



515 Palmetto Drive, Simpsonville, SC 29681 • 864.963.5000 Fax: 864.963.5352  
Visit us on our website: [www.ftzind.com](http://www.ftzind.com)

Manufacturing Facilities Located in:  
Cincinnati, OH • Brownsville, TX • Harrison, OH • Mississauga, ON

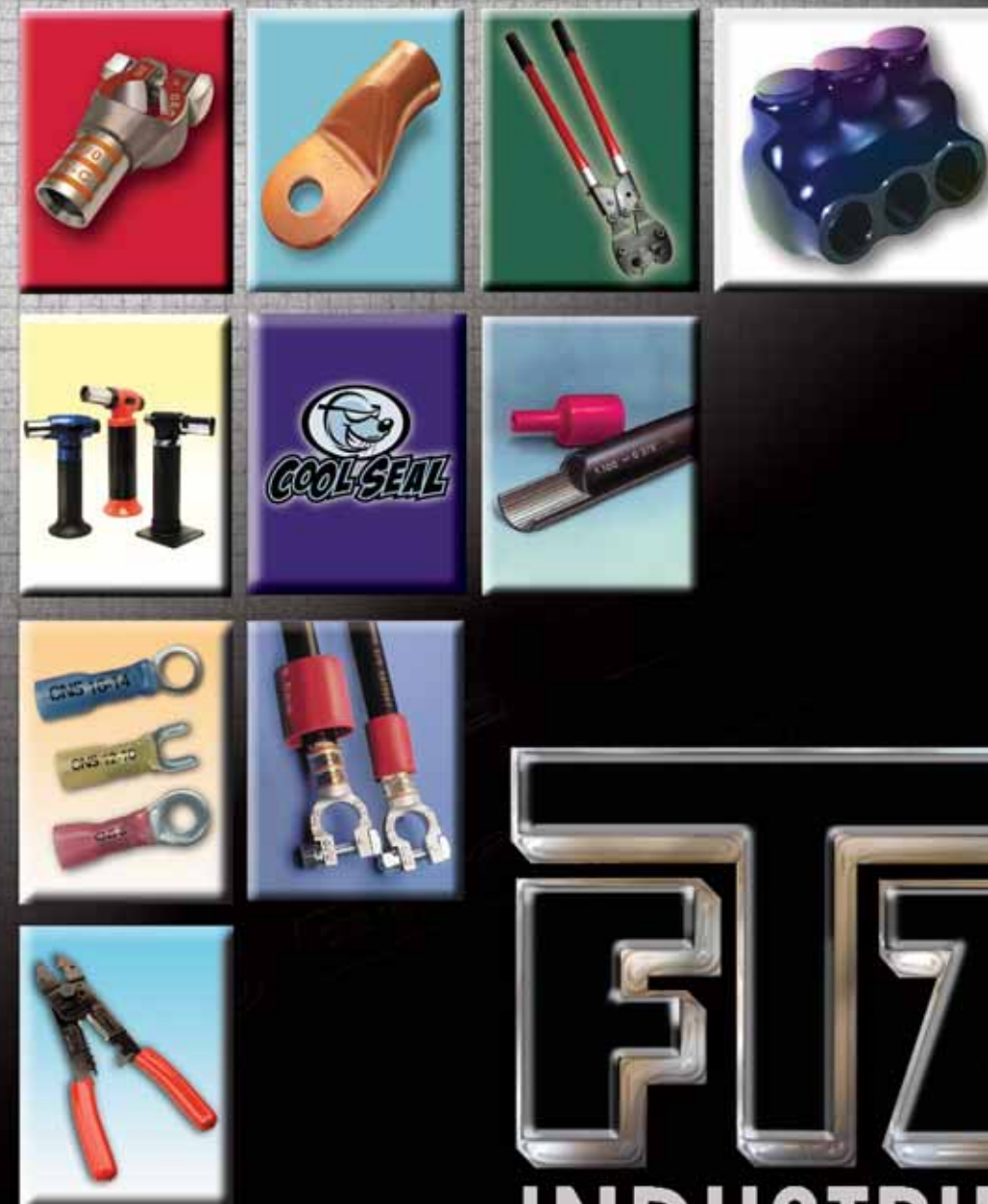


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FTZ INDUSTRIES • Electrical Products for Transportation, Plant Maintenance, Marine and Custom Applications.



Electrical Products for Transportation, Plant Maintenance,  
Marine and Custom Applications.

# FTZ New Products



(See page 6)

## COOL SEAL<sup>®</sup>

*The patented heat-less, solderless terminal that saves time and money.*



(See page 6)

## CLEAR SEAL<sup>®</sup>

*The latest advancement in heat shrink connectors providing increased clarity and strength.*



(See page 14)

## EXTREME SEAL

*The waterproof terminal designed to perform in the harshest environments.*



(See page 50)

## CORRECT CONNECT<sup>™</sup>

*The bi-metal design of this terminal provides a highly conductive, corrosion resistant connection.*



(See page 60)

## SEAMLESS COPPER LUGS

*Unique design that combines pure copper construction with a seamless pad that provides ultimate performance.*



(See page 82)

## MPC CRIMP TOOL

*An ergonomic design that facilitates crimping and minimizes hand fatigue.*

## Quality Statement

“FTZ Industries is committed to providing quality products and exemplary customer service in order to satisfy customer needs and exceed their expectations.”

ISO 9001:2000  
Certificate # 01.236.2





A photograph of a large, modern industrial building with a light-colored facade and a dark roof. The building features a large, stylized logo on its side. The scene is set outdoors with trees and a clear blue sky. A blue vertical bar is visible on the right side of the image.

# Welcome to FTZ INDUSTRIES

FTZ Industries is a leading manufacturer of electrical components for transportation and industrial applications. For over 25 years we have provided innovative products and unmatched service to our customers. In this latest master catalog we have tripled the number of high quality products to provide our distributors a complete electrical offering from one source.

Based in Simpsonville, South Carolina, FTZ Industries' state of the art manufacturing facility and distribution center provide distributors the products they need, when they need them. We are also supported by manufacturing facilities in:

Brownsville, Texas

Cincinnati, Ohio

Harrison, Ohio

Mississauga, Ontario, Canada.





## TABLE OF CONTENTS

---

Solderless Terminals 03-32

Heat Shrink Tubing 33-48

Battery Terminals  
and Accessories 49-64

Wire, Cable and  
Wire Management 65-76

Tools 77-90

Industrial Connectors 91-135

Index 138-148



# TERMINALS

03-32

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

- Crimp 'N Seal<sup>®</sup> Heat Shrink Terminals & Splices
  - Cool Seal<sup>®</sup>
  - Polyolefin Heat Shrink Connectors
  - Clear Seal<sup>®</sup> Heat Shrink Connectors
  - Extreme Seal 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

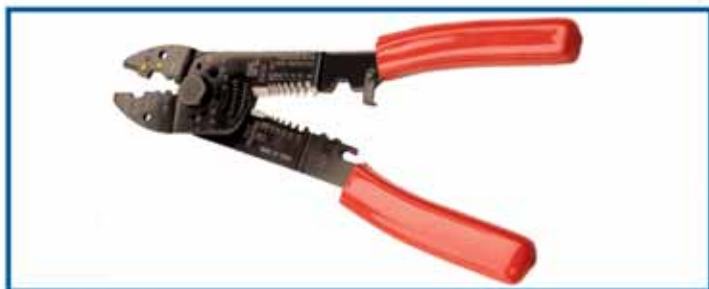
FTZ's patented Cool Seal is the most innovative and cost effective sealed electrical connector to hit the market in 25 years. A heat-less, solderless terminal, it utilizes revolutionary anaerobic sealant technology that installs in a fraction of the time of comparable heat seal connectors. Simply strip 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<sup>®</sup> 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

