TOOL

CAT. NO.	COLOR	DESCRIPTION
94400	RED	Installation and cutoff tool for standard cable ties 18-50 lbs

### CABLE TIE KIT

CAT. NO.	KIT INCLUDES	DESCRIPTION	QTY. IN KIT
93403	94400	CABLE TIE INSTALLATION TOOL	1
	93230	8 UV BLACK 50 LB. CABLE TIES	50
	93120	5.7 NATURAL 40 LB. CABLE TIES	100
	93510	1x1 NATURAL MOUNTING BASES	10



# WIRE AND CABLE

## CABLE CLAMPS

CAT. NO.	PKG QTY	COLOR	CABLE DIAMETER	STUD SIZE	TYPE
60301	100	NATURAL	3/16"	#8	LIGHT DUTY NYLON
60301BK	100	UV BLACK	3/16"	#8	LIGHT DUTY NYLON
60302	100	NATURAL	1/4"	#8	LIGHT DUTY NYLON
60302BK	100	UV BLACK	1/4"	#8	LIGHT DUTY NYLON
60304	100	NATURAL	3/8"	#8	LIGHT DUTY NYLON
60304BK	100	UV BLACK	3/8"	#8	LIGHT DUTY NYLON
60306	100	NATURAL	1/2"	#8	LIGHT DUTY NYLON
60306BK	100	UV BLACK	1/2"	#8	LIGHT DUTY NYLON
60402	100	NATURAL	1/4"	#10	HEAVY DUTY NYLON
60402BK	100	UV BLACK	1/4"	#10	HEAVY DUTY NYLON
60404	100	NATURAL	3/8"	#10	HEAVY DUTY NYLON
60404BK	100	UV BLACK	3/8"	#10	HEAVY DUTY NYLON
60406	100	NATURAL	1/2"	#10	HEAVY DUTY NYLON
60406BK	100	UV BLACK	1/2"	#10	HEAVY DUTY NYLON
60408	100	NATURAL	3/4"	#10	HEAVY DUTY NYLON
60408BK	100	UV BLACK	3/4"	#10	HEAVY DUTY NYLON
60410	100	NATURAL	1"	#10	HEAVY DUTY NYLON
60410BK	100	UV BLACK	1"	#10	HEAVY DUTY NYLON
60411	100	NATURAL	1-1/4"	#10	HEAVY DUTY NYLON
60411BK	100	UV BLACK	1-1/4"	#10	HEAVY DUTY NYLON
60102-14	100	BLACK-RUBBER	1/4"	1/4"	STEEL
60104-14	100	BLACK-RUBBER	3/8"	1/4"	STEEL
60106-38	100	BLACK-RUBBER	1/2"	3/8"	STEEL
60107-38	50	BLACK-RUBBER	5/8"	3/8"	STEEL
60108-38	50	BLACK-RUBBER	3/4"	3/8"	STEEL
60110-38	25	BLACK-RUBBER	1"	3/8"	STEEL
60112-38	25	BLACK-RUBBER	1-1/2"	3/8"	STEEL
60114-38	25	BLACK-RUBBER	2"	3/8"	STEEL
60202-14	100	BLACK-VINYL	1/4"	1/4"	STEEL
60204-14	100	BLACK-VINYL	3/8"	1/4"	STEEL
60206-38	100	BLACK-VINYL	1/2"	3/8"	STEEL
60207-38	50	BLACK-VINYL	5/8"	3/8"	STEEL
60208-38	50	BLACK-VINYL	3/4"	3/8"	STEEL
60210-38	25	BLACK-VINYL	1"	3/8"	STEEL
60212-38	25	BLACK-VINYL	1-1/2"	3/8"	STEEL
60214-38	25	BLACK-VINYL	2"	3/8"	STEEL
SSC-.187-EPDM	10	BLACK-RUBBER	3/16"	#10	STAINLESS STEEL
SSC-.250-EPDM	10	BLACK-RUBBER	1/4"	#10	STAINLESS STEEL
SSC-.312-EPDM	10	BLACK-RUBBER	5/16"	#10	STAINLESS STEEL
SSC-.375-EPDM	10	BLACK-RUBBER	3/8"	#10	STAINLESS STEEL
SSC-.500-EPDM	10	BLACK-RUBBER	1/2"	#10	STAINLESS STEEL
SSC-.562-EPDM	10	BLACK-RUBBER	9/16"	#10	STAINLESS STEEL
SSC-.625-EPDM	10	BLACK-RUBBER	5/8"	#10	STAINLESS STEEL
SSC-.750-EPDM	10	BLACK-RUBBER	3/4"	#10	STAINLESS STEEL
SSC-.875-EPDM	10	BLACK-RUBBER	7/8"	#10	STAINLESS STEEL
SSC-1.00-EPDM	10	BLACK-RUBBER	1"	#10	STAINLESS STEEL
SSC-1.25-EPDM	10	BLACK-RUBBER	1-1/4"	#10	STAINLESS STEEL
SSC-1.50-EPDM	10	BLACK-RUBBER	1-1/2"	#10	STAINLESS STEEL
SSC-1.75-EPDM	10	BLACK-RUBBER	1-3/4"	#10	STAINLESS STEEL
SSC-2.00-EPDM	10	BLACK-RUBBER	2"	#10	STAINLESS STEEL
SSC-2.50-EPDM	10	BLACK-RUBBER	2-1/2"	#10	STAINLESS STEEL
SSC-3.0-EPDM	10	BLACK-RUBBER	3"	#10	STAINLESS STEEL



60306



60402BK



60108-38



60208-38



SSC-.500-EPDM

# SPLIT LOOM

## POLYETHYLENE SPLIT LOOM

- Thick wall offers superior crush-resistance and a tight seam enclosure
- Temperature rating: -40° F to 200° F (-40° C to 93° C)
- Flexible cable routing and easy break-out
- Good chemical and abrasion resistance
- Rounded edges prevent cutting cable insulation



DISPENSER BOX



FASTENED COIL

CAT. NO.	SIZE	LENGTH	PACKAGE
80002-25BOX	0.250	25'	DISPENSER BOX
80002-25COIL	0.250	25'	FASTENED COIL
80002-100COIL	0.250	100'	FASTENED COIL
80002-BRL	0.250	GAYLORD*	BULK BOX
80004-25BOX	0.375	25'	DISPENSER BOX
80004-25COIL	0.375	25'	FASTENED COIL
80004-100COIL	0.375	100'	FASTENED COIL
80004-BRL	0.375	GAYLORD*	BULK BOX
80005-25BOX	0.4375	25'	DISPENSER BOX
80005-25COIL	0.4375	25'	FASTENED COIL
80005-100COIL	0.4375	100'	FASTENED COIL
80005-BRL	0.4375	GAYLORD*	BULK BOX
80006-25BOX	0.500	25'	DISPENSER BOX
80006-25COIL	0.500	25'	FASTENED COIL
80006-100COIL	0.500	100'	FASTENED COIL
80006-BRL	0.500	GAYLORD*	BULK BOX
80007-25BOX	0.625	25'	DISPENSER BO
80007-25COIL	0.625	25'	FASTENED COIL
80007-100COIL	0.625	100'	FASTENED COIL
80007-BRL	0.625	GAYLORD*	BULK BOX
80008-25BOX	0.750	25'	DISPENSER BOX
80008-25COIL	0.750	25'	FASTENED COIL
80008-100COIL	0.750	100'	FASTENED COIL
80008-BRL	0.750	GAYLORD*	BULK BOX
80010-25BOX	1.00	25'	DISPENSER BOX
80010-25COIL	1.00	25'	FASTENED COIL
80011-25COIL	1.25	25'	FASTENED COIL
80012-15COIL	1.50	15'	FASTENED COIL

Consult factory for current Gaylord quantities

# WIRE AND CABLE

## SPLIT LOOM ACCESSORIES

### SPIRAL WRAP – NATURAL, POLYETHYLENE

CAT. NO.	SIZE	LENGTH	PKG. QTY.
81002-100	.250	100'	1
81004-100	.375	100'	1
81006-100	.500	100'	1
81008-50	.750	50'	1
81010-25	1.00	25'	1



SPIRAL WRAP

### SPLIT LOOM TEE

- Quick and easy solutions for wire bundling and abrasion resistance

CAT. NO.	SIZE	PKG. QTY.
85001	.413 x .413 x .413	10 PCS
85002	.413 x .350 x .350	10 PCS
85004	.500 x .350 x .750	10 PCS
85005	.750 x .350 x .750	10 PCS
85006	.750 x .500 x .750	10 PCS
85007	.750 x .750 x .500	10 PCS
85008	.500 x .500 x .500	10 PCS



SPLIT LOOM TEE

### LOOM OUTLET FITTING

CAT. NO.	SIZE	PKG. QTY.
86004	.413 X .413	10 PCS
86005	.413 X .500	10 PCS
86006	.500 X .500	10 PCS



OUTLET FITTING

### LOOM ROSEBUD CLIP

CAT. NO.	SIZE	PKG. QTY.
87003	.350	10 PCS
87004	.413	10 PCS
87006	.500	10 PCS
87008	.750	10 PCS



ROSEBUD CLIP

# WRAP 'N SEAL

## SELF FUSING TAPE

Wrap 'N Seal Self Fusing Tape is the newest addition to FTZ Industries' advanced line of electrical connectivity products. The latest technology in silicone tape, Wrap'N Seal is ideal for almost any application requiring a water-proof seal and is an excellent insulator with high dielectric strength. Typical usages include marine connections, battery terminals, automotive hose systems, color coding, garden hoses, outside plant cable splices and grip enhancements.

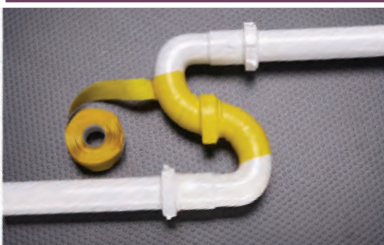
### SPECIFICATIONS:

Dielectric Strength: 400 volts per mil (vpm)  
Operating Temperature: -85°F to 500°F  
Water Absorption 3% Max. by Weight  
MIL-SPEC: Meets A-A-59163  
UL 510  
Type II Triangular Guidelines  
Type I, Rectangular  
Tensile Strength: 700 psi  
Elongation: 300%



### FEATURES

- Center Ridge Line Facilitates Uniform Application of Tape
- An Excellent Insulator with High Dielectric Strength
- Revolutionary Alternative to Heat Shrink Tubing
- Self Fusing and Begins Curing Immediately
- Forms a Permanent Moisture Tight Seal
- Ideal for High Temperature Applications
- No Adhesive Residue Upon Removal
- Available in a Wide Variety of Colors
- Seamless Self-Fusing Silicone Tape
- Completely Cures Within 24 Hours
- 1" Width; 20' Lengths
- Salt Water Resistant



# WIRE AND CABLE

## TAPE



### WRAP 'N SEAL SELF FUSING SILICONE TAPE

- Wrap 'N Seal silicone tape self fuses and cures in 24 hours to form a permanent moisture tight seal
- Has no adhesive lining leaving the application clean with no sticky residue
- Center ridge acts as a guide when wrapping for a uniform and straight application
- Ideal for high temperature applications

CAT. NO.	COLOR	WIDTH	LENGTH	PKG. QTY.
99200	WHITE	1	20'	1
99201	RED	1	20'	1
99202	BLACK	1	20'	1
99205	GREEN	1	20'	1
99206	BLUE	1	20'	1
99207	YELLOW	1	20'	1
99211	GRAY	1	20'	1
99212	ORANGE	1	20'	1
99208	CLEAR	1	20'	1
99209	GLOW-IN-DARK	1	20'	1

#### Specifications:

Operating Temperature	-65° F to +500° F
Dielectric Strength	400 volts per mil (vpm)
Tensile Strength	700 psi
Elongation	300%
MIL-SPEC	Meets MIL-I-46852C Type II Standard 20 MIL Thickness
UL	UL 510

### ELECTRICAL TAPE

- Super 33+ tape gives premium performance even in extreme temperatures!
- 1700 Temflex vinyl tape is designed to perform!

CAT. NO.	DESCRIPTION	SIZE	LENGTH	COLOR	PKG. QTY.
99203	SUPER 33+	3/4	66'	BLACK	1
99204	1700 TEMFLEX VINYL	3/4	60'	BLACK	1

# FUSES

PART NUMBER	AMPS	DESCRIPTION	FUSE STYLE	PKG. QTY.
AGC-0.25	0.25	1/4" Diameter 1-1/4" Length Glass Fuses Fast Acting	AGC	5
AGC-0.5	0.5			5
AGC-1.0	1			5
AGC-1.5	1.5			5
AGC-2.0	2			5
AGC-2.5	2.5			5
AGC-3.0	3			5
AGC-4.0	4			5
AGC-5.0	5			5
AGC-6.0	6			5
AGC-7.0	7			5
AGC-7.5	7.5			5
AGC-10	10			5
AGC-15	15			5
AGC-20	20			5
AGC-25	25	5		
AGC-30	30	5		
ATM-10	10	RED	ATM/MINI	5
ATM-15	15	BLUE		5
ATM-20	20	YELLOW		5
ATM-25	25	CLEAR		5
ATM-30	30	GREEN		5
ATO-ATC-1	1	BLACK	ATO/ATC	5
ATO-ATC-2	2	GRAY		5
ATO-ATC-3	3	VIOLET		5
ATO-ATC-4	4	PINK		5
ATO-ATC-5	5	TAN		5
ATO-ATC-7.5	7.5	BROWN		5
ATO-ATC-10	10	RED		5
ATO-ATC-15	15	BLUE		5
ATO-ATC-20	20	YELLOW		5
ATO-ATC-25	25	CLEAR		5
ATO-ATC-30	30	GREEN		5
ATO-ATC-40	40	ORANGE		3
GMA-1	1	5 mm Diameter 20mm Length Fast Acting Glass Fuses	GMA	5
GMA-2	2			5
GMA-3	3			5
GMA-5	5			5
GMA-7	7			5
GMA-10	10			5
MDL-3	3	1/4" Diameter 1-1/4" Length Time Delayed Glass Fuses	MDL	2
MDL-5	5			2
MDL-6.25	6.25			2
MDL-10	10			2
MDL-15	15			2
MDL-20	20			2
MDL-25	25			2
MDL-30	30	2		



AGC



ATM/MINI



ATO/ATC



GMA



MDL



## TOOLS

FTZ's professional line of tools offers a complete package of dependable tools from one source. Whether you're cutting, stripping, crimping, or heating, we have the correct high quality tool for the job.

- Heavy Duty Crimp Tools
- Industrial Crimp Tools
- Terminal Crimp Tools
- Cutting & Stripping Tools
- Heat Tools





# TOOLS

**CAT. NO.  
THT-SC-CC**

**CABLE CUTTER & CRIMPER  
ELECTRICIAN SCISSOR 2K**

*Toolbelt  
Sheath*



*Cut*



*Crimp*



- For cutting up to #6 AWG Copper and Aluminum Conductors
- Crimping at Terminal-Sleeves (#22-#10 AWG)
- 2 Component Handles
- Cushion Grip
- Heavy Duty Stainless Steel Blades
- 50% Less Cutting Force Required
- Blade with Micro-Indentations

**\*ATTENTION: NOT SUITABLE FOR WORK ON ENERGIZED LINES**

# SURE CRIMP



FTZ's next generation heavy duty battery powered crimp tool is engineered to provide the highest quality crimp, repeatedly with the simple pull of the trigger. The removable dies allow our electricians the flexibility to tap, terminate and splice a variety of wire types and sizes. The circumferential crimp shape produces a solid mass of copper with every crimp leaving a secure low resistance connection.

## CAT.NO. 94293K

- Kit includes: Carrying Case, Crimp Tool, Battery, Battery Charger and 94294 crimp dies for use on Red, Yellow & Blue insulated butts and terminals.
- 26 GA. – 2 AWG Range: One tool conveniently accommodates popular sizes
- Removable Dies offer flexibility with respect to wire size and connector type. Dies are designed and produced in the USA.
- Tool will perform 250 crimps per charge. Once the battery is fully discharged, it can be recharged in 40 minutes.
- Spare batteries are available (CAT. NO. 94293B)
- Spare battery chargers are available (CAT. NO. 94293C)
- Ease of use is what makes this tool special: just insert the connector and partially pull the trigger, this will hold the connector in place. Insert the stripped wire and pull the trigger the rest of the way. The dies will open when the crimp is complete, release the trigger. Connection complete!
- Specifications: Length 9.93 Weight 2.18 Lbs. Color – Green & Black



## AVAILABLE DIE SETS

CAT. NO.	WIRE RANGE	PRODUCT LINES	PRODUCT STYLES
94294-00	10 AWG - 22 AWG 6 mm <sup>2</sup> to 0.5 mm <sup>2</sup>	Clear Seal Cool Seal Crimp 'N Seal Extreme Seal	Insulated terminals, rings, forks and splices
94294-01	14 AWG - 26 AWG 1.5 mm <sup>2</sup> to 0.2 mm <sup>2</sup>	Clear Seal Cool Seal Crimp 'N Seal Extreme Seal	Insulated terminals, rings, forks and splices
94294-02	8 AWG	SureCrimp Copper Compression Lugs and Splices 53xxx and 56xxx Series Copper Compression Splices	For copper CSW, CSN, CLW, CLN, CT and CTL non-insulated compression lugs and splices
94294-03	6 AWG	SureCrimp Copper Compression Lugs and Splices 53xxx and 56xxx Series Copper Compression Splices	For copper CSW, CSN, CLW, CLN, CT and CTL non-insulated compression lugs and splices
94294-04	4 AWG	SureCrimp Copper Compression Lugs and Splices 53xxx and 56xxx Series Copper Compression Splices	For copper CSW, CSN, CLW, CLN, CT and CTL non-insulated compression lugs and splices
94294-05	2 AWG	SureCrimp Copper Compression Lugs and Splices 53xxx and 56xxx Series Copper Compression Splices	For copper CSW, CSN, CLW, CLN, CT and CTL non-insulated compression lugs and splices

## HEAVY DUTY CRIMP TOOLS

### CORRECT CRIMP HEAVY DUTY CRIMP TOOL

#### CAT.NO. 94284

**CAT.NO. 94285** includes controlled cycle mechanism

FTZ's professional heavy duty crimp tool is engineered to provide the most complete crimp on all major brands of connectors. The diamond shaped rotating dies produce a solid mass of copper with every crimp leaving a secure low resistance connection.

Features Include:

- **6 GA. – 250 MCM Range** one tool conveniently accommodates popular sizes
- **Diamond-Shaped Crimp** completely compresses cable to form solid mass assuring low resistance connection
- **Compound Action** exerts five tons of force for complete crimps
- **Built-in Dies** no detached dies to purchase or lose
- **Rotating Dies** quickly adjust setting to accommodate various terminals and lugs
- **Comfortable Grip** improves your grip and eases hand fatigue
- **Specifications:** Length 25 Weight 5.9 Lbs. Color – Red & Black
- **Replacement** parts are available, call for details.

**Cat No. 94285** also includes:

- **Controlled Cycle Ratchet Mechanism** once crimp is started tool will not release until complete
- **Specifications:** Length 25 Weight 6.2 Lbs. Color – Red & Black Rounded edges prevent cutting cable insulation



### CORRECT CRIMP BENCH MOUNT HEAVY DUTY CRIMP TOOL

#### CAT.NO. 94284BM

The same high quality tool as the 94284, the bench mount version can be securely and safely attached to any solid surface. Perfect for higher volume applications or repair shop work-stations.

Features Include:

- Securely fastens to work surfaces
- Provides added leverage for larger size cable
- Mounted tool helps prevent loss, damage, and theft of tool
- **Specifications:** Length 20 Weight 7.8 Lbs. Color – Red & Black
- 6 GA. – 250 MCM Range



### TRI-FORM CRIMP TOOL

#### CAT.NO. 94297

The Tri-Form's unique triangular crimp distributes equal force on all three sides eliminating pinching and fracturing. This dieless tool has over 50 settings that easily adjust with the two-finger dial.

Features Include:

- **Tri-Form Crimp** provides equal force on three sides eliminating pinching, flashing, and fracturing
- **50 Different Settings** crimps 8 GA. – 4/0
- **Two-Finger Dial** adjust settings quickly and accurately
- **Comfortable Grip** improves your grip and eases hand fatigue
- **Specifications:** Length 25 Weight 5 Lbs. Color – Red & Black



## TRI-FORM BENCH MOUNT CRIMP TOOL

### CAT.NO. 94298

The Tri-Form bench mount version can be securely and safely attached to any solid surface. Perfect for higher volume applications or repair shop work-stations.

Features Include:

- Securely fastens to work surfaces
- Provides added leverage for larger size cable
- Mounted tool helps prevent loss, damage, and theft of tool
- 6 GA. – 250 MCM Range



94298

## TRI-FORM COMPACT CRIMP TOOL

### CAT.NO. 94296

The compact version of the Tri-Form crimp tool delivers the same quality features as the larger version, but with added versatility. Designed for medium and heavy duty crimps this tool is ideal for situations when space is restricted like under hoods or inside industrial enclosures.

Features Include:

- **8 GA. – 1/0 GA. Range**
- **Compact Size** suited for tight spaces like under the hood or inside industrial enclosures
- **Two-Finger Dial** adjust settings quickly and accurately
- **Comfortable Grip** improves your grip and eases hand fatigue
- **Specifications:** Length 16 Weight 5 Lbs. Color – Red & Black



94296

## HAMMER CRIMP HEAVY DUTY CRIMP TOOL

### CAT.NO. 94840

A convenient and durable tool for crimping lugs and terminals from 6 GA. – 4/0. Made of high strength steel, the hammer crimp tool features a V-shaped nest for a solid crimp each time with a simple swing of a hammer.

- **Terminal & Lug Size Guide** lets you know the crimp is complete



94840

## HAMMER CRIMP TOOL

### CAT.NO. 94841

Convenient and economical alternative for crimping lugs and terminals 6 GA. – 4/0.

Features Include:

- **Spring Loaded** locks in up position for loading connector and cable and locks them in place when released



94841

# INDUSTRIAL CRIMP TOOLS

## ERGONOMIC HAND TOOL

### CAT.NO. ILC-10-N

A high quality ratchet hand tool that comfortably crimps lugs and terminals from 8 GA. – 1/0. The ergonomic design allows for added crimp force with minimal exertion and the ratchet control mechanism ensures every crimp is complete.

Features Include:

- **Crimps #8 AWG. – 1/0 Copper Compression Lugs**
- **Rotatable Die** for fast and easy size change
- **Color-Coded Crimp Nests** for correct crimps
- **Ratchet Control Mechanism** assures a complete crimp every time
- **Ergonomic Design** provides long molded handles to reduce hand stress

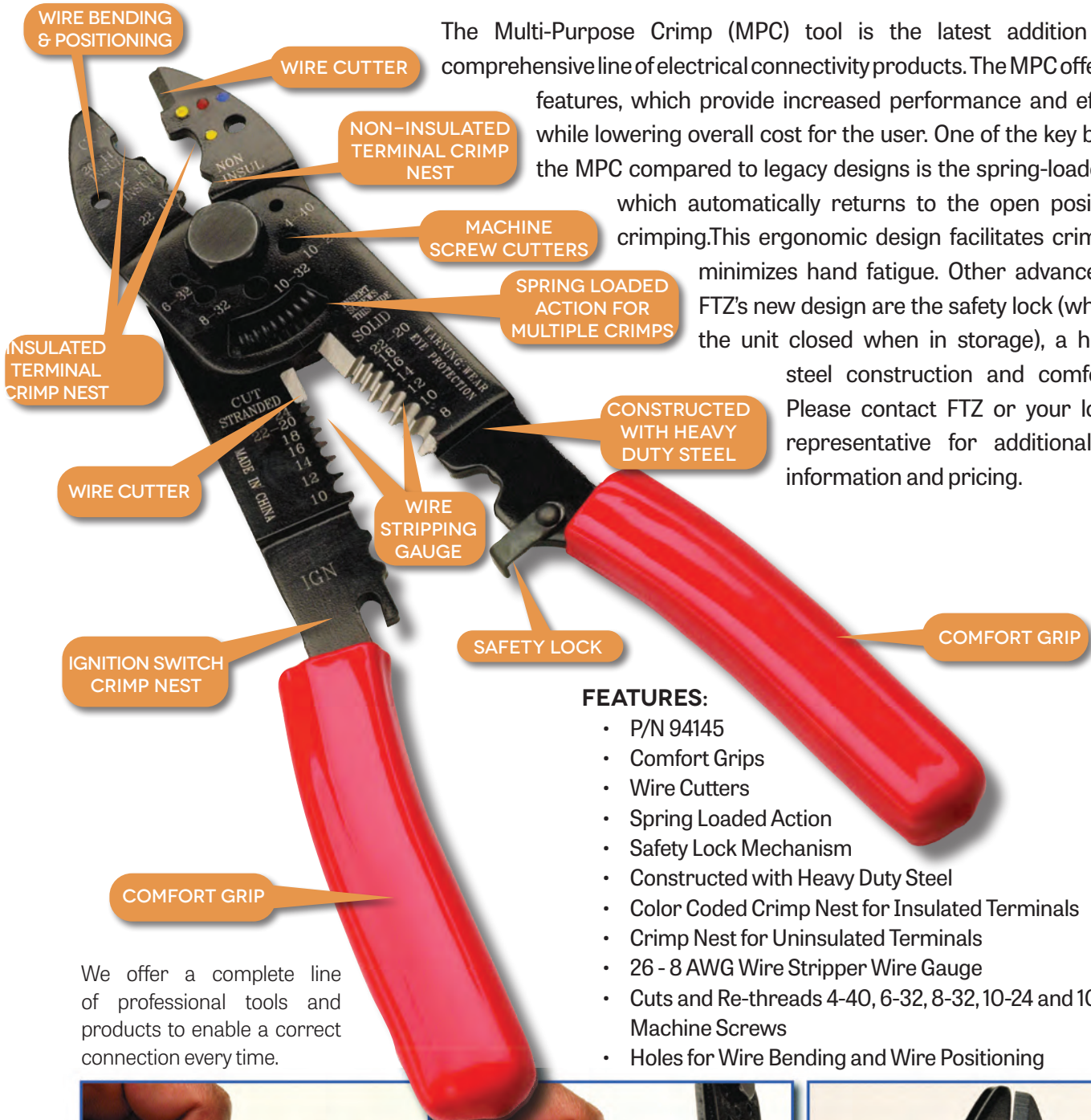


### Specifications:

Weight	1-3/8 lbs.
Overall Length	11
Width	3.75
Conductor Range	8 AWG – 1/0
Color	Yellow/Black

# MPC TOOL

## MULTI-PURPOSE CRIMP



The Multi-Purpose Crimp (MPC) tool is the latest addition to FTZ's comprehensive line of electrical connectivity products. The MPC offers unique features, which provide increased performance and efficiencies while lowering overall cost for the user. One of the key benefits of the MPC compared to legacy designs is the spring-loaded handle which automatically returns to the open position after crimping. This ergonomic design facilitates crimping and minimizes hand fatigue. Other advancements in FTZ's new design are the safety lock (which keeps the unit closed when in storage), a heavy duty steel construction and comfort grips. Please contact FTZ or your local sales representative for additional product information and pricing.

### FEATURES:

- P/N 94145
- Comfort Grips
- Wire Cutters
- Spring Loaded Action
- Safety Lock Mechanism
- Constructed with Heavy Duty Steel
- Color Coded Crimp Nest for Insulated Terminals
- Crimp Nest for Uninsulated Terminals
- 26 - 8 AWG Wire Stripper Wire Gauge
- Cuts and Re-threads 4-40, 6-32, 8-32, 10-24 and 10-32 Machine Screws
- Holes for Wire Bending and Wire Positioning

We offer a complete line of professional tools and products to enable a correct connection every time.



## TERMINAL CRIMP TOOLS

### CONTROLLED CYCLE CRIMP TOOL

**CAT.NO. 94230 (22-10 AWG)**

**CAT.NO. 94330 (16-8 AWG)**

**CAT.NO. 94231 (26-14 AWG)**

FTZ's controlled cycle ratchet crimp tool is specifically designed and manufactured for Crimp 'N Seal heat shrink terminals and splices. The 94130 is UL Listed and CSA Certified with CNS terminals and splices to provide the correct crimp every time. Features Include:

- **UL Listed & CSA Certified** for use with Crimp 'N Seal heat shrink terminals 22-10 AWG.
- **Precision Dies** color-coded to industry standards for an accurate crimp each time
  - **Ratchet Mechanism** ensures a proper crimp each time by not releasing until cycle is complete
  - **Compound Action** delivers maximum crimp force with minimal effort
  - **Cushion Grip Handles** comfortable grip eases strain on hands

### MULTI-PURPOSE HAND TOOL

**CAT.NO. 94145**

Features Include:

- **Multiple Crimp Dies**
  - Crimps 26-10 AWG insulated terminals
  - Crimps 22-10 AWG non-insulated terminals
  - Crimps 7-8mm ignition terminals
  - Crimps 'F' type auto terminals
- **Two Precision-Ground Wire Cutters**
  - **Up Front Anvil Type Cutter** ideal for work in confined spaces
  - **Scissor Type Cutter** conveniently located next to wire stripper for fast installation
- **Precision-Ground Wire Stripper**
  - Strips 26-10 AWG stranded wire
  - Strips 18-8 AWG solid wire
- **Bolt Cutters**
  - **Cuts Five Common Sizes** 4-40, 6-32, 8-32, 10-24, 10-32.
  - **Threaded Slots firmly** grips bolts and can be used to rethread bolts
- **Wire Looping Slots**
  - Dual slot locations for looping solid wire
- **High Strength Construction**
- **Made of Heat Treated Steel** maintains accuracy and sharpness for extended life
- **Cushion Grip Handles** comfortable grip eases strain on hands
- **Weighs Only 7 oz.** Compact tool perfect for work in confined spaces
- **Spring loaded action with safety lock mechanism**

### ECONOMICAL 7-IN-1 HAND TOOL

**CAT.NO. 94146**

Features Include:

- **Strips 18-10 AWG Wire** stamped wire strip gauge enables consistent wire stripping every time
- **Precision Wire Cutting Tool** precision ground to cut small conductors
- **Steel Wire Cutting Tool** center hole for cutting fine steel wire
- **Crimps 18-14 AWG Insulated Terminals** completes the cut-strip-crimp process
- **Plier Nose** flat plier nose allows you to punch and twist knock outs
- **Wire Loop Slots** built in looping holes allows for convenient bending of eye loops into solid conductors
- **Scale MM & Inch** stamped markings help to easily convert measurements
- **Cushion Grip Handles** eases pressure on hands
- **'Open' Spring** keeps tool in open position making wire insertion simpler



## CUTTING & STRIPPING TOOLS

FTZ's complete line of professional cutting and stripping tools provide the correct cut every time. From the smallest wire up to 750MCM cable the hardened alloy blades provide a clean cut for better terminal installation.

### CAT.NO. 94012

Features Include:

- **7.5 Overall Length** convenient compact tool
- **Sharp Heat Treated Blades** maintains sharpness longer for cleaner cuts
- **Narrow Head Design** better performance in confined spaces
- **Wide Cutting Range** cuts up to 2/0 copper or aluminum cable



### CAT.NO. 94014

Features Include:

- **Durable 16 Handles** provides better leverage and control
- **Sharp Heat Treated Blades** maintains sharpness longer for cleaner cuts
- **Wide Cutting Range** cuts up to 350MCM copper or aluminum cable

**CAT.NO. 94014BM:** Bench Mount Cable Cutter



### CAT.NO. 94015

Features Include:

- **Durable 20.75 Fiberglass Handles** light but strong handles provide better leverage and control
- **Sharp Heat Treated Blades** maintains sharpness longer for cleaner cuts
- **Wide Cutting Range** cuts up to 500MCM copper or aluminum cable



### CAT.NO. 94031

Features Include:

- **Ratchet Mechanism** cut large cables with little effort
- **16 Length** compact tool works well in tight spaces and stores easily
- **Replaceable Blades** extends life of tool
- **Wide Cutting Range** cuts up to 750MCM copper or aluminum cable



### CAT.NO. 94040

Features Include:

- **8 AWG – 4/0 Wire Range**
- **Adjustable Blade Height** adjust depth to match insulation thickness of cable
- **Replacement Blades** available extending the life of the tool





## POWER TORCHES

### CAT.NO. 94600



The most successful tool available in the transportation and industrial markets. This durable tool provides a dependable and powerful heat source for almost any application where a controlled flame is required. No shop should be without it. Features Include:

- **Brass and Steel Construction** no tool is tougher
- **Dual Gas and Air Flame Controls** adjust temperature and flame precision to fit your application
- **2500°F Torch output** one tool for every job
- **Safety Lock** unique safety lock prevents accidents
- **Removable Base** for safe hands-free operation in both the vertical and horizontal position

#### Specifications:

Length	3.9 in. (100mm)
Width	1.4 in. (36mm)
Height	5.4 in. (138mm)
Weight (gas filled)	9.88 oz. (280g)
Tank Capacity	2.03 fl. oz. (60ml)
Operating Time (one tank)	up to 220 min.
Color	Black

Note: Tool shipped without fuel  
U.S. Patent 5,564,918



### CAT.NO. 94905



The latest and most powerful butane torch yet, the heavy duty 94905 is equipped for the most demanding jobs. The best there is in high output butane tools, the ribbed aluminum body with ergonomic grip provide a light, but extremely durable tool. Leave your cumbersome propane setup at the shop. This compact tool does it all. Features include:

- **Waterproof Piezo Electronic Ignition** dependable ignition in any condition
- **Wind Resistant** constant flame in the most extreme environments
- **High BTU Torch Output** propane power in a portable easily refillable tool
- **Broad Base** for safe hands-free operation

#### Specifications:

Length	4.73 in. (120mm)
Grip Dia.	1.78 in. (45mm)
Base Dia.	2.56 in. (65mm)
Height	6.8 in. (172mm)
Weight (w/o fuel)	1.02 lbs. (460g)
Tank Capacity	2.03 fl. oz. (60ml)
Operating Time (one tank)	approx. 60 min. mid-setting
Color	Blue

Note: Tool shipped without fuel  
U.S. Patent 5,564,918



## CAT.NO. 94902

Lightweight version of the more powerful 94905 this tool provides compact durability and affordable versatility. Constructed of hi-tech polymers, brass, and ceramic parts that ensure precise performance and long operating life. Features include:

- **Waterproof Piezo Electronic Ignition** dependable ignition in any condition
- **Wind Resistant** High BTU Flame adjustable for medium duty tasks
- **2500°F Torch Output** lightweight but powerful
- **Ergonomic Hand Grip** for hours of comfortable operation
- **Broad Base** for safe hands-free operation

### Specifications:

Length	3.9 in. (100mm)
Grip Dia.	1.34 in. (34mm)
Base Dia.	2.36 in. (60mm)
Height	5.47 in. (139mm)
Weight (w/o fuel)	5.12 oz. (145g)
Tank Capacity	0.68 fl. oz. (20ml)
Operating Time (one tank)	approx. 60 min. mid-setting
Color	Blue

Note: Tool shipped without fuel  
U.S. Patent 5,564,9



## COMPACT HEAT TOOLS

### CAT.NO. 94940 ULTRA SHRINK JET



The high output flameless heat gun designed for industrial applications where versatility and power are a must. The flameless tool is safe to use in environments where vapors may be present or flames are prohibited. Included deflector attachment evenly distributes heat making heat shrink tubing installation faster. Leave the extension cords behind with this portable ergonomic heat tool.

Features Include:

- **Automatic Piezo Ignition System**
- **Deflector & Stand Attachments** circulates heat evenly and provides safe hands-free option
- **1400° F Hot Output** the best tool for heavy duty flameless applications

Specifications:

Length (with soldering tip)	7.5 in. (190mm)
Weight (w/o fuel)	4.77 oz. (135g)
Tank Capacity	1.29 fl. oz. (38ml)
Operating Time (one tank)	200 min. at mid-setting
Color	Blue

Note: Tool shipped without fueled  
U.S. Patent 5,490,496  
U.S. Patent 5,810,579



### CAT.NO. 94700 SHRINK JET

FTZ's most successful compact heat tool provides up to a 1300°F flameless heat source that is safe to use in environments where vapors may be present or flames are prohibited. The perfect tool for heat shrink terminal kits or heat shrink tubing assortments – it's one of our best performers.

- **Automatic Piezo Ignition System** water & wind resistant for a dependable light anywhere
- **1300°F Flameless Heat** safe and durable
- **Refillable Fuel Cell** use it over and over

Specifications:

Length	1 in. (25mm)
Width	3.2 in. (80mm)
Height	4.5 in. (115mm)
Weight (with fuel)	3.35 oz. (95g)
Operating Time (one tank)	approx. 20 min.
Color	Black

Note: Tool shipped without fuel  
U.S. Patent 5,460,520



**CAT.NO. 94701** – Replacement Fuel Cartridge

## CAT.NO. 94800 MICRO JET

The perfect tool for heat shrink terminal kits or heat shrink tubing assortments the 94800 provides an affordable compact heat tool.

- **Automatic Piezo Ignition System** water & wind resistant for a dependable light anywhere
- **2500°F Torch Output** safe and durable
- **Compact & Powerful** thousands of everyday applications
- **Refillable Fuel Cell** use it over and over

### Specifications:

Length	1 in. (25mm)
Width	2.6 in. (65mm)
Height	4.3 in. (110mm)
Weight (with fuel)	2.12 oz. (60g)
Operating Time (one gas fill)	approx. 20 min.
Color	Black

Note: Tool shipped partially fueled  
U.S. Patent 5,340,060

**CAT.NO. 94701** – Replacement Fuel Cartridge



## CAT.NO. 94900 TURBO LITE II

This small but versatile heat tool provides a 2400°F pinpoint blue flame that can easily handle applications such as heat shrink terminals and heat shrink tubing. Perfect for kits and promotional giveaways this tool is always a customer favorite. Features Include:

- **Piezo Waterproof /Windproof Ignition System** wet & windy environments are no problem
- **Convenient Twist Flame Adjustment** set the flame the way you want it
- **Refillable Translucent Fuel Tank** takes the guess work out of when to refill
- **Compact & Powerful** thousands of everyday applications

### Specifications:

Length	1.4 in. (35mm)
Width	0.8 in. (20mm)
Height	2.8 in. (71mm)
Weight (with fuel)	1.62 oz. (46g)
Operating Time (one gas fill)	approx. 25 min.
Color	Charcoal

Note: Tool shipped without fuel  
U.S. Patent 5,460,520



## HEAT TOOL KITS

### Applications

- Heat Shrink Terminals & Solder Terminals
- Heat Shrink Tubing
- Cut foam, plastics & cauterize nylon and other materials
- Automotive & Marine Repair
- Heavy Equipment and Truck Repair
- Aviation Service & Repair
- Electrical Components & Environmental Splicing
- Maintain Switch Panels & Sensitive IC Boards
- Solder Circuit Boards

### CAT.NO. 94907K

Compact multi-function heat tool with exceptional maneuverability and versatility that is ideally suited for the electronics market. Features include

- **Rapid Heat-Up** no more delays, improved efficiency
- **Multi-Function** 25W-80W soldering iron. 2400°F torch with hot knife and hot air blower options
- **Visible Fuel Tank** never run out of fuel while in the field
- **Accessories Included** interchangeable tips and cleaning sponge, coil of solder, professional grade case
- **Note:** Tool shipped without fuel



### CAT.NO. 94901K

Top-of-the-line professional grade tool is rapidly becoming the standard by which other solder tools are judged. This versatile multi-function solder tool kit offers the following features:

- **Automatic Ignition** for a quick and convenient start every time
- **Rapid Heat-Up** no more delays, improved efficiency
- **Multi-Function** 35W-120W soldering iron. 2400°F torch with hot knife and hot air blower options
- **Large Visible Fuel Tank** never run out of fuel while in the field
- **Accessories Included** interchangeable tips and cleaning sponge, coil of solder, professional grade case
- **Note:** Tool shipped without fuel



## ELECTRIC HEAT TOOL

### ELECTRIC HEAT GUNS

These durable heat guns offer high temperature electric heat sources for a wide range of applications. Popular with a wide range of installers from high volume wire harness manufacturers to heavy duty truck repair technicians, these tools have years of successful performance behind them. Each gun offers dual temperature settings and include deflector attachments to evenly distribute heat, making heat shrink installations faster, easier and less prone to scorching.



#### Specifications:

Cat. No.	94510	94502
Length	9.75	9.75
Weight	1.5 lbs	1.9 lbs
Color	Red	Blue
Heat Setting 1	660°F	750°F
Heat Setting 2	1020°F	1100°F
Accessories	4 Piece	1 Piece
Stand	Built in	Fold Down
Power	1500 Watts	1200 Watts



# TOOLS



## HEAVY DUTY HEAT GUN CAT. NO. 94906

### FEATURES



- Automatic ignition.
- Temperature range 450-550°C/842-1022°F.
- Integrated hands free collar.
- Task Nozzles for various applications.
- Cylinder Type: US 1" Thread Cylinder (CGA600 Valve).
- Fuel Consumption: 40g / hour.
- Long lasting readily available Fuel Supply (approximately 10 hrs).

### APPLICATIONS

- General Heating and Drying Application
- Auto Body and Auto Interior Repair
- Auto Windshield Repair
- Plastic Bending and Forming
- Sign Making and Repairs
- Orthotic and Prosthetic Labs
- Heat Shrink Tubing and Sheets
- Heat Shrinkable Terminals
- Paint Scraping
- Ice Thawing

### SPECIFICATIONS

Dimension (H)	122.5mm (4.82 inch)
Dimension (L)	225mm (8.86 inch)
Dimension (W)	53mm (2.09 inch)
Weight	485 g± 15 g (w/o cylinder*)
Approximate temperature (At the distance of heat outlet 1 inch)	500°C (±50°C) ( 932°F±122F)

\* PROPANE TANK IS NOT INCLUDED.

## INDUSTRIAL CONNECTORS

FTZ offers a wide range of standard industrial connectors and labor-saving specialty products for aluminum and copper conductors. Our comprehensive line of connectors are manufactured to conform to UL and CSA standards ensuring the highest quality electrical connection.

- Sure Crimp® Copper Compression Lugs & Splices
- ClearTap® (Multi-Tap Connectors)
- ClearSplice® (Splicer-Reducer Connector)
- KUP-L-Tap® (Insulation Piercing Connectors)
- Nimbus™ (Splicer-Reducer Connector)
- Splice Kits
- Ground Clamps
- Split Bolts
- Mechanical Lugs
- Mechanical Splicer-Reducer





# SURECRIMP®

## COPPER COMPRESSION CONNECTORS

- Expanded line of lugs
- UL Listed, CSA certified for power, bonding and grounding applications.
- Reduces inventory requirements
- Connectors accept multiple conductor classes
- Manufactured from high strength seamless copper tubing
- Electro-tin plated which offers corrosion resistance and improved connector longevity
- Color coded

**NEW COPPER  
COMPRESSION  
CONNECTORS**

**SURECRIMP™**



# INDUSTRIAL CONNECTORS

## SURECRIMP®

### COPPER COMPRESSION LUGS – STANDARD BARREL

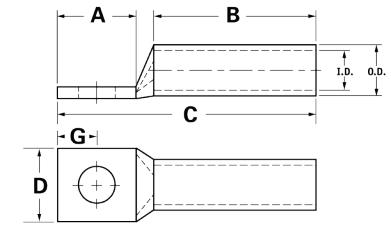
#### 1 HOLE, W/SIGHT HOLE – CONDUCTOR RANGE: #8 – #1



## TYPE CSWS

### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation techniques are used, may be used for high voltage applications up to 35KV.
- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
						A	B	C	D	G				
CSWS-8-10	#8 AWG	#8 FLEX	-	10	0.219	0.562	0.500	1.257	0.374	0.258	Red	I-21	0.272	0.179
CSWS-8-14	#8 AWG	#8 FLEX	-	1/4	0.281	0.680	0.500	1.375	0.486	0.320	Red	I-21	0.272	0.179
CSWS-8-516	#8 AWG	#8 FLEX	-	5/16	0.343	0.875	0.500	1.570	0.532	0.352	Red	I-21	0.272	0.179
CSWS-8-38	#8 AWG	#8 FLEX	-	3/8	0.406	0.875	0.500	1.570	0.593	0.414	Red	I-21	0.272	0.179
CSWS-6-10	#6 AWG	-	-	10	0.219	0.562	0.500	1.257	0.411	0.258	Blue	I-24	0.295	0.203
CSWS-6-14	#6 AWG	-	-	1/4	0.281	0.680	0.500	1.375	0.411	0.320	Blue	I-24	0.295	0.203
CSWS-6-516	#6 AWG	-	-	5/16	0.343	0.875	0.500	1.570	0.532	0.352	Blue	I-24	0.295	0.203
CSWS-6-38	#6 AWG	-	-	3/8	0.406	0.875	0.500	1.570	0.593	0.414	Blue	I-24	0.295	0.203
CSWS-6-12	#6 AWG	-	-	1/2	0.562	1.250	0.500	1.945	0.750	0.546	Blue	I-24	0.295	0.203
CSWS-4-10	#4 AWG	#6 FLEX	4-6 AWG	10	0.219	0.562	0.500	1.296	0.486	0.258	Gray	I-29	0.343	0.250
CSWS-4-14	#4 AWG	#6 FLEX	4-6 AWG	1/4	0.281	0.680	0.500	1.414	0.486	0.320	Gray	I-29	0.343	0.250
CSWS-4-516	#4 AWG	#6 FLEX	4-6 AWG	5/16	0.343	0.875	0.500	1.609	0.486	0.352	Gray	I-29	0.343	0.250
CSWS-4-38	#4 AWG	#6 FLEX	4-6 AWG	3/8	0.406	0.875	0.500	1.609	0.593	0.414	Gray	I-29	0.343	0.250
CSWS-4-12	#4 AWG	#6 FLEX	4-6 AWG	1/2	0.562	1.250	0.500	1.984	0.750	0.546	Gray	I-29	0.343	0.250
CSWS-3-10	#3 AWG	#4 FLEX	3-6 AWG	10	0.219	0.562	0.625	1.442	0.532	0.258	White	I-29	0.375	0.275
CSWS-3-14	#3 AWG	#4 FLEX	3-6 AWG	1/4	0.281	0.680	0.625	1.560	0.532	0.320	White	I-29	0.375	0.275
CSWS-3-516	#3 AWG	#4 FLEX	3-6 AWG	5/16	0.343	0.875	0.625	1.755	0.532	0.352	White	I-29	0.375	0.275
CSWS-3-38	#3 AWG	#4 FLEX	3-6 AWG	3/8	0.406	0.875	0.625	1.755	0.593	0.414	White	I-29	0.375	0.275
CSWS-3-12	#3 AWG	#4 FLEX	3-6 AWG	1/2	0.562	1.250	0.625	2.130	0.750	0.546	White	I-29	0.375	0.275
CSWS-2-10	#2 AWG	-	2-6 AWG	10	0.219	0.562	0.625	1.473	0.599	0.258	Brown	I-33	0.421	0.312
CSWS-2-14	#2 AWG	-	2-6 AWG	1/4	0.281	0.680	0.625	1.591	0.599	0.320	Brown	I-33	0.421	0.312
CSWS-2-516	#2 AWG	-	2-6 AWG	5/16	0.343	0.875	0.625	1.786	0.599	0.352	Brown	I-33	0.421	0.312
CSWS-2-38	#2 AWG	-	2-6 AWG	3/8	0.406	0.875	0.625	1.786	0.599	0.414	Brown	I-33	0.421	0.312
CSWS-2-12	#2 AWG	-	2-6 AWG	1/2	0.562	1.250	0.625	2.161	0.750	0.546	Brown	I-33	0.421	0.312
CSWS-1-10	#1 AWG	#2 FLEX	1-6 AWG	10	0.219	0.562	0.625	1.517	0.673	0.258	Green	I-37	0.468	0.359
CSWS-1-14	#1 AWG	#2 FLEX	1-6 AWG	1/4	0.281	0.875	0.625	1.830	0.673	0.320	Green	I-37	0.468	0.359
CSWS-1-516	#1 AWG	#2 FLEX	1-6 AWG	5/16	0.343	0.875	0.625	1.830	0.673	0.352	Green	I-37	0.468	0.359
CSWS-1-38	#1 AWG	#2 FLEX	1-6 AWG	3/8	0.406	0.875	0.625	1.830	0.673	0.414	Green	I-37	0.468	0.359
CSWS-1-12	#1 AWG	#2 FLEX	1-6 AWG	1/2	0.562	1.250	0.625	2.205	0.750	0.546	Green	I-37	0.468	0.359

\* When installed with specified dieless tools

# SURECRIMP®

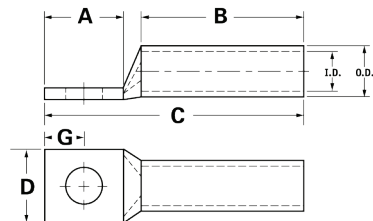
## COPPER COMPRESSION LUGS – STANDARD BARREL 1 HOLE, W/SIGHT HOLE – CONDUCTOR RANGE: 1/0 – 400KCMIL



### TYPE CSWS

#### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation techniques are used, may be used for high voltage applications up to 35KV.
- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
						A	B	C	D	G				
CSWS-1/0-10	1/0 AWG	#1 FLEX	1/0-6 AWG	10	0.219	0.562	0.750	1.668	0.738	0.258	Pink	I-42	0.515	0.390
CSWS-1/0-14	1/0 AWG	#1 FLEX	1/0-6 AWG	1/4	0.281	0.875	0.750	1.981	0.738	0.320	Pink	I-42	0.515	0.390
CSWS-1/0-516	1/0 AWG	#1 FLEX	1/0-6 AWG	5/16	0.343	0.875	0.750	1.981	0.738	0.352	Pink	I-42	0.515	0.390
CSWS-1/0-38	1/0 AWG	#1 FLEX	1/0-6 AWG	3/8	0.406	0.875	0.750	1.981	0.738	0.414	Pink	I-42	0.515	0.390
CSWS-1/0-12	1/0 AWG	#1 FLEX	1/0-6 AWG	1/2	0.562	1.25	0.750	2.356	0.738	0.546	Pink	I-42	0.515	0.390
CSWS-2/0-10	2/0 AWG	1/0 FLEX	2/0-4 AWG	10	0.219	0.562	0.750	1.708	0.811	0.258	Black	I-45	0.562	0.437
CSWS-2/0-14	2/0 AWG	1/0 FLEX	2/0-4 AWG	1/4	0.281	0.875	0.750	2.021	0.811	0.320	Black	I-45	0.562	0.437
CSWS-2/0-516	2/0 AWG	1/0 FLEX	2/0-4 AWG	5/16	0.343	0.875	0.750	2.021	0.811	0.352	Black	I-45	0.562	0.437
CSWS-2/0-38	2/0 AWG	1/0 FLEX	2/0-4 AWG	3/8	0.406	0.875	0.750	2.021	0.811	0.414	Black	I-45	0.562	0.437
CSWS-2/0-12	2/0 AWG	1/0 FLEX	2/0-4 AWG	1/2	0.562	1.250	0.750	2.396	0.811	0.546	Black	I-45	0.562	0.437
CSWS-3/0-10	3/0 AWG	2/0 FLEX	3/0-2 AWG	10	0.219	0.562	0.750	1.751	0.885	0.258	Orange	I-50	0.609	0.484
CSWS-3/0-14	3/0 AWG	2/0 FLEX	3/0-2 AWG	1/4	0.281	0.875	0.750	2.064	0.885	0.320	Orange	I-50	0.609	0.484
CSWS-3/0-516	3/0 AWG	2/0 FLEX	3/0-2 AWG	5/16	0.343	0.875	0.750	2.064	0.885	0.352	Orange	I-50	0.609	0.484
CSWS-3/0-38	3/0 AWG	2/0 FLEX	3/0-2 AWG	3/8	0.406	0.875	0.750	2.064	0.885	0.414	Orange	I-50	0.609	0.484
CSWS-3/0-12	3/0 AWG	2/0 FLEX	3/0-2 AWG	1/2	0.562	1.250	0.750	2.439	0.885	0.546	Orange	I-50	0.609	0.484
CSWS-4/0-14	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/4	0.281	0.875	0.875	2.241	0.999	0.320	Purple	I-54	0.687	0.546
CSWS-4/0-516	4/0 AWG	3/0 FLEX	4/0-1 AWG	5/16	0.343	0.875	0.875	2.241	0.999	0.352	Purple	I-54	0.687	0.546
CSWS-4/0-38	4/0 AWG	3/0 FLEX	4/0-1 AWG	3/8	0.406	0.875	0.875	2.241	0.999	0.414	Purple	I-54	0.687	0.546
CSWS-4/0-12	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/2	0.562	1.250	0.875	2.616	0.999	0.546	Purple	I-54	0.687	0.546
CSWS-250-516	250kcmil	4/0 FLEX	250kcmil - 1/0 AWG	5/16	0.343	0.875	1.063	2.469	1.088	0.352	Yellow	I-62	0.750	0.593
CSWS-250-38	250kcmil	4/0 FLEX	250kcmil - 1/0 AWG	3/8	0.406	0.875	1.063	2.469	1.088	0.414	Yellow	I-62	0.750	0.593
CSWS-250-12	250kcmil	4/0 FLEX	250kcmil - 1/0 AWG	1/2	0.562	1.250	1.063	2.844	1.088	0.546	Yellow	I-62	0.750	0.593
CSWS-300-516	300kcmil	250 G, H FLEX	300kcmil - 2/0 AWG	5/16	0.343	0.875	1.063	2.525	1.189	0.352	White	I-66	0.812	0.660
CSWS-300-38	300kcmil	250 G, H FLEX	300kcmil - 2/0 AWG	3/8	0.406	0.875	1.063	2.525	1.189	0.414	White	I-66	0.812	0.660
CSWS-300-12	300kcmil	250 G, H FLEX	300kcmil - 2/0 AWG	1/2	0.562	1.250	1.063	2.900	1.189	0.546	White	I-66	0.812	0.660
CSWS-300-58	300kcmil	250 G, H FLEX	300kcmil - 2/0 AWG	5/8	0.656	1.437	1.063	3.087	1.189	0.671	White	I-66	0.812	0.660
CSWS-350-38	350kcmil	250 I,K, M FLEX 262.2 DLO	350kcmil - 3/0 AWG	3/8	0.406	0.875	1.063	2.561	1.291	0.414	Red	I-71	0.890	0.703
CSWS-350-12	350kcmil	250 I,K, M FLEX 262.2 DLO	350kcmil - 3/0 AWG	1/2	0.562	1.250	1.063	2.936	1.291	0.546	Red	I-71	0.890	0.703
CSWS-350-58	350kcmil	250 I,K, M FLEX 262.2 DLO	350kcmil - 3/0 AWG	5/8	0.656	1.437	1.063	3.123	1.291	0.671	Red	I-71	0.890	0.703
CSWS-400-38	400kcmil	300 G,H,I,K, M FLEX 313.1 DLO	400kcmil - 4/0 AWG	3/8	0.406	0.875	1.188	2.730	1.365	0.414	Blue	I-76	0.937	0.750
CSWS-400-12	400kcmil	300 G,H,I,K, M FLEX 313.1 DLO	400kcmil - 4/0 AWG	1/2	0.562	1.250	1.188	3.105	1.365	0.546	Blue	I-76	0.937	0.750
CSWS-400-58	400kcmil	300 G,H,I,K, M FLEX 313.1 DLO	400kcmil - 4/0 AWG	5/8	0.656	1.437	1.188	3.292	1.365	0.671	Blue	I-76	0.937	0.750
CSWS-400-38	400kcmil	300 G,H,I,K, M FLEX 313.1 DLO	400kcmil - 4/0 AWG	3/8	0.406	0.875	1.188	2.730	1.365	0.414	Blue	I-76	0.937	0.750
CSWS-400-12	400kcmil	300 G,H,I,K, M FLEX 313.1 DLO	400kcmil - 4/0 AWG	1/2	0.562	1.250	1.188	3.105	1.365	0.546	Blue	I-76	0.937	0.750
CSWS-400-58	400kcmil	300 G,H,I,K, M FLEX 313.1 DLO	400kcmil - 4/0 AWG	5/8	0.656	1.437	1.188	3.292	1.365	0.671	Blue	I-76	0.937	0.750

\* When installed with specified dieless tools

# INDUSTRIAL CONNECTORS

## SURECRIMP®

### COPPER COMPRESSION LUGS – STANDARD BARREL

1 HOLE, W/SIGHT HOLE – CONDUCTOR RANGE: 500KCMIL – 1000KCMIL

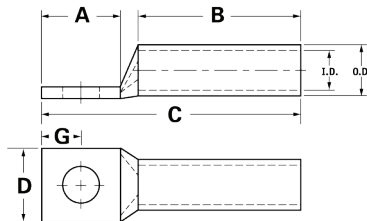


## TYPE CSWS

### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation

- techniques are used, may be used for high voltage applications up to 35KV.
- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
						A	B	C	D	G				
CSWS-500-12	500kcmil	350 G,H,I,K,M FLEX 373.7 DLO	500kcmil - 250kcmil	1/2	0.562	1.250	1.300	3.282	1.535	0.414	Brown	I-87	1.062	0.828
CSWS-500-38	500kcmil	350 G,H,I,K,M FLEX 373.7 DLO	500kcmil - 250kcmil	3/8	0.406	0.875	1.300	2.907	1.535	0.546	Brown	I-87	1.062	0.828
CSWS-500-58	500kcmil	350 G,H,I,K,M FLEX 373.7 DLO	500kcmil - 250kcmil	5/8	0.656	1.437	1.300	3.469	1.535	0.671	Brown	I-87	1.062	0.828
CSWS-600-38	600kcmil	400 G,H,I,K,M FLEX 444.4 DLO	600kcmil - 250kcmil	3/8	0.406	0.875	1.375	3.059	1.712	0.414	Green	I-94	1.187	0.920
CSWS-600-12	600kcmil	400 G,H,I,K,M FLEX 444.4 DLO	600kcmil - 250kcmil	1/2	0.562	1.250	1.375	3.434	1.712	0.546	Green	I-94	1.187	0.920
CSWS-600-58	600kcmil	400 G,H,I,K,M FLEX 444.4 DLO	600kcmil - 250kcmil	5/8	0.656	1.437	1.375	3.621	1.712	0.671	Green	I-94	1.187	0.920
CSWS-650-516	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	5/16	0.343	0.875	1.375	3.119	1.764	0.352	Pink	I-99	1.217	0.958
CSWS-650-38	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	3/8	0.406	0.875	1.375	3.119	1.764	0.414	Pink	I-99	1.217	0.958
CSWS-650-12	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	1/2	0.562	1.25	1.375	3.494	1.764	0.546	Pink	I-99	1.217	0.958
CSWS-650-58	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	5/8	0.656	1.437	1.375	3.681	1.764	0.671	Pink	I-99	1.217	0.958
CSWS-700-38	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	3/8	0.406	0.875	1.375	3.119	1.816	0.414	Pink	I-99	1.250	0.991
CSWS-700-12	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	1/2	0.562	1.250	1.375	3.494	1.816	0.546	Pink	I-99	1.250	0.991
CSWS-700-58	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	5/8	0.656	1.437	1.375	3.681	1.816	0.671	Pink	I-99	1.250	0.991
CSWS-750-38	750kcmil	600 G,H,I,K,M FLEX 646.4 DLO	750kcmil - 500kcmil	3/8	0.406	0.875	1.500	3.277	1.901	0.414	Black	I-106	1.313	1.031
CSWS-750-12	750kcmil	600 G,H,I,K,M FLEX 646.4 DLO	750kcmil - 500kcmil	1/2	0.562	1.250	1.500	3.652	1.901	0.546	Black	I-106	1.313	1.031
CSWS-750-58	750kcmil	600 G,H,I,K,M FLEX 646.4 DLO	750kcmil - 500kcmil	5/8	0.656	1.437	1.500	3.839	1.901	0.671	Black	I-106	1.313	1.031
CSWS-1000-38	1000kcmil	750 G,H,I FLEX 777.7 DLO	1000kcmil - 750kcmil	3/8	0.406	0.875	1.625	3.525	2.169	0.414	White	I-125	1.500	1.172
CSWS-1000-12	1000kcmil	750 G,H,I FLEX 777.7 DLO	1000kcmil - 750kcmil	1/2	0.562	1.250	1.625	3.900	2.169	0.546	White	I-125	1.500	1.172
CSWS-1000-58	1000kcmil	750 G,H,I FLEX 777.7 DLO	1000kcmil - 750kcmil	5/8	0.656	1.437	1.625	4.087	2.169	0.671	White	I-125	1.500	1.172

\* When installed with specified dieless tools

# SURECRIMP®

## COPPER COMPRESSION LUGS – STANDARD BARREL

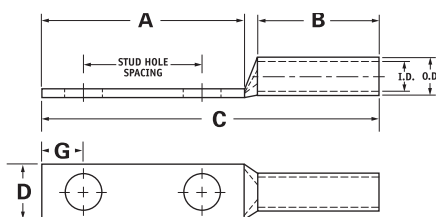
### 2 HOLE, W/SIGHT HOLE – CONDUCTOR RANGE: #8 – #6



## TYPE CSWD

### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation techniques are used, may be used for high voltage applications up to 35KV.
- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	BOLT SIZE	STUD HOLE DIA.	STUD HOLE SPACING	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
						A	B	C	D	G				
CSWD-8-10-58	#8 AWG	#8 FLEX, 8 SOL	10	0.219	0.625	1.250	0.500	1.945	0.374	0.258	Red	I-21	0.272	0.179
CSWD-8-10-34	#8 AWG	#8 FLEX, 8 SOL	10	0.219	0.750	1.437	0.500	2.132	0.374	0.258	Red	I-21	0.272	0.179
CSWD-8-14-58	#8 AWG	#8 FLEX, 8 SOL	1/4	0.281	0.625	1.437	0.500	2.132	0.486	0.320	Red	I-21	0.272	0.179
CSWD-8-14-34	#8 AWG	#8 FLEX, 8 SOL	1/4	0.281	0.750	1.437	0.500	2.132	0.486	0.320	Red	I-21	0.272	0.179
CSWD-8-14-1	#8 AWG	#8 FLEX, 8 SOL	1/4	0.281	1.000	1.687	0.500	2.382	0.486	0.320	Red	I-21	0.272	0.179
CSWD-8-38-1	#8 AWG	#8 FLEX, 8 SOL	3/8	0.406	1.000	1.937	0.500	2.632	0.593	0.414	Red	I-21	0.272	0.179
CSWD-6-10-12	#6 AWG	#6 FLEX, 6 SOL	10	0.219	0.500	1.250	0.500	1.945	0.411	0.258	Blue	I-24	0.295	0.203
CSWD-6-10-58	#6 AWG	#6 FLEX, 6 SOL	10	0.219	0.625	1.250	0.500	1.945	0.411	0.258	Blue	I-24	0.295	0.203
CSWD-6-10-1116	#6 AWG	#6 FLEX, 6 SOL	10	0.219	0.687	1.250	0.500	1.945	0.411	0.258	Blue	I-24	0.295	0.203
CSWD-6-10-34	#6 AWG	#6 FLEX, 6 SOL	10	0.219	0.750	1.437	0.500	2.132	0.411	0.258	Blue	I-24	0.295	0.203
CSWD-6-14-12	#6 AWG	#6 FLEX, 6 SOL	1/4	0.281	0.500	1.250	0.500	1.945	0.411	0.320	Blue	I-24	0.295	0.203
CSWD-6-14-58	#6 AWG	#6 FLEX, 6 SOL	1/4	0.281	0.625	1.437	0.500	2.132	0.411	0.320	Blue	I-24	0.295	0.203
CSWD-6-14-34	#6 AWG	#6 FLEX, 6 SOL	1/4	0.281	0.750	1.437	0.500	2.132	0.411	0.320	Blue	I-24	0.295	0.203
CSWD-6-14-1	#6 AWG	#6 FLEX, 6 SOL	1/4	0.281	1.000	1.687	0.500	2.382	0.411	0.320	Blue	I-24	0.295	0.203
CSWD-6-516-34	#6 AWG	#6 FLEX, 6 SOL	5/16	0.343	0.750	1.687	0.500	2.382	0.532	0.352	Blue	I-24	0.295	0.203
CSWD-6-516-1	#6 AWG	#6 FLEX, 6 SOL	5/16	0.343	1.000	1.937	0.500	2.632	0.532	0.352	Blue	I-24	0.295	0.203
CSWD-6-38-34	#6 AWG	#6 FLEX, 6 SOL	3/8	0.406	0.750	1.687	0.500	2.382	0.593	0.414	Blue	I-24	0.295	0.203
CSWD-6-38-78	#6 AWG	#6 FLEX, 6 SOL	3/8	0.406	0.875	1.937	0.500	2.632	0.593	0.414	Blue	I-24	0.295	0.203
CSWD-6-38-1	#6 AWG	#6 FLEX, 6 SOL	3/8	0.406	1.000	1.937	0.500	2.632	0.593	0.414	Blue	I-24	0.295	0.203
CSWD-6-12-134	#6 AWG	#6 FLEX, 6 SOL	1/2	0.562	1.750	3.000	0.500	3.695	0.750	0.546	Blue	I-24	0.295	0.203

\* When installed with specified dieless tools

# INDUSTRIAL CONNECTORS

## SURECRIMP®

### COPPER COMPRESSION LUGS – STANDARD BARREL

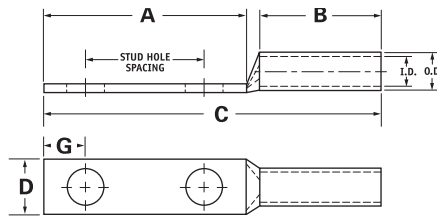
### 2 HOLE, W/SIGHT HOLE – CONDUCTOR RANGE: #4 – #3



## TYPE CSWD

#### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation techniques are used, may be used for high voltage applications up to 35KV.
- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	STUD HOLE SPACING	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
							A	B	C	D	G				
CSWD-4-10-58	#4 AWG	#4 SOL	4-6 AWG	10	0.219	0.625	1.250	0.500	1.984	0.486	0.258	Gray	I-29	0.343	0.250
CSWD-4-10-34	#4 AWG	#4 SOL	4-6 AWG	10	0.219	0.750	1.437	0.500	2.171	0.486	0.258	Gray	I-29	0.343	0.250
CSWD-4-10-1	#4 AWG	#4 SOL	4-6 AWG	10	0.219	1.000	1.687	0.500	2.421	0.486	0.258	Gray	I-29	0.343	0.250
CSWD-4-14-58	#4 AWG	#4 SOL	4-6 AWG	1/4	0.281	0.625	1.437	0.500	2.171	0.486	0.320	Gray	I-29	0.343	0.250
CSWD-4-14-34	#4 AWG	#4 SOL	4-6 AWG	1/4	0.281	0.750	1.437	0.500	2.171	0.486	0.320	Gray	I-29	0.343	0.250
CSWD-4-14-1	#4 AWG	#4 SOL	4-6 AWG	1/4	0.281	1.000	1.687	0.500	2.421	0.486	0.320	Gray	I-29	0.343	0.250
CSWD-4-516-1	#4AWG	#4 SOL	4-6AWG	5/16	0.343	1.000	1.937	0.500	2.671	0.486	0.320	Gray	I-29	0.343	0.250
CSWD-4-38-34	#4 AWG	#4 SOL	4-6 AWG	3/8	0.406	0.750	1.687	0.500	2.421	0.593	0.414	Gray	I-29	0.343	0.250
CSWD-4-38-1	#4 AWG	#4 SOL	4-6 AWG	3/8	0.406	1.000	1.937	0.500	2.671	0.593	0.414	Gray	I-29	0.343	0.250
CSWD-4-12-134	#4 AWG	#4 SOL	4-6 AWG	1/2	0.562	1.750	3.000	0.500	3.734	0.750	0.546	Gray	I-29	0.343	0.250
CSWD-3-14-58	#3 AWG	#4 FLEX	3-6 AWG	1/4	0.281	0.625	1.437	0.625	2.317	0.532	0.320	White	I-29	0.375	0.275
CSWD-3-14-34	#3 AWG	#4 FLEX	3-6 AWG	1/4	0.281	0.750	1.437	0.625	2.317	0.532	0.320	White	I-29	0.375	0.275
CSWD-3-516-1	#3 AWG	#4 FLEX	3-6 AWG	5/16	0.343	1.000	1.937	0.625	2.817	0.532	0.352	White	I-29	0.375	0.275
CSWD-3-38-34	#3 AWG	#4 FLEX	3-6 AWG	3/8	0.406	0.750	1.687	0.625	2.567	0.593	0.414	White	I-29	0.375	0.275
CSWD-3-38-1	#3 AWG	#4 FLEX	3-6 AWG	3/8	0.406	1.000	1.937	0.625	2.817	0.593	0.414	White	I-29	0.375	0.275
CSWD-3-12-134	#3 AWG	#4 FLEX	3-6 AWG	1/2	0.562	1.750	3.000	0.625	3.880	0.750	0.546	White	I-29	0.375	0.275

\* When installed with specified dieless tools

# SURECRIMP®

## COPPER COMPRESSION LUGS – STANDARD BARREL

### 2 HOLE, W/SIGHT HOLE – CONDUCTOR RANGE: #2 – 1/0



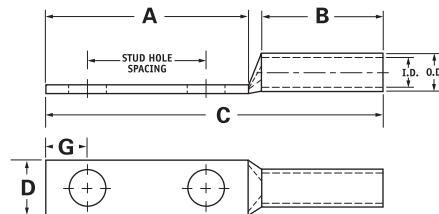
## TYPE CSWD

### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation

techniques are used, may be used for high voltage applications up to 35KV.

- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	STUD HOLE SPACING	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
							A	B	C	D	G				
CSWD-2-10-34	#2 AWG	-	2-6 AWG	10	0.219	0.750	1.437	0.625	2.348	0.599	0.258	Brown	I-33	0.421	0.312
CSWD-2-14-58	#2 AWG	-	2-6 AWG	1/4	0.281	0.625	1.437	0.625	2.348	0.599	0.320	Brown	I-33	0.421	0.312
CSWD-2-14-34	#2 AWG	-	2-6 AWG	1/4	0.281	0.750	1.437	0.625	2.348	0.599	0.320	Brown	I-33	0.421	0.312
CSWD-2-14-1	#2 AWG	-	2-6 AWG	1/4	0.281	1.000	1.687	0.625	2.598	0.599	0.320	Brown	I-33	0.421	0.312
CSWD-2-516-34	#2 AWG	-	2-6 AWG	5/16	0.343	0.750	1.687	0.625	2.598	0.599	0.352	Brown	I-33	0.421	0.312
CSWD-2-516-1	#2 AWG	-	2-6 AWG	5/16	0.343	1.000	1.937	0.625	2.848	0.599	0.352	Brown	I-33	0.421	0.312
CSWD-2-38-34	#2 AWG	-	2-6 AWG	3/8	0.406	0.750	1.687	0.625	2.598	0.599	0.414	Brown	I-33	0.421	0.312
CSWD-2-38-78	#2 AWG	-	2-6 AWG	3/8	0.406	0.875	1.937	0.625	2.848	0.599	0.414	Brown	I-33	0.421	0.312
CSWD-2-38-1	#2 AWG	-	2-6 AWG	3/8	0.406	1.000	1.937	0.625	2.848	0.599	0.414	Brown	I-33	0.421	0.312
CSWD-2-38-134	#2 AWG	-	2-6 AWG	3/8	0.406	1.750	2.625	0.625	3.536	0.599	0.414	Brown	I-33	0.421	0.312
CSWD-2-12-134	#2 AWG	-	2-6 AWG	1/2	0.562	1.750	3.000	0.625	3.911	0.750	0.546	Brown	I-33	0.421	0.312
CSWD-1-14-58	#1 AWG	#2 FLEX	1-6 AWG	1/4	0.281	0.625	1.437	0.625	2.392	0.673	0.320	Green	I-37	0.468	0.359
CSWD-1-14-34	#1 AWG	#2 FLEX	1-6 AWG	1/4	0.281	0.750	1.437	0.625	2.392	0.673	0.320	Green	I-37	0.468	0.359
CSWD-1-14-1	#1 AWG	#2 FLEX	1-6 AWG	1/4	0.281	1.000	1.687	0.625	2.642	0.673	0.320	Green	I-37	0.468	0.359
CSWD-1-516-78	#1 AWG	#2 FLEX	1-6 AWG	5/16	0.343	0.875	1.687	0.625	2.642	0.673	0.352	Green	I-37	0.468	0.359
CSWD-1-516-1	#1 AWG	#2 FLEX	1-6 AWG	5/16	0.343	1.000	1.937	0.625	2.892	0.673	0.352	Green	I-37	0.468	0.359
CSWD-1-38-1	#1 AWG	#2 FLEX	1-6 AWG	3/8	0.406	1.000	1.937	0.625	2.892	0.673	0.414	Green	I-37	0.468	0.359
CSWD-1-12-134	#1 AWG	#2 FLEX	1-6 AWG	1/2	0.562	1.750	3.000	0.625	3.955	0.750	0.546	Green	I-37	0.468	0.359
CSWD-1/0-14-58	1/0 AWG	#1 FLEX	1/0-6 AWG	1/4	0.281	0.625	1.437	0.750	2.543	0.738	0.320	Pink	I-42	0.515	0.390
CSWD-1/0-14-34	1/0 AWG	#1 FLEX	1/0-6 AWG	1/4	0.281	0.750	1.437	0.750	2.543	0.738	0.320	Pink	I-42	0.515	0.390
CSWD-1/0-14-1	1/0 AWG	#1 FLEX	1/0-6 AWG	1/4	0.281	1.000	1.687	0.750	2.793	0.738	0.320	Pink	I-42	0.515	0.390
CSWD-1/0-516-34	1/0 AWG	#1 FLEX	1/0-6 AWG	5/16	0.343	0.750	1.687	0.750	2.793	0.738	0.352	Pink	I-42	0.515	0.390
CSWD-1/0-516-78	1/0 AWG	#1 FLEX	1/0-6 AWG	5/16	0.343	0.875	1.687	0.750	2.793	0.738	0.352	Pink	I-42	0.515	0.390
CSWD-1/0-516-1	1/0 AWG	#1 FLEX	1/0-6 AWG	5/16	0.343	1.000	1.937	0.750	3.043	0.738	0.352	Pink	I-42	0.515	0.390
CSWD-1/0-38-1	1/0 AWG	#1 FLEX	1/0-6 AWG	3/8	0.406	1.000	1.937	0.750	3.043	0.738	0.414	Pink	I-42	0.515	0.390
CSWD-1/0-38-134	1/0 AWG	#1 FLEX	1/0-6 AWG	3/8	0.406	1.750	2.625	0.750	3.731	0.738	0.414	Pink	I-42	0.515	0.390
CSWD-1/0-12-1	1/0 AWG	#1 FLEX	1/0-6 AWG	1/2	0.562	1.000	2.125	0.750	3.231	0.738	0.546	Pink	I-42	0.515	0.390
CSWD-1/0-12-134	1/0 AWG	#1 FLEX	1/0-6 AWG	1/2	0.562	1.750	3.000	0.750	4.106	0.738	0.546	Pink	I-42	0.515	0.390

# INDUSTRIAL CONNECTORS

## SURECRIMP®

### COPPER COMPRESSION LUGS – STANDARD BARREL

### 2 HOLE, W/SIGHT HOLE – CONDUCTOR RANGE: 2/0 – 4/0

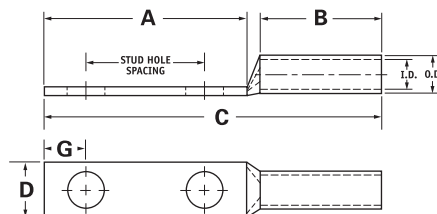


## TYPE CSWD

#### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation techniques are used, may be used for high voltage applications up to 35KV.

- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E620
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	STUD HOLE SPACING	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
							A	B	C	D	G				
CSWD-2/0-14-58	2/0 AWG	1/0 FLEX	2/0-4 AWG	1/4	0.281	0.625	1.437	0.750	2.583	0.811	0.320	Black	I-45	0.562	0.437
CSWD-2/0-14-34	2/0 AWG	1/0 FLEX	2/0-4 AWG	1/4	0.281	0.750	1.437	0.750	2.583	0.811	0.320	Black	I-45	0.562	0.437
CSWD-2/0-14-1	2/0 AWG	1/0 FLEX	2/0-4 AWG	1/4	0.281	1.000	1.687	0.750	2.833	0.811	0.320	Black	I-45	0.562	0.437
CSWD-2/0-516-78	2/0 AWG	1/0 FLEX	2/0-4 AWG	5/16	0.343	0.875	1.687	0.750	2.833	0.811	0.352	Black	I-45	0.562	0.437
CSWD-2/0-516-1	2/0 AWG	1/0 FLEX	2/0-4 AWG	5/16	0.343	1.000	1.937	0.750	3.083	0.811	0.352	Black	I-45	0.562	0.437
CSWD-2/0-38-1	2/0 AWG	1/0 FLEX	2/0-4 AWG	3/8	0.406	1.000	1.937	0.750	3.083	0.811	0.414	Black	I-45	0.562	0.437
CSWD-2/0-38-134	2/0 AWG	1/0 FLEX	2/0-4 AWG	3/8	0.406	1.750	2.625	0.750	3.771	0.811	0.414	Black	I-45	0.562	0.437
CSWD-2/0-12-1	2/0 AWG	1/0 FLEX	2/0-4 AWG	1/2	0.562	1.000	2.125	0.750	3.271	0.811	0.546	Black	I-45	0.562	0.437
CSWD-2/0-12-134	2/0 AWG	1/0 FLEX	2/0-4 AWG	1/2	0.562	1.750	3.000	0.750	4.146	0.811	0.546	Black	I-45	0.562	0.437
CSWD-3/0-14-58	3/0 AWG	2/0 FLEX	3/0-2 AWG	1/4	0.281	0.625	1.437	0.750	2.626	0.885	0.320	Orange	I-50	0.609	0.484
CSWD-3/0-14-34	3/0 AWG	2/0 FLEX	3/0-2 AWG	1/4	0.281	0.750	1.437	0.750	2.626	0.885	0.320	Orange	I-50	0.609	0.484
CSWD-3/0-516-1	3/0 AWG	2/0 FLEX	3/0-2 AWG	5/16	0.343	1.000	1.937	0.750	3.126	0.885	0.352	Orange	I-50	0.609	0.484
CSWD-3/0-38-1	3/0 AWG	2/0 FLEX	3/0-2 AWG	3/8	0.406	1.000	1.937	0.750	3.126	0.885	0.414	Orange	I-50	0.609	0.484
CSWD-3/0-12-134	3/0 AWG	2/0 FLEX	3/0-2 AWG	1/2	0.562	1.750	3.000	0.750	4.189	0.885	0.546	Orange	I-50	0.609	0.484
CSWD-4/0-14-58	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/4	0.281	0.625	1.437	0.875	2.803	0.999	0.320	Purple	I-54	0.687	0.546
CSWD-4/0-14-34	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/4	0.281	0.750	1.437	0.875	2.803	0.999	0.320	Purple	I-54	0.687	0.546
CSWD-4/0-14-1	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/4	0.281	1.000	1.687	0.875	3.053	0.999	0.320	Purple	I-54	0.687	0.546
CSWD-4/0-516-34	4/0 AWG	3/0 FLEX	4/0-1 AWG	5/16	0.343	0.750	1.687	0.875	3.053	0.999	0.352	Purple	I-54	0.687	0.546
CSWD-4/0-516-1	4/0 AWG	3/0 FLEX	4/0-1 AWG	5/16	0.343	1.000	1.937	0.875	3.303	0.999	0.352	Purple	I-54	0.687	0.546
CSWD-4/0-516-134	4/0 AWG	3/0 FLEX	4/0-1 AWG	5/16	0.343	1.750	2.500	0.875	3.866	0.999	0.352	Purple	I-54	0.687	0.546
CSWD-4/0-38-1	4/0 AWG	3/0 FLEX	4/0-1 AWG	3/8	0.406	1.000	1.937	0.875	3.303	0.999	0.414	Purple	I-54	0.687	0.546
CSWD-4/0-38-134	4/0 AWG	3/0 FLEX	4/0-1 AWG	3/8	0.406	1.750	2.625	0.875	3.991	0.999	0.414	Purple	I-54	0.687	0.546
CSWD-4/0-12-1	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/2	0.562	1.000	2.125	0.875	3.491	0.999	0.546	Purple	I-54	0.687	0.546
CSWD-4/0-12-114	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/2	0.562	1.250	2.500	0.875	3.866	0.999	0.546	Purple	I-54	0.687	0.546
CSWD-4/0-12-134	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/2	0.562	1.750	3.000	0.875	4.366	0.999	0.546	Purple	I-54	0.687	0.546

\* When installed with specified dieless tools



# SURECRIMP®

## COPPER COMPRESSION LUGS – STANDARD BARREL

2 HOLE, W/SIGHT HOLE – CONDUCTOR RANGE: 250KCMIL – 500KCMIL



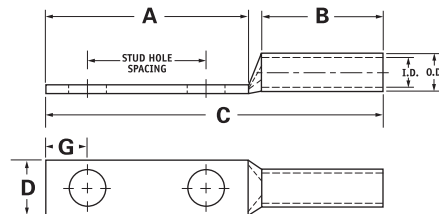
### TYPE CSWD

#### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation

techniques are used, may be used for high voltage applications up to 35KV.

- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	STUD HOLE SPACING	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
							A	B	C	D	G				
CSWD-250-14-34	250kcmil	4/0 FLEX	250kcmil-1/0 AWG	1/4	0.281	0.750	1.437	1.063	3.031	1.088	0.320	Yellow	I-62	0.750	0.593
CSWD-250-38-1	250kcmil	4/0 FLEX	250kcmil-1/0 AWG	3/8	0.406	1.00	1.937	1.063	3.531	1.088	0.414	Yellow	I-62	0.750	0.593
CSWD-250-38-134	250kcmil	4/0 FLEX	250kcmil-1/0 AWG	3/8	0.406	1.750	2.625	1.063	4.219	1.088	0.414	Yellow	I-62	0.750	0.593
CSWD-250-12-114	250kcmil	4/0 FLEX	250kcmil-1/0 AWG	1/2	0.562	1.250	2.500	1.063	4.094	1.088	0.546	Yellow	I-62	0.750	0.593
CSWD-250-12-134	250kcmil	4/0 FLEX	250kcmil-1/0 AWG	1/2	0.562	1.750	3.000	1.063	4.594	1.088	0.546	Yellow	I-62	0.750	0.593
CSWD-300-38-1	300kcmil	250 G,H FLEX	300kcmil-2/0 AWG	3/8	0.406	1.000	1.937	1.063	3.587	1.189	0.414	White	I-66	0.812	0.660
CSWD-300-12-134	300kcmil	250 G,H FLEX	300kcmil-2/0 AWG	1/2	0.562	1.750	3.000	1.063	4.650	1.189	0.546	White	I-66	0.812	0.660
CSWD-350-14-34	350kcmil	250 I,K,M FLEX 262.2 DLO	350kcmil-3/0 AWG	1/4	0.281	0.750	1.437	1.063	3.123	1.291	0.320	Red	I-71	0.890	0.703
CSWD-350-516-134	350kcmil	250 I,K,M FLEX 262.2 DLO	350kcmil-3/0 AWG	5/16	0.343	1.750	2.500	1.063	4.186	1.291	0.352	Red	I-71	0.890	0.703
CSWD-350-38-1	350kcmil	250 I,K,M FLEX 262.2 DLO	350kcmil-3/0 AWG	3/8	0.406	1.000	1.937	1.063	3.623	1.291	0.414	Red	I-71	0.890	0.703
CSWD-350-12-114	350kcmil	250 I,K,M FLEX 262.2 DLO	350kcmil-3/0 AWG	1/2	0.562	1.250	2.500	1.063	4.186	1.291	0.546	Red	I-71	0.890	0.703
CSWD-350-12-134	350kcmil	250 I,K,M FLEX 262.2 DLO	350kcmil-3/0 AWG	1/2	0.562	1.750	3.000	1.063	4.686	1.291	0.546	Red	I-71	0.890	0.703
CSWD-400-38-1	400kcmil	300 G,H,I,K,M FLEX 313.1 DLO	400kcmil-4/0 AWG	3/8	0.406	1.000	1.937	1.188	3.792	1.365	0.414	Blue	I-76	0.937	0.750
CSWD-400-38-116	400kcmil	300 G,H,I,K,M FLEX 313.1 DLO	400kcmil-4/0 AWG	3/8	0.406	1.062	1.937	1.188	3.792	1.365	0.414	Blue	I-76	0.937	0.750
CSWD-400-12-134	400kcmil	300 G,H,I,K,M FLEX 313.1 DLO	400kcmil-4/0 AWG	1/2	0.562	1.750	3.000	1.188	4.855	1.365	0.546	Blue	I-76	0.937	0.750
CSWD-500-14-34	500kcmil	350 G,H,I,K,M FLEX 373.7 DLO	500kcmil-250kcmil	1/4	0.281	0.750	1.437	1.300	3.469	1.535	0.320	Brown	I-87	1.062	0.828
CSWD-500-38-1	500kcmil	350 G,H,I,K,M FLEX 373.7 DLO	500kcmil-250kcmil	3/8	0.406	1.000	1.937	1.300	3.969	1.535	0.414	Brown	I-87	1.062	0.828
CSWD-500-12-114	500kcmil	350 G,H,I,K,M FLEX 373.7 DLO	500kcmil-250kcmil	1/2	0.562	1.250	2.500	1.300	4.532	1.535	0.546	Brown	I-87	1.062	0.828
CSWD-500-12-134	500kcmil	350 G,H,I,K,M FLEX 373.7 DLO	500kcmil-250kcmil	1/2	0.562	1.750	3.000	1.300	5.032	1.535	0.546	Brown	I-87	1.062	0.828

\* When installed with specified dieless tools

# INDUSTRIAL CONNECTORS

## SURECRIMP®

### COPPER COMPRESSION LUGS – STANDARD BARREL

2 HOLE W/SIGHT HOLE – CONDUCTOR RANGE: 600KCMIL – 1000KCMIL



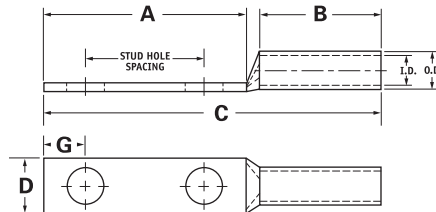
## TYPE CSWD

### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation

techniques are used, may be used for high voltage applications up to 35KV.

- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	STUD HOLE SPACING	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
							A	B	C	D	G				
CSWD-600-38-1	600kcmil	400 G,H,I,K,M FLEX 444.4 DLO	600kcmil - 250kcmil	3/8	0.406	1.000	1.937	1.375	4.121	1.712	0.414	Green	I-94	1.187	0.920
CSWD-600-12-134	600kcmil	400 G,H,I,K,M FLEX 444.4 DLO	600kcmil - 250kcmil	1/2	0.562	1.750	3.000	1.375	5.184	1.712	0.546	Green	I-94	1.187	0.920
CSWD-650-12-134	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	1/2	0.562	1.75	3	1.375	5.244	1.764	0.546	Pink	I-99	1.217	0.958
CSWD-650-12-114	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	1/2	0.562	1.25	2.5	1.375	4.744	1.764	0.546	Pink	I-99	1.217	0.958
CSWD-650-38-1	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	3/8	0.406	1	1.937	1.375	4.181	1.764	0.414	Pink	I-99	1.217	0.958
CSWD-650-38-118	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	3/8	0.406	1.125	2.125	1.375	4.369	1.764	0.414	Pink	I-99	1.217	0.958
CSWD-650-516-1	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	5/16	0.343	1	1.937	1.375	4.181	1.764	0.352	Pink	I-99	1.217	0.958
CSWD-700-38-1	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	3/8	0.406	1.000	1.937	1.375	4.181	1.816	0.414	Pink	I-99	1.250	0.991
CSWD-700-12-114	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	1/2	0.562	1.250	2.500	1.375	4.744	1.816	0.546	Pink	I-99	1.250	0.991
CSWD-700-12-134	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	1/2	0.562	1.750	3.000	1.375	5.244	1.816	0.546	Pink	I-99	1.250	0.991
CSWD-700-12-178	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	1/2	0.562	1.875	3.000	1.375	5.244	1.816	0.546	Pink	I-99	1.250	0.991
CSWD-750-38-1	750kcmil	600 G,H,I,M FLEX 646.4 DLO	750kcmil - 500kcmil	3/8	0.406	1.000	1.937	1.500	4.339	1.901	0.414	Black	I-106	1.313	1.031
CSWD-750-38-118	750kcmil	600 G,H,I,M FLEX 646.4 DLO	750kcmil - 500kcmil	3/8	0.406	1.125	2.125	1.500	4.527	1.901	0.414	Black	I-106	1.313	1.031
CSWD-750-12-112	750kcmil	600 G,H,I,M FLEX 646.4 DLO	750kcmil - 500kcmil	1/2	0.562	1.500	2.625	1.500	5.027	1.901	0.546	Black	I-106	1.313	1.031
CSWD-750-12-134	750kcmil	600 G,H,I,M FLEX 646.4 DLO	750kcmil - 500kcmil	1/2	0.562	1.750	3.000	1.500	5.402	1.901	0.546	Black	I-106	1.313	1.031
CSWD-750-58-112	750kcmil	600 G,H,I,M FLEX 646.4 DLO	750kcmil - 500kcmil	5/8	0.562	1.500	3.000	1.500	5.402	1.901	0.671	Black	I-106	1.313	1.031
CSWD-1000-38-1	1000kcmil	750 G,H,I FLEX 777.7 DLO	1000kcmil - 750kcmil	3/8	0.406	1.000	1.937	1.625	4.587	2.169	0.414	White	I-125	1.500	1.172
CSWD-1000-12-114	1000kcmil	750 G,H,I FLEX 777.7 DLO	1000kcmil - 750kcmil	1/2	0.562	1.250	2.500	1.625	5.150	2.169	0.546	White	I-125	1.500	1.172
CSWD-1000-12-134	1000kcmil	750 G,H,I FLEX 777.7 DLO	1000kcmil - 750kcmil	1/2	0.562	1.750	3.000	1.625	5.650	2.169	0.546	White	I-125	1.500	1.172
CSWD-1000-58-112	1000kcmil	750 G,H,I FLEX 777.7 DLO	1000kcmil - 750kcmil	5/8	0.562	1.500	3.000	1.625	5.650	2.169	0.671	White	I-125	1.500	1.172

\* When installed with specified dieless tools

# SURECRIMP®

## COPPER COMPRESSION LUGS – LONG BARREL

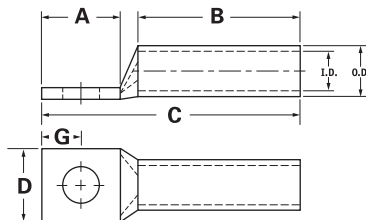
### 1 HOLE, W/SIGHT HOLE – CONDUCTOR RANGE: #8 – #1



## TYPE CLWS

### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Long barrel length with chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation techniques are used, may be used for high voltage applications up to 35KV.
- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
						A	B	C	D	G				
CLWS-8-10	#8 AWG	#8 FLEX, 8 SOL	-	10	0.219	0.562	0.812	1.569	0.374	0.258	Red	I-21	0.272	0.179
CLWS-8-14	#8 AWG	#8 FLEX, 8 SOL	-	1/4	0.281	0.68	0.812	1.687	0.486	0.32	Red	I-21	0.272	0.179
CLWS-8-516	#8 AWG	#8 FLEX, 8 SOL	-	5/16	0.343	0.875	0.812	1.882	0.532	0.352	Red	I-21	0.272	0.179
CLWS-8-38	#8 AWG	#8 FLEX, 8 SOL	-	3/8	0.406	0.875	0.812	1.882	0.593	0.414	Red	I-21	0.272	0.179
CLWS-6-10	#6 AWG	#6 FLEX, 6 SOL	-	10	0.219	0.562	1.125	1.882	0.411	0.258	Blue	I-24	0.295	0.203
CLWS-6-14	#6 AWG	#6 FLEX, 6 SOL	-	1/4	0.281	0.68	1.125	2	0.411	0.32	Blue	I-24	0.295	0.203
CLWS-6-516	#6 AWG	#6 FLEX, 6 SOL	-	5/16	0.343	0.875	1.125	2.195	0.532	0.352	Blue	I-24	0.295	0.203
CLWS-6-38	#6 AWG	#6 FLEX, 6 SOL	-	3/8	0.406	0.875	1.125	2.195	0.593	0.414	Blue	I-24	0.295	0.203
CLWS-6-12	#6 AWG	#6 FLEX, 6 SOL	-	1/2	0.562	1.25	1.125	2.57	0.75	0.546	Blue	I-24	0.295	0.203
CLWS-6-34	#6 AWG	#6 FLEX, 6 SOL	-	3/4	0.781	1.687	1.125	3.007	0.411	0.75	Blue	I-24	0.295	0.203
CLWS-4-10	#4 AWG	#4 SOL	4-6 AWG	10	0.219	0.562	1.125	1.921	0.486	0.258	Gray	I-29	0.343	0.25
CLWS-4-14	#4 AWG	#4 SOL	4-6 AWG	1/4	0.281	0.68	1.125	2.039	0.486	0.32	Gray	I-29	0.343	0.25
CLWS-4-516	#4 AWG	#4 SOL	4-6 AWG	5/16	0.343	0.875	1.125	2.234	0.486	0.352	Gray	I-29	0.343	0.25
CLWS-4-38	#4 AWG	#4 SOL	4-6 AWG	3/8	0.406	0.875	1.125	2.234	0.593	0.414	Gray	I-29	0.343	0.25
CLWS-4-12	#4 AWG	#4 SOL	4-6 AWG	1/2	0.562	1.25	1.125	2.609	0.75	0.546	Gray	I-29	0.343	0.25
CLWS-3-10	#3 AWG	#4 FLEX	3-6 AWG	10	0.219	0.562	1.125	1.942	0.532	0.258	White	I-29	0.375	0.275
CLWS-3-14	#3 AWG	#4 FLEX	3-6 AWG	1/4	0.281	0.68	1.125	2.06	0.532	0.32	White	I-29	0.375	0.275
CLWS-3-516	#3 AWG	#4 FLEX	3-6 AWG	5/16	0.343	0.875	1.125	2.255	0.532	0.352	White	I-29	0.375	0.275
CLWS-3-38	#3 AWG	#4 FLEX	3-6 AWG	3/8	0.406	0.875	1.125	2.255	0.593	0.414	White	I-29	0.375	0.275
CLWS-3-12	#3 AWG	#4 FLEX	3-6 AWG	1/2	0.562	1.25	1.125	2.63	0.75	0.546	White	I-29	0.375	0.275
CLWS-2-10	#2 AWG	-	2-6 AWG	10	0.219	0.562	1.125	1.973	0.599	0.258	Brown	I-33	0.421	0.312
CLWS-2-14	#2 AWG	-	2-6 AWG	1/4	0.281	0.68	1.125	2.091	0.599	0.32	Brown	I-33	0.421	0.312
CLWS-2-516	#2 AWG	-	2-6 AWG	5/16	0.343	0.875	1.125	2.286	0.599	0.352	Brown	I-33	0.421	0.312
CLWS-2-38	#2 AWG	-	2-6 AWG	3/8	0.406	0.875	1.125	2.286	0.599	0.414	Brown	I-33	0.421	0.312
CLWS-2-12	#2 AWG	-	2-6 AWG	1/2	0.562	1.25	1.125	2.661	0.75	0.546	Brown	I-33	0.421	0.312
CLWS-1-10	#1 AWG	#2 FLEX	1-6 AWG	10	0.219	0.562	1.375	2.267	0.673	0.258	Green	I-37	0.468	0.359
CLWS-1-14	#1 AWG	#2 FLEX	1-6 AWG	1/4	0.281	0.875	1.375	2.58	0.673	0.32	Green	I-37	0.468	0.359
CLWS-1-516	#1 AWG	#2 FLEX	1-6 AWG	5/16	0.343	0.875	1.375	2.58	0.673	0.352	Green	I-37	0.468	0.359
CLWS-1-38	#1 AWG	#2 FLEX	1-6 AWG	3/8	0.406	0.875	1.375	2.58	0.673	0.414	Green	I-37	0.468	0.359
CLWS-1-12	#1 AWG	#2 FLEX	1-6 AWG	1/2	0.562	1.25	1.375	2.955	0.75	0.546	Green	I-37	0.468	0.359

\* When installed with specified dieless tools

# INDUSTRIAL CONNECTORS

## SURECRIMP®

### COPPER COMPRESSION LUGS – LONG BARREL

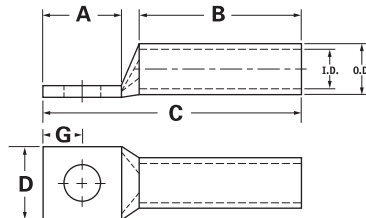
1 HOLE, W/SIGHT HOLE – CONDUCTOR RANGE: 1/0 – 400KCMIL