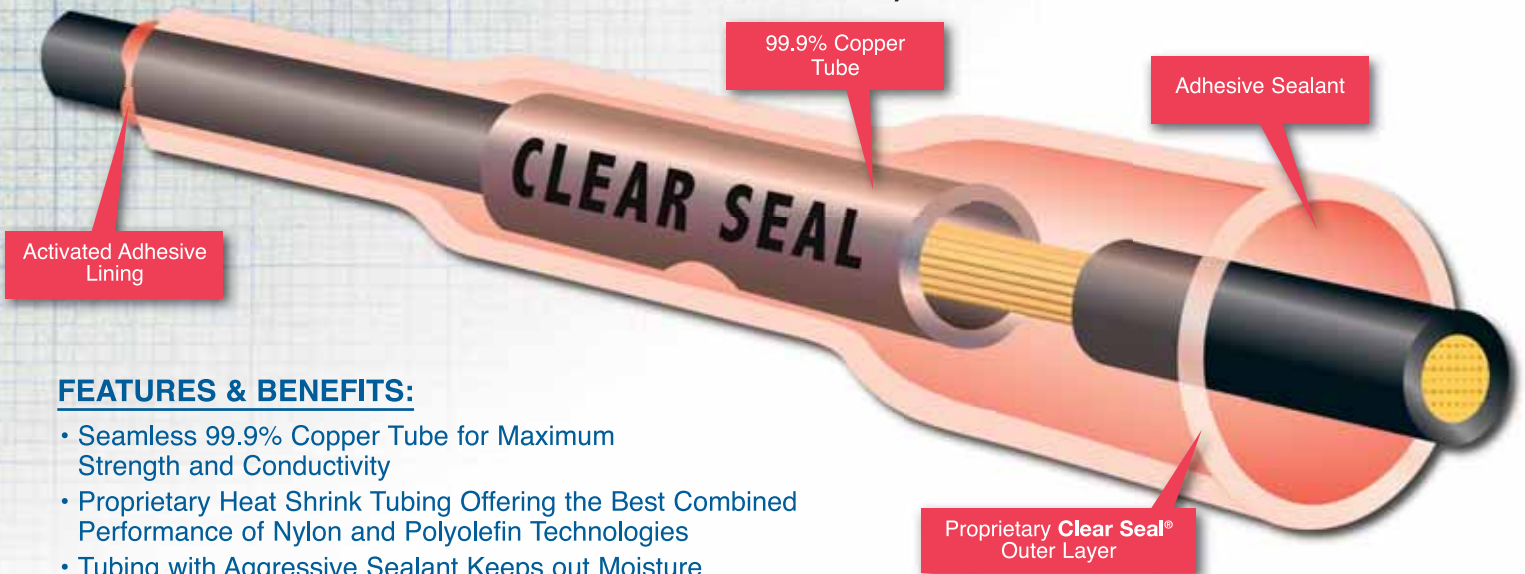






BY FTZ INDUSTRIES

**CLEAR SEAL®** is the latest advancement in an expanding line of patented and innovative heat shrink connectors manufactured by FTZ Industries. The Clear Seal® 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®.



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

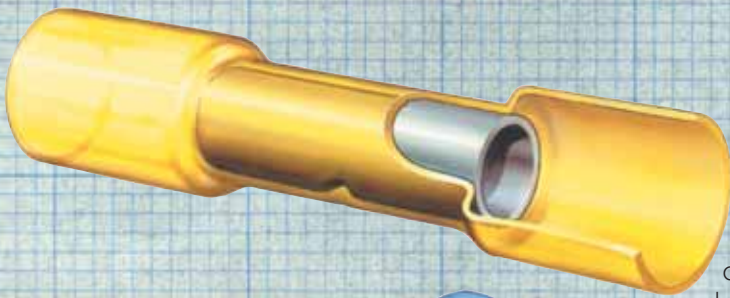


Clear Seal tubing provides maximum clarity and enhances the ease of inspection, insuring proper wire insertion into the connector. Comparable terminals are opaque which could compromise the installation and integrity of the connection.



# Crimp 'N Seal®

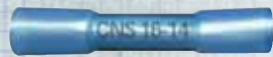
## Waterproof Heat Shrink Connectors



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 two 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 unequaled strain relief.
- **Polyolefin or Clear Seal** the most complete heat shrinkable connector offering is now stocked in two styles
- **Packaged or Bulk** available in convenient packaged quantities or order in bulk and save
- **UL File #E 6207**
- **Maximum Performance** Up to 600 volts, 90°C



31330



37330

### Butt Splices

COOL SEAL®	POLY CAT. NO.	CLEAR SEAL® CAT. NO.	WIRE RANGE	PKG. QTY.
33130	31130	37130	22-18 GA.	Bulk
33130-P500	31130-P500	37130-P500	22-18 GA.	500
33130-P50	31130-P50	37130-P50	22-18 GA.	50
33330	31330	37330	16-14 GA.	Bulk
33330-P500	31330-P500	37330-P500	16-14 GA.	500
33330-P50	31330-P50	37330-P50	16-14 GA.	50
33430	31430	37430	12-10 GA.	Bulk
33430-P250	31430-P250	37430-P250	12-10 GA.	250
33430-P25	31430-P25	37430-P25	12-10 GA.	25
	31530	37530	8 GA.	Bulk
	31530-P25	37530-P25	8 GA.	25

### Butt Splices: Step Down

POLY CAT. NO.	CLEAR SEAL® CAT. NO.	WIRE RANGE	COLOR	PKG. QTY.
35330	37333	22-18 & 16-14 GA.	BLUE	Bulk
35330-P50	37333-P50	22-18 & 16-14 GA.	BLUE	50
35430	37433	16-14 & 12-10 GA.	YELLOW	Bulk
35430-P25	37433-P25	16-14 & 12-10 GA.	YELLOW	25
35530	37533	12-10 & 8 GA.	PINK	Bulk
35530-P25	37533-P25	12-10 & 8 GA.	PINK	25

### Butt Splices: 3 and 4 Way Type

POLY CAT. NO.	CLEAR SEAL® CAT. NO.	WIRE RANGE	STYLE	PKG. QTY.
31103	37103	22-18 GA.	3 WAY	Bulk
31104	37104	22-18 GA.	4 WAY	Bulk
31303	37303	16-14 GA.	3 WAY	Bulk
31304	37304	16-14 GA.	4 WAY	Bulk
31403	37403	12-10 GA.	3 WAY	Bulk
31404	37404	12-10 GA.	4 WAY	Bulk



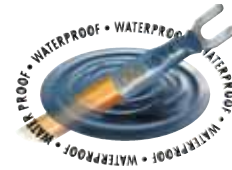
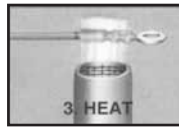
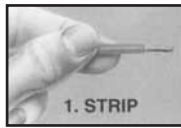
31103



31304



• Easy Installation Steps:



**Rings: Brazed Seam**



POLY CAT. NO.	CLEAR SEAL® CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
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
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



37113



37314



37315



37414



37417



31515

# Crimp 'N Seal® (Cont.)



State of the art  
manufacturing equipment  
and engineering.