## TYPE CLWS

### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Long barrel length with chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation techniques are used, may be used for high voltage applications up to 35KV.
- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
						A	B	C	D	G				
CLWS-1/0-10	1/0 AWG	#1 FLEX	1/0-6 AWG	10	0.219	0.562	1.500	2.418	0.738	0.258	Pink	I-42	0.515	0.390
CLWS-1/0-14	1/0 AWG	#1 FLEX	1/0-6 AWG	1/4	0.281	0.875	1.500	2.731	0.738	0.320	Pink	I-42	0.515	0.390
CLWS-1/0-516	1/0 AWG	#1 FLEX	1/0-6 AWG	5/16	0.343	0.875	1.500	2.731	0.738	0.352	Pink	I-42	0.515	0.390
CLWS-1/0-38	1/0 AWG	#1 FLEX	1/0-6 AWG	3/8	0.406	0.875	1.500	2.731	0.738	0.414	Pink	I-42	0.515	0.390
CLWS-1/0-12	1/0 AWG	#1 FLEX	1/0-6 AWG	1/2	0.562	1.250	1.500	3.106	0.738	0.546	Pink	I-42	0.515	0.390
CLWS-2/0-10	2/0 AWG	1/0 FLEX	2/0-4 AWG	10	0.219	0.562	1.500	2.458	0.811	0.258	Black	I-45	0.562	0.437
CLWS-2/0-14	2/0 AWG	1/0 FLEX	2/0-4 AWG	1/4	0.281	0.875	1.500	2.771	0.811	0.320	Black	I-45	0.562	0.437
CLWS-2/0-516	2/0 AWG	1/0 FLEX	2/0-4 AWG	5/16	0.343	0.875	1.500	2.771	0.811	0.352	Black	I-45	0.562	0.437
CLWS-2/0-38	2/0 AWG	1/0 FLEX	2/0-4 AWG	3/8	0.406	0.875	1.500	2.771	0.811	0.414	Black	I-45	0.562	0.437
CLWS-2/0-12	2/0 AWG	1/0 FLEX	2/0-4 AWG	1/2	0.562	1.250	1.500	3.146	0.811	0.546	Black	I-45	0.562	0.437
CLWS-3/0-10	3/0 AWG	2/0 FLEX	3/0-2 AWG	10	0.219	0.562	1.500	2.501	0.885	0.258	Orange	I-50	0.609	0.484
CLWS-3/0-14	3/0 AWG	2/0 FLEX	3/0-2 AWG	1/4	0.281	0.875	1.500	2.814	0.885	0.320	Orange	I-50	0.609	0.484
CLWS-3/0-516	3/0 AWG	2/0 FLEX	3/0-2 AWG	5/16	0.343	0.875	1.500	2.814	0.885	0.352	Orange	I-50	0.609	0.484
CLWS-3/0-38	3/0 AWG	2/0 FLEX	3/0-2 AWG	3/8	0.406	0.875	1.500	2.814	0.885	0.414	Orange	I-50	0.609	0.484
CLWS-3/0-12	3/0 AWG	2/0 FLEX	3/0-2 AWG	1/2	0.562	1.250	1.500	3.189	0.885	0.546	Orange	I-50	0.609	0.484
CLWS-4/0-14	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/4	0.281	0.875	1.500	2.866	0.999	0.320	Purple	I-54	0.687	0.546
CLWS-4/0-516	4/0 AWG	3/0 FLEX	4/0-1 AWG	5/16	0.343	0.875	1.500	2.866	0.999	0.352	Purple	I-54	0.687	0.546
CLWS-4/0-38	4/0 AWG	3/0 FLEX	4/0-1 AWG	3/8	0.406	0.875	1.500	2.866	0.999	0.414	Purple	I-54	0.687	0.546
CLWS-4/0-12	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/2	0.562	1.250	1.500	3.241	0.999	0.546	Purple	I-54	0.687	0.546
CLWS-250-516	250kcmil	4/0 FLEX	250kcmil - 1/0 AWG	5/16	0.343	0.875	1.688	3.094	1.088	0.352	Yellow	I-62	0.750	0.593
CLWS-250-38	250kcmil	4/0 FLEX	250kcmil - 1/0 AWG	3/8	0.406	0.875	1.688	3.094	1.088	0.414	Yellow	I-62	0.750	0.593
CLWS-250-12	250kcmil	4/0 FLEX	250kcmil - 1/0 AWG	1/2	0.562	1.250	1.688	3.469	1.088	0.546	Yellow	I-62	0.750	0.593
CLWS-300-516	300kcmil	250 G,H FLEX	300kcmil - 2/0 AWG	5/16	0.343	0.875	2.000	3.462	1.189	0.352	White	I-66	0.812	0.660
CLWS-300-38	300kcmil	250 G,H FLEX	300kcmil - 2/0 AWG	3/8	0.406	0.875	2.000	3.462	1.189	0.414	White	I-66	0.812	0.660
CLWS-300-12	300kcmil	250 G,H FLEX	300kcmil - 2/0 AWG	1/2	0.562	1.250	2.000	3.837	1.189	0.546	White	I-66	0.812	0.660
CLWS-350-38	350kcmil	250 I,K,M FLEX 262.2 DLO	350kcmil - 3/0 AWG	3/8	0.406	0.875	2.000	3.498	1.291	0.414	Red	I-71	0.890	0.703
CLWS-350-12	350kcmil	250 I,K,M FLEX 262.2 DLO	350kcmil - 3/0 AWG	1/2	0.562	1.250	2.000	3.873	1.291	0.546	Red	I-71	0.890	0.703
CLWS-350-58	350kcmil	250 I,K,M FLEX 262.2 DLO	350kcmil - 3/0 AWG	5/8	0.656	1.437	2.000	4.060	1.291	0.671	Red	I-71	0.890	0.703
CLWS-400-38	400kcmil	300 G,H,I,K,M FLEX 313.1 DLO	400kcmil - 4/0 AWG	3/8	0.406	0.875	2.125	3.667	1.365	0.414	Blue	I-76	0.937	0.750
CLWS-400-12	400kcmil	300 G,H,I,K,M FLEX 313.1 DLO	400kcmil - 4/0 AWG	1/2	0.562	1.250	2.125	4.042	1.365	0.546	Blue	I-76	0.937	0.750
CLWS-400-58	400kcmil	300 G,H,I,K,M FLEX 313.1 DLO	400kcmil - 4/0 AWG	5/8	0.656	1.437	2.125	4.229	1.365	0.671	Blue	I-76	0.937	0.750

\* When installed with specified dieless tools

# SURECRIMP®

## COPPER COMPRESSION LUGS – LONG BARREL

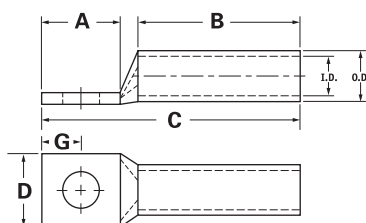
1 HOLE, W/SIGHT HOLE – CONDUCTOR RANGE: 500KCMIL – 1000KCMIL



### TYPE CLWS

#### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Long barrel length with chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation techniques are used, may be used for high voltage applications up to 35KV.
- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
						A	B	C	D	G				
CLWS-500-38	500kcmil	350 G,H,I,K,M FLEX 373.7 DLO	500kcmil - 250kcmil	3/8	0.406	0.875	2.250	3.857	1.535	0.414	Brown	I-87	1.062	0.828
CLWS-500-12	500kcmil	350 G,H,I,K,M FLEX 373.7 DLO	500kcmil - 250kcmil	1/2	0.562	1.250	2.250	4.232	1.535	0.546	Brown	I-87	1.062	0.828
CLWS-500-58	500kcmil	350 G,H,I,K,M FLEX 373.7 DLO	500kcmil - 250kcmil	5/8	0.656	1.437	2.250	4.419	1.535	0.671	Brown	I-87	1.062	0.828
CLWS-600-38	600kcmil	400 G,H,I,K,M FLEX 444.4 DLO	600kcmil - 250kcmil	3/8	0.406	0.875	2.687	4.371	1.712	0.414	Green	I-94	1.187	0.920
CLWS-600-12	600kcmil	400 G,H,I,K,M FLEX 444.4 DLO	600kcmil - 250kcmil	1/2	0.562	1.250	2.687	4.746	1.712	0.546	Green	I-94	1.187	0.920
CLWS-600-58	600kcmil	400 G,H,I,K,M FLEX 444.4 DLO	600kcmil - 250kcmil	5/8	0.656	1.437	2.687	4.933	1.712	0.671	Green	I-94	1.187	0.920
CLWS-650-516	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	5/16	0.343	0.875	2.687	4.431	1.764	0.352	Pink	I-99	1.217	0.958
CLWS-650-38	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	3/8	0.406	0.875	2.687	4.431	1.764	0.414	Pink	I-99	1.217	0.958
CLWS-650-12	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	1/2	0.562	1.25	2.687	4.806	1.764	0.546	Pink	I-99	1.217	0.958
CLWS-650-58	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	5/8	0.656	1.437	2.687	4.993	1.764	0.671	Pink	I-99	1.217	0.958
CLWS-700-38	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	3/8	0.406	0.875	2.687	4.431	1.816	0.414	Pink	I-99	1.250	0.991
CLWS-700-12	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	1/2	0.562	1.250	2.687	4.806	1.816	0.546	Pink	I-99	1.250	0.991
CLWS-700-58	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	5/8	0.656	1.437	2.687	4.993	1.816	0.671	Pink	I-99	1.250	0.991
CLWS-750-38	750kcmil	600 G,H,I,M FLEX 646.4 DLO	750kcmil - 500kcmil	3/8	0.406	0.875	2.875	4.652	1.901	0.414	Black	I-106	1.313	1.031
CLWS-750-12	750kcmil	600 G,H,I,M FLEX 646.4 DLO	750kcmil - 500kcmil	1/2	0.562	1.250	2.875	5.027	1.901	0.546	Black	I-106	1.313	1.031
CLWS-750-58	750kcmil	600 G,H,I,M FLEX 646.4 DLO	750kcmil - 500kcmil	5/8	0.656	1.437	2.875	5.214	1.901	0.671	Black	I-106	1.313	1.031
CLWS-1000-38	1000kcmil	750 G,H,I FLEX 777.7 DLO	1000kcmil - 750kcmil	3/8	0.406	0.875	3.000	4.900	2.169	0.414	White	I-125	1.500	1.172
CLWS-1000-12	1000kcmil	750 G,H,I FLEX 777.7 DLO	1000kcmil - 750kcmil	1/2	0.562	1.250	3.000	5.275	2.169	0.546	White	I-125	1.500	1.172
CLWS-1000-58	1000kcmil	750 G,H,I FLEX 777.7 DLO	1000kcmil - 750kcmil	5/8	0.656	1.437	3.000	5.462	2.169	0.671	White	I-125	1.500	1.172

\* When installed with specified dieless tools

# INDUSTRIAL CONNECTORS

## SURECRIMP®

### COPPER COMPRESSION LUGS – LONG BARREL

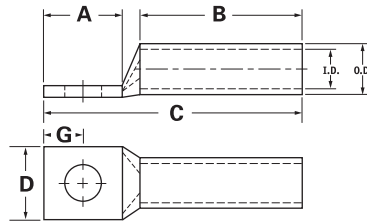
#### 1 HOLE, W/O SIGHT HOLE – CONDUCTOR RANGE: #8 – #1



## TYPE CLNS

### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Long barrel length with chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation techniques are used, may be used for high voltage applications up to 35KV.
- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
						A	B	C	D	G				
CLNS-8-10	#8 AWG	#8 FLEX	-	10	0.219	0.562	0.812	1.569	0.374	0.258	Red	I-21	0.272	0.179
CLNS-8-14	#8 AWG	#8 FLEX	-	1/4	0.281	0.680	0.812	1.687	0.486	0.320	Red	I-21	0.272	0.179
CLNS-8-516	#8 AWG	#8 FLEX	-	5/16	0.343	0.875	0.812	1.882	0.532	0.352	Red	I-21	0.272	0.179
CLNS-8-38	#8 AWG	#8 FLEX	-	3/8	0.406	0.875	0.812	1.882	0.593	0.414	Red	I-21	0.272	0.179
CLNS-6-10	#6 AWG	-	-	10	0.219	0.562	1.125	1.882	0.411	0.258	Blue	I-24	0.295	0.203
CLNS-6-14	#6 AWG	-	-	1/4	0.281	0.680	1.125	2.000	0.411	0.320	Blue	I-24	0.295	0.203
CLNS-6-516	#6 AWG	-	-	5/16	0.343	0.875	1.125	2.195	0.532	0.352	Blue	I-24	0.295	0.203
CLNS-6-38	#6 AWG	-	-	3/8	0.406	0.875	1.125	2.195	0.593	0.414	Blue	I-24	0.295	0.203
CLNS-6-12	#6 AWG	-	-	1/2	0.562	1.250	1.125	2.570	0.750	0.546	Blue	I-24	0.295	0.203
CLNS-4-10	#4 AWG	#6 FLEX	4-6 AWG	10	0.219	0.562	1.125	1.921	0.486	0.258	Gray	I-29	0.343	0.250
CLNS-4-14	#4 AWG	#6 FLEX	4-6 AWG	1/4	0.281	0.680	1.125	2.039	0.486	0.320	Gray	I-29	0.343	0.250
CLNS-4-516	#4 AWG	#6 FLEX	4-6 AWG	5/16	0.343	0.875	1.125	2.234	0.486	0.352	Gray	I-29	0.343	0.250
CLNS-4-38	#4 AWG	#6 FLEX	4-6 AWG	3/8	0.406	0.875	1.125	2.234	0.593	0.414	Gray	I-29	0.343	0.250
CLNS-4-12	#4 AWG	#6 FLEX	4-6 AWG	1/2	0.562	1.250	1.125	2.609	0.750	0.546	Gray	I-29	0.343	0.250
CLNS-3-10	#3 AWG	#4 FLEX	3-6 AWG	10	0.219	0.562	1.125	1.942	0.532	0.258	White	I-29	0.375	0.275
CLNS-3-14	#3 AWG	#4 FLEX	3-6 AWG	1/4	0.281	0.680	1.125	2.060	0.532	0.320	White	I-29	0.375	0.275
CLNS-3-516	#3 AWG	#4 FLEX	3-6 AWG	5/16	0.343	0.875	1.125	2.255	0.532	0.352	White	I-29	0.375	0.275
CLNS-3-38	#3 AWG	#4 FLEX	3-6 AWG	3/8	0.406	0.875	1.125	2.255	0.593	0.414	White	I-29	0.375	0.275
CLNS-3-12	#3 AWG	#4 FLEX	3-6 AWG	1/2	0.562	1.250	1.125	2.630	0.750	0.546	White	I-29	0.375	0.275
CLNS-2-10	#2 AWG	-	2-6 AWG	10	0.219	0.562	1.125	1.973	0.599	0.258	Brown	I-33	0.421	0.312
CLNS-2-14	#2 AWG	-	2-6 AWG	1/4	0.281	0.680	1.125	2.091	0.599	0.320	Brown	I-33	0.421	0.312
CLNS-2-516	#2 AWG	-	2-6 AWG	5/16	0.343	0.875	1.125	2.286	0.599	0.352	Brown	I-33	0.421	0.312
CLNS-2-38	#2 AWG	-	2-6 AWG	3/8	0.406	0.875	1.125	2.286	0.599	0.414	Brown	I-33	0.421	0.312
CLNS-2-12	#2 AWG	-	2-6 AWG	1/2	0.562	1.250	1.125	2.661	0.750	0.546	Brown	I-33	0.421	0.312
CLNS-1-10	#1 AWG	#2 FLEX	1-6 AWG	10	0.219	0.562	1.375	2.267	0.673	0.258	Green	I-37	0.468	0.359
CLNS-1-14	#1 AWG	#2 FLEX	1-6 AWG	1/4	0.281	0.875	1.375	2.580	0.673	0.320	Green	I-37	0.468	0.359
CLNS-1-516	#1 AWG	#2 FLEX	1-6 AWG	5/16	0.343	0.875	1.375	2.580	0.673	0.352	Green	I-37	0.468	0.359
CLNS-1-38	#1 AWG	#2 FLEX	1-6 AWG	3/8	0.406	0.875	1.375	2.580	0.673	0.414	Green	I-37	0.468	0.359
CLNS-1-12	#1 AWG	#2 FLEX	1-6 AWG	1/2	0.562	1.250	1.375	2.955	0.750	0.546	Green	I-37	0.468	0.359

\* When installed with specified dieless tools

# SURECRIMP®

## COPPER COMPRESSION LUGS – LONG BARREL

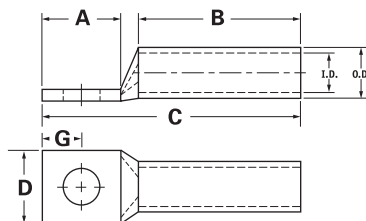
1 HOLE, W/O SIGHT HOLE – CONDUCTOR RANGE: 1/0 – 400KCMIL



### TYPE CLNS

#### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Long barrel length with chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation techniques are used, may be used for high voltage applications up to 35KV.
- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
						A	B	C	D	G				
CLNS-1/0-10	1/0 AWG	#1 FLEX	1/0-6 AWG	10	0.219	0.562	1.5	2.418	0.738	0.258	Pink	I-42	0.515	0.39
CLNS-1/0-14	1/0 AWG	#1 FLEX	1/0-6 AWG	1/4	0.281	0.875	1.5	2.731	0.738	0.32	Pink	I-42	0.515	0.39
CLNS-1/0-516	1/0 AWG	#1 FLEX	1/0-6 AWG	5/16	0.343	0.875	1.5	2.731	0.738	0.352	Pink	I-42	0.515	0.39
CLNS-1/0-38	1/0 AWG	#1 FLEX	1/0-6 AWG	3/8	0.406	0.875	1.5	2.731	0.738	0.414	Pink	I-42	0.515	0.39
CLNS-1/0-12	1/0 AWG	#1 FLEX	1/0-6 AWG	1/2	0.562	1.25	1.5	3.106	0.738	0.546	Pink	I-42	0.515	0.39
CLNS-2/0-10	2/0 AWG	1/0 FLEX	2/0-4 AWG	10	0.219	0.562	1.5	2.458	0.811	0.258	Black	I-45	0.562	0.437
CLNS-2/0-14	2/0 AWG	1/0 FLEX	2/0-4 AWG	1/4	0.281	0.875	1.5	2.771	0.811	0.32	Black	I-45	0.562	0.437
CLNS-2/0-516	2/0 AWG	1/0 FLEX	2/0-4 AWG	5/16	0.343	0.875	1.5	2.771	0.811	0.352	Black	I-45	0.562	0.437
CLNS-2/0-38	2/0 AWG	1/0 FLEX	2/0-4 AWG	3/8	0.406	0.875	1.5	2.771	0.811	0.414	Black	I-45	0.562	0.437
CLNS-2/0-12	2/0 AWG	1/0 FLEX	2/0-4 AWG	1/2	0.562	1.25	1.5	3.146	0.811	0.546	Black	I-45	0.562	0.437
CLNS-3/0-10	3/0 AWG	2/0 FLEX	3/0-2 AWG	10	0.219	0.562	1.5	2.501	0.885	0.258	Orange	I-50	0.609	0.484
CLNS-3/0-14	3/0 AWG	2/0 FLEX	3/0-2 AWG	1/4	0.281	0.875	1.5	2.814	0.885	0.32	Orange	I-50	0.609	0.484
CLNS-3/0-516	3/0 AWG	2/0 FLEX	3/0-2 AWG	5/16	0.343	0.875	1.5	2.814	0.885	0.352	Orange	I-50	0.609	0.484
CLNS-3/0-38	3/0 AWG	2/0 FLEX	3/0-2 AWG	3/8	0.406	0.875	1.5	2.814	0.885	0.414	Orange	I-50	0.609	0.484
CLNS-3/0-12	3/0 AWG	2/0 FLEX	3/0-2 AWG	1/2	0.562	1.25	1.5	3.189	0.885	0.546	Orange	I-50	0.609	0.484
CLNS-4/0-14	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/4	0.281	0.875	1.5	2.866	0.999	0.32	Purple	I-54	0.687	0.546
CLNS-4/0-516	4/0 AWG	3/0 FLEX	4/0-1 AWG	5/16	0.343	0.875	1.5	2.866	0.999	0.352	Purple	I-54	0.687	0.546
CLNS-4/0-38	4/0 AWG	3/0 FLEX	4/0-1 AWG	3/8	0.406	0.875	1.5	2.866	0.999	0.414	Purple	I-54	0.687	0.546
CLNS-4/0-12	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/2	0.562	1.25	1.5	3.241	0.999	0.546	Purple	I-54	0.687	0.546
CLNS-250-516	250kcmil	4/0 FLEX	250kcmil - 1/0 AWG	5/16	0.343	0.875	1.688	3.094	1.088	0.352	Yellow	I-62	0.75	0.593
CLNS-250-38	250kcmil	4/0 FLEX	250kcmil - 1/0 AWG	3/8	0.406	0.875	1.688	3.094	1.088	0.414	Yellow	I-62	0.75	0.593
CLNS-250-12	250kcmil	4/0 FLEX	250kcmil - 1/0 AWG	1/2	0.562	1.25	1.688	3.469	1.088	0.546	Yellow	I-62	0.75	0.593
CLNS-300-516	300kcmil	250 G,H FLEX	300kcmil - 2/0 AWG	5/16	0.343	0.875	2	3.462	1.189	0.352	White	I-66	0.812	0.66
CLNS-300-38	300kcmil	250 G,H FLEX	300kcmil - 2/0 AWG	3/8	0.406	0.875	2	3.462	1.189	0.414	White	I-66	0.812	0.66
CLNS-300-12	300kcmil	250 G,H FLEX	300kcmil - 2/0 AWG	1/2	0.562	1.25	2	3.837	1.189	0.546	White	I-66	0.812	0.66
CLNS-350-38	350kcmil	250 I,K,M FLEX 262.2 DLO	350kcmil - 3/0 AWG	3/8	0.406	0.875	2	3.498	1.291	0.414	Red	I-71	0.89	0.703
CLNS-350-12	350kcmil	250 I,K,M FLEX 262.2 DLO	350kcmil - 3/0 AWG	1/2	0.562	1.25	2	3.873	1.291	0.546	Red	I-71	0.89	0.703
CLNS-350-58	350kcmil	250 I,K,M FLEX 262.2 DLO	350kcmil - 3/0 AWG	5/8	0.656	1.437	2	4.06	1.291	0.671	Red	I-71	0.89	0.703
CLNS-400-38	400kcmil	300 G,H,I,K,M FLEX 313.1 DLO	400kcmil - 4/0 AWG	3/8	0.406	0.875	2.125	3.667	1.365	0.414	Blue	I-76	0.937	0.75
CLNS-400-12	400kcmil	300 G,H,I,K,M FLEX 313.1 DLO	400kcmil - 4/0 AWG	1/2	0.562	1.25	2.125	4.042	1.365	0.546	Blue	I-76	0.937	0.75
CLNS-400-58	400kcmil	300 G,H,I,K,M FLEX 313.1 DLO	400kcmil - 4/0 AWG	5/8	0.656	1.437	2.125	4.229	1.365	0.671	Blue	I-76	0.937	0.75

\* When installed with specified dieless tools

# INDUSTRIAL CONNECTORS

## SURECRIMP®

### COPPER COMPRESSION LUGS – LONG BARREL

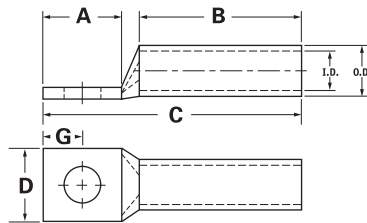
1 HOLE, W/O SIGHT HOLE – CONDUCTOR RANGE: 500KCMIL – 1000KCMIL



## TYPE CLNS

### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Long barrel length with chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation techniques are used, may be used for high voltage applications up to 35KV.
- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+ UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
						A	B	C	D	G				
CLNS-500-38	500kcmil	350 G,H,I,K,M FLEX 373.7 DLO	500kcmil - 250kcmil	3/8	0.406	0.875	2.250	3.857	1.535	0.414	Brown	I-87	1.062	0.828
CLNS-500-12	500kcmil	350 G,H,I,K,M FLEX 373.7 DLO	500kcmil - 250kcmil	1/2	0.562	1.250	2.250	4.232	1.535	0.546	Brown	I-87	1.062	0.828
CLNS-500-58	500kcmil	350 G,H,I,K,M FLEX 373.7 DLO	500kcmil - 250kcmil	5/8	0.656	1.437	2.250	4.419	1.535	0.671	Brown	I-87	1.062	0.828
CLNS-600-38	600kcmil	400 G,H,I,K,M FLEX 444.4 DLO	600kcmil - 250kcmil	3/8	0.406	0.875	2.687	4.371	1.712	0.414	Green	I-94	1.187	0.920
CLNS-600-12	600kcmil	400 G,H,I,K,M FLEX 444.4 DLO	600kcmil - 250kcmil	1/2	0.562	1.250	2.687	4.746	1.712	0.546	Green	I-94	1.187	0.920
CLNS-600-58	600kcmil	400 G,H,I,K,M FLEX 444.4 DLO	600kcmil - 250kcmil	5/8	0.656	1.437	2.687	4.933	1.712	0.671	Green	I-94	1.187	0.920
CLNS-650-516	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	5/16	0.343	0.875	2.687	4.431	1.764	0.352	Pink	I-99	1.217	0.958
CLNS-650-38	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	3/8	0.406	0.875	2.687	4.431	1.764	0.414	Pink	I-99	1.217	0.958
CLNS-650-12	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	1/2	0.562	1.25	2.687	4.806	1.764	0.546	Pink	I-99	1.217	0.958
CLNS-650-58	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	5/8	0.656	1.437	2.687	4.993	1.764	0.671	Pink	I-99	1.217	0.958
CLNS-700-38	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	3/8	0.406	0.875	2.687	4.431	1.816	0.414	Pink	I-99	1.250	0.991
CLNS-700-12	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	1/2	0.562	1.250	2.687	4.806	1.816	0.546	Pink	I-99	1.250	0.991
CLNS-700-58	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	5/8	0.656	1.437	2.687	4.993	1.816	0.671	Pink	I-99	1.250	0.991
CLNS-750-38	750kcmil	600 G,H,I,M FLEX 646.4 DLO	750kcmil - 500kcmil	3/8	0.406	0.875	2.875	4.652	1.901	0.414	Black	I-106	1.313	1.031
CLNS-750-12	750kcmil	600 G,H,I,M FLEX 646.4 DLO	750kcmil - 500kcmil	1/2	0.562	1.250	2.875	5.027	1.901	0.546	Black	I-106	1.313	1.031
CLNS-750-58	750kcmil	600 G,H,I,M FLEX 646.4 DLO	750kcmil - 500kcmil	5/8	0.656	1.437	2.875	5.214	1.901	0.671	Black	I-106	1.313	1.031
CLNS-1000-38	1000kcmil	750 G,H,I FLEX 777.7 DLO	1000kcmil - 750kcmil	3/8	0.406	0.875	3.000	4.900	2.169	0.414	White	I-125	1.500	1.172
CLNS-1000-12	1000kcmil	750 G,H,I FLEX 777.7 DLO	1000kcmil - 750kcmil	1/2	0.562	1.250	3.000	5.275	2.169	0.546	White	I-125	1.500	1.172
CLNS-1000-58	1000kcmil	750 G,H,I FLEX 777.7 DLO	1000kcmil - 750kcmil	5/8	0.656	1.437	3.000	5.462	2.169	0.671	White	I-125	1.500	1.172

\* When installed with specified dieless tools



# SURECRIMP®

## COPPER COMPRESSION LUGS – LONG BARREL

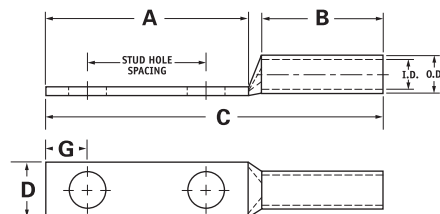
### 2 HOLE, W/SIGHT HOLE – CONDUCTOR RANGE: #8 – #4



## TYPE CLWD

### Features

- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Long barrel length with chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation techniques are used, may be used for high voltage applications up to 35KV.
- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	STUD HOLE SPACING	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
							A	B	C	D	G				
CLWD-8-10-58	#8 AWG	#8 FLEX	-	10	0.219	0.625	1.250	0.812	2.257	0.374	0.258	Red	I-21	0.272	0.179
CLWD-8-10-34	#8 AWG	#8 FLEX	-	10	0.219	0.750	1.437	0.812	2.444	0.374	0.258	Red	I-21	0.272	0.179
CLWD-8-14-58	#8 AWG	#8 FLEX	-	1/4	0.281	0.625	1.437	0.812	2.444	0.486	0.320	Red	I-21	0.272	0.179
CLWD-8-14-34	#8 AWG	#8 FLEX	-	1/4	0.281	0.750	1.437	0.812	2.444	0.486	0.320	Red	I-21	0.272	0.179
CLWD-8-14-1	#8 AWG	#8 FLEX	-	1/4	0.281	1.000	1.687	0.812	2.694	0.486	0.320	Red	I-21	0.272	0.179
CLWD-8-38-1	#8 AWG	#8 FLEX	-	3/8	0.406	1.000	1.937	0.812	2.944	0.593	0.414	Red	I-21	0.272	0.179
CLWD-6-10-12	#6 AWG	-	-	10	0.219	0.500	1.250	1.125	2.570	0.411	0.258	Blue	I-24	0.295	0.203
CLWD-6-10-58	#6 AWG	-	-	10	0.219	0.625	1.250	1.125	2.570	0.411	0.258	Blue	I-24	0.295	0.203
CLWD-6-10-1116	#6 AWG	-	-	10	0.219	0.687	1.250	1.125	2.570	0.411	0.258	Blue	I-24	0.295	0.203
CLWD-6-10-34	#6 AWG	-	-	10	0.219	0.750	1.437	1.125	2.757	0.411	0.258	Blue	I-24	0.295	0.203
CLWD-6-14-12	#6 AWG	-	-	1/4	0.281	0.500	1.250	1.125	2.570	0.411	0.320	Blue	I-24	0.295	0.203
CLWD-6-14-58	#6 AWG	-	-	1/4	0.281	0.625	1.437	1.125	2.757	0.411	0.320	Blue	I-24	0.295	0.203
CLWD-6-14-34	#6 AWG	-	-	1/4	0.281	0.750	1.437	1.125	2.757	0.411	0.320	Blue	I-24	0.295	0.203
CLWD-6-14-1	#6 AWG	-	-	1/4	0.281	1.000	1.687	1.125	3.007	0.411	0.320	Blue	I-24	0.295	0.203
CLWD-6-516-34	#6 AWG	-	-	5/16	0.343	0.750	1.687	1.125	3.007	0.532	0.352	Blue	I-24	0.295	0.203
CLWD-6-516-1	#6 AWG	-	-	5/16	0.343	1.000	1.937	1.125	3.257	0.532	0.352	Blue	I-24	0.295	0.203
CLWD-6-38-34	#6 AWG	-	-	3/8	0.406	0.750	1.687	1.125	3.007	0.593	0.414	Blue	I-24	0.295	0.203
CLWD-6-38-78	#6 AWG	-	-	3/8	0.406	0.875	1.937	1.125	3.257	0.593	0.414	Blue	I-24	0.295	0.203
CLWD-6-38-1	#6 AWG	-	-	3/8	0.406	1.000	1.937	1.125	3.257	0.593	0.414	Blue	I-24	0.295	0.203
CLWD-6-12-134	#6 AWG	-	-	1/2	0.562	1.750	3.000	1.125	4.320	0.750	0.546	Blue	I-24	0.295	0.203
CLWD-4-10-58	#4 AWG	#6 FLEX	4-6 AWG	10	0.219	0.625	1.250	1.125	2.609	0.486	0.258	Gray	I-29	0.343	0.250
CLWD-4-10-34	#4 AWG	#6 FLEX	4-6 AWG	10	0.219	0.750	1.437	1.125	2.796	0.486	0.258	Gray	I-29	0.343	0.250
CLWD-4-10-1	#4 AWG	#6 FLEX	4-6 AWG	10	0.219	1.000	1.687	1.125	3.046	0.486	0.258	Gray	I-29	0.343	0.250
CLWD-4-14-58	#4 AWG	#6 FLEX	4-6 AWG	1/4	0.281	0.625	1.437	1.125	2.796	0.486	0.320	Gray	I-29	0.343	0.250
CLWD-4-14-34	#4 AWG	#6 FLEX	4-6 AWG	1/4	0.281	0.750	1.437	1.125	2.796	0.486	0.320	Gray	I-29	0.343	0.250
CLWD-4-14-1	#4 AWG	#6 FLEX	4-6 AWG	1/4	0.281	1.000	1.687	1.125	3.046	0.486	0.320	Gray	I-29	0.343	0.250
CLWD-4-516-58	#4 AWG	#6 FLEX	4-6 AWG	5/16	0.343	0.625	1.437	1.125	2.796	0.486	0.352	Gray	I-29	0.343	0.250
CLWD-4-516-34	#4 AWG	#6 FLEX	4-6 AWG	5/16	0.343	0.750	1.687	1.125	3.046	0.486	0.352	Gray	I-29	0.343	0.250
CLWD-4-516-1	#4 AWG	#6 FLEX	4-6 AWG	5/16	0.343	1.000	1.937	1.125	3.296	0.486	0.352	Gray	I-29	0.343	0.250
CLWD-4-38-34	#4 AWG	#6 FLEX	4-6 AWG	3/8	0.406	0.750	1.687	1.125	3.046	0.593	0.414	Gray	I-29	0.343	0.250
CLWD-4-38-1	#4 AWG	#6 FLEX	4-6 AWG	3/8	0.406	1.000	1.937	1.125	3.296	0.593	0.414	Gray	I-29	0.343	0.250
CLWD-4-12-134	#4 AWG	#6 FLEX	4-6 AWG	1/2	0.562	1.750	3.000	1.125	4.359	0.750	0.546	Gray	I-29	0.343	0.250

\* When installed with specified dieless tools

# INDUSTRIAL CONNECTORS

## SURECRIMP®

### COPPER COMPRESSION LUGS – LONG BARREL

#### 2 HOLE, W/SIGHT HOLE – CONDUCTOR RANGE: #3 – #1



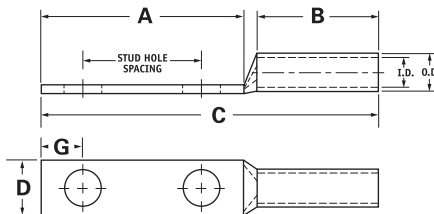
## TYPE CLWD

### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Long barrel length with chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation

techniques are used, may be used for high voltage applications up to 35KV.

- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	STUD HOLE SPACING	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
							A	B	C	D	G				
CLWD-3-14-58	#3 AWG	#4 FLEX	3-6 AWG	1/4	0.281	0.625	1.437	1.125	2.817	0.532	0.320	White	I-29	0.375	0.275
CLWD-3-14-34	#3 AWG	#4 FLEX	3-6 AWG	1/4	0.281	0.750	1.437	1.125	2.817	0.532	0.320	White	I-29	0.375	0.275
CLWD-3-516-58	#3 AWG	#4 FLEX	3-6 AWG	5/16	0.343	0.625	1.437	1.125	2.817	0.532	0.352	White	I-29	0.375	0.275
CLWD-3-516-1	#3 AWG	#4 FLEX	3-6 AWG	5/16	0.343	1.000	1.937	1.125	3.317	0.532	0.352	White	I-29	0.375	0.275
CLWD-3-38-34	#3 AWG	#4 FLEX	3-6 AWG	3/8	0.406	0.750	1.687	1.125	3.067	0.593	0.414	White	I-29	0.375	0.275
CLWD-3-38-1	#3 AWG	#4 FLEX	3-6 AWG	3/8	0.406	1.000	1.937	1.125	3.317	0.593	0.414	White	I-29	0.375	0.275
CLWD-3-12-134	#3 AWG	#4 FLEX	3-6 AWG	1/2	0.562	1.750	3.000	1.125	4.380	0.750	0.546	White	I-29	0.375	0.275
CLWD-2-10-34	#2 AWG	-	2-6 AWG	10	0.219	0.750	1.437	1.125	2.848	0.599	0.258	Brown	I-33	0.421	0.312
CLWD-2-14-58	#2 AWG	-	2-6 AWG	1/4	0.281	0.625	1.437	1.125	2.848	0.599	0.320	Brown	I-33	0.421	0.312
CLWD-2-14-34	#2 AWG	-	2-6 AWG	1/4	0.281	0.750	1.437	1.125	2.848	0.599	0.320	Brown	I-33	0.421	0.312
CLWD-2-14-1	#2 AWG	-	2-6 AWG	1/4	0.281	1.000	1.687	1.125	3.098	0.599	0.320	Brown	I-33	0.421	0.312
CLWD-2-516-58	#2 AWG	-	2-6 AWG	5/16	0.343	0.625	1.687	1.125	3.098	0.599	0.352	Brown	I-33	0.421	0.312
CLWD-2-516-34	#2 AWG	-	2-6 AWG	5/16	0.343	0.750	1.687	1.125	3.098	0.599	0.352	Brown	I-33	0.421	0.312
CLWD-2-516-1	#2 AWG	-	2-6 AWG	5/16	0.343	1.000	1.937	1.125	3.348	0.599	0.352	Brown	I-33	0.421	0.312
CLWD-2-38-58	#2 AWG	-	2-6 AWG	3/8	0.406	0.625	1.687	1.125	3.098	0.599	0.414	Brown	I-33	0.421	0.312
CLWD-2-38-34	#2 AWG	-	2-6 AWG	3/8	0.406	0.750	1.687	1.125	3.098	0.599	0.414	Brown	I-33	0.421	0.312
CLWD-2-38-78	#2 AWG	-	2-6 AWG	3/8	0.406	0.875	1.937	1.125	3.348	0.599	0.414	Brown	I-33	0.421	0.312
CLWD-2-38-1	#2 AWG	-	2-6 AWG	3/8	0.406	1.000	1.937	1.125	3.348	0.599	0.414	Brown	I-33	0.421	0.312
CLWD-2-38-134	#2 AWG	-	2-6 AWG	3/8	0.406	1.750	2.625	1.125	4.036	0.599	0.414	Brown	I-33	0.421	0.312
CLWD-2-12-134	#2 AWG	-	2-6 AWG	1/2	0.562	1.750	3.000	1.125	4.411	0.750	0.546	Brown	I-33	0.421	0.312
CLWD-1-14-58	#1 AWG	#2 FLEX	1-6 AWG	1/4	0.281	0.625	1.437	1.375	3.142	0.673	0.320	Green	I-37	0.468	0.359
CLWD-1-14-34	#1 AWG	#2 FLEX	1-6 AWG	1/4	0.281	0.750	1.437	1.375	3.142	0.673	0.320	Green	I-37	0.468	0.359
CLWD-1-14-1	#1 AWG	#2 FLEX	1-6 AWG	1/4	0.281	1.000	1.687	1.375	3.392	0.673	0.320	Green	I-37	0.468	0.359
CLWD-1-516-78	#1 AWG	#2 FLEX	1-6 AWG	5/16	0.343	0.875	1.687	1.375	3.392	0.673	0.352	Green	I-37	0.468	0.359
CLWD-1-516-1	#1 AWG	#2 FLEX	1-6 AWG	5/16	0.343	1.000	1.937	1.375	3.642	0.673	0.352	Green	I-37	0.468	0.359
CLWD-1-38-1	#1 AWG	#2 FLEX	1-6 AWG	3/8	0.406	1.000	1.937	1.375	3.642	0.673	0.414	Green	I-37	0.468	0.359
CLWD-1-12-134	#1 AWG	#2 FLEX	1-6 AWG	1/2	0.562	1.750	3.000	1.375	4.705	0.750	0.546	Green	I-37	0.468	0.359

\* When installed with specified dieless tools

# SURECRIMP®

## COPPER COMPRESSION LUGS – LONG BARREL

### 2 HOLE, W/SIGHT HOLE – CONDUCTOR RANGE: 1/0 – 3/0



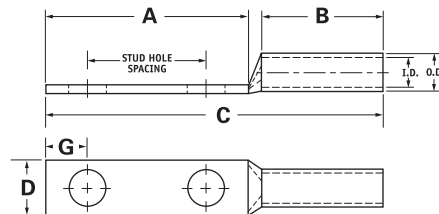
## TYPE CLWD

### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Long barrel length with chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation

techniques are used, may be used for high voltage applications up to 35KV.

- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- St



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	STUD HOLE SPACING	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
							A	B	C	D	G				
CLWD-1/0-14-58	1/0 AWG	#1 FLEX	1/0-6 AWG	1/4	0.281	0.625	1.437	1.500	3.293	0.738	0.320	Pink	I-42	0.515	0.390
CLWD-1/0-14-34	1/0 AWG	#1 FLEX	1/0-6 AWG	1/4	0.281	0.750	1.437	1.500	3.293	0.738	0.320	Pink	I-42	0.515	0.390
CLWD-1/0-14-1	1/0 AWG	#1 FLEX	1/0-6 AWG	1/4	0.281	1.000	1.687	1.500	3.543	0.738	0.320	Pink	I-42	0.515	0.390
CLWD-1/0-516-34	1/0 AWG	#1 FLEX	1/0-6 AWG	5/16	0.343	0.750	1.687	1.500	3.543	0.738	0.352	Pink	I-42	0.515	0.390
CLWD-1/0-516-78	1/0 AWG	#1 FLEX	1/0-6 AWG	5/16	0.343	0.875	1.687	1.500	3.543	0.738	0.352	Pink	I-42	0.515	0.390
CLWD-1/0-516-1	1/0 AWG	#1 FLEX	1/0-6 AWG	5/16	0.343	1.000	1.937	1.500	3.793	0.738	0.352	Pink	I-42	0.515	0.390
CLWD-1/0-38-1	1/0 AWG	#1 FLEX	1/0-6 AWG	3/8	0.406	1.000	1.937	1.500	3.793	0.738	0.414	Pink	I-42	0.515	0.390
CLWD-1/0-38-134	1/0 AWG	#1 FLEX	1/0-6 AWG	3/8	0.406	1.750	2.625	1.500	4.481	0.738	0.414	Pink	I-42	0.515	0.390
CLWD-1/0-12-1	1/0 AWG	#1 FLEX	1/0-6 AWG	1/2	0.562	1.000	2.125	1.500	3.981	0.738	0.546	Pink	I-42	0.515	0.390
CLWD-1/0-12-134	1/0 AWG	#1 FLEX	1/0-6 AWG	1/2	0.562	1.750	3.000	1.500	4.856	0.738	0.546	Pink	I-42	0.515	0.390
CLWD-2/0-14-58	2/0 AWG	1/0 FLEX	2/0-4 AWG	1/4	0.281	0.625	1.437	1.500	3.333	0.811	0.320	Black	I-45	0.562	0.437
CLWD-2/0-14-34	2/0 AWG	1/0 FLEX	2/0-4 AWG	1/4	0.281	0.750	1.437	1.500	3.333	0.811	0.320	Black	I-45	0.562	0.437
CLWD-2/0-14-1	2/0 AWG	1/0 FLEX	2/0-4 AWG	1/4	0.281	1.000	1.687	1.500	3.583	0.811	0.320	Black	I-45	0.562	0.437
CLWD-2/0-516-1	2/0 AWG	1/0 FLEX	2/0-4 AWG	5/16	0.343	1.000	1.937	1.500	3.833	0.811	0.352	Black	I-45	0.562	0.437
CLWD-2/0-38-1	2/0 AWG	1/0 FLEX	2/0-4 AWG	3/8	0.406	1.000	1.937	1.500	3.833	0.811	0.414	Black	I-45	0.562	0.437
CLWD-2/0-38-134	2/0 AWG	1/0 FLEX	2/0-4 AWG	3/8	0.406	1.750	2.625	1.500	4.521	0.811	0.414	Black	I-45	0.562	0.437
CLWD-2/0-12-1	2/0 AWG	1/0 FLEX	2/0-4 AWG	1/2	0.562	1.000	2.125	1.500	4.021	0.811	0.546	Black	I-45	0.562	0.437
CLWD-2/0-12-134	2/0 AWG	1/0 FLEX	2/0-4 AWG	1/2	0.562	1.750	3.000	1.500	4.896	0.811	0.546	Black	I-45	0.562	0.437
CLWD-3/0-14-58	3/0 AWG	2/0 FLEX	3/0-2 AWG	1/4	0.281	0.625	1.437	1.500	3.376	0.885	0.320	Orange	I-50	0.609	0.484
CLWD-3/0-14-34	3/0 AWG	2/0 FLEX	3/0-2 AWG	1/4	0.281	0.750	1.437	1.500	3.376	0.885	0.320	Orange	I-50	0.609	0.484
CLWD-3/0-516-1	3/0 AWG	2/0 FLEX	3/0-2 AWG	5/16	0.343	1.000	1.937	1.500	3.876	0.885	0.352	Orange	I-50	0.609	0.484
CLWD-3/0-38-1	3/0 AWG	2/0 FLEX	3/0-2 AWG	3/8	0.406	1.000	1.937	1.500	3.876	0.885	0.414	Orange	I-50	0.609	0.484
CLWD-3/0-12-134	3/0 AWG	2/0 FLEX	3/0-2 AWG	1/2	0.562	1.750	3.000	1.500	4.939	0.885	0.546	Orange	I-50	0.609	0.484

\* When installed with specified dieless tools

# INDUSTRIAL CONNECTORS

## SURECRIMP®

### COPPER COMPRESSION LUGS – LONG BARREL

2 HOLE, W/SIGHT HOLE – CONDUCTOR RANGE: 4/0 – 300KCMIL



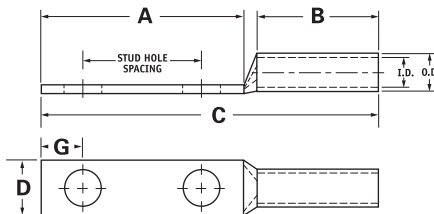
## TYPE CLWD

### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Long barrel length with chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation

techniques are used, may be used for high voltage applications up to 35KV.

- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitat



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	STUD HOLE SPACING	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
							A	B	C	D	G				
CLWD-4/0-14-58	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/4	0.281	0.625	1.437	1.500	3.428	0.999	0.320	Purple	I-54	0.687	0.546
CLWD-4/0-14-34	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/4	0.281	0.750	1.437	1.500	3.428	0.999	0.320	Purple	I-54	0.687	0.546
CLWD-4/0-14-1	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/4	0.281	1.000	1.687	1.500	3.678	0.999	0.320	Purple	I-54	0.687	0.546
CLWD-4/0-516-34	4/0 AWG	3/0 FLEX	4/0-1 AWG	5/16	0.343	0.750	1.687	1.500	3.678	0.999	0.352	Purple	I-54	0.687	0.546
CLWD-4/0-516-1	4/0 AWG	3/0 FLEX	4/0-1 AWG	5/16	0.343	1.000	1.937	1.500	3.928	0.999	0.352	Purple	I-54	0.687	0.546
CLWD-4/0-516-134	4/0 AWG	3/0 FLEX	4/0-1 AWG	5/16	0.343	1.750	2.500	1.500	4.491	0.999	0.352	Purple	I-54	0.687	0.546
CLWD-4/0-38-1	4/0 AWG	3/0 FLEX	4/0-1 AWG	3/8	0.406	1.000	1.937	1.500	3.928	0.999	0.414	Purple	I-54	0.687	0.546
CLWD-4/0-38-134	4/0 AWG	3/0 FLEX	4/0-1 AWG	3/8	0.406	1.750	2.625	1.500	4.616	0.999	0.414	Purple	I-54	0.687	0.546
CLWD-4/0-12-1	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/2	0.562	1.000	2.125	1.500	4.116	0.999	0.546	Purple	I-54	0.687	0.546
CLWD-4/0-12-114	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/2	0.562	1.250	2.500	1.500	4.491	0.999	0.546	Purple	I-54	0.687	0.546
CLWD-4/0-12-134	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/2	0.562	1.750	3.000	1.500	4.991	0.999	0.546	Purple	I-54	0.687	0.546
CLWD-250-14-34	250kcmil	4/0 FLEX	250kcmil - 1/0 AWG	1/4	0.281	0.750	1.437	1.688	3.656	1.088	0.320	Yellow	I-62	0.750	0.593
CLWD-250-38-1	250kcmil	4/0 FLEX	250kcmil - 1/0 AWG	3/8	0.406	1.000	1.937	1.688	4.156	1.088	0.414	Yellow	I-62	0.750	0.593
CLWD-250-38-134	250kcmil	4/0 FLEX	250kcmil - 1/0 AWG	3/8	0.406	1.750	2.625	1.688	4.844	1.088	0.414	Yellow	I-62	0.750	0.593
CLWD-250-12-114	250kcmil	4/0 FLEX	250kcmil - 1/0 AWG	1/2	0.562	1.250	2.500	1.688	4.719	1.088	0.546	Yellow	I-62	0.750	0.593
CLWD-250-12-134	250kcmil	4/0 FLEX	250kcmil - 1/0 AWG	1/2	0.562	1.750	3.000	1.688	5.219	1.088	0.546	Yellow	I-62	0.750	0.593
CLWD-300-38-1	300kcmil	250 G,H FLEX	300kcmil - 2/0 AWG	3/8	0.406	1.000	1.937	2.000	4.524	1.189	0.414	White	I-66	0.812	0.660
CLWD-300-12-134	300kcmil	250 G,H FLEX	300kcmil - 2/0 AWG	1/2	0.562	1.750	3.000	2.000	5.587	1.189	0.546	White	I-66	0.812	0.660

\* When installed with specified dieless tools

# SURECRIMP®

## COPPER COMPRESSION LUGS – LONG BARREL

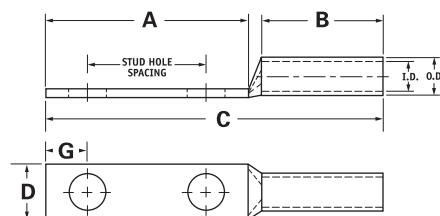
2 HOLE, W/SIGHT HOLE – CONDUCTOR RANGE: 350KCMIL – 650KCMIL



### TYPE CLWD

#### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Long barrel length with chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation techniques are used, may be used for high voltage applications up to 35KV.
- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	STUD HOLE SPACING	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
							A	B	C	D	G				
CLWD-350-14-34	350kcmil	250 I,K,M FLEX 262.2 DLO	350kcmil-3/0 AWG	1/4	0.281	0.750	1.437	2.000	4.060	1.291	0.320	Red	I-71	0.890	0.703
CLWD-350-516-134	350kcmil	250 I,K,M FLEX 262.2 DLO	350kcmil-3/0 AWG	5/16	0.343	1.750	2.500	2.000	5.123	1.291	0.352	Red	I-71	0.890	0.703
CLWD-350-38-1	350kcmil	250 I,K,M FLEX 262.2 DLO	350kcmil-3/0 AWG	3/8	0.406	1.000	1.937	2.000	4.560	1.291	0.414	Red	I-71	0.890	0.703
CLWD-350-12-114	350kcmil	250 I,K,M FLEX 262.2 DLO	350kcmil-3/0 AWG	1/2	0.562	1.250	2.500	2.000	5.123	1.291	0.546	Red	I-71	0.890	0.703
CLWD-350-12-134	350kcmil	250 I,K,M FLEX 262.2 DLO	350kcmil-3/0 AWG	1/2	0.562	1.750	3.000	2.000	5.623	1.291	0.546	Red	I-71	0.890	0.703
CLWD-400-38-1	400kcmil	300 G,H,I,K,M FLEX 313.1 DLO	400kcmil-4/0 AWG	3/8	0.406	1.000	1.937	2.125	4.729	1.365	0.414	Blue	I-76	0.937	0.750
CLWD-400-38-116	400kcmil	300 G,H,I,K,M FLEX 313.1 DLO	400kcmil-4/0 AWG	3/8	0.406	1.062	1.937	2.125	4.729	1.365	0.414	Blue	I-76	0.937	0.750
CLWD-400-12-134	400kcmil	300 G,H,I,K,M FLEX 313.1 DLO	400kcmil-4/0 AWG	1/2	0.562	1.750	3.000	2.125	5.792	1.365	0.546	Blue	I-76	0.937	0.750
CLWD-500-14-34	500kcmil	350 G,H,I,K,M FLEX 373.7 DLO	500kcmil-250kcmil	1/4	0.281	0.750	1.437	2.250	4.419	1.535	0.320	Brown	I-87	1.062	0.828
CLWD-500-38-1	500kcmil	350 G,H,I,K,M FLEX 373.7 DLO	500kcmil-250kcmil	3/8	0.406	1.000	1.937	2.250	4.919	1.535	0.414	Brown	I-87	1.062	0.828
CLWD-500-12-114	500kcmil	350 G,H,I,K,M FLEX 373.7 DLO	500kcmil-250kcmil	1/2	0.562	1.250	2.500	2.250	5.482	1.535	0.546	Brown	I-87	1.062	0.828
CLWD-500-12-134	500kcmil	350 G,H,I,K,M FLEX 373.7 DLO	500kcmil-250kcmil	1/2	0.562	1.750	3.000	2.250	5.982	1.535	0.546	Brown	I-87	1.062	0.828
CLWD-600-38-1	600kcmil	400 G,H,I,K,M FLEX 444.4 DLO	600kcmil-250kcmil	3/8	0.406	1.000	1.937	2.687	5.433	1.712	0.414	Green	I-94	1.187	0.920
CLWD-600-12-134	600kcmil	400 G,H,I,K,M FLEX 444.4 DLO	600kcmil-250kcmil	1/2	0.562	1.750	3.000	2.867	6.496	1.712	0.546	Green	I-94	1.187	0.920
CLWD-650-12-114	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil-350kcmil	1/2	0.562	1.25	2.5	2.687	6.056	1.764	0.546	Pink	I-99	1.217	0.958
CLWD-650-12-134	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil-350kcmil	1/2	0.562	1.75	3	2.687	6.556	1.764	0.546	Pink	I-99	1.217	0.958
CLWD-650-38-1	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil-350kcmil	3/8	0.406	1	1.937	2.687	5.493	1.764	0.414	Pink	I-99	1.217	0.958
CLWD-650-38-118	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil-350kcmil	3/8	0.406	1.125	2.125	2.687	5.681	1.764	0.414	Pink	I-99	1.217	0.958
CLWD-650-516-1	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil-350kcmil	5/16	0.343	1	1.937	2.687	5.493	1.764	0.3515	Pink	I-99	1.217	0.958

\* When installed with specified dieless tools

# INDUSTRIAL CONNECTORS

## SURECRIMP®

### COPPER COMPRESSION LUGS – LONG BARREL

2 HOLE, W/SIGHT HOLE – CONDUCTOR RANGE: 700KCMIL – 1000KCMIL



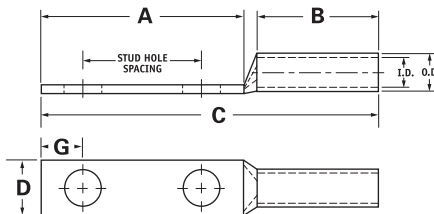
## TYPE CLWD

### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Long barrel length with chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation

techniques are used, may be used for high voltage applications up to 35KV.

- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	STUD HOLE SPACING	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
							A	B	C	D	G				
CLWD-700-38-1	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	3/8	0.406	1.000	1.937	2.687	5.493	1.816	0.414	Pink	I-99	1.250	0.991
CLWD-700-38-118	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	3/8	0.406	1.125	2.125	2.687	5.681	1.816	0.414	Pink	I-99	1.250	0.991
CLWD-700-12-112	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	1/2	0.562	1.500	2.625	2.687	6.181	1.816	0.546	Pink	I-99	1.250	0.991
CLWD-700-12-134	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	1/2	0.562	1.750	3.000	2.687	6.556	1.816	0.546	Pink	I-99	1.250	0.991
CLWD-700-12-178	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	1/2	0.562	1.875	3.000	2.687	6.556	1.816	0.546	Pink	I-99	1.250	0.991
CLWD-750-38-1	750kcmil	600 G,H,I,M FLEX 646.4 DLO	750kcmil - 500kcmil	3/8	0.406	1.000	1.937	2.875	5.714	1.901	0.414	Black	I-106	1.313	1.031
CLWD-750-38-118	750kcmil	600 G,H,I,M FLEX 646.4 DLO	750kcmil - 500kcmil	3/8	0.406	1.125	2.125	2.875	5.902	1.901	0.414	Black	I-106	1.313	1.031
CLWD-750-12-112	750kcmil	600 G,H,I,M FLEX 646.4 DLO	750kcmil - 500kcmil	1/2	0.562	1.500	2.625	2.875	6.402	1.901	0.546	Black	I-106	1.313	1.031
CLWD-750-12-134	750kcmil	600 G,H,I,M FLEX 646.4 DLO	750kcmil - 500kcmil	1/2	0.562	1.750	3.000	2.875	6.777	1.901	0.546	Black	I-106	1.313	1.031
CLWD-750-58-112	750kcmil	600 G,H,I,M FLEX 646.4 DLO	750kcmil - 500kcmil	5/8	0.562	1.500	3.000	2.875	6.777	1.901	0.671	Black	I-106	1.313	1.031
CLWD-1000-38-1	1000kcmil	750 G,H,I FLEX 777.7 DLO	1000kcmil - 750kcmil	3/8	0.406	1.000	1.937	3.000	5.962	2.169	0.414	White	I-125	1.500	1.172
CLWD-1000-12-114	1000kcmil	750 G,H,I FLEX 777.7 DLO	1000kcmil - 750kcmil	1/2	0.562	1.250	2.500	3.000	6.525	2.169	0.546	White	I-125	1.500	1.172
CLWD-1000-12-134	1000kcmil	750 G,H,I FLEX 777.7 DLO	1000kcmil - 750kcmil	1/2	0.562	1.750	3.000	3.000	7.025	2.169	0.546	White	I-125	1.500	1.172
CLWD-1000-58-112	1000kcmil	750 G,H,I FLEX 777.7 DLO	1000kcmil - 750kcmil	5/8	0.562	1.500	3.000	3.000	7.025	2.169	0.671	White	I-125	1.500	1.172

\* When installed with specified dieless tools

# SURECRIMP®

## COPPER COMPRESSION LUGS – LONG BARREL

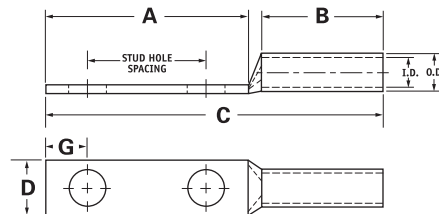
### 2 HOLE, W/O SIGHT HOLE – CONDUCTOR RANGE: #8 – #6



## TYPE CLND

### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Long barrel length with chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation techniques are used, may be used for high voltage applications up to 35KV.
- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	STUD HOLE SPACING	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
							A	B	C	D	G				
CLND-8-10-58	#8 AWG	#8 FLEX	-	10	0.219	0.625	1.250	0.812	2.257	0.374	0.258	Red	I-21	0.272	0.179
CLND-8-10-34	#8 AWG	#8 FLEX	-	10	0.219	0.750	1.437	0.812	2.444	0.374	0.258	Red	I-21	0.272	0.179
CLND-8-14-58	#8 AWG	#8 FLEX	-	1/4	0.281	0.625	1.437	0.812	2.444	0.486	0.320	Red	I-21	0.272	0.179
CLND-8-14-34	#8 AWG	#8 FLEX	-	1/4	0.281	0.750	1.437	0.812	2.444	0.486	0.320	Red	I-21	0.272	0.179
CLND-8-14-1	#8 AWG	#8 FLEX	-	1/4	0.281	1.000	1.687	0.812	2.694	0.486	0.320	Red	I-21	0.272	0.179
CLND-8-38-1	#8 AWG	#8 FLEX	-	3/8	0.406	1.000	1.937	0.812	2.944	0.593	0.414	Red	I-21	0.272	0.179
CLND-6-10-12	#6 AWG	-	-	10	0.219	0.500	1.250	1.125	2.570	0.411	0.258	Blue	I-24	0.295	0.203
CLND-6-10-58	#6 AWG	-	-	10	0.219	0.625	1.250	1.125	2.570	0.411	0.258	Blue	I-24	0.295	0.203
CLND-6-10-1116	#6 AWG	-	-	10	0.219	0.687	1.250	1.125	2.570	0.411	0.258	Blue	I-24	0.295	0.203
CLND-6-10-34	#6 AWG	-	-	10	0.219	0.750	1.437	1.125	2.757	0.411	0.258	Blue	I-24	0.295	0.203
CLND-6-14-12	#6 AWG	-	-	1/4	0.281	0.500	1.250	1.125	2.570	0.411	0.320	Blue	I-24	0.295	0.203
CLND-6-14-58	#6 AWG	-	-	1/4	0.281	0.625	1.437	1.125	2.757	0.411	0.320	Blue	I-24	0.295	0.203
CLND-6-14-34	#6 AWG	-	-	1/4	0.281	0.750	1.437	1.125	2.757	0.411	0.320	Blue	I-24	0.295	0.203
CLND-6-14-1	#6 AWG	-	-	1/4	0.281	1.000	1.687	1.125	3.007	0.411	0.320	Blue	I-24	0.295	0.203
CLND-6-516-34	#6 AWG	-	-	5/16	0.343	0.750	1.687	1.125	3.007	0.532	0.352	Blue	I-24	0.295	0.203
CLND-6-516-1	#6 AWG	-	-	5/16	0.343	1.000	1.937	1.125	3.257	0.532	0.352	Blue	I-24	0.295	0.203
CLND-6-38-34	#6 AWG	-	-	3/8	0.406	0.750	1.687	1.125	3.007	0.593	0.414	Blue	I-24	0.295	0.203
CLND-6-38-78	#6 AWG	-	-	3/8	0.406	0.875	1.937	1.125	3.257	0.593	0.414	Blue	I-24	0.295	0.203
CLND-6-38-1	#6 AWG	-	-	3/8	0.406	1.000	1.937	1.125	3.257	0.593	0.414	Blue	I-24	0.295	0.203
CLND-6-12-134	#6 AWG	-	-	1/2	0.562	1.750	3.000	1.125	4.320	0.750	0.546	Blue	I-24	0.295	0.203

\* When installed with specified dieless tools

# INDUSTRIAL CONNECTORS

## SURECRIMP®

### COPPER COMPRESSION LUGS – LONG BARREL

#### 2 HOLE, W/O SIGHT HOLE – CONDUCTOR RANGE: #4 – #3



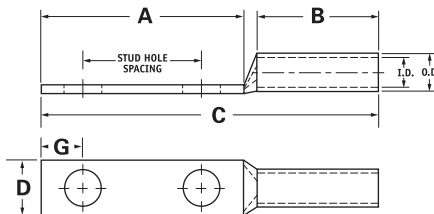
## TYPE CLND

### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Long barrel length with chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation

techniques are used, may be used for high voltage applications up to 35KV.

- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	STUD HOLE SPACING	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
							A	B	C	D	G				
CLND-4-10-58	#4 AWG	#6 FLEX	4-6 AWG	10	0.219	0.625	1.250	1.125	2.609	0.486	0.258	Gray	I-29	0.343	0.250
CLND-4-10-34	#4 AWG	#6 FLEX	4-6 AWG	10	0.219	0.750	1.437	1.125	2.796	0.486	0.258	Gray	I-29	0.343	0.250
CLND-4-10-1	#4 AWG	#6 FLEX	4-6 AWG	10	0.219	1.000	1.687	1.125	3.046	0.486	0.258	Gray	I-29	0.343	0.250
CLND-4-14-58	#4 AWG	#6 FLEX	4-6 AWG	1/4	0.281	0.625	1.437	1.125	2.796	0.486	0.320	Gray	I-29	0.343	0.250
CLND-4-14-34	#4 AWG	#6 FLEX	4-6 AWG	1/4	0.281	0.750	1.437	1.125	2.796	0.486	0.320	Gray	I-29	0.343	0.250
CLND-4-516-34	#4 AWG	#6 FLEX	4-6 AWG	5/16	0.343	0.750	1.687	1.125	3.046	0.486	0.352	Gray	I-29	0.343	0.250
CLND-4-516-1	#4 AWG	#6 FLEX	4-6 AWG	5/16	0.343	1.000	1.937	1.125	3.296	0.486	0.352	Gray	I-29	0.343	0.250
CLND-4-38-34	#4 AWG	#6 FLEX	4-6 AWG	3/8	0.406	0.750	1.687	1.125	3.046	0.593	0.414	Gray	I-29	0.343	0.250
CLND-4-38-1	#4 AWG	#6 FLEX	4-6 AWG	3/8	0.406	1.000	1.937	1.125	3.296	0.593	0.414	Gray	I-29	0.343	0.250
CLND-4-12-134	#4 AWG	#6 FLEX	4-6 AWG	1/2	0.562	1.750	3.000	1.125	4.359	0.750	0.546	Gray	I-29	0.343	0.250
CLND-3-14-58	#3 AWG	#4 FLEX	3-6 AWG	1/4	0.281	0.625	1.437	1.125	2.817	0.532	0.320	White	I-29	0.375	0.275
CLND-3-14-34	#3 AWG	#4 FLEX	3-6 AWG	1/4	0.281	0.750	1.437	1.125	2.817	0.532	0.320	White	I-29	0.375	0.275
CLND-3-516-58	#3 AWG	#4 FLEX	3-6 AWG	5/16	0.343	0.625	1.437	1.125	2.817	0.532	0.352	White	I-29	0.375	0.275
CLND-3-516-1	#3 AWG	#4 FLEX	3-6 AWG	5/16	0.343	1.000	1.937	1.125	3.317	0.532	0.352	White	I-29	0.375	0.275
CLND-3-38-34	#3 AWG	#4 FLEX	3-6 AWG	3/8	0.406	0.750	1.687	1.125	3.067	0.593	0.414	White	I-29	0.375	0.275
CLND-3-38-1	#3 AWG	#4 FLEX	3-6 AWG	3/8	0.406	1.000	1.937	1.125	3.317	0.593	0.414	White	I-29	0.375	0.275
CLND-3-12-134	#3 AWG	#4 FLEX	3-6 AWG	1/2	0.562	1.750	3.000	1.125	4.380	0.750	0.546	White	I-29	0.375	0.275

\* When installed with specified dieless tools



# SURECRIMP®

## COPPER COMPRESSION LUGS – LONG BARREL

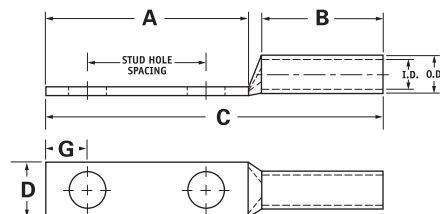
### 2 HOLE, W/O SIGHT HOLE – CONDUCTOR RANGE: #2 – 1/0



## TYPE CLND

### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Long barrel length with chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation techniques are used, may be used for high voltage applications up to 35KV.
- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	STUD HOLE SPACING	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
							A	B	C	D	G				
CLND-2-10-34	#2 AWG	-	2-6 AWG	10	0.219	0.750	1.437	1.125	2.848	0.599	0.258	Brown	I-33	0.421	0.312
CLND-2-14-58	#2 AWG	-	2-6 AWG	1/4	0.281	0.625	1.437	1.125	2.848	0.599	0.320	Brown	I-33	0.421	0.312
CLND-2-14-34	#2 AWG	-	2-6 AWG	1/4	0.281	0.750	1.437	1.125	2.848	0.599	0.320	Brown	I-33	0.421	0.312
CLND-2-14-1	#2 AWG	-	2-6 AWG	1/4	0.281	1.000	1.687	1.125	3.098	0.599	0.320	Brown	I-33	0.421	0.312
CLND-2-516-34	#2 AWG	-	2-6 AWG	5/16	0.343	0.750	1.687	1.125	3.098	0.599	0.352	Brown	I-33	0.421	0.312
CLND-2-516-1	#2 AWG	-	2-6 AWG	5/16	0.343	1.000	1.937	1.125	3.348	0.599	0.352	Brown	I-33	0.421	0.312
CLND-2-38-34	#2 AWG	-	2-6 AWG	3/8	0.406	0.750	1.687	1.125	3.098	0.599	0.414	Brown	I-33	0.421	0.312
CLND-2-38-78	#2 AWG	-	2-6 AWG	3/8	0.406	0.875	1.937	1.125	3.348	0.599	0.414	Brown	I-33	0.421	0.312
CLND-2-38-1	#2 AWG	-	2-6 AWG	3/8	0.406	1.000	1.937	1.125	3.348	0.599	0.414	Brown	I-33	0.421	0.312
CLND-2-38-134	#2 AWG	-	2-6 AWG	3/8	0.406	1.750	2.625	1.125	4.036	0.599	0.414	Brown	I-33	0.421	0.312
CLND-2-12-134	#2 AWG	-	2-6 AWG	1/2	0.562	1.750	3.000	1.125	4.411	0.750	0.546	Brown	I-33	0.421	0.312
CLND-1-14-58	#1 AWG	#2 FLEX	1-6 AWG	1/4	0.281	0.625	1.437	1.375	3.142	0.673	0.320	Green	I-37	0.468	0.359
CLND-1-14-34	#1 AWG	#2 FLEX	1-6 AWG	1/4	0.281	0.750	1.437	1.375	3.142	0.673	0.320	Green	I-37	0.468	0.359
CLND-1-14-1	#1 AWG	#2 FLEX	1-6 AWG	1/4	0.281	1.000	1.687	1.375	3.392	0.673	0.320	Green	I-37	0.468	0.359
CLND-1-516-78	#1 AWG	#2 FLEX	1-6 AWG	5/16	0.343	0.875	1.687	1.375	3.392	0.673	0.352	Green	I-37	0.468	0.359
CLND-1-516-1	#1 AWG	#2 FLEX	1-6 AWG	5/16	0.343	1.000	1.937	1.375	3.642	0.673	0.352	Green	I-37	0.468	0.359
CLND-1-38-1	#1 AWG	#2 FLEX	1-6 AWG	3/8	0.406	1.000	1.937	1.375	3.642	0.673	0.414	Green	I-37	0.468	0.359
CLND-1-12-134	#1 AWG	#2 FLEX	1-6 AWG	1/2	0.562	1.750	3.000	1.375	4.705	0.750	0.546	Green	I-37	0.468	0.359
CLND-1/0-14-58	1/0 AWG	#1 FLEX	1/0-6 AWG	1/4	0.281	0.625	1.437	1.500	3.293	0.738	0.320	Pink	I-42	0.515	0.390
CLND-1/0-14-34	1/0 AWG	#1 FLEX	1/0-6 AWG	1/4	0.281	0.750	1.437	1.500	3.293	0.738	0.320	Pink	I-42	0.515	0.390
CLND-1/0-14-1	1/0 AWG	#1 FLEX	1/0-6 AWG	1/4	0.281	1.000	1.687	1.500	3.543	0.738	0.320	Pink	I-42	0.515	0.390
CLND-1/0-516-34	1/0 AWG	#1 FLEX	1/0-6 AWG	5/16	0.343	0.750	1.687	1.500	3.543	0.738	0.352	Pink	I-42	0.515	0.390
CLND-1/0-516-78	1/0 AWG	#1 FLEX	1/0-6 AWG	5/16	0.343	0.875	1.687	1.500	3.543	0.738	0.352	Pink	I-42	0.515	0.390
CLND-1/0-516-1	1/0 AWG	#1 FLEX	1/0-6 AWG	5/16	0.343	1.000	1.937	1.500	3.793	0.738	0.352	Pink	I-42	0.515	0.390
CLND-1/0-38-1	1/0 AWG	#1 FLEX	1/0-6 AWG	3/8	0.406	1.000	1.937	1.500	3.793	0.738	0.414	Pink	I-42	0.515	0.390
CLND-1/0-38-134	1/0 AWG	#1 FLEX	1/0-6 AWG	3/8	0.406	1.750	2.625	1.500	4.481	0.738	0.414	Pink	I-42	0.515	0.390
CLND-1/0-12-1	1/0 AWG	#1 FLEX	1/0-6 AWG	1/2	0.562	1.000	2.125	1.500	3.981	0.738	0.546	Pink	I-42	0.515	0.390
CLND-1/0-12-134	1/0 AWG	#1 FLEX	1/0-6 AWG	1/2	0.562	1.750	3.000	1.500	4.856	0.738	0.546	Pink	I-42	0.515	0.390

\* When installed with specified dieless tools

# INDUSTRIAL CONNECTORS

## SURECRIMP®

### COPPER COMPRESSION LUGS – LONG BARREL

2 HOLE, W/O SIGHT HOLE – CONDUCTOR RANGE: 2/0 – 250KCMIL



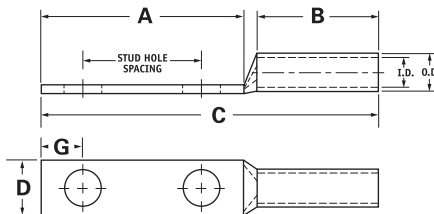
## TYPE CLND

### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Long barrel length with chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation

techniques are used, may be used for high voltage applications up to 35KV.

- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	STUD HOLE SPACING	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
							A	B	C	D	G				
CLND-2/0-14-58	2/0 AWG	1/0 FLEX	2/0-4 AWG	1/4	0.281	0.625	1.437	1.500	3.333	0.811	0.320	Black	I-45	0.562	0.437
CLND-2/0-14-34	2/0 AWG	1/0 FLEX	2/0-4 AWG	1/4	0.281	0.750	1.437	1.500	3.333	0.811	0.320	Black	I-45	0.562	0.437
CLND-2/0-14-1	2/0 AWG	1/0 FLEX	2/0-4 AWG	1/4	0.281	1.000	1.687	1.500	3.583	0.811	0.320	Black	I-45	0.562	0.437
CLND-2/0-516-1	2/0 AWG	1/0 FLEX	2/0-4 AWG	5/16	0.343	1.000	1.937	1.500	3.833	0.811	0.352	Black	I-45	0.562	0.437
CLND-2/0-38-1	2/0 AWG	1/0 FLEX	2/0-4 AWG	3/8	0.406	1.000	1.937	1.500	3.833	0.811	0.414	Black	I-45	0.562	0.437
CLND-2/0-38-134	2/0 AWG	1/0 FLEX	2/0-4 AWG	3/8	0.406	1.750	2.625	1.500	4.521	0.811	0.414	Black	I-45	0.562	0.437
CLND-2/0-12-1	2/0 AWG	1/0 FLEX	2/0-4 AWG	1/2	0.562	1.000	2.125	1.500	4.021	0.811	0.546	Black	I-45	0.562	0.437
CLND-2/0-12-134	2/0 AWG	1/0 FLEX	2/0-4 AWG	1/2	0.562	1.750	3.000	1.500	4.896	0.811	0.546	Black	I-45	0.562	0.437
CLND-3/0-14-58	3/0 AWG	2/0 FLEX	3/0-2 AWG	1/4	0.281	0.625	1.437	1.500	3.376	0.885	0.320	Orange	I-50	0.609	0.484
CLND-3/0-14-34	3/0 AWG	2/0 FLEX	3/0-2 AWG	1/4	0.281	0.750	1.437	1.500	3.376	0.885	0.320	Orange	I-50	0.609	0.484
CLND-3/0-516-1	3/0 AWG	2/0 FLEX	3/0-2 AWG	5/16	0.343	1.000	1.937	1.500	3.876	0.885	0.352	Orange	I-50	0.609	0.484
CLND-3/0-38-1	3/0 AWG	2/0 FLEX	3/0-2 AWG	3/8	0.406	1.000	1.937	1.500	3.876	0.885	0.414	Orange	I-50	0.609	0.484
CLND-3/0-12-134	3/0 AWG	2/0 FLEX	3/0-2 AWG	1/2	0.562	1.750	3.000	1.500	4.939	0.885	0.546	Orange	I-50	0.609	0.484
CLND-4/0-14-58	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/4	0.281	0.625	1.437	1.500	3.428	0.999	0.320	Purple	I-54	0.687	0.546
CLND-4/0-14-34	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/4	0.281	0.750	1.437	1.500	3.428	0.999	0.320	Purple	I-54	0.687	0.546
CLND-4/0-14-1	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/4	0.281	1.000	1.687	1.500	3.678	0.999	0.320	Purple	I-54	0.687	0.546
CLND-4/0-516-34	4/0 AWG	3/0 FLEX	4/0-1 AWG	5/16	0.343	0.750	1.687	1.500	3.678	0.999	0.352	Purple	I-54	0.687	0.546
CLND-4/0-516-1	4/0 AWG	3/0 FLEX	4/0-1 AWG	5/16	0.343	1.000	1.937	1.500	3.928	0.999	0.352	Purple	I-54	0.687	0.546
CLND-4/0-516-134	4/0 AWG	3/0 FLEX	4/0-1 AWG	5/16	0.343	1.750	2.500	1.500	4.491	0.999	0.352	Purple	I-54	0.687	0.546
CLND-4/0-38-1	4/0 AWG	3/0 FLEX	4/0-1 AWG	3/8	0.406	1.000	1.937	1.500	3.928	0.999	0.414	Purple	I-54	0.687	0.546
CLND-4/0-38-134	4/0 AWG	3/0 FLEX	4/0-1 AWG	3/8	0.406	1.750	2.625	1.500	4.616	0.999	0.414	Purple	I-54	0.687	0.546
CLND-4/0-12-1	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/2	0.562	1.000	2.125	1.500	4.116	0.999	0.546	Purple	I-54	0.687	0.546
CLND-4/0-12-114	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/2	0.562	1.250	2.500	1.500	4.491	0.999	0.546	Purple	I-54	0.687	0.546
CLND-4/0-12-134	4/0 AWG	3/0 FLEX	4/0-1 AWG	1/2	0.562	1.750	3.000	1.500	4.991	0.999	0.546	Purple	I-54	0.687	0.546
CLND-250-14-34	250kcmil	4/0 FLEX	250kcmil - 1/0 AWG	1/4	0.281	0.750	1.437	1.688	3.656	1.088	0.320	Yellow	I-62	0.750	0.593
CLND-250-38-1	250kcmil	4/0 FLEX	250kcmil - 1/0 AWG	3/8	0.406	1.000	1.937	1.688	4.156	1.088	0.414	Yellow	I-62	0.750	0.593
CLND-250-38-134	250kcmil	4/0 FLEX	250kcmil - 1/0 AWG	3/8	0.406	1.750	2.625	1.688	4.844	1.088	0.414	Yellow	I-62	0.750	0.593
CLND-250-12-114	250kcmil	4/0 FLEX	250kcmil - 1/0 AWG	1/2	0.562	1.250	2.500	1.688	4.719	1.088	0.546	Yellow	I-62	0.750	0.593
CLND-250-12-134	250kcmil	4/0 FLEX	250kcmil - 1/0 AWG	1/2	0.562	1.750	3.000	1.688	5.219	1.088	0.546	Yellow	I-62	0.750	0.593

\* When installed with specified dieless tools

# SURECRIMP®

## COPPER COMPRESSION LUGS – LONG BARREL

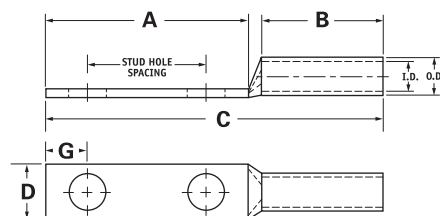
2 HOLE, W/O SIGHT HOLE – CONDUCTOR RANGE: 300KCMIL – 600KCMIL



### TYPE CLND

#### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Long barrel length with chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation techniques are used, may be used for high voltage applications up to 35KV.
- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	STUD HOLE SPACING	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
							A	B	C	D	G				
CLND-300-38-1	300kcmil	250 I,K,M FLEX	300kcmil - 2/0 AWG	3/8	0.406	1.000	1.937	2.000	4.524	1.189	0.414	White	I-66	0.812	0.660
CLND-300-12-134	300kcmil	250 I,K,M FLEX	300kcmil - 2/0 AWG	1/2	0.562	1.750	3.000	2.000	5.587	1.189	0.546	White	I-66	0.812	0.660
CLND-350-14-34	350kcmil	250 I,K,M FLEX 262.2 DLO	350kcmil - 3/0 AWG	1/4	0.281	0.750	1.437	2.000	4.060	1.291	0.320	Red	I-71	0.890	0.703
CLND-350-516-134	350kcmil	250 I,K,M FLEX 262.2 DLO	350kcmil - 3/0 AWG	5/16	0.343	1.750	2.500	2.000	5.123	1.291	0.352	Red	I-71	0.890	0.703
CLND-350-38-1	350kcmil	250 I,K,M FLEX 262.2 DLO	350kcmil - 3/0 AWG	3/8	0.406	1.000	1.937	2.000	4.560	1.291	0.414	Red	I-71	0.890	0.703
CLND-350-12-114	350kcmil	250 I,K,M FLEX 262.2 DLO	350kcmil - 3/0 AWG	1/2	0.562	1.250	2.500	2.000	5.123	1.291	0.546	Red	I-71	0.890	0.703
CLND-350-12-134	350kcmil	250 I,K,M FLEX 262.2 DLO	350kcmil - 3/0 AWG	1/2	0.562	1.750	3.000	2.000	5.623	1.291	0.546	Red	I-71	0.890	0.703
CLND-400-38-1	400kcmil	300 G,H,I,K,M FLEX 313.1 DLO	400kcmil - 4/0 AWG	3/8	0.406	1.000	1.937	2.125	4.729	1.365	0.414	Blue	I-76	0.937	0.750
CLND-400-38-116	400kcmil	300 G,H,I,K,M FLEX 313.1 DLO	400kcmil - 4/0 AWG	3/8	0.406	1.062	1.937	2.125	4.729	1.365	0.414	Blue	I-76	0.937	0.750
CLND-400-12-134	400kcmil	300 G,H,I,K,M FLEX 313.1 DLO	400kcmil - 4/0 AWG	1/2	0.562	1.750	3.000	2.125	5.792	1.365	0.546	Blue	I-76	0.937	0.750
CLND-500-14-34	500kcmil	350 G,H,I,K,M FLEX 373.7 DLO	500kcmil - 250kcmil	1/4	0.281	0.750	1.437	2.250	4.419	1.535	0.320	Brown	I-87	1.062	0.828
CLND-500-38-1	500kcmil	350 G,H,I,K,M FLEX 373.7 DLO	500kcmil - 250kcmil	3/8	0.406	1.000	1.937	2.250	4.919	1.535	0.414	Brown	I-87	1.062	0.828
CLND-500-12-114	500kcmil	350 G,H,I,K,M FLEX 373.7 DLO	500kcmil - 250kcmil	1/2	0.562	1.250	2.500	2.250	5.482	1.535	0.546	Brown	I-87	1.062	0.828
CLND-500-12-134	500kcmil	350 G,H,I,K,M FLEX 373.7 DLO	500kcmil - 250kcmil	1/2	0.562	1.750	3.000	2.250	5.982	1.535	0.546	Brown	I-87	1.062	0.828
CLND-600-38-1	600kcmil	400 G,H,I,K,M FLEX 444.4 DLO	600kcmil - 250kcmil	3/8	0.406	1.000	1.937	2.687	5.433	1.712	0.414	Green	I-94	1.187	0.920
CLND-600-12-134	600kcmil	400 G,H,I,K,M FLEX 444.4 DLO	600kcmil - 250kcmil	1/2	0.562	1.750	3.000	2.687	6.496	1.712	0.546	Green	I-94	1.187	0.920

\* When installed with specified dieless tools

# INDUSTRIAL CONNECTORS

## SURECRIMP®

### COPPER COMPRESSION LUGS – LONG BARREL

2 HOLE, W/O SIGHT HOLE – CONDUCTOR RANGE: 650KCMIL – 1000KCMIL



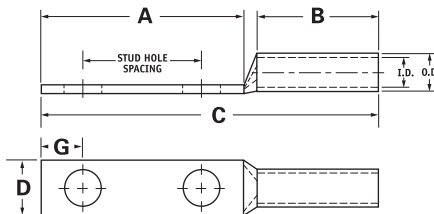
## TYPE CLND

### Features

- Manufactured from high strength seamless copper tubing.
- Electro-Tin plated.
- Maximum conductivity and excellent crimping characteristics.
- Long barrel length with chamfered entry.
- Color coded.
- UL 486A 90°C Listed and CSA Certified for 600 Volts.
- If proper high voltage spacing and insulation

techniques are used, may be used for high voltage applications up to 35KV.

- For Copper conductor only.
- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.+
- UL File E6207
- UL 467 listed for grounded and bonding #8-500kcmil
- Suitable for direct burial



CATALOG NUMBER	WIRE SIZE	ALT WIRE SIZE	EXPANDED* WIRE RANGE	BOLT SIZE	STUD HOLE DIA.	STUD HOLE SPACING	DIMENSIONS					DIE COLOR CODE	DIE INDEX	O.D.	I.D.
							A	B	C	D	G				
CLND-650-12-114	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	1/2	0.562	1.25	2.5	2.687	6.056	1.764	0.546	Pink	I-99	1.217	0.958
CLND-650-12-134	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	1/2	0.562	1.75	3	2.687	6.556	1.764	0.546	Pink	I-99	1.217	0.958
CLND-650-38-1	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	3/8	0.406	1	2.125	2.687	5.493	1.764	0.414	Pink	I-99	1.217	0.958
CLND-650-38-118	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	3/8	0.406	1.125	2.125	2.687	5.681	1.764	0.414	Pink	I-99	1.217	0.958
CLND-650-516-1	650kcmil	500 G,H,I,K,M FLEX 535.3 DLO	650kcmil - 350kcmil	5/16	0.343	1	1.937	2.687	5.493	1.764	0.3515	Pink	I-99	1.217	0.958
CLND-700-38-1	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	3/8	0.406	1.000	1.937	2.687	5.493	1.816	0.414	Pink	I-99	1.250	0.991
CLND-700-38-118	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	3/8	0.406	1.125	2.125	2.687	5.681	1.816	0.414	Pink	I-99	1.250	0.991
CLND-700-12-112	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	1/2	0.562	1.500	2.625	2.687	6.181	1.816	0.546	Pink	I-99	1.250	0.991
CLND-700-12-134	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	1/2	0.562	1.750	3.000	2.687	6.556	1.816	0.546	Pink	I-99	1.250	0.991
CLND-700-12-178	700kcmil	500 G,H,I,K,M FLEX 535.3 DLO	700kcmil - 350kcmil	1/2	0.562	1.875	3.000	2.687	6.556	1.816	0.546	Pink	I-99	1.250	0.991
CLND-750-38-1	750kcmil	600 G,H,I,M FLEX 646.4 DLO	750kcmil - 500kcmil	3/8	0.406	1.000	1.937	2.875	5.714	1.901	0.414	Black	I-106	1.313	1.031
CLND-750-38-118	750kcmil	600 G,H,I,M FLEX 646.4 DLO	750kcmil - 500kcmil	3/8	0.406	1.125	2.125	2.875	5.902	1.901	0.414	Black	I-106	1.313	1.031
CLND-750-12-112	750kcmil	600 G,H,I,M FLEX 646.4 DLO	750kcmil - 500kcmil	1/2	0.562	1.500	2.625	2.875	6.402	1.901	0.546	Black	I-106	1.313	1.031
CLND-750-12-134	750kcmil	600 G,H,I,M FLEX 646.4 DLO	750kcmil - 500kcmil	1/2	0.562	1.750	3.000	2.875	6.777	1.901	0.546	Black	I-106	1.313	1.031
CLND-750-58-112	750kcmil	600 G,H,I,M FLEX 646.4 DLO	750kcmil - 500kcmil	5/8	0.562	1.500	3.000	2.875	6.777	1.901	0.671	Black	I-106	1.313	1.031
CLND-1000-38-1	1000kcmil	750 G,H,I FLEX 777.7 DLO	1000kcmil - 750kcmil	3/8	0.406	1.000	1.937	3.000	5.962	2.169	0.414	White	I-125	1.500	1.172
CLND-1000-12-114	1000kcmil	750 G,H,I FLEX 777.7 DLO	1000kcmil - 750kcmil	1/2	0.562	1.250	2.500	3.000	6.525	2.169	0.546	White	I-125	1.500	1.172
CLND-1000-12-134	1000kcmil	750 G,H,I FLEX 777.7 DLO	1000kcmil - 750kcmil	1/2	0.562	1.750	3.000	3.000	7.025	2.169	0.546	White	I-125	1.500	1.172
CLND-1000-58-112	1000kcmil	750 G,H,I FLEX 777.7 DLO	1000kcmil - 750kcmil	5/8	0.562	1.500	3.000	3.000	7.025	2.169	0.671	White	I-125	1.500	1.172

\* When installed with specified dieless tools

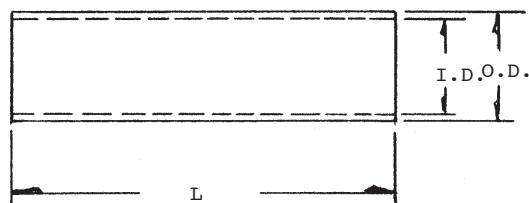
# COPPER COMPRESSION SPLICES

## Features

- Manufactured from high strength seamless copper tubing
- Electro-tin plated
- Center wire stop
- Chamfered barrel
- UL Listed and CSA Certified for 600 volts, 90° C
- Color coded
- Clearly marked with wire size and die index for IlSCO tools, proper number and location of crimps

## Benefits

- Provides maximum conductivity and excellent crimping characteristics
- Provides low contact resistance
- Ensures maximum cable insertion
- Provides easy conductor insertion
- Ensures reliability for copper conductors
- Provides visual tooling recommendation for IlSCO or standard industry tools
- Provides easy identification and tooling recommendation



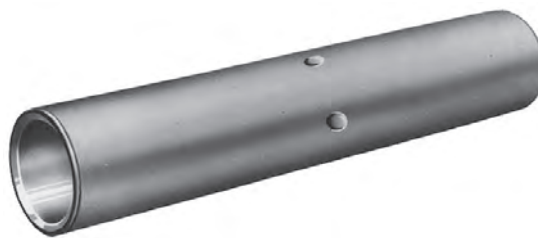
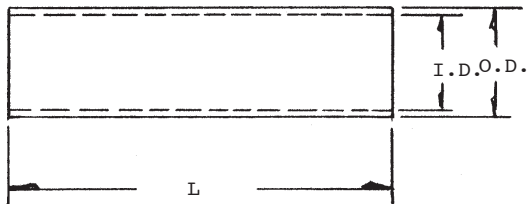
## COPPER COMPRESSION SPLICES – SHORT BARREL



CATALOG NUMBER	WIRE SIZE	WIRE RANGE WHEN INSTALLED WITH IDT-12-N TOOL	WELDING CABLE SIZE	LENGTH	DIE COLOR CODE	DIE INDEX	O.D.	I.D.
CT-8	8	-	NO. 6 Weld	1-1/8	Red	1	9/32	11/64
CT-6	6	6	NO. 6 Weld	1-3/4	Blue	2	19/64	13/64
CT-4	4	4-6	NO. 4 Weld	1-7/8	Gray	3	11/32	1/4
CT-3	3	3-6	-	1-3/4	White	3	3/8	9/32
CT-2	2	2-6	-	1-7/8	Brown	4	27/64	5/16
CT-1	1	1-6	No. 2 Weld	1-7/8	Green	4	15/32	23/64
CT-1/0	1/0	1/0-6	No. 1 Weld	1-7/8	Pink	5	33/64	25/64
CT-2/0	2/0	2/0-4	1/0 Weld	2	Black	6	9/16	7/16
CT-3/0	3/0	3/0-2	2/0 Weld	2-1/8	Orange	9	39/64	31/64
CT-4/0	4/0	4/0-1	3/0 Weld	2-1/8	Purple	10	11/16	35/64
CT-250	250MCM	250MCM-1/0	4/0 Weld	2-1/4	Yellow	11	3/4	19/32
CT-300	300MCM	300MCM-2/0	-	2-1/4	White	12	13/16	21/32
CT-350	350MCM	350MCM-3/0	-	2-3/8	Red	13	7/8	11/16
CT-400	400MCM	400MCM-4/0	-	2-1/2	Blue	14	15/16	3/4
CT-500	500MCM	500MCM-4/0	-	2-7/8	Brown	15	1-1/16	53/64
CT-600	600MCM	600MCM-250MCM	-	2-7/8	Green	16	1-3/16	59/64
CT-750	750MCM	750MCM-500MCM	-	3-3/8	Black	17	1-5/16	1-1/32
CT-1000	1000MCM	1000MCM-750MCM	-	3-7/8	White	18	1-1/2	1/11/64

# INDUSTRIAL CONNECTORS

## COPPER COMPRESSION SPLICES



### COPPER COMPRESSION SPLICES – LONG BARREL



CATALOG NUMBER	WIRE SIZE	WIRE RANGE WHEN INSTALLED WITH IDT-12-N TOOL	WELDING CABLE SIZE	LENGTH	DIE COLOR CODE	DIE INDEX	O.D.	I.D.
CTL-8	8		#8 Flex	1-3/4	Red	1	9/32	11/64
CTL-6	6	6	No. 6 Weld	2-3/8	Blue	2	19/64	13/64
CTL-4	4	4-6	No. 4 Weld	2-3/8	Gray	3	11/32	1/4
CTL-3	3	3-6	-	2-3/8	White	3	3/8	9/32
CTL-2	2	2-6	-	2-5/8	Brown	4	27/64	5/16
CTL-1	1	1-6	No. 2 Weld	2-7/8	Green	4	15/32	23/64
CTL-1/0	1/0	1/0-6	No. 1 Weld	2-7/8	Pink	5	33/64	25/64
CTL-2/0	2/0	2/0-4	1/0 Weld	3-1/8	Black	6	9/16	7/16
CTL-3/0	3/0	3/0-2	2/0 Weld	3-1/8	Orange	9	39/64	31/64
CTL-4/0	4/0	4/0-1	3/0 Weld	3-3/8	Purple	10	11/16	35/64
CTL-250	250MCM	250MCM-1/0	4/0 Weld	3-3/8	Yellow	11	3/4	19/32
CTL-300	300MCM	300MCM-2/0	-	4-1/8	White	12	13/16	21/32
CTL-350	350MCM	350MCM-3/0	-	4-1/8	Red	13	57/64	45/64
CTL-400	400MCM	400MCM-4/0	-	4-3/8	Blue	14	15/16	3/4
CTL-500	500MCM	500MCM-4/0	-	4-5/8	Brown	15	1-1/16	53/64
CTL-600	600MCM	600MCM-250MCM	-	4-5/8	Green	16	1-3/16	59/64
CTL-750	750MCM	750MCM-500MCM	-	5-7/8	Black	17	1-5/16	1-1/32
CTL-1000	1000MCM	1000MCM-750MCM	-	6-1/8	White	18	1-1/2	1-11/64

# CLEARTAP® INSULATED MULTI-TAP CONNECTORS

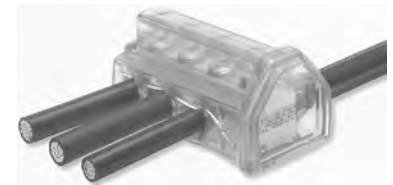
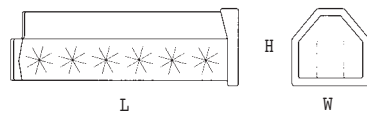
## Features

- Transparent flexible insulating cover
- Captive pressure screws
- Self-closing openings
- Access from both sides of connector
- Broad wire range: 800MCM-14
- UL Listed for 600 volts, 90° C
- Dual Rated

## Benefits

- No taping and allows visual inspection of connection
- No wasted time finding screws
- No lost or loose caps and plugs
- Provides greater versatility
- Reduces inventory
- Ensures reliability
- For copper or aluminum conductors

Fig. 2



## MULTI-TAP CONNECTORS – CLEA. UL SP

CATALOG NUMBER	CONNECTOR SHAPE	FIGURE NO.	NO. OF PORTS	WIRE RANGE	DIMENSIONS			HEX SIZE
					L	W	H	
PCT-2-2/0		2	2	2/0-14	2.61	2.30	1.97	3/16
PCT-4-2/0		2	4	2/0-14	4.30	2.30	1.97	3/16
PCT-6-2/0		2	6	2/0-14	5.98	2.30	1.97	3/16
PCT-8-2/0		2	8	2/0-14	7.67	2.30	1.97	3/16
PCT-2-4/0		2	2	4/0-6	2.75	2.49	2.25	5/16
PCT-4-4/0		2	4	4/0-6	4.61	2.49	2.25	5/16
PCT-6-4/0		2	6	4/0-6	6.47	2.49	2.25	5/16
PCT-8-4/0		2	8	4/0-6	8.33	2.49	2.25	5/16
PCT-2-350		2	2	350 MCM-6	3.31	2.69	2.65	5/16
PCT-4-350		2	4	350 MCM-6	5.62	2.69	2.65	5/16
PCT-6-350		2	6	350 MCM-6	7.93	2.69	2.65	5/16
PCT-8-350		2	8	350 MCM-6	10.24	2.69	2.65	5/16
PCT-2-600		2	2	600 MCM-4	3.90	3.43	3.27	1/2
PCT-4-600		2	4	600 MCM-4	6.64	3.43	3.27	1/2
PCT-6-600		2	6	600 MCM-4	9.39	3.43	3.27	1/2
PCT-8-600		2	8	600 MCM-4	12.14	3.43	3.27	1/2
PCT-2-800		2	2	800MCM-250MCM	4.25	3.43	3.40	1/2
PCT-4-800		2	4	800MCM-250MCM	7.40	3.43	3.40	1/2
PCT-6-800		2	6	800MCM-250MCM	10.50	3.43	3.40	1/2

UL Listed 486 B. Not suitable for direct burial.

# INDUSTRIAL CONNECTORS

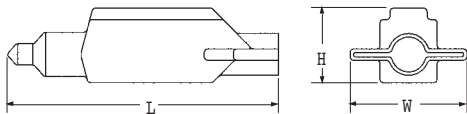
## CLEARSPlice®

### Features

- Transparent flexible insulating cover
- Range adjustable trim-to-fit tip
- Unique shape and compact design
- Connector, cover and cable tie packaged together
- UL Listed and CSA Certified for 600 volts
- Dual Rated

### Benefits

- No taping and allows visual inspection of splice
- Ensures proper fit of cover to cable
- Provides ease of installation, versatility and serviceability of connections made in tight spaces
- Provides ease of ordering
- Ensures reliability
- Use with copper or aluminum conductor



## INSULATED SPLICER-REDUCER CONNECTOR



CATALOG NUMBER	CONNECTOR SHAPE	WIRE RANGE	DIMENSIONS			SCREW SIZE & SHAPE
			L	W	H	
SPAR-4		4-14	3.30	1.55	.90	slotted
SPAR-2		2-14	3.83	1.75	0.95	slotted
SPAR-1/0		1/0-14	4.80	1.94	1.14	slotted
SPAR-250		250MCM-6	7.91	2.43	1.62	5/16 socket head
SPAR-350		350MCM-6	7.91	2.43	1.62	5/16" socket head
SPAR-500		500MCM-3/0	8.86	3.23	2.04	3/8" socket head

Not suitable for direct burial. DE-OX Oxide Inhibitor is recommended for all aluminum terminations.