## Rings: Brazed Seam Multi-Stud



3111M

POLY CAT. NO.	CLEAR SEAL® CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
3111MS	3711MS	22-18 GA.	2,4,6	Bulk
3111MS-P50	3711MS-P50	22-18 GA.	2,4,6	50
3111M	3711M	22-18 GA.	6,8,10	Bulk
3111M-P50	3711M-P50	22-18 GA.	6,8,10	50
3131MS	3731MS	16-14 GA.	2,4,6	Bulk
3131MS-P50	3731MS-P50	16-14 GA.	2,4,6	50
3131M	3731M	16-14 GA.	6,8,10	Bulk
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

## Spades/Forks: Brazed Seam



31323

POLY CAT. NO.	CLEAR SEAL® CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
31122	37122	22-18 GA.	6	Bulk
31122-P50	37122-P50	22-18 GA.	6	50
31123	37123	22-18 GA.	8	Bulk
31123-P50	37123-P50	22-18 GA.	8	50
31124	37124	22-18 GA.	10	Bulk
31124-P50	37124-P50	22-18 GA.	10	50
31322	37322	16-14 GA.	6	Bulk
31322-P50	37322-P50	16-14 GA.	6	50
31323	37323	16-14 GA.	8	Bulk
31323-P50	37323-P50	16-14 GA.	8	50
31324	37324	16-14 GA.	10	Bulk
31324-P50	37324-P50	16-14 GA.	10	50
31422	37422	12-10 GA.	6	Bulk
31422-P25	37422-P25	12-10 GA.	6	25
31423	37423	12-10 GA.	8	Bulk
31423-P25	37423-P25	12-10 GA.	8	25
31424	37424	12-10 GA.	10	Bulk
31424-P25	37424-P25	12-10 GA.	10	25



## Snap Spade/Locking Forks: Brazed Seam



POLY CAT. NO.	CLEAR SEAL® CAT. NO.	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
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



POLY CAT. NO.	CLEAR SEAL® CAT. NO.	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	37322FL	16-14 GA.	6	Bulk
31322FL-P50	37322FL-P50	16-14 GA.	6	50
31323FL	37323FL	16-14 GA.	8	Bulk
31323FL-P50	37323FL-P50	16-14 GA.	8	50
31324FL	37324FL	16-14 GA.	10	Bulk
31324FL-P50	37324FL-P50	16-14 GA.	10	50
31422FL	37422FL	12-10 GA.	6	Bulk
31422FL-P25	37422FL-P25	12-10 GA.	6	25
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



## Controlled Cycle Crimp Tool

Part No. 94230  
See Page 82



## Hooks: Butted Seam



31154

POLY CAT. NO.	CLEAR SEAL® CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
31152	37152	22-18 GA.	6	Bulk
31152-P50	37152-P50	22-18 GA.	6	50
31153	37153	22-18 GA.	8	Bulk
31153-P50	37153-P50	22-18 GA.	8	50
31154	37154	22-18 GA.	10	Bulk
31154-P50	37154-P50	22-18 GA.	10	50
31352	37352	16-14 GA.	6	Bulk
31352-P50	37352-P50	16-14 GA.	6	50
31353	37353	16-14 GA.	8	Bulk
31353-P50	37353-P50	16-14 GA.	8	50
31354	37354	16-14 GA.	10	Bulk
31354-P50	37354-P50	16-14 GA.	10	50
31452	37452	12-10 GA.	6	Bulk
31452-P25	37452-P25	12-10 GA.	6	25
31453	37453	12-10 GA.	8	Bulk
31453-P25	37453-P25	12-10 GA.	8	25
31454	37454	12-10 GA.	10	Bulk
31454-P25	37454-P25	12-10 GA.	10	25

## Quick Disconnects: Fully Insulated - Double Hump



30187



30197

POLY 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
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

POLY 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
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



30388

## Quick Disconnects

POLY CAT. NO.	CLEAR SEAL® CAT. NO.	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





## Quick Disconnects: Piggy-Back

POLY CAT. NO.	CLEAR SEAL® CAT. NO.	WIRE RANGE	TAB SIZE	PKG. QTY.
31191	37191	22-18 GA.	.250 X .032	Bulk
31191-P50	37191-P50	22-18 GA.	.250 X .032	50
31391	37391	16-14 GA.	.250 X .032	Bulk
31391-P50	37391-P50	16-14 GA.	.250 X .032	50

## Bullets/Receptacles

POLY CAT. NO.	CLEAR SEAL® CAT. NO.	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	-	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
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	-	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
31469	37469	12-10 GA.	.156"	MALE	Bulk
31469-P25	37469-P25	12-10 GA.	.156"	MALE	25



31369



30379



31465

## Pin Terminals

POLY CAT. NO.	CLEAR SEAL® CAT. NO.	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







# 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 Transportation
- Off Road Vehicles
- Construction Equipment
- Plant Maintenance
- Mining Equipment
- Energy Exploration
- Marine

Installs with FTZ Tools:



94940



94230



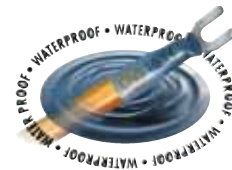
# Crimp 'N Seal® Extreme

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
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
30433	12-10 GA.	Bulk
30433-P25	12-10 GA.	25

## Multi-Stud Rings

CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
301IMS	22-18 GA.	2,4,6	Bulk
301IMS-P50	22-18 GA.	2,4,6	50
301IM	22-18 GA.	6,8,10	Bulk
301IM-P50	22-18 GA.	6,8,10	50
303IMS	16-14 GA.	2,4,6	Bulk
303IMS-P50	16-14 GA.	2,4,6	50
303IM	16-14 GA.	6,8,10	Bulk
303IM-P50	16-14 GA.	6,8,10	50
304IM	12-10 GA.	6,8,10	Bulk
304IM-P25	12-10 GA.	6,8,10	25



## Rings



30114



30314

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
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
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

## Snap Spades/Locking Forks

CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
30142	22-18 GA.	6	Bulk
30142-P50	22-18 GA.	6	50
30143	22-18 GA.	8	Bulk
30143-P50	22-18 GA.	8	50
30144	22-18 GA.	10	Bulk
30144-P50	22-18 GA.	10	50
30342	16-14 GA.	6	Bulk
30342-P50	16-14 GA.	6	50
30343	16-14 GA.	8	Bulk
30343-P50	16-14 GA.	8	50
30344	16-14 GA.	10	Bulk
30344-P50	16-14 GA.	10	50
30442	12-10 GA.	6	Bulk
30442-P25	12-10 GA.	6	25
30443	12-10 GA.	8	Bulk
30443-P25	12-10 GA.	8	25
30444	12-10 GA.	10	Bulk
30444-P25	12-10 GA.	10	25
30445	12-10 GA.	1/4"	Bulk
30445-P25	12-10 GA.	1/4"	25

## Flanged Forks

CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
30122FL	22-18 GA.	6	Bulk
30122FL-P50	22-18 GA.	6	50
30123FL	22-18 GA.	8	Bulk
30123FL-P50	22-18 GA.	8	50
30124FL	22-18 GA.	10	Bulk
30124FL-P50	22-18 GA.	10	50
30322FL	16-14 GA.	6	Bulk
30322FL-P50	16-14 GA.	6	50
30323FL	16-14 GA.	8	Bulk
30323FL-P50	16-14 GA.	8	50
30324FL	16-14 GA.	10	Bulk
30324FL-P50	16-14 GA.	10	50
30422FL	12-10 GA.	6	Bulk
30422FL-P25	12-10 GA.	6	25
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



30124



30444



# Crimp 'N Seal® Extreme (Cont.)



## Quick Disconnects: Fully Insulated - Double Hump



30187



30197

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
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



30388

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
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





## 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
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: Piggy-Backs

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
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
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



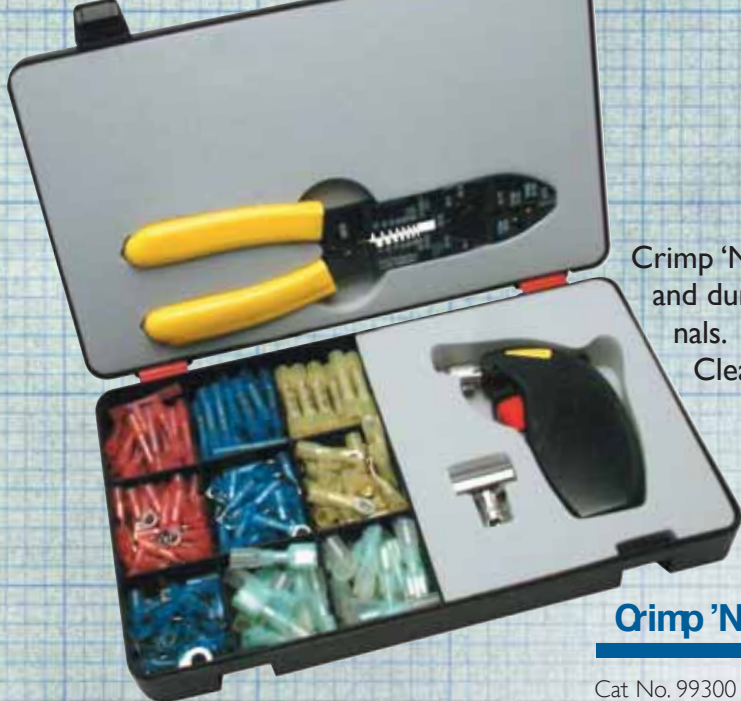
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30379

# 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 Polyolefin 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 Polyolefin 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 Polyolefin Crimp 'N Seal®

Cat No. 99120 Clear Seal®

Cat No. 99125 Extreme 3-Piece Crimp 'N Seal®

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

**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	94130 CNS Ratchet Crimp Tool
25	12-10 3/8" Stud Ring Terminal	1	94900 Micro Jet Butane Heat Tool



### Splice 'N Seal Kit

Cat. No. 99165

Our 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 Torch
- 1 99160 Soft Sided 3 Compartment Kit



### Waterproof Wiring Kit

Cat. No. 99166

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	46130	40130	22-18 GA	Bulk
45130N-P1000	45130-P1000	46130-P1000	40130-P1000	22-18 GA.	1000
45130N-P100	45130-P100	46130-P100	40130-P100	22-18 GA.	100
45330N	45330	46330	40330	16-14 GA.	Bulk
45330N-P1000	45330-P1000	46330-P1000	40330-P1000	16-14 GA.	1000
45330N-P100	45330-P100	46330-P100	40330-P100	16-14 GA.	100
45430N	45430	46430	40430	12-10 GA.	Bulk
45430N-P500	45430-P500	46430-P500	40430-P500	12-10 GA.	500
45430N-P50	45430-P50	46430-P50	40430-P50	12-10 GA.	50
	45530	46530	-	8 GA.	Bulk
	45530-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



45330



45330N

## 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.	100
45433N	-	-	-	12-10 GA.	Bulk
45433N-P50	-	-	-	12-10 GA.	50

## 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-P100	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



45333



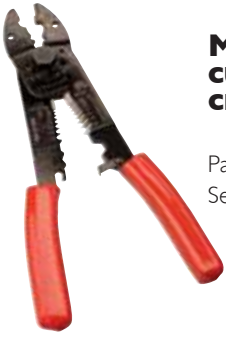
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45633



# Standard Solderless Terminals (Cont.)



**Multi-Purpose tool cuts, strips and crimps.**

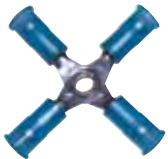
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See Page 82



45203

## 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	45204	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



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

NYLON CAT. NO.	VINYL CAT. NO.	NON-INSULATED CAT. NO.	HIGH TEMP. 900°F 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	45515	46515	40515	8 GA.	1/4"	Bulk
45515N-P50	45515-P50	46515-P50	40515-P50	8 GA.	1/4"	50
45516N	45516	46516	-	8 GA.	5/16"	Bulk
45516N-P50	45516-P50	46516-P50	-	8 GA.	5/16"	50
45517N	45517	46517	-	8 GA.	3/8"	Bulk
45517N-P50	45517-P50	46517-P50	-	8 GA.	3/8"	50
45519N	45519	46519	-	8 GA.	1/2"	Bulk
45519N-P50	45519-P50	46519-P50	-	8 GA.	1/2"	50
45614N	45614	46614	-	6 GA.	10	Bulk
45614N-P25	45614-P25	46614-P25	-	6 GA.	10	25
45615N	45615	46615	-	6 GA.	1/4"	Bulk
45615N-P25	45615-P25	46615-P25	-	6 GA.	1/4"	25
45616N	45616	46616	-	6 GA.	5/16"	Bulk
45616N-P25	45616-P25	46616-P25	-	6 GA.	5/16"	25
45617N	45617	46617	40617	6 GA.	3/8"	Bulk
45617N-P25	45617-P25	46617-P25	40617-P25	6 GA.	3/8"	25
45619N	45619	46619	-	6 GA.	1/2"	Bulk
45619N-P25	45619-P25	46619-P25	-	6 GA.	1/2"	25
45714N	45714	46714	-	4 GA.	10	Bulk
45714N-P25	45714-P25	46714-P25	-	4 GA.	10	25
45715N	45715	46715	-	4 GA.	1/4"	Bulk
45715N-P25	45715-P25	46715-P25	-	4 GA.	1/4"	25
45716N	45716	46716	-	4 GA.	5/16"	Bulk
45716N-P25	45716-P25	46716-P25	-	4 GA.	5/16"	25
45717N	45717	46717	40717	4 GA.	3/8"	Bulk
45717N-P25	45717-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



45114N



45314



45615



# 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	4611MS	22-18 GA.	2,4,6	Bulk
4511MSN-P100	4511MS-P100	4611MS-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	4631MS	16-14 GA.	2,4,6	Bulk
4531MSN-P100	4531MS-P100	4631MS-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
45422FLN	45422FL	46422FL	12-10 GA.	6	Bulk
45422FLN-P50	45422FL-P50	46422FL-P50	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

## Hooks

NYLON CAT. NO.	VINYL CAT. NO.	NON-INSULATED CAT. NO.	WIRE RANGE	STUD SIZE	PKG. QTY.
45152N	45152	46152	22-18 GA.	6	Bulk
45152N-P100	45152-P100	46152-P100	22-18 GA.	6	100
45153N	45153	46153	22-18 GA.	8	Bulk
45153N-P100	45153-P100	46153-P100	22-18 GA.	8	100
45154N	45154	46154	22-18 GA.	10	Bulk
45154N-P100	45154-P100	46154-P100	22-18 GA.	10	100
45352N	45352	46352	16-14 GA.	6	Bulk
45352N-P100	45352-P100	46352-P100	16-14 GA.	6	100
45353N	45353	46353	16-14 GA.	8	Bulk
45353N-P100	45353-P100	46353-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	46453	12-10 GA.	8	Bulk
45453N-P50	45453-P50	46453-P50	12-10 GA.	8	50
45454N	45454	46454	12-10 GA.	10	Bulk
45454N-P50	45454-P50	46454-P50	12-10 GA.	10	50