# KUP-L-TAP®

## Features

- Body is molded from tough, resilient glass-filled nylon
- Compact design
- Tin plated copper contact teeth
- Insulation piercing
- Perforated end tabs
- Pre-filled with silicone lubricant
- Horizontal line grid
- Temperature rating 90° C

## Benefits

- Provides high degree of breakage resistance and long dependable use
- Saves space
- Easily penetrates most types of insulation
- No need to strip the conductor which saves installation time
- Break out easily by hand
- Prevents oxidation and moisture from entering the contact area
- Can be used as a splice or tap connector
- Contains no external energized parts. Can be installed 'hot' on energized conductors providing tap conductor is not under load.
- Provides a visual guide for proper installation of conductors

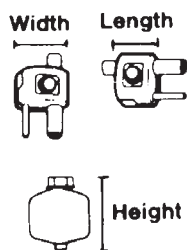


FIG. 1



FIG. 2



FIG. 3



FIG. 4

## INSULATION PIERCING CONNECTORS – DUAL RATED



CATALOG NUMBER	FIGURE NUMBER	WIRE RANGE		VOLTS	CURRENT RATING		DIMENSIONS			TORQUE FT. LBS.	BOLT HEAD SIZE
		MAIN	TAP		CU	AL	L	W	H		
IPC-1/0-2	3	1/0-8	8-Feb	300 (480 Grounded Y System)	130	100	1-7/32	1-15/32	2-5/16	16	1/2
IPC-4/0-2/0	2	4/0-4	6-14	600	75	60	23403	1	1-7/8	13	1/2
IPC-4/0-6	3	4/0-2	2/0-6	600	195	150	11709	1-7/8	2-7/8	25	1/2
IPC-250-4/0	2	250MCM-1	4/0-6	600	260	205	1-7/8	11730	11759	30	5/8
IPC-350-4/0	3	350MCM-4/0	4/0-10	300 (480 Grounded Y System)	260	205	1-43/64	5882	3-1/8	25	5/8
IPC-350-350	4	350MCM-4/0	350MCM-4/0	300 (480 Grounded Y System)	350	280	2-43/64	11742	3-1/4	25	5/8
IPC-500-12	1	500MCM-250MCM	10-12	300 (480 Grounded Y System)	40	35	1-43/64	5882	3-1/4	25	5/8
IPC-500-250	1	500MCM-250MCM	250MCM-4	600	290	230	23434	11748	3-3/4	55	5/8-11/16
IPC-500-500	1	500MCM-300MCM	500MCM-250MCM	600	430	350	5907	3-5/8	5	75	7/8-7/8
IPC-750-500	1	750MCM-500MCM	500MCM-350MCM	600	430	350	5907	3-5/8	5	75	7/8-7/8

# INDUSTRIAL CONNECTORS

## NIMBUS™

### Features

- Broad wire range: 750MCM-14
- UL Listed for 600 volts, 90° C
- Dual Rated
- Cold Temperature Rated to -45° C
- High dielectric strength plastisol
- Black Cover
- Removable plugs
- Prefilled with De-ox

### Benefits

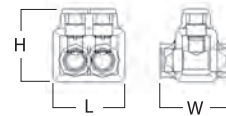
- Flexibility in the field
- Ensures reliability
- For copper or aluminum conductor
- Application variability
- Chemical resistant
- UV Rated
- Entry port closure
- Prevents oxides from forming



FIG. 1



FIG. 2



## TWO WIRE IN-LINE AND OFFSET – INSULATED SPLICER-REDUCER CONNECTORS



CATALOG NUMBER	FIGURE NO.	NO. OF PARTS	WIRE RANGE	DIMENSIONS			HEX SIZE
				L	W	H	
PBT-1/0	1	-	1/0-14	3.25	0.94	1.63	SLOT
PBT-250	1	-	250MCM-6	3.96	1.19	2.17	5/16
PBT-350	1	-	350MCM-6	4.43	1.31	2.62	5/16
PBT-500	1	-	500MCM-4	5.38	1.44	3.03	3/8
PBTO-1/0	2	2	1/0-14	1.63	1.63	1.63	SLOT
PBTO-3/0	2	2	3/0-6	1.89	1.68	1.86	3/16

## INSULATED MULTI-TAP CONNECTORS – DUAL SIDED ENTRY.



CATALOG NUMBER	NO. OF PARTS	WIRE RANGE	DIMENSIONS			HEX SIZE
			L	W	H	
PBTD-2-250	2	250MCM-6	2.17	2.13	2.17	5/16
PBTD-3-250	3	250MCM-6	3.07	2.13	2.17	5/16
PBTD-4-250	4	250MCM-6	3.96	2.13	2.17	5/16
PBTD-6-250	6	250MCM-6	5.75	2.13	2.17	5/16
PBTD-2-350	2	350MCM-6	2.51	2.25	2.62	5/16
PBTD-3-350	3	350MCM-6	3.56	2.25	2.62	5/16
PBTD-6-350	6	350MCM-6	6.71	2.25	2.62	5/16
PBTD-8-350	8	350MCM-6	8.81	2.25	2.62	5/16
PBTD-2-500	2	500MCM-4	2.97	2.63	3.04	3/8
PBTD-3-500	3	500MCM-4	4.12	2.63	3.04	3/8
PBTD-4-500	4	500MCM-4	5.28	2.63	3.04	3/8
PBTD-5-500	5	500MCM-4	6.44	2.63	3.04	3/8
PBTD-6-500	6	500MCM-4	7.59	2.63	3.04	3/8
PBTD-8-500	8	500MCM-4	9.90	2.63	3.04	3/8



## INSULATED MULTI-TAP CONNECTORS – SINGLE SIDED ENTRY



CATALOG NUMBER	NO. OF PARTS	WIRE RANGE	DIMENSIONS			HEX SIZE
			L	W	H	
PBTS-2-4	2	4-14	1.24	1.22	1.42	SLOT
PBTS-3-4	3	4-14	1.70	1.22	1.42	SLOT
PBTS-4-4	4	4-14	2.16	1.22	1.42	SLOT
PBTS-2-1/0	2	1/0-14	1.67	1.53	1.63	SLOT
PBTS-3-1/0	3	1/0-14	2.29	1.53	1.63	SLOT
PBTS-2-3/0	2	3/0-6	1.89	1.58	1.86	3/16

# SPLICE KITS

## Features

- DBK-1 connectors manufactured from electrolytic copper
- All other connectors manufactured from high strength aluminum alloy
- Heavy wall heat shrink tubing with sealant
- Connector and heat shrink packaged together
- UL listed, rated for 600 volts, 90° C

## Benefits

- Provides maximum conductivity for UF cable
- Provides high conductivity and can be used with either aluminum or copper conductors
- Provides watertight splice. Kits with heat shrink are designed to withstand abrasions due to direct burial in rocky soil.
- Provides ease of ordering
- Ensures reliability



FIG. 1



FIG. 2



FIG. 3



FIG. 4



FIG. 5

## DIRECT BURIAL AND ABOVE GRADE.



CATALOG NUMBER	FIGURE NUMBER	UF CABLE RANGE		WIRE RANGE	TESTING CERTIFICATION
		MINIMUM	MAXIMUM		
DBK-1	1	14/2 with Ground	8/3 with Ground	-	
DBK-2	2	-	-	2-8	
DBK-250	3	-	-	250MCM-1	

## ABOVE GRADE SPLICE KITS\*

ASK-2*	4	-	-	2-8	
ASK-250*	5	-	-	250MCM-1	

\*Not UL Listed for direct burial.

# INDUSTRIAL CONNECTORS

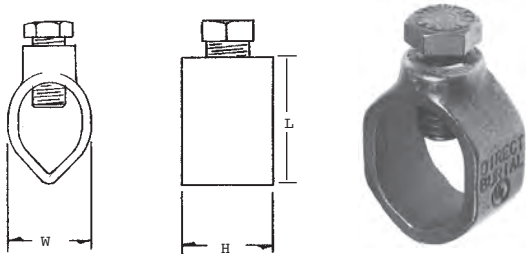
## GROUND CLAMPS

### Features

- Manufactured from cast bronze
- Supplied with bronze hardware
- UL Listed and CSA Certified for 600 volts
- Suitable for grounding and bonding in applications such as swimming pools and spas

### Benefits

- Ensures maximum strength and durability
- Suitable for direct burial in earth or concrete
- Ensures reliability for copper conductor



## CAST BRONZE



### STANDARD

CATALOG NUMBER	GROUND ROD SIZE	REBAR SIZE	GROUND ROD WIRE RANGE	REBAR WIRE RANGE	DIMENSIONS		
					L	W	H
CGRC-38	3/8	#3	4-10	4-10	1/2	11/16	1
CGRC-48	1/2	#4	2-10	2-10	5/8	27/32	1/13/16
CGRC-58	5/8	#5	2-10	4-10	5/8	15/16	1/1/32
CGRC-68	3/4	#6	2-10	4-10	5/8	1/1/16	1/13/32

Plain copper finish.

\* 3/8 Ground Rod Not UL Listed

### HEAVY DUTY

CATALOG NUMBER	GROUND ROD SIZE	REBAR SIZE	GROUND ROD WIRE RANGE	REBAR WIRE RANGE	DIMENSIONS		
					L	W	H
BGRC-48	1/2	--	2-10	--	7/8	3/4	1-1/4
BGRC-58	5/8	#5	1/0-8	1/0-8	1/1/32	29/32	1/13/32
BGRC-68	3/4	--	1/0-8	--	1	1	1-5/8

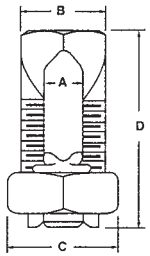
# SPLIT BOLTS

## Features

- Manufactured from high strength copper alloy
- Precision tooled threads
- UL Listed and CSA Certified, rated for 600 volts
- For copper conductor only

## Benefits

- Allows maximum conductivity and high breakage resistance
- Allows maximum torque to be applied
- Ensures reliability



COPPER							
CATALOG NUMBER	COPPER WIRE			DIMENSIONS			
	RANGE FOR EQUAL MAIN & TAP		MIN. TAP WITH ONE MAX. MAIN	A	B	C	D MAX.
	MIN	MAX					
IK-10	12 Str.	10 Str.	16 Str.	0.15	0.38	0.50	0.85
IK-8	16 Str.	8 Str.	16 Str.	0.15	0.38	0.50	0.85
IK-6	10 Sol.	6 Sol.	16 Sol.	0.17	0.50	0.63	1.05
IK-4	8 Sol.	4 Sol.	16 Sol.	0.22	0.56	0.69	1.05
IK-3	6 Sol.	2 Sol.	12 Sol.	0.33	0.69	0.82	1.32
IK-2	6 Sol.	2 Str.	14 Str.	0.33	0.69	0.82	1.32
IK-1/0	4 Sol.	1/0 Str.	14 Sol.	0.38	0.75	0.88	1.64
IK-2/0	2 Sol.	2/0 Str.	14 Str.	0.42	0.82	1.00	1.82
IK-3/0	2 Sol.	3/0 Str.	12 Sol.	0.47	0.88	1.13	2.00
IK-250	1/0 Sol.	250 MCM	10 Sol.	0.58	1.00	1.31	2.08
IK-350	4/0 Str.	350 MCM	8 Sol.	0.75	1.50	1.63	2.63
IK-500	250 MCM	500 MCM	8 Sol.	0.83	1.63	1.82	3.00
IK-750	350 MCM	750 MCM	8 Sol.	1.03	1.94	2.13	3.44
IK-1000	500 MCM	1000 MCM	8 Sol.	1.22	2.25	2.50	4.00

# INDUSTRIAL CONNECTORS

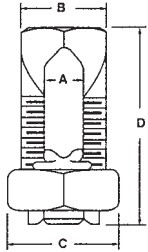
## SPLIT BOLTS

### Features

- Manufactured from high strength copper alloy
- Precision tooled threads
- Electro-tin plated
- Serrated spacer bar
- UL 486A Listed, rated for 600 volts

### Benefits

- Allows maximum conductivity and high breakage resistance
- Allows maximum torque to be applied
- Provides low contact resistance
- Makes a secure connection
- Ensures reliability



## TIN PLATED COPPER



CATALOG NUMBER	WIRE RANGE		WIRE RANGE		DIMENSIONS			
	MAIN COPPER & ALUMINUM	ACSR-AAAC 5005	TAP COPPER & ALUMINUM	ACSR-AAAC 5005	A	WIDTH	C	LENGTH
SK-6	8 Str.-14 Str.	8(6-1)	8 Str.-14 Str.	8(6-1)	0.166	1/2	5/8	1/7/64
SK-4	6 Str.-10 Str.	6(6-1)	6 Str.-10 Str.	6(6-1)	0.217	9/16	11/16	1/17/64
SK-3	2 Sol.-8 Sol./ Str. CU		2 Sol.-8 Sol./ Str. CU					
SK-2	2 Str.-8 Sol./ Str.	3(6-1)-2(6-1)	2 Str.-8 Sol./ Str.	6(6-1)-2(7-1)	0.326	11/16	13/16	1-35/64

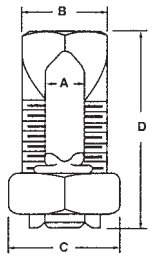
\*UL 486B Listed, Dual Rated

CATALOG NUMBER	WIRE RANGE		ALUMINUM RANGE NON UL LISTED		DIMENSIONS			
	MAIN COPPER	TAP COPPER	MAIN	TAP	A	WIDTH	C	LENGTH
SK-1/0	1/0 Str.-6 Sol./ Str.	1/0 Str.-10 Sol./ Str.	3(6-1)-1(6-1)	6(6-1)-1(6-1)	0.376	3/4	7/8	1-41/64
SK-2/0	2/0 Str.-6 Str.	2/0 Str.-10 Sol./ Str.	1(6-1)-1/0(6-1)	6(6-1)-1/0(6-1)	.420	13/16	1	1-53/64
SK-3/0	3/0 Str.-4 Str.	3/0 Str./6 Sol./ Str.	1(6-1)-2/0(6-1)	8(6-1)-2/0(6-1)	0.466	7/8	1-1/8	2
SK-250	250MCM-4 Str.	250MCM-4 Str.	2/0(6-1)-4/0(6-1)	4(7-1)-4/0(6-1)	0.577	1	1/15/16	2/21/64
SK-350	350MCM-3/0 Str.	350 MCM-1 Sol./ Str.	3/0(6-1)-4/0(6-1)	4(6-1)-4/0(6-1)	0.746	1-1/2	1-5/8	2-5/8
SK-500	500MCM-3/0 Str.	500 MCM-1/0 Str.	336.4(30-7)-477(18-1)	2/0(6-1)-477(18/1)	0.834	1-5/8	1/13/16	3

# SPLIT BOLTS

## Features

- Manufactured from heat treated aluminum alloy
- Triangular edges
- UL Listed and CSA Certified for 600 volts, 90° C
- Electro-tin plated
- Spacer bar
- Hex Head



## Benefits

- Provides maximum conductivity and strength for copper and aluminum conductors
- Bite into the conductor to break through surface oxides which eliminates wire brushing
- Ensures reliability for copper or aluminum conductors
- Provides low contact resistance
- Separates dissimilar metals which prevents galvanic corrosion
- Provides ease of installation with standard wrenches

## ALUMINUM: DUAL RATED.



CATALOG NUMBER	WIRE RANGE		RECOMMENDED TIGHTENING TORQUE	DIMENSIONS		
	MAIN	TAP		B	C	D
AK-6	6 Str.-10 Sol.	6 Str.-10 Sol.	165	.56	.75	1.88
AK-4	4 Str.-8 Sol.	4 Str.-10 Sol.	165	.62	.81	1.38
AK-2	2 Str.-6 Str. Compact	2 Str.-8 Str.	275	.69	.94	1.58
AK-1/0	1/0 Str.-2 Str. Compact	1/0 Str.-8 Str.	385	.75	1.00	1.92
AK-2/0	2/0 Str.-2 Str. Compact	2/0 Str.-8 Str.	385	.88	1.12	1.92
AK-4/0	4/0 Str.-2 Str. Compact	4/0 Str.-6 Str.	500	1.13	1.49	2.54
AK-350	350MCM-1/0 Str. Compact	350MCM-4 Str.	50	1.50	1.69	3.24
AK-500	500MCM-400MCM Compact	500MCM-2 Str. Compact	825	1.73	2.00	3.62

DE-OX Inhibitor is recommended for all aluminum terminations.

# INDUSTRIAL CONNECTORS

## MECHANICAL LUGS

### Features

- Manufactured from electrolytic copper tubing and strip stock
- Compact design
- Range taking
- Re-usable
- UL Listed and CSA Certified for 600 volts
- V-bottom collar
- 50302 and 50305 are suitable for direct burial

### Benefits

- Provides maximum conductivity and strength
- Saves space and reduces installation time
- Permits inventories to be kept to a minimum
- Provides efficient use and flexibility in the field
- Ensures reliability for copper conductor
- Wires are wedged between arched pressure bar and collar, establishing positive contact and firm permanent grip

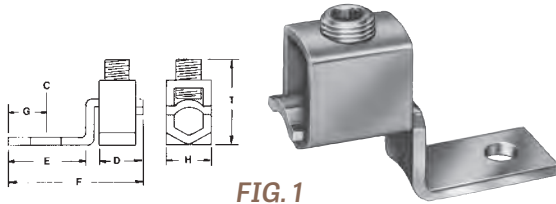


FIG. 1

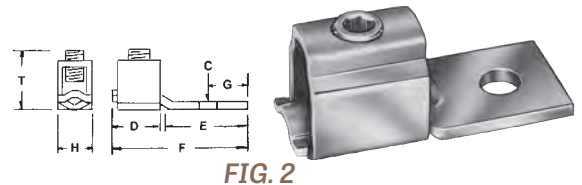


FIG. 2

## COPPER – OFFSET TONGUE. ONE CONDUCTOR, ONE HOLE.



CATALOG NUMBER	SCREW TYPE	FIGURE NUMBER	WIRE RANGE COPPER	BOLT SIZE	DIMENSIONS							HEX SIZE
					C	D	E	F	G	H	T	
SLU-25	⊖	1	10-14	#6	5/32	9/32	7/16	1	3/16	5/16	21/32	Slot
SLU-35	⊖	1	6-14 & List Comb. (A)	#10	13/64	7/16	15/32	1/3/16	7/32	3/8	3/4	Slot
SLU-35DB	⊖	1	6-14 & List Comb. (A)	#10	13/64	7/16	15/32	1/3/16	7/32	3/8	3/4	Slot
SAU-70	⊖	1	4-14	1/4	17/64	7/16	17/32	1/5/16	1/4	1/2	13/16	Slot
SLU-70	⊖	1	2-8 & List Comb. (B)	1/4	17/64	1/2	21/32	1/17/32	1/4	1/2	1	Slot
SLU-70DB	⊖	1	2-8 & List Comb. (B)	1/4	17/64	1/2	21/32	1/17/32	1/4	1/2	1	Slot
SLU-125	⊖	1	1/0-6	1/4	17/64	5/8	13/16	1/31/32	7/16	5/8	1/11/32	Slot
SLU-175	⬡	1	3/0-4	3/8	13/32	3/4	15/16	2/3/16	7/16	3/4	1/9/16	3/16
SLU-225	⬡	1	4/0-2	5/16	11/32	1	1/5/32	2-5/8	1/2	1	1/13/16	7/32
SLU-300	⬡	1	350MCM-1/0	3/8	13/32	1-1/4	1-1/2	3/3/16	1/2	1	2-5/8	5/16
SLU-400	⬡	1	500MCM-1/0	3/8	13/32	1-1/2	1/15/16	4-14	15/16	1-1/2	2-3/4	5/16
SLU-650	⬡	1	1000MCM-600MCM	1/2	17/32	1-7/8	1-7/8	4-5/8	1/7/64	2	3/11/16	3/8
SLS-25	⊖	2	10-14	#6	5/32	9/32	19/32	61/64	3/16	5/16	19/32	Slot
SLS-35	⊖	2	6-14 & List Comb. (A)	#10	13/64	7/16	41/64	1/9/64	7/32	3/8	11/16	Slot
SAS-70	⊖	2	4-14	1/4	17/64	7/16	23/32	1-1/4	1/4	1/2	27/32	Slot
SLS-70	⊖	2	2-8 & List Comb. (B)	1/4	17/64	1/2	13/16	1/15/32	1/4	1/2	31/32	Slot
SLS-125	⊖	2	1/0-6	1/4	17/64	5/8	1/3/16	1/15/16	7/16	5/8	1-1/4	Slot
SLS-175	⬡	2	3/0-4	3/8	13/32	3/4	1-1/4	2/3/16	7/16	3/4	1/9/16	3/16
SLS-225	⬡	2	4/0-2	5/16	11/32	1	1/7/32	2-3/8	1/2	1	1/21/32	7/32
SLS-300	⬡	2	350MCM-1/0	3/8	13/32	1-1/4	1-1/2	3/3/16	1/2	1	2-3/8	5/16
SLS-400	⬡	2	500MCM-1/0	3/8	13/32	1-1/2	2/3/16	3-7/8	15/16	1-1/2	2/9/16	5/16
SLS-650	⬡	2	1000MCM-600MCM	1/2	17/32	1-7/8	3	5-1/8	1/3/16	2	3/11/16	3/8



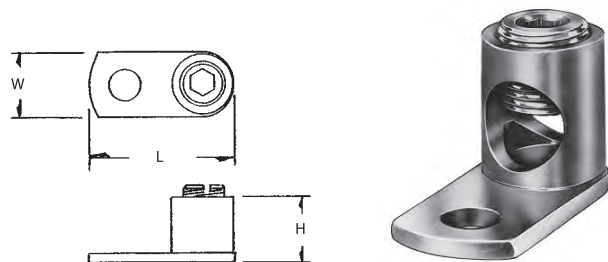
# MECHANICAL LUGS

## Features

- Manufactured from high conductivity copper alloy
- Compact design
- Range taking
- Re-usable
- UL Listed and CSA Certified for 600 volts

## Benefits

- Provides long lasting reliable contact
- Saves space and reduces installation time
- Permits inventories to be kept to a minimum
- Provides efficient use and flexibility in the field
- Ensures reliability for copper conductor



## COPPER POST CONNECTORS



CATALOG NUMBER	WIRE RANGE	BOLT SIZE	STUD HOLE SIZE	DIMENSIONS			HEX SIZE
				L	W	H	
CP-8	8-14	10	13/64	51/64	3/8	27/64	Slot
CP-4	4-14	1/4	17/64	1-3/32	17/32	35/64	Slot
CP-0	1/0-14	5/16	11/32	1-1/2	3/4	5/8	1/4
CP-250	250MCM-6	3/8	13/32	1-31/32	15/16	1-1/16	1/4
CP-500*	500MCM-4/0	1/2	17/32	2-31/32	1-3/8	1-7/16	3/8
CP-1000*	1000MCM-500MCM	17/32	17/32	3-31/32	2-1/32	2-3/16	1/2

\*Not CSA Certified

# INDUSTRIAL CONNECTORS

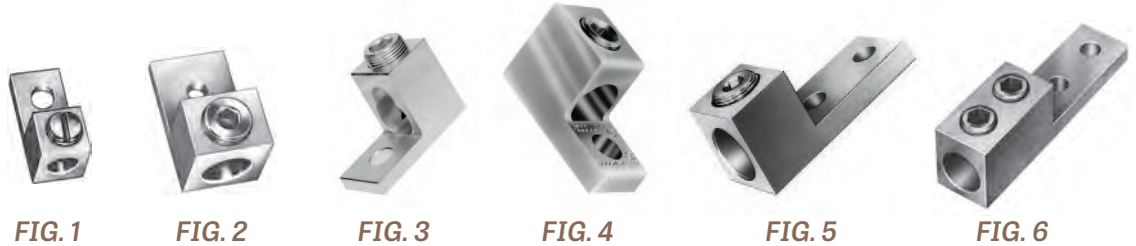
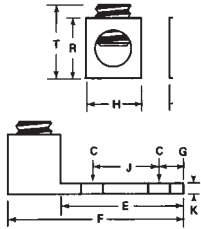
## MECHANICAL LUGS

### Features

- Manufactured from high strength 6061-T6 aluminum alloy
- Electro-tin plated
- Chamfered wire entry
- UL Listed and CSA Certified for 600 volts, 90° C

### Benefits

- Suitable for use with either copper or aluminum conductors
- Provides low contact resistance
- Provides ease of installation
- Ensures reliability for copper or aluminum conductors



ALUMINUM. DUAL RATED. ONE CONDUCTOR.



CATALOG NUMBER	FIGURE NUMBER	WIRE RANGE	BOLT SIZE	DIMENSIONS									HEX SIZE
				C	E	F	G	H	J	K	R	T	
TA-6-S	1	4-14	1/4	17/64	11/16	1-1/16	1/4	1/2	-	3/32	1/2	41/64	S
TA-2	1	2-14	1/4	17/64	11/16	1-5/32	5/16	1/2	-	7/64	9/16	3/4	S
TA-0	1	1/0-14	1/4	17/64	27/32	1-15/32	7/16	5/8	-	3/16	25/32	29/32	S
TA-2/0	2	2/0-14	1/4	17/64	27/32	1-15/32	7/16	5/8	-	3/16	25/32	1-1/32	3/16
TA-250	2	250MCM-6	5/16	21/64	1	2	15/32	1	-	1/4	1-1/8	1-21/64	5/16
TA-300	2	300MCM-6	1/4	9/32	1	2	1/2	55/64	-	1/4	1-1/8	1-11/32	5/16
TA-350	2	350MCM-6	3/8	13/32	1-1/8	2-1/4	1/2	1-1/8	-	1/4	1-1/4	1-29/64	3/8
TA-500	2	500MCM-4	3/8	13/32	1-19/32	2-13/16	7/8	1-1/2	-	5/16	1-13/16	1-13/16	3/8
TA-500-S	3	One: 600MCM-4 Two: 250MCM-1/0	3/8	13/32	1-1/2	2-13/16	5/8	1-5/16	-	5/16	1-13/16	2-3/16	1/2
TA-600	2	600MCM-2	3/8	13/32	1-13/16	3-3/16	7/8	1-1/2	-	7/16	1-9/16	1-31/32	1/2
TA-800	2	800MCM-300MCM	5/8	21/32	1-3/4	3-3/8	7/8	1-3/4	-	1/2	1-15/16	2-15/64	1/2
TA-800-S	4	800MCM-3/0 CU 800MCM-250MCM AL	5/8	21/32	1-3/4	3-1/4	11/16	1-5/16	-	1/2	1-13/16	2-3/16	1/2
TA-1000	2	1000MCM-350MCM	5/8	21/32	1-3/4	3-3/8	7/8	1-3/4	-	1/2	1-15/16	2-25/64	9/16
TA-1000-S	4	1000MCM-500MCM	5/8	21/32	1-3/4	3-1/4	11/16	1-7/16	-	1/2	1-13/16	2-3/16	9/16
TA-350-2NS	5	350MCM-6	1/2	9/16	3	4-5/16	5/8	1-1/8	1-3/4	5/16	1-3/8	1-29/64	3/8
TA-600-2NS	5	600MCM-2	1/2	9/16	3-5/16	4-11/16	5/8	1-1/2	1-3/4	7/16	1-3/8	1-59/64	1/2
TA-800-2NS	5	800MCM-300MCM	1/2	9/16	3-1/8	4-3/4	5/8	1-3/4	1-3/4	1/2	1-15/16	2-3/16	1/2
TA-1000-2NS	5	1000MCM-500MCM	1/2	9/16	3-1/8	4-3/4	5/8	1-3/4	1-3/4	1/2	1-15/16	2-27/64	9/16
TA-350-2N	6	350MCM-6	1/2	9/16	3-1/4	5-1/2	5/8	1-1/4	1-3/4	3/8	1-1/2	1-21/32	(2)3/8
TA-600-2N	6	600MCM-2	1/2	9/16	3-1/4	5-1/2	5/8	1-3/8	1-3/4	3/8	1-1/2	1-31/32	(2)3/8
TA-800-2N	6	800MCM-300MCM	1/2	9/16	3-7/16	6-3/16	5/8	1-3/4	1-3/4	9/16	1-7/8	2-15/64	(2)1/2
TA-1000-2N	6	1000MCM-500MCM	1/2	9/16	3-7/16	6-3/16	5/8	1-5/8	1-3/4	9/16	1-15/16	2-25/64	(2)1/2

DE-OX Inhibitor is recommended for all aluminum terminations.

# MECHANICAL LUGS

## Features

- Manufactured from high strength 6061-T6 aluminum alloy
- Electro-tin plated
- Chamfered wire entry
- UL Listed and CSA Certified for 600 volts, 90° C

## Benefits

- Suitable for use with either copper or aluminum conductors
- Provides low contact resistance
- Provides ease of installation
- Ensures reliability for copper or aluminum conductors

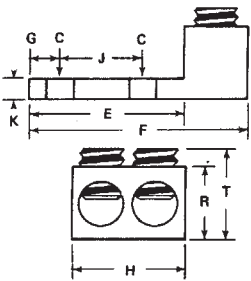


FIG. 1



FIG. 2



FIG. 3



FIG. 4

ALUMINUM. DUAL RATED. ONE CONDUCTOR.



CATALOG NUMBER	FIGURE NUMBER	WIRE RANGE	BOLT SIZE	DIMENSIONS									HEX SIZE
				C	E	F	G	H	J	K	R	T	
AU-0	1	Two: 1/0-14	1/4	17/64	27/32	1-15/32	7/16	1-1/8	-	3/16	51/64	29/32	S
AU-2/0	2	Two: 2/0-14	1/4	17/64	27/32	1-15/32	27/64	1-1/4	-	3/16	51/64	1-1/32	3/16
AU-250	2	Two: 250MCM-6	3/8	25/64	1-9/16	2-9/16	7/8	1-21/32	-	1/4	1-3/16	1-9/32	5/16
AU-350	2	Two: 350MCM-4	1/2	9/16	1-3/4	2-7/8	7/8	1-57/64	-	1/4	1-1/4	1-3/8	5/16
AU-600	2	Two: 600MCM-2	1/2	17/32	1-13/16	3-3/16	5/8	2-13/32	-	7/16	1-9/16	1-31/32	1/2
AU-800	2	Two: 800MCM-300MCM	5/8	21/32	1-3/4	3-3/8	7/8	3-3/16	-	1/2	1-15/16	2-15/64	1/2
AU-1000	2	Two: 1000MCM-500MCM	5/8	21/32	1-3/4	3-3/8	7/8	3-3/16	-	1/2	1-15/16	2-25/64	9/16
AU-600-2NS	3	Two: 600MCM-2	1/2	9/16	3-5/16	4-11/16	5/8	2-13/32	1-3/4	7/16	1-3/8	2-3/64	1/2
AU-800-2NS	3	Two: 800MCM-300MCM	1/2	9/16	3-1/8	4-3/4	5/8	3-3/16	1-3/4	1/2	1-15/16	2-3/16	1/2
AU-1000-2NS	3	Two: 1000MCM-500MCM	1/2	9/16	3-1/8	4-3/4	5/8	3-3/16	1-3/4	1/2	1-5/8	2-33/64	9/16
AU-350-2N	3	Two: 350MCM-6	1/2	9/16	3	4-5/16	5/8	2	1-3/4	5/16	1-3/8	1-29/64	5/16
AU-600-2N	4	Two: 600MCM-2	1/2	9/16	3-1/4	5-1/2	5/8	2-13/32	1-3/4	3/8	1-1/2	1-31/32	1/2
AU-800-2N	4	Two: 800MCM-300MCM	1/2	9/16	3-7/16	6-3/16	5/8	3	1-3/4	9/16	1-7/8	2-15/64	1/2
AU-1000-2N	4	Two: 1000MCM-500MCM	1/2	9/16	3-7/16	6-3/16	5/8	3-3/16	1-3/4	9/16	1-7/8	2-25/64	9/16

DE-OX Inhibitor is recommended for all aluminum terminations.