45354N



# Standard Solderless Terminals (Cont.)



45387N

## Quick Disconnects: Fully Insulated: Double Hump Type

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

## Quick Disconnects: Fully Insulated: Single Hump Type

NYLON CAT. NO.	WIRE RANGE	TAB SIZE	STYLE	PKG. QTY.
45186N	22-18 GA.	.187 X .020	MALE	Bulk
45186N-P100	22-18 GA.	.187 X .020	MALE	100
45188N	22-18 GA.	.250 X .032	MALE	Bulk
45188N-P100	22-18 GA.	.250 X .032	MALE	100
45196N	22-18 GA.	.187 X .020	FEMALE	Bulk
45196N-P100	22-18 GA.	.187 X .020	FEMALE	100
45198N	22-18 GA.	.250 X .032	FEMALE	Bulk
45198N-P100	22-18 GA.	.250 X .032	FEMALE	100
45386N	16-14 GA.	.187 X .020	MALE	Bulk
45386N-P100	16-14 GA.	.187 X .020	MALE	100
45388N	16-14 GA.	.250 X .032	MALE	Bulk
45388N-P100	16-14 GA.	.250 X .032	MALE	100
45396N	16-14 GA.	.187 X .020	FEMALE	Bulk
45396N-P100	16-14 GA.	.187 X .020	FEMALE	100
45398N	16-14 GA.	.250 X .032	FEMALE	Bulk
45398N-P100	16-14 GA.	.250 X .032	FEMALE	100
45488N	12-10 GA.	.250 X .032	MALE	Bulk
45488N-P50	12-10 GA.	.250 X .032	MALE	50
45498N	12-10 GA.	.250 X .032	FEMALE	Bulk
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.	.187 X .020	MALE	Bulk
45184N-P100	45184-P100	46184-P100	22-18 GA.	.187 X .020	MALE	100
45183N	45183	46183	22-18 GA.	.250 X .032	MALE	Bulk
45183N-P100	45183-P100	46183-P100	22-18 GA.	.250 X .032	MALE	100
45194N	45194	46194	22-18 GA.	.187 X .020	FEMALE	Bulk
45194N-P100	45194-P100	46194-P100	22-18 GA.	.187 X .020	FEMALE	100
45193N	45193	46193	22-18 GA.	.250 X .032	FEMALE	Bulk
45193N-P100	45193-P100	46193-P100	22-18 GA.	.250 X .032	FEMALE	100
45384N	45384	46384	16-14 GA.	.187 X .020	MALE	Bulk
45384N-P100	45384-P100	46384-P100	16-14 GA.	.187 X .020	MALE	100
45383N	45383	46383	16-14 GA.	.250 X .032	MALE	Bulk
45383N-P100	45383-P100	46383-P100	16-14 GA.	.250 X .032	MALE	100
45394N	45394	46394	16-14 GA.	.187 X .020	FEMALE	Bulk
45394N-P100	45394-P100	46394-P100	16-14 GA.	.187 X .020	FEMALE	100
45393N	45393	46393	16-14 GA.	.250 X .032	FEMALE	Bulk
45393N-P100	45393-P100	46393-P100	16-14 GA.	.250 X .032	FEMALE	100
45483N	45483	46483	12-10 GA.	.250 X .032	MALE	Bulk
45483N-P50	45483-P50	46483-P50	12-10 GA.	.250 X .032	MALE	50
45493N	45493	46493	12-10 GA.	.250 X .032	FEMALE	Bulk
45493N-P50	45493-P50	46493-P50	12-10 GA.	.250 X .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.	.250 X .032	FEMALE FLAG	Bulk
45177N-P100	-	22-18 GA.	.250 X .032	FEMALE FLAG	100
45377N	-	16-14 GA.	.250 X .032	FEMALE FLAG	Bulk
45377N-P100	-	16-14 GA.	.250 X .032	FEMALE FLAG	100
45477N	-	12-10 GA.	.250 X .032	FEMALE FLAG	Bulk
45477N-P50	-	12-10 GA.	.250 X .032	FEMALE FLAG	50
45191N	45191	22-18 GA.	.250 X .032	PIGGY BACK	Bulk
45191N-P100	45191-P100	22-18 GA.	.250 X .032	PIGGY BACK	100
45391N	45391	16-14 GA.	.250 X .032	PIGGY BACK	Bulk
45391N-P100	45391-P100	16-14 GA.	.250 X .032	PIGGY BACK	100



45377N



45391

# Standard Solderless Terminals (Cont.)

## Bullets/Receptacles



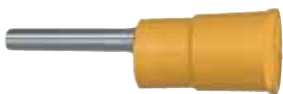
45368N



45378N

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	45179	-	22-18 GA.	.156"	FEMALE	Bulk
45179N-P100	45179-P100	-	22-18 GA.	.156"	FEMALE	100
45178N	45178	-	22-18 GA.	.180"	FEMALE	Bulk
45178N-P100	45178-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	45379	-	16-14 GA.	.156"	FEMALE	Bulk
45379N-P100	45379-P100	-	16-14 GA.	.156"	FEMALE	100
45378N	45378	-	16-14 GA.	.180"	FEMALE	Bulk
45378N-P100	45378-P100	-	16-14 GA.	.180"	FEMALE	100

## Pin Terminals



45465

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



## 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
45904	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
45907	18-14 GA.	LIGHT BLUE	Tap and parallel	Bulk
45908	18-14 GA.	DARK BLUE	Moisture resistant applications	Bulk
45910	18-14 GA.	BLACK	Disconnect	Bulk
45911	18-14 GA. TAP; 12-10 GA. RUN	BROWN	Flame retardant tap	Bulk
45912	12-10 GA.	YELLOW	Tap and parallel	Bulk
45913	22-18 GA. TAP; 18-14 GA. RUN	RED	Flame retardant tap	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



45904



45908



45912



45611



45610



45612

# 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.
41132	22-10 GA.	YELLOW	Bulk
41134	18-10 GA.	RED	Bulk
41136	14-8 GA.	GRAY	Bulk
41138	12-6 GA.	BLUE	Bulk

## Specialty Connectors: Winged Wire Connectors



41146

CAT. NO.	WIRE RANGE	COLOR	PKG. QTY.
41144	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



41152

41154

41156





# HEAT SHRINK TUBING

33-48

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	High Ratio Dual Wall
<b>Material</b>	Polyolefin	Polyolefin	Polyolefin	Polyolefin
<b>Shrink Ratio</b>	2:1	2:1	3:1	4:1
<b>Description</b>	A flexible, non-adhesive lined general purpose tubing	A flexible non-adhesive lined general purpose tubing with a lower shrink temperature. Ideal for sensitive electronic applications	A flexible, adhesive lined tubing that provides a water-tight gas-tight seal for connectors and splices	A semi-rigid adhesive lined tubing that accommodates a wide variety of connector shapes and configurations
<b>Colors Available</b>	Black, Red, Clear, Blue, Green, White, Yellow	Black	Black, Red, Clear, Blue, Green, White, Yellow	Black & Clear
<b>Diameters Available</b>	3/64" – 4"	3/64" – 1"	1/8" – 1 1/2"	.225", .293", .427", .700"
<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	48", 12", 6" & Special Lengths
<b>MIL-SPEC</b>	MIL-DTL-23053/5C	AMS-DTL-23053/5 Class 1 & 3	AMS-DTL-23053/4 Class 3	MIL-DTL-23053/4 Class 3
<b>UL Listed</b>	UL224-VW-1 (Except Clear)	UL224-VW-1	-	UL File-E85381

**Note: Additional Specifications on pages 39 & 40**



Semi-Rigid Dual Wall	Mil-Spec Heavy Wall	High Ratio Heavy Wall	Kynar	
Polyolefin	Polyolefin	Polyolefin	Polyvinylidene fluoride	
2.5:1	3:1	6:1	2:1	
A semi-rigid, adhesive lined tubing that provides a water-tight gas-tight seal for connectors and splices	A rigid, adhesive lined tubing with a 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 superior chemical solvent resistance	
Black & Red Color-Coded By Size	Black & Red	Black	Clear	
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", 1.5" & Special Lengths	48", 12", & 6" & Special Lengths	48", 12", & 6" & Special Lengths	
AMS-DTL-23053/4 Class I	AMS-DTL-23053/15 Class I	-	AMS-DTL-23053/8 Class I	
UL File E157227	UL 486 B&D	-	UL File E-39100	



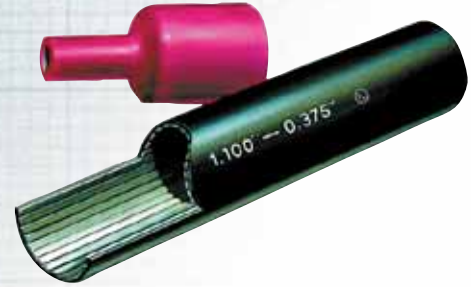
# HEATSHRINK TUBING SPECIFICATIONS

<b>SPECIFICATION</b>	<b>HEAVY WALL</b>	<b>6:1 HIGH RATIO</b>
UL	UL 486 B&D	-
MIL SPEC.	AMS-DTL-23053/15	-
CSA	MEETS C22.2 NO.198.2	-
Continuous Operating Temperature	-55° C to 110° C	-55° C to 110° C
Minimum Shrink Temperature	120° C	120° C
Tensile Strength	2100 psi	2100 psi
Heat Shock (No Cracking or Flowing)	4 Hours @ 225° C	4 Hours @ 225° C
Elongation	600%	600%
Low Temp. Flexibility (No Cracking)	4 Hours @ -55° C	4 Hours @ -55° C
Longitudinal Change	1%,-10%	1%,-10%
Flame Retarded	Yes	No
Dielectric Strength	500 V/Mil	500 V/Mil
Volume Resistivity	10E16 ohm-cm	10E16 ohm-cm
Corrosion Resistance	Non-Corrosive	Non-Corrosive
Fungus Resistance	No Growth	No Growth
Fluid Resistance	Excellent	Excellent
<b>SPECIFICATION</b>	<b>REPAIR SLEEVES</b>	<b>END CAPS</b>
UL	-	-
MIL-SPEC.	-	-
CSA	-	-
Continuous Operating Temperature	-55° C to 110° C	-55° C to 110° C
Minimum Shrink Temperature	120° C	120° C
Tensile Strength	2700 psi	2100 psi
Heat Shock (No Cracking or Flowing)	4 Hours @ 225° C	4 Hours @ 225° C
Elongation	600%	600%
Low Temp. Flexibility (No Cracking)	-	4 Hours @ -55° C
Longitudinal Change	-	-
Flame Retardant	No	Yes
Dielectric Strength	700 V/Mil	500 V/Mil
Volume Resistivity	1.9E18 ohm-cm	10E16 ohm-cm
Corrosion Resistance	Non-Corrosive	Non-Corrosive
Fungus Resistance	No Growth	No Growth
Fluid Resistance	Excellent	Excellent

# HEATSHRINK TUBING SPECIFICATIONS (cont.)

<b>SPECIFICATION</b>	<b>DUAL WALL</b>	<b>HIGH RATIO DUAL WALL</b>	<b>SEMI-RIGID DUAL WALL</b>
UL MIL SPEC. CSA	- MIL-DTL-23053/4, Class 3 -	UL FILE-E85381 - -	UL FILE-E157227 AMS-DTL-23053/4, Class I -
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%, -15% Jacket Only (Except Clear)	4 Hours @ -40° C 0%, -10% Yes	4 Hours @ -55° C - No
Dielectric Strength Volume Resistivity	600 V/Mil 10E16 ohm-cm	350 V/Mil 10E12 ohm-cm	900 V/Mil 10E15 ohm-cm
Corrosion Resistance Fungus Resistance Fluid Resistance	Non-Corrosive No Growth Excellent	Non-Corrosive Non-Nutrient Excellent	Non-Corrosive Non-Nutrient Excellent
<b>SPECIFICATION</b>	<b>KYNAR</b>	<b>THIN WALL</b>	<b>LOW TEMP THIN WALL</b>
UL MIL SPEC. CSA	UL224-VW-1 AMS-DTL-23053/18 Class I; AMS-DTL-23053/8 CSA FILE LR38227 OFT	UL224-VW-1 AMS-DTL-23053/5C, Class I & 3 -	UL224-VW-1 AMS-DTL-23053/5C, Class I & 3 -
Continuous Operating Temperature Minimum Shrink Temperature	-55° C to 175° C 175° C	-55° C to 135° C 120° 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 200%	1500 psi 4 Hours @ 250° C 200%
Low Temp. Flexibility (No Cracking) Longitudinal Change Flame Retardant	4 Hours @ -55° C 0%, -10% YES (UL224-VW-1)	4 Hours @ -55° C 5%, -5% YES (UL224-VW-1)	4 Hours @ -55° C 1%, -15% YES (UL224-VW-1)
Dielectric Strength Volume Resistivity	900 V/Mil 10E14 ohm-cm	600 V/Mil 10E14 ohm-cm	600 V/Mil 10E14 ohm-cm
Corrosion Resistance Fungus Resistance Fluid Resistance	Non-Corrosive No Growth Excellent	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"	I.D. IN INCHES		COLOR	WIRE RANGE	MAX. WALL THICKNESS
				EXP.	REC.			
21948	21912	21906		.300	.100	BLACK	18-14 GA.	.060"
21048	21012	21006		.300	.100	RED	18-14 GA.	.060"
21148	21112	21106		.400	.150	BLACK	14-6 GA.	.070"
21848	21812	21806		.400	.150	RED	14-6 GA.	.070"
20548	20512	20506	20501	.510	.160	BLACK	12-4 GA.	.080"
20548R	20512R	20506R	20501R	.510	.160	RED	12-4 GA.	.080"
21248	21212	21206	21201	.750	.220	BLACK	8-1 GA.	.090"
21348	21312	21306	21301	.750	.220	RED	8-1 GA.	.090"
21448	21412	21406	21401	1.10	.375	BLACK	2-4/0	.120"
21548	21512	21506	21501	1.10	.375	RED	2-4/0	.120"
21648	21612	21606		1.50	.500	BLACK	4/0-400MCM	.160"
20648	20612	20606		1.50	.500	RED	4/0-400MCM	.160"
21748	21712	21706		2.00	.750	BLACK	500-1000MCM	.160"
20748	20712	20706		2.00	.750	RED	500-1000MCM	.160"
20148	20112			2.70	.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"

Please contact factory for additional cut lengths in any size.

## 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	I.D. IN INCHES	
			EXP.	REC.
10	21106	BLACK	.400	.150
10	21806	RED	.400	.150
4	21206	BLACK	.750	.220
4	21306	RED	.750	.220
4	21406	BLACK	1.10	.375
4	21506	RED	1.10	.375





## High-Ratio Heavy Wall Heat Shrink Tubing with Sealant

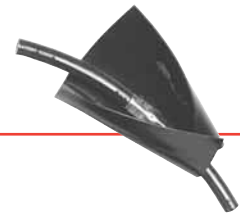


- Extremely versatile 6:1 shrink ratio polyolefin tubing can accommodate a wide variety of connector shapes and configurations
- Rigid heavy wall and thermoplastic adhesive lining provides a gas-tight, water-tight seal for the toughest applications

48"	12"	6"	I.D. IN INCHES		COLOR	WIRE RANGE	MAX. WALL THICKNESS
			EXP.	REC.			
27100-48	27100-12	27100-6	.750	.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	.673	BLACK	500-1300MCM	.170"

Please contact factory for additional cut lengths in any size.