# INDUSTRIAL CONNECTORS

## MECHANICAL SPLICER/REDUCER

### Features

- Manufactured from high strength 6061-T6 aluminum alloy
- Electro-tin plated
- Chamfered wire entry
- UL Listed and CSA Certified for 600 volts, 90° C
- Rounded bottoms
- Large screw diameters
- Wire stop in center

### Benefits

- Suitable for use with either copper or aluminum conductors
- Provides low contact resistance
- Provides ease of installation
- Ensures reliability for copper or aluminum conductors
- Facilitates taping
- Ensures all wire strands are held securely
- Prevents dissimilar metals coming into contact



## ALUMINUM: DUAL RATED.























CATALOG NUMBER	WIRE RANGE	DIMENSIONS			NUMBER OF SCREWS	SCREW DIAMETER	HEX SIZE
		LENGTH	WIDTH	HEIGHT			
SPA-2	2-14	1-3/16	29/64	9/16	2	3/8	Slot
SPA-0	1/0-14	1-29/32	5/8	11/16	2	7/16	Slot
SPA-250	250MCM-6	2-5/16	1	1-1/32	2	7/16	5/16
SPA-350	350MCM-6	4-11/32	1	1-3/32	4	11/16	5/6
SPA-500	500MCM-3/0	4-25/32	1-1/4	1-3/8	4	13/16	3/8
SPA-750	750MCM-250MCM	6-1/16	1-7/16	1-5/8	4	15/16	1/2
SPA-1000	1000MCM-500MCM	8-11/16	1-23/32	1-7/8	6	1-1/8	9/16

DE-OX Inhibitor is recommended for all aluminum terminations.

## DECIMAL EQUIVALENTS CHARTS

FRACTION = DECIMAL		FRACTION = DECIMAL	
1/64	0.015625	33/64	0.515625
1/32	0.03125	17/32	0.53125
3/64	0.046875	35/64	0.546875
1/16	0.0625	9/16	0.5625
5/64	0.07815	37/64	0.578125
3/32	0.09375	19/32	0.59375
7/64	0.109375	39/64	0.609375
1/8	0.125	5/8	0.625
9/64	0.140625	41/64	0.640625
5/32	0.15625	21/32	0.65625
11/64	0.171875	43/64	0.671875
3/16	0.1875	11/16	0.6875
13/64	0.203125	45/64	0.703125
7/32	0.21875	23/32	0.71875
5/64	0.234375	47/64	0.734375
1/4	0.25	3/4	0.75
17/64	0.265625	49/64	0.765625
9/32	0.28125	25/32	0.78125
19/64	0.296875	51/64	0.796875
5/16	0.3125	13/16	0.8125
21/64	0.328125	53/64	0.828125
11/32	0.34375	27/32	0.84375
23/64	0.359375	55/64	0.859375
3/8	0.375	7/8	0.875
25/64	0.390625	57/64	0.890625
13/32	0.40625	29/32	0.90625
27/64	0.421875	59/64	0.921875
7/16	0.4375	15/16	0.9375
29/64	0.453125	61/64	0.953125
15/32	0.46875	31/32	0.95875
31/64	0.484375	63/64	0.984375
1/2	0.5	1	1.0

## STUD AND HOLE CHART SIZES

STANDARD STUD SIZE	SCREW DIAMETER	HOLE DIAMETER
 #5	.125	0.146
 #6	.138	
 4 mm	.157	5 mm
 #8	.164	0.173
 #10	.190	0.198
 5 mm	.197	6 mm
 #12	.216	.265
 6 mm	.236	
 #14	.242	
 1/4	.250	8 mm
 7 mm	.276	
 5/16	.312	.328
 8 mm	.315	9 mm
 3/8	.375	.390
 10 mm	.394	11 mm
 7/16	.437	.453
 12 mm	.472	13 mm
 1/2	.500	.515
 14 mm	.551	15 mm
 5/8	.625	.656

# DECIMAL & STUD DIMENSIONS

## LENGTH CONVERSION

1 inch = 25.4 millimeters

1 millimeter = 0.03937 inch

1 foot = 0.3048 meters

1 yard = 0.9144 meters

1 meter = 3.281 feet

## TIGHTENING TORQUE VALUES FOR FTZ MECHANICAL SCREW CONNECTORS

AWG OR CIRCULAR MILL SIZE	TIGHTENING TORQUE IN INCH POUNDS	
	SCREW DRIVER	EXTERNAL DRIVE WRENCH
14	35	75
12	35	75
10	35	75
8	40	75
6	45	110
4	45	110
2	50	150
1	50	150
1/0	50	180
2/0	50	180
3/0		250
4/0		250
250		325
350		325
500		375
600		375
700		375
750		375
800		500
1000		500

## WIRE GAUGE CONVERSION

To read mils, move decimal point three places to the right

GAUGE	DIAMETER (IN.)	GAUGE	DIAMETER (IN.)	GAUGE	DIAMETER (IN.)
4/0	0.460	12	0.081	27	0.0142
3/0	0.410	13	0.072	28	0.0126
2/0	0.365	14	0.064	29	0.0113
1/0	0.325	15	0.057	30	0.0100
1	0.289	16	0.051	31	0.0089
2	0.258	17	0.045	32	0.0080
3	0.229	18	0.040	33	0.0071
4	0.204	19	0.036	34	0.0063
5	0.182	20	0.032	35	0.0056
6	0.162	21	0.0285	36	0.0050
7	0.144	22	0.0253	37	0.0045
8	0.128	23	0.0226	38	0.0040
9	0.114	24	0.0201	39	0.0035
10	0.102	25	0.0179	40	0.0031
11	0.091	26	0.0159		

## TIGHTENING TORQUE VALUES FOR FTZ SOCKETHEAD SCREW CONNECTORS

INTERNAL SOCKET SIZE ACROSS FLATS INCHES	TIGHTENING TORQUE IN INCH POUNDS
1/8	45
5/32	100
3/16	120
7/32	150
1/4	200
5/16	275
3/8	375
1/2	500
9/16	600

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
12140	52		52	12774	52	13192	53	17162	54	18464	51
12141	52		52	12780	52	13198	53	17180	54	18473	51
12143	52	12460	52	12781	52	13262	53	17181	54	18474	51
12144	52	12461	52	12783	52	13268	53		54	18483	51
12160	52	12463	52	12784	52	13272	53		54	18484	51
12161	52	12464	52	12790	52	13278	53	17472	54	18493	51
12163	52	12470	52	12791	52	13282	53	17480	54	18494	51
12164	52	12471	52	12793	52	13288	53	17481	54		62
12170	52	12473	52	12794	52	13292	53	17901	62	20112	38
12171	52	12474	52	12860	52	13298	53	17902	62	20148	38
12173	52	12480	52	12863	52	13568	53	17903	62	20212	38
12174	52	12481	52	12864	52	13578	53	17904	62	20248	38
12180	52	12483	52	12870	52	13588	53	17905	62	20312	38
12181	52	12484	52	12871	52	13598	53	17906	62	20348	38
12183	52	12490	52	12873	52	13928	53	17907	62	20501	38
12184	52	12491	52	12874	52	13958	53	17908	62	20506	38
12190	52	12493	52	12880	52	13968	53	17998	62	20512	38
12191	52	12494	52	12881	52	13978	53	17999	62	20548	38
12193	52	12520	52	12883	52	13988	53	18120	51	20606	38
12194	52	12521	52	12884	52	13998	53	18121	51	20612	38
12260	52	12523	52	12890	52	14022	56	18123	51	20648	38
12261	52	12524	52	12891	52	14032	56	18124	51	20706	38
12263	52	12540	52	12893	52	14052	56	18128	51	20712	38
12264	52	12541	52	12894	52	14062	56	18143	51	20748	38
12270	52	12543	52	12960	52	16012	55	18144	51	21006	38
12271	52	12544	52	12961	52	16022	55	18163	51	21012	38
12273	52	12560	52	12963	52	16032	55	18164	51	21048	38
12274	52	12561	52	12964	52	16035	55	18173	51	21106	38
12280	52	12563	52	12970	52	16036	55	18174	51	21112	38
12281	52	12564	52	12971	52	16050	55	18183	51	21148	38
12283	52	12570	52	12973	52	16051	55	18184	51	21201	38
12284	52	12571	52	12974	52	16052	55	18193	51	21206	38
	52	12573	52	12980	52	16060	55	18194	51	21212	38
12291	52	12574	52	12981	52	16061	55	18263	51	21248	38
	52	12580	52	12983	52	17028	54	18264	51	21268	39
	52	12581	52	12984	52	17029	54	18273	51	21301	38
	52	12583	52	12990	52	17101	54	18274	51	<b>21306</b>	<b>38</b>
12361	52	12584	52	12991	52	17112	54	18283	51	21312	38
12363	52	12590	52	12993	52		54	18284	51	21348	38
12364	52		52	12994	52	17120	54	18293	51	21401	38
12370	52	12593	52	13122	53	17122	54	18294	51	21406	38
12371	52	12594	52	13128	53	17125	54	18363	51	21412	38
12373	52		52	13152	53	17126	54	18364	51	21448	38
12374	52	12760	52	13158	53	17128	54	18373	51	21468	39
12380	52	12761	52	13162	53	17129	54	18374	51	21501	38
12381	52	12763	52	13168	53	17132	54	18383	51	21506	38
12383	52	12764	52	13172	53	17133	54	18384	51	21512	38
12384	52	12770	52	13178	53	17138	55	18393	51	21548	38
12390	52	12771	52	13182	53	17139	55	18394	51	21606	38
12391	52	12773	52	13188	53	17140	55	18463	51	21612	38

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
21648	38	30178	12	30386	18	31113	7	31404	6	37144	9
21706	38	30178	19	30387	10	31114	7	31412	7		10
21712	38	30179	12	30387	18	31115	7	31413	7	37165	12
21748	38	30179	19	30388	11	31116	7	31414	7	37168	12
21768	39	30183	19	30388	18	31117	7	31415	7	37169	12
21806	38	30184	19	30391	19	31122	8	31416	7	37178	12
21812	38	30185	10	30393	19	31123	8	31417	7	37179	12
21848	38	30185	18	30394	19	31124	8	31419	7	37183	11
21906	38	30186	11	30395	10	31130	6	31422	8	37184	11
21912	38	30186	18	30395	18	31142	9	31423	8	37191	12
21948	38	30187	10	30396	11	31143	9	31424	8	37193	11
24106	42	30187	18	30396	18	31144	9	31430	6	37194	11
	42	30188	11	30397	10		10	31442	9	37303	6
	42	30188	18	30397	18		10	31443	9	37304	6
24206	42	30191	19	30398	11		10	31444	9	37312	7
24212	42	30193	19	30398	18	31165	12	31445	9	37313	7
24248	42	30194	19	30412	16	31168	12		10	37314	7
24306	42	30195	10	30413	16	31169	12		10	37315	7
24312	42	30195	18	30414	16	31183	11		10	37316	7
24348	42	30196	11	30415	16	31184	11	31465	12	37317	7
28101	46	30196	18	30416	16	31191	12	31469	12	37322	8
28102	46	30197	10	30417	16	31193	11	31483	11	37323	8
28103	46	30197	18	30419	16	31194	11	31493	11	37324	8
28104	46	30198	11	30422	16	31303	6	31514	7	37330	6
28105	46	30198	18	30423	16	31304	6	31515	7	37333	6
28106	46	30312	16	30424	16	31312	7	31516	7	37342	9
28107	46	30313	16	30430	15	31313	7	31517	7	37343	9
28108	46	30314	16	30433	15	31314	7	31519	7	37344	9
28109	46	30315	16	30442	17	31315	7	31530	6		10
28110	46	30316	16	30443	17	31316	7	33130	6	37354	10
28111	46	30317	16	30444	17	31317	7	33330	6	37365	12
28115	46	30322	16		17	31322	8	33430	6	37368	12
28116	46	30323	16	30483	19	31323	8	35330	6	37369	12
28117	46	30324	16	30487	10	31324	8	35430	6	37378	12
30112	16	30330	15	30487	18	31330	6	35530	6	37379	12
30113	16	30333	15	30488	11	31342	9	37030	6	37383	11
30114	16	30342	17	30488	18	31343	9	37103	6	<b>37384</b>	<b>11</b>
30115	16	30343	17	30493	19	31344	9	37104	6	37391	12
30116	16	30344	17	30497	10		10	37112	7	37393	11
30117	16	30368	19	30497	18		10	37113	7	37394	11
30122	16	30369	19	30498	11	31354	10	37114	7	37403	6
30123	16	30378	12	30498	18	31365	12	37115	7	37404	6
30124	16	30378	19	31012	7	31368	12	37116	7	37412	7
30130	15	30379	12	31013	7	31369	12	37117	7	37413	7
30133	15	30379	19	31014	7	31383	11	37122	8	37414	7
30142	17	30383	19	31015	7	31384	11	37123	8	37415	7
30143	17	30384	19	31030	6	31391	12	37124	8	37416	7
30144	17	30385	10	31103	6	31393	11	37130	6	37417	7
30168	19	30385	18	31104	6	31394	11	37142	9	37419	7
30169	19	30386	11	31112	7	31403	6	37143	9	37422	8



ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
37423	8	41615	32	45193	28	45452	27	46312	24	46614	24
37424	8	41618	32	45194	28	45453	27	46313	24	46615	24
37430	6	41622	32	45203	23	45454	27	46314	24	<b>46616</b>	<b>24</b>
37433	6	41627	32	45303	23	45465	29	46315	24	46617	24
37442	9	41629	32	45304	23	45483	28	46316	24	46619	24
37443	9	41631	32	45312	24	45493	28	46317	24	46630	22
37444	9	41633	32	45313	24	45514	24	46322	25	46631	23
37445	9	41635	32	45314	24	45531	23	46323	25	46633	22
37465	12	41638	32	45315	24	45533	22	46324	25	46714	24
37469	12	41640	32	45316	24	45600	30	46331	23	46715	24
37483	11	41642	32	45317	24	45601	30	46333	22	46716	24
37493	11	41643	32	45322	25	45610	30	46342	26	46717	24
37514	7	41644	32	45323	25	45611	30	46343	26	46719	24
37515	7	41645	32	45324	25	45612	30	46344	26	46730	22
37516	7	41701	32	45330	22	45613	30	46354	27	46731	23
37517	7	41702	32	45331	23	45630	22	46365	29	60301	71
37519	7	41703	32	45333	22	45631	23	46368	29	60302	71
37530	6	41704	32	45342	26	45633	22	46369	29	60304	71
37533	6	41705	32	45343	26	45719	24	46383	28	60306	71
40112	24	41706	32	45344	26	45730	22	46384	28	60402	71
40114	24	41707	32	45352	27	45731	23	46393	28	60404	71
40115	24	41708	32	45353	27	45900	30	46394	28	60406	71
40130	22	41709	32	45354	27	45901	30	46412	24	60408	71
40312	24	41710	32	45365	29	45903	30	46413	24	60410	71
40314	24	41711	32	45368	29	45905	30	46414	24		
40315	24	41712	32	45369	29	45906	30	46415	24		
40330	22	41713	32	45383	28	45908	30	46416	24		
40412	24	45112	24	45384	28	45910	30	46417	24		
40414	24	45113	24	45391	28	45911	30	46419	24		
40415	24	45114	24	45393	28	45912	30	46422	25		
40417	24	45115	24	45394	28	46112	24	46423	25		
40430	22	45116	24	45403	23	46113	24	46424	25		
40515	24	45117	24	45404	23	46114	24	46431	23		
40617	24	45122	25	45412	24	46115	24	46433	22		
40717	24	45123	25	45413	24	46116	24	46442	26		
41101	31	45124	25	45414	24	46117	24	46443	26		
41103	31	45130	22	45415	24	46122	25	46444	26		
41146	31	45131	23	45416	24	46123	25	46445	26		
41148	31	45142	26	45417	24	46124	25	46452	27		
41152	31	45143	26	45419	24	46131	23	46465	29		
41154	31	45144	26	45422	25	46142	26	46483	28		
41156	31	45152	27	45423	25	46143	26	46493	28		
41203	31	45153	27	45424	25	46144	26	46514	24		
41205	31	45154	27	45430	22	46165	29	46515	24		
41305	31	45165	29	45431	23	46168	29	46516	24		
41602	32	45168	29	45433	22	46169	29	46517	24		
41604	32	45169	29	45442	26	46183	28	46519	24		
41606	32	45183	28	45443	26	46184	28	46530	22		
41608	32	45184	28	45444	26	46193	28	46531	23		
41611	32	45191	28	45445	26	46194	28	46533	22		

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
60411	71	87004	73	91117	59	91724	60	92171	66	94231	84
61007	63	87006	73	91119	59	91725	60	92175	66	94284	80
61811	63	87008	73	91124	59	91726	60	92181	66	94285	80
61812	63	91004	59	91125	59	91727	60	92185	66	94296	81
61813	63	91005	59	91126	59	91729	60	92400	67	94297	80
61822	63	91006	59	91127	59	91735	60	92401	67	94298	81
61823	63	91007	59	91129	59	91736	60	92402	67	94330	84
62004	63	91009	59	91135	59	91737	60	92403	67	94400	70
62007	63	91014	59	91136	59	91739	60	92404	67	94502	91
62231	63	91015	59	91137	59	91745	60	92405	67	94510	91
62233	63	91016	59	91139	59	91746	60	92406	67	94600	86
62331	63	91017	59	91145	59	91747	60	92407	67	94700	88
62333	63	91019	59	91146	59	91749	60	92408	67	94800	89
62431	63	91024	59	91147	59	91755	60	92409	67	94840	81
62433	63	91025	59	91149	59	91756	60	92410	67	94841	81
62631	63	91026	59	91155	59	91757	60	92412	67	94900	89
62633	63	91027	59	91156	59	91759	60	92413	67	94902	87
62802	63	91029	59	91157	59	91765	60	93120	70	94905	86
62803	63	91035	59	91159	59	91766	60	93230	70	94906	92
62812	63	91036	59	91165	59	91767	60	93345	69	94940	88
62813	63	91037	59	91166	59	91769	60	93403	70	95242	56
62831	63	91039	59	91167	59	91775	60	93445	69	95243	56
62832	63	91045	59	91169	59	91776	60	93510	70	95246	56
62833	63	91046	59	91175	59	91777	60	93511	70	95247	56
63004	63	91047	59	91176	59	91779	60	93512	70	95262	56
63007	63	91049	59	91177	59	91785	60	93513	70	95263	56
63241	63	91055	59	91179	59	91786	60	93514	70	95266	56
63243	63	91056	59	91185	59	91787	60	93515	70	95267	56
63441	63	91057	59	91186	59	91789	61	93804	70	95342	56
63443	63	91059	59	91187	59	91800	61	93805	70	95352	56
63641	63	91065	59	91189	59	91810	61	93808	70	95901	56
63643	63	91066	59	91200	61	91820	61	93809	70	95902	56
63841	63	91067	59	91210	61	91830	61	93812	70	99001	56
63842	63	91069	59	91220	61	91840	61	93813	70	<b>99002</b>	<b>56</b>
63843	63	91075	59	91230	61	91850	61	94012	85	99003	57
63852	63	91076	59	91240	61	91860	61	94014	85	99004	57
63853	63	91077	59	91250	61	91870	61	94015	85	99005	57
63862	63	91079	59	91260	61	91880	61	94031	85	99007	57
63863	63	91085	59	91270	61	92105	66	94040	85	99010	57
85001	73	91086	59	91280	61	92115	66	94071	64	99011	64
85002	73	91087	59	91704	60	92121	66	94072	64	99012	64
85004	73	91089	59	91705	60	92125	66	94073	64	99015	57
85005	73	91104	59	91706	60	92131	66	94074	64	99018	57
85006	73	91105	59	91707	60	92135	66	94077	64	99051	57
85007	73	91106	59	91709	60	92141	66	94078	64	99052	57
85008	73	91107	59	91714	60	92145	66	94145	83	99053	57
86004	73	91109	59	91715	60	92151	66	94145	84	99054	57
86005	73	91114	59	91716	60	92155	66	94146	84		
86006	73	91115	59	91717	60	92161	66	94147	30		
87003	73	91116	59	91719	60	92165	66	94230	84		

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
99055	57	26001G-48	45	26002W-6	45	26004-600	44	26005C-48	45	26006R-12	45
99056	57	26001G-6	45	26002W-600	45	26004BL-12	45	26005C-6	44	26006R-48	45
99057	57	26001G-600	45	26002W-BRL	45	26004BL-48	45	26005C-6	45	26006R-6	45
99058	57	26001G-BRL	45	26002Y-12	45	26004BL-6	45	26005C-600	45	26006R-600	45
99102	20	26001R-12	45	26002Y-48	45	26004BL-600	45	26005C-BRL	44	26006R-BRL	45
99110	20	26001R-48	45	26002Y-6	45	26004BL-BRL	45	26005C-BRL	45	26006W-12	45
	20	26001R-6	45	26002Y-600	45	26004-BRL	44	26005G-12	45	26006W-48	45
	20	26001R-600	45	26002Y-BRL	45	26004C-12	44	26005G-48	45	26006W-6	45
99165	21	26001R-BRL	45	26003-12	44	26004C-12	45	26005G-6	45	26006W-6	46
99166	21	26001W-12	45	26003-48	44	26004C-48	44	26005G-600	45	26006W-600	45
99167	21	26001W-48	45	26003-6	44	26004C-48	45	26005G-BRL	45	26006W-BRL	45
99168	21	26001W-6	45	26003-600	44	26004C-6	44	26005R-12	45	26006Y-12	45
99200	75	26001W-600	45	26003BL-12	45	26004C-6	45	26005R-48	45	26006Y-48	45
99201	75	26001W-BRL	45	26003BL-48	45	26004C-600	45	26005R-6	45	26006Y-6	45
99202	75	26001Y-12	45	26003BL-6	45	26004C-BRL	44	26005R-600	45	26006Y-600	45
99203	75	26001Y-48	45	26003BL-600	45	26004C-BRL	45	26005R-BRL	45	26006Y-BRL	45
99204	75	26001Y-6	45	26003BL-BRL	45	26004G-12	45	26005W-12	45	26007-12	44
99205	75	26001Y-600	45	26003-BRL	44	26004G-48	45	26005W-48	45	26007-48	44
99206	75	26001Y-BRL	45	26003C-12	44	26004G-6	45	26005W-6	45	26007-6	44
99207	75	26002-12	44	26003C-12	45	26004G-600	45	26005W-600	45	26007-600	44
99208	75	26002-48	44	26003C-48	44	26004G-BRL	45	26005W-BRL	45	26007BL-12	45
99209	75	26002-6	44	26003C-48	45	26004R-12	45	26005Y-12	45	26007BL-48	45
99211	75	26002-600	44	26003C-6	44	26004R-48	45	26005Y-48	45	26007BL-6	45
99212	75	26002BL-12	45	26003C-6	45	26004R-6	45	26005Y-6	45	26007BL-600	45
99300	20	26002BL-48	45	26003C-600	45	26004R-600	45	26005Y-600	45	26007BL-BRL	45
99513	57	26002BL-6	45	26003C-BRL	44	26004R-BRL	45	26005Y-BRL	45	26007-BRL	44
20501R	38	26002BL-600	45	26003C-BRL	45	26004W-12	45	26006-12	44	26007C-12	44
20506R	38	26002BL-BRL	45	26003G-12	45	26004W-48	45	26006-48	44	26007C-12	45
20512R	38	26002-BRL	44	26003G-48	45	26004W-6	45	26006-6	44	26007C-48	44
20548R	38	26002C-12	44	26003G-6	45	26004W-600	45	26006-600	44	26007C-48	45
26001-12	44	26002C-12	45	26003G-600	45	26004W-BRL	45	26006BL-12	45	26007C-6	44
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	17		15	3041M-P25	15	31142-P50	9	31413-P25	7	37116-P50	7
	17		17		17	31143-P50	9	31414-P25	7	37117-P50	7
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CLND-400-12-134	120	CLND-8-10-58	116	CLNS-4/0-516	108	CLWD-1-14-34	111	CLWD-4/0-12-1	113	CLWD-6-516-34	110
CLND-400-38-1	120	CLND-8-14-1	116	CLNS-400-12	108	CLWD-1-14-58	111	CLWD-4/0-12-114	113	CLWD-700-12-112	115
CLND-400-38-116	120	CLND-8-14-34	116	CLNS-400-38	108	CLWD-1-38-1	111	CLWD-4/0-12-134	113	CLWD-700-12-134	115
CLND-4-10-1	117	CLND-8-14-58	116	CLNS-400-58	108	CLWD-1-516-1	111	CLWD-4/0-14-1	113	CLWD-700-12-178	115
CLND-4-10-34	117	CLND-8-38-1	116	CLNS-4-10	107	CLWD-1-516-78	111	CLWD-4/0-14-34	113	CLWD-700-38-1	115
CLND-4-10-58	117	CLNS-1/0-10	108	CLNS-4-12	107	CLWD-2/0-12-1	112	CLWD-4/0-14-58	113	CLWD-700-38-118	115
CLND-4-12-134	117	CLNS-1/0-12	108	CLNS-4-14	107	CLWD-2/0-12-134	112	CLWD-4/0-38-1	113	CLWD-750-12-112	115
CLND-4-14-34	117	CLNS-1/0-14	108	CLNS-4-38	107	CLWD-2/0-14-1	112	CLWD-4/0-38-134	113	CLWD-750-12-134	115
CLND-4-14-58	117	CLNS-1/0-38	108	CLNS-4-516	107	CLWD-2/0-14-34	112	CLWD-4/0-516-1	113	CLWD-750-38-1	115
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CLND-4-516-34	117	CLNS-1000-58	109	CLNS-600-12	109	CLWD-2/0-516-1	112	CLWD-400-38-1	114	CLWD-8-10-58	110
CLND-500-12-114	120	CLNS-1-10	107	CLNS-600-38	109	CLWD-2-10-34	111	CLWD-400-38-116	114	CLWD-8-14-1	110
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CLND-500-38-1	120	CLNS-1-38	107	CLNS-6-12	107	CLWD-2-14-34	111	CLWD-4-10-58	110	CLWD-8-38-1	110
CLND-600-12-134	120	CLNS-1-516	107	CLNS-6-14	107	CLWD-2-14-58	111	CLWD-4-12-134	110	CLWS-1/0-10	105
CLND-600-38-1	120	CLNS-2/0-10	108	CLNS-6-38	107	CLWD-2-38-1	111	CLWD-4-14-1	110	CLWS-1/0-12	105
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CLND-6-10-58	116	CLNS-2/0-516	108	CLNS-650-58	109	CLWD-2-38-78	111	CLWD-4-38-34	110	CLWS-1000-12	106
CLND-6-12-134	116	CLNS-2-10	107	CLNS-6-516	107	CLWD-250-12-114	113	CLWD-4-516-1	110	CLWS-1000-38	106
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CLND-6-14-58	116	CLNS-250-12	108	CLNS-750-12	109	CLWD-250-38-134	113	CLWD-500-12-134	114	<b>CLWS-1-14</b>	<b>104</b>
CLND-6-38-1	116	CLNS-250-38	108	CLNS-750-38	109	CLWD-2-516-1	111	CLWD-500-14-34	114	CLWS-1-38	104
CLND-6-38-34	116	CLNS-250-516	108	CLNS-750-58	109	CLWD-2-516-34	111	CLWD-500-38-1	114	CLWS-1-516	104
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CLND-650-12-114	121	CLNS-3/0-10	108	CLNS-8-14	107	CLWD-3/0-12-134	112	CLWD-600-38-1	114	CLWS-2/0-12	105
CLND-650-12-134	121	CLNS-3/0-12	108	CLNS-8-38	107	CLWD-3/0-14-34	112	CLWD-6-10-1116	110	CLWS-2/0-14	105
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CLND-700-12-112	121	CLNS-300-516	108	CLWD-1/0-14-58	112	CLWD-3-12-134	111	CLWD-6-14-12	110	CLWS-2-38	104
CLND-700-12-134	121	CLNS-3-10	107	CLWD-1/0-38-1	112	CLWD-3-14-34	111	CLWD-6-14-34	110	CLWS-250-12	105
		CLNS-3-12	107	CLWD-1/0-38-134	112	CLWD-3-14-58	111	CLWD-6-14-58	110	CLWS-250-38	105

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CLWS-250-516	105	CLWS-750-38	10	CSWD-2-38-78	100	CSWD-500-12-114	102	CSWS-1-14	95	CSWS-600-58	97
CLWS-2-516	104	CLWS-750-58	10	CSWD-250-12-114	102	CSWD-500-12-134	102	CSWS-1-38	95	CSWS-6-10	95
CLWS-3/0-10	105	CLWS-8-10	10	CSWD-250-12-134	102	CSWD-500-14-34	102	CSWS-1-516	95	CSWS-6-12	95
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CLWS-300-38	105	CP-250	13	CSWD-3/0-12-134	101	CSWD-6-10-34	98	CSWS-2-10	95	CSWS-650-58	97
CLWS-300-516	105	CP-4	13	CSWD-3/0-14-34	101	CSWD-6-10-58	98	CSWS-2-12	95	CSWS-6-516	95
CLWS-3-10	104	CP-500	13	CSWD-3/0-14-58	101	CSWD-6-12-134	98	CSWS-2-14	95	CSWS-700-12	97
CLWS-3-12	104	CP-8	13	CSWD-3/0-38-1	101	CSWD-6-14-1	98	CSWS-2-38	95	CSWS-700-38	97
CLWS-3-14	104	CSWD-1/0-12-1	10	CSWD-3/0-516-1	101	CSWD-6-14-12	98	CSWS-250-12	96	CSWS-700-58	97
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CLWS-350-12	105	CSWD-1/0-14-1	10	CSWD-300-38-1	102	CSWD-6-14-58	98	CSWS-250-516	96	CSWS-750-38	97
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CLWS-3-516	104	CSWD-1/0-38-1	10	CSWD-3-14-58	99	CSWD-6-38-78	98	CSWS-3/0-12	96	CSWS-8-14	95
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CLWS-400-38	105	CSWD-1000-12-134	10	CSWD-350-38-1	102	CSWD-6-516-1	98	CSWS-300-516	96	CT-2	122
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CLWS-4-10	104	CSWD-1000-58-112	10	CSWD-3-516-1	99	CSWD-700-12-114	103	CSWS-3-10	95	CT-250	122
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CLWS-4-14	104	CSWD-1-14-1	10	CSWD-4/0-12-114	101	CSWD-700-12-178	103	CSWS-3-14	95	CT-3/0	122
CLWS-4-38	104	CSWD-1-14-34	10	CSWD-4/0-12-134	101	CSWD-700-38-1	103	CSWS-3-38	95	CT-300	122
CLWS-4-516	104	CSWD-1-14-58	10	CSWD-4/0-14-1	101	CSWD-750-12-112	103	CSWS-350-12	96	CT-350	122
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CLWS-600-12	106	CSWD-2/0-12-1	10	CSWD-4/0-38-134	101	CSWD-750-58-112	103	CSWS-4/0-12	96	CT-500	122
CLWS-600-38	106	CSWD-2/0-12-134	10	CSWD-4/0-516-1	101	CSWD-8-10-34	98	CSWS-4/0-14	96	CT-6	122
CLWS-600-58	106	CSWD-2/0-14-1	10	CSWD-4/0-516-134	101	CSWD-8-10-58	98	CSWS-4/0-38	96	CT-600	122
CLWS-6-10	104	CSWD-2/0-14-34	10	CSWD-4/0-516-34	101	CSWD-8-14-1	98	CSWS-4/0-516	96	<b>CT-750</b>	<b>122</b>
CLWS-6-12	104	CSWD-2/0-14-58	10	CSWD-400-12-134	102	CSWD-8-14-34	98	CSWS-400-12	96	CT-8	122
CLWS-6-14	104	CSWD-2/0-38-1	10	CSWD-400-38-1	102	CSWD-8-14-58	98	CSWS-400-38	96	CTL-1	123
CLWS-6-34	104	CSWD-2/0-38-134	10	CSWD-400-38-116	102	CSWD-8-38-1	98	CSWS-400-58	96	CTL-1/0	123
CLWS-6-38	104	CSWD-2/0-516-1	10	CSWD-4-10-1	99	CSWS-1/0-10	96	CSWS-4-10	95	CTL-1000	123
CLWS-650-12	106	CSWD-2/0-516-78	10	CSWD-4-10-34	99	CSWS-1/0-12	96	CSWS-4-12	95	CTL-2	123
CLWS-650-38	106	CSWD-2-10-34	10	CSWD-4-10-58	99	CSWS-1/0-14	96	CSWS-4-14	95	CTL-2/0	123
CLWS-650-516	106	CSWD-2-12-134	10	CSWD-4-12-134	99	CSWS-1/0-38	96	CSWS-4-38	95	CTL-250	123
CLWS-650-58	106	CSWD-2-14-1	10	CSWD-4-14-1	99	CSWS-1/0-516	96	CSWS-4-516	95	CTL-3	123
CLWS-6-516	104	CSWD-2-14-34	10	CSWD-4-14-34	99	CSWS-1000-12	97	CSWS-500-12	97	CTL-3/0	123
CLWS-700-12	106	CSWD-2-14-58	10	CSWD-4-14-58	99	CSWS-1000-38	97	CSWS-500-38	97	CTL-300	123
CLWS-700-38	106	CSWD-2-38-1	10	CSWD-4-38-1	99	CSWS-1000-58	97	CSWS-500-58	97	CTL-350	123
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CLWS-750-12	106	CSWD-2-38-34	10	CSWD-4-516-1	99	CSWS-1-12	95	CSWS-600-38	97	CTL-4/0	123





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