## Heavy Wall Heat Shrink Tubing – Railless 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"	I.D. IN INCHES		COLOR	WIRE RANGE	MAX. WALL THICKNESS
		EXP.	REC.			
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	Multiple Conductor	.080"
27206-36	27206-12	6.75	2.50	BLACK	Multiple Conductor	.080"

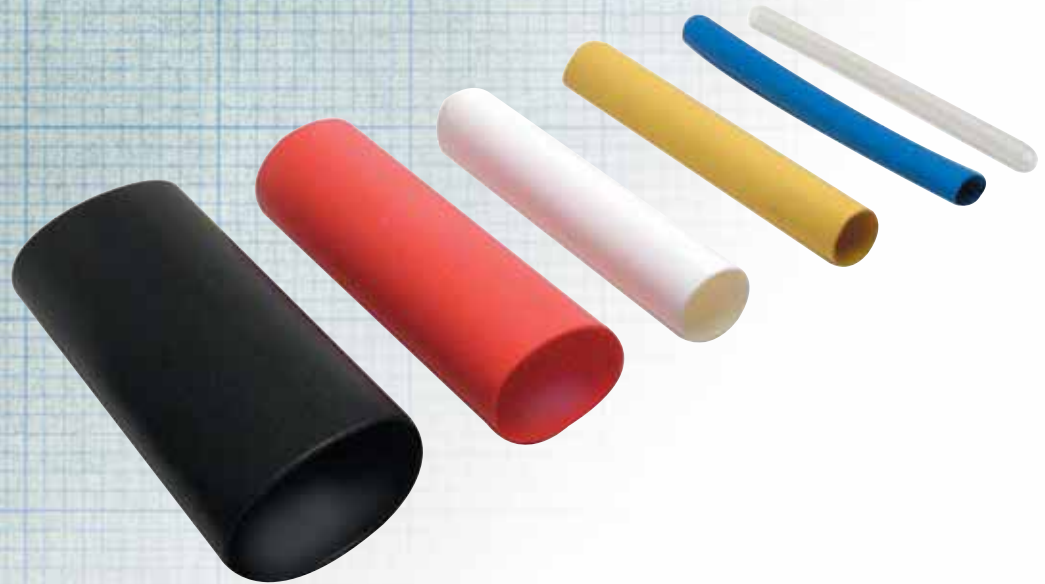
## Heavy Wall Heat Shrink Tubing – End Caps with Sealant



- 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	I.D. IN INCHES		COLOR	WIRE RANGE	MAX. WALL THICKNESS
		EXP.	REC.			
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: Black

- 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"	I.D. IN INCHES		WIRE RANGE	MAX. WALL THICKNESS
			EXP.	REC.		
29004-48	29004-12	29004-6	1/8" (.125)	.040	30-18 GA.	.040"
29005-48	29005-12	29005-6	3/16" (.187)	.060	20-14 GA.	.040"
29006-48	29006-12	29006-6	1/4" (.250)	.080	18-10 GA.	.040"
29008-48	29008-12	29008-6	3/8" (.375)	.125	12-6 GA.	.060"
29009-48	29009-12	29009-6	1/2" (.500)	.160	8-4 GA.	.070"
29010-48	29010-12	29010-6	3/4" (.750)	.250	4-2/0	.070"
29011-48	29011-12	29011-6	1" (1.00)	.320	2-4/0	.100"
29012-48	29012-12	29012-6	1 1/4" (1.25)	.416	1-250MCM	.100"
29013-48	29013-12	29013-6	1 1/2" (1.50)	.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

- Clear polyolefin tubing allows for visual inspection of underlying material

CLEAR

48"	12"	6"	I.D. IN INCHES		WIRE RANGE	MAX. WALL THICKNESS
			EXP.	REC.		
29004C-48	29004C-12	29004C-6	1/8" (.125)	.040	30-18 GA.	.040"
29005C-48	29005C-12	29005C-6	3/16" (.187)	.060	20-14 GA.	.040"
29006C-48	29006C-12	29006C-6	1/4" (.250)	.080	18-10 GA.	.040"
29008C-48	29008C-12	29008C-6	3/8" (.375)	.125	12-6 GA.	.060"
29009C-48	29009C-12	29009C-6	1/2" (.500)	.160	8-4 GA.	.070"
29010C-48	29010C-12	29010C-6	3/4" (.750)	.250	4-2/0	.070"
29011C-48	29011C-12	29011C-6	1" (1.00)	.320	2-4/0	.100"
29012C-48	29012C-12	29012C-6	1 1/4" (1.25)	.416	1-250MCM	.100"
29013C-48	29013C-12	29013C-6	1 1/2" (1.50)	.510	2/0-350MCM	.100"

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



## Dual Wall Heat Shrink Tubing with Sealant: Colors

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

### COLORS

48"	12"	6"	I.D. IN INCHES		COLOR	WIRE RANGE	MAX. WALL THICKNESS
			EXP.	REC.			
29004(cc)-48	29004(cc)-12	29004(cc)-6	1/8" (.125)	.040	Specify	30-18 GA.	.040"
29005(cc)-48	29005(cc)-12	29005(cc)-6	3/16" (.187)	.060	Specify	20-14 GA.	.040"
29006(cc)-48	29006(cc)-12	29006(cc)-6	1/4" (.250)	.080	Specify	18-10 GA.	.040"
29008(cc)-48	29008(cc)-12	29008(cc)-6	3/8" (.375)	.125	Specify	12-6 GA.	.060"
29009(cc)-48	29009(cc)-12	29009(cc)-6	1/2" (.500)	.160	Specify	8-4 GA.	.070"
29010(cc)-48	29010(cc)-12	29010(cc)-6	3/4" (.750)	.250	Specify	4-2/0	.070"
29011(cc)-48	29011(cc)-12	29011(cc)-6	1" (1.00)	.320	Specify	2-4/0	.100"
29012(cc)-48	29012(cc)-12	29012(cc)-6	1 1/4" (1.25)	.416	Specify	1-250MCM	.100"
29013(cc)-48	29013(cc)-12	29013(cc)-6	1 1/2" (1.50)	.510	Specify	2/0-350MCM	.100"

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



(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: Black

- 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"	I.D. IN INCHES		WIRE RANGE	MAX. WALL THICKNESS
			EXP.	REC.		
27601-48	27601-12	27601-6	.225	.050	28-12 GA.	.047"
27602-48	27602-12	27602-6	.293	.065	20-8 GA.	.060"
27603-48	27603-12	27603-6	.427	.095	14-4 GA.	.075"
27604-48	27604-12	27604-6	.700	.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: Clear

- 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

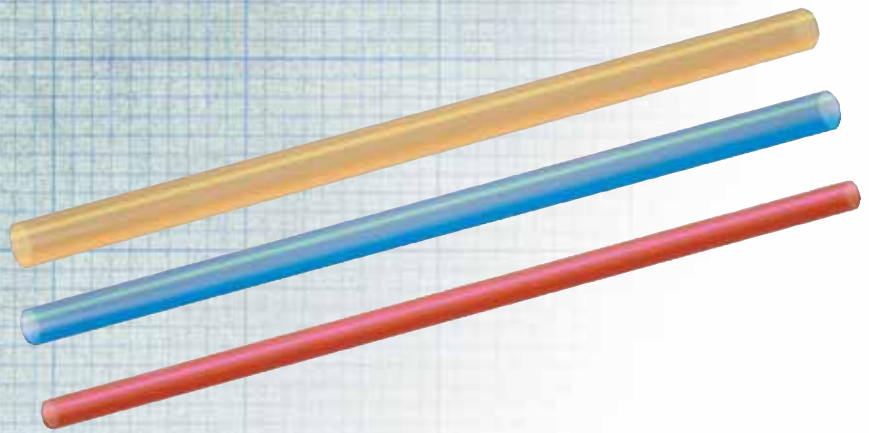
### CLEAR

48"	12"	6"	I.D. IN INCHES		WIRE RANGE	MAX. WALL THICKNESS
			EXP.	REC.		
27601C-48	27601C-12	27601C-6	.225	.050	28-12 GA.	.047"
27602C-48	27602C-12	27602C-6	.293	.065	20-8 GA.	.060"
27603C-48	27603C-12	27603C-6	.427	.095	14-4 GA.	.075"
27604C-48	27604C-12	27604C-6	.700	.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

12"	6"	1 1/2"	I.D. IN INCHES		COLOR	WIRE RANGE	MAX. WALL THICKNESS
			EXP.	REC.			
24112	24106	24115	.187" (3/16)	.075	RED	22-18 GA.	.047"
24212	24206	24215	.250" (1/4)	.100	BLUE	16-14 GA.	.047"
24312	24306	24315	.312" (5/16)	.125	YELLOW	12-10 GA.	.050"

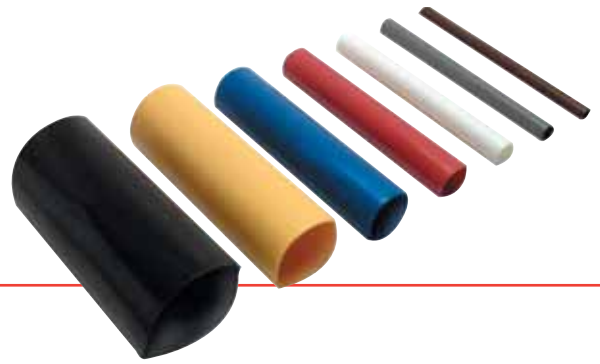
## Semi-Rigid Dual Wall Heat Shrink Tubing with Meltable Inner Wall: Black

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

### BLACK

48"	12"	6"	I.D. IN INCHES		WIRE RANGE	MAX. WALL THICKNESS
			EXP.	REC.		
27804-48	27804-12	27804-6	1/8" (.125)	.030	26-18 GA.	.036"
27805-48	27805-12	27805-6	3/16" (.187)	.060	22-16 GA.	.043"
27806-48	27806-12	27806-6	1/4" (.250)	.080	16-12 GA.	.047"
27808-48	27808-12	27808-6	3/8" (.375)	.130	12-8 GA.	.050"
27809-48	27809-12	27809-6	1/2" (.500)	.195	8-4 GA.	.055"
27810-48	27810-12	27810-6	3/4" (.750)	.313	4-1/0	.065"
27811-48	27811-12	27811-6	1" (1.00)	.400	2-4/0	.075"

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



## Semi-Rigid Dual Wall Heat Shrink Tubing with Meltable Inner Wall: 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" (.125)	.030	BROWN	26-18 GA.	.036"
27805GY-48	27805GY-12	27805GY-6	3/16" (.187)	.060	GRAY	22-16 GA.	.043"
27806W-48	27806W-12	27806W-6	1/4" (.250)	.080	WHITE	16-12 GA.	.047"
27808R-48	27808R-12	27808R-6	3/8" (.375)	.130	RED	12-8 GA.	.050"
27809BL-48	27809BL-12	27809BL-6	1/2" (.500)	.195	BLUE	8-4 GA.	.055"
27810Y-48	27810Y-12	27810Y-6	3/4" (.750)	.313	YELLOW	4-1/0	.065"
27811-48	27811-12	27811-6	1" (1.00)	.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	I.D. IN INCHES	
			EXP.	REC.
25	29006-6	BLACK	.250	.080
25	29006R-6	RED	.250	.080
15	29008-6	BLACK	.375	.125
15	29008R-6	RED	.375	.125
10	29009-6	BLACK	.500	.160
10	29009R-6	RED	.500	.160
5	29010-6	BLACK	.750	.320
5	29010R-6	RED	.750	.320



## Kynar Heat Shrink Tubing: Transparent

- The ideal tubing for applications demanding superior chemical solvent resistance
- The transparent tubing allows easy view of connection with a 2:1 shrink ratio
- Excellent cut-through and abrasion resistance
- Highly flame retardant

48"	12"	6"	I.D. IN INCHES		WIRE RANGE	MAX. WALL THICKNESS
			EXP.	REC.		
26404-48	26404-12	26404-6	1/8" (.125)	.062	24-20 GA.	.025"
26405-48	26405-12	26405-6	3/16" (.187)	.093	22-18 GA.	.025"
26406-48	26406-12	26406-6	1/4" (.250)	.125	16-14 GA.	.030"
26408-48	26408-12	26408-6	3/8" (.375)	.187	12-10 GA.	.030"
26409-48	26409-12	26409-6	1/2" (.500)	.250	8-6 GA.	.030"
26410-48	26410-12	26410-6	3/4" (.750)	.375	6-1/0	.045"
26411-48	26411-12	26411-6	1" (1.00)	.500	1-3/0	.050"

# 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

### BLACK

BULK SPOOL	SMALL SPOOL	48"	12"	6"	I.D. IN INCHES		MAX. WALL THICKNESS	
					EXP.	REC.		
26001-BRL	26001-600 (50')	26001-48	26001-12	26001-6	3/64"	(.046)	.023	.016"
26002-BRL	26002-600 (50')	26002-48	26002-12	26002-6	1/16"	(.063)	.031	.017"
26003-BRL	26003-600 (50')	26003-48	26003-12	26003-6	3/32"	(.093)	.046	.020"
26004-BRL	26004-600 (50')	26004-48	26004-12	26004-6	1/8"	(.125)	.062	.020"
26005-BRL	26005-600 (50')	26005-48	26005-12	26005-6	3/16"	(.187)	.093	.020"
26006-BRL	26006-600 (50')	26006-48	26006-12	26006-6	1/4"	(.250)	.125	.025"
26007-BRL	26007-600 (50')	26007-48	26007-12	26007-6	5/16"	(.312)	.156	.025"
26008-BRL	26008-600 (50')	26008-48	26008-12	26008-6	3/8"	(.375)	.187	.025"
26009-BRL	26009-600 (50')	26009-48	26009-12	26009-6	1/2"	(.500)	.250	.025"
26010-BRL	26010-300 (25')	26010-48	26010-12	26010-6	3/4"	(.750)	.375	.030"
26011-BRL	26011-300 (25')	26011-48	26011-12	26011-6	1"	(1.000)	.500	.035"
26013-BRL	26013-300 (25')	26013-48	26013-12	26013-6	1 1/2"	(1.500)	.750	.040"
26014-BRL	26014-300 (25')	26014-48	26014-12	26014-6	2"	(2.000)	1.00	.045"
26015-BRL		26015-48	26015-12	26015-6	3"	(3.000)	1.50	.050"
26016-BRL		26016-48	26016-12	26016-6	4"	(4.000)	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

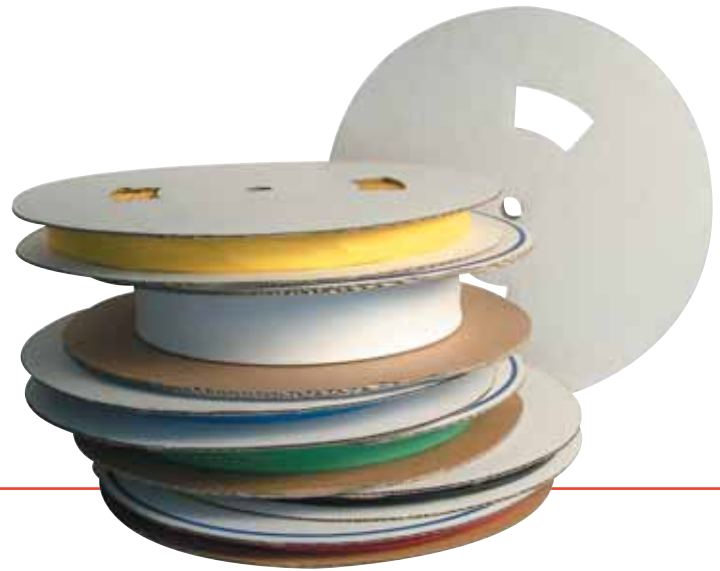
- Clear polyolefin tubing allows for visual inspection of underlying material

### CLEAR

BULK SPOOL	SMALL SPOOL	48"	12"	6"	I.D. IN INCHES		MAX. WALL THICKNESS	
					EXP.	REC.		
26001C-BRL	26001C-600 (50')	26001C-48	26001C-12	26001C-6	3/64"	(.046)	.023	.016"
26002C-BRL	26002C-600 (50')	26002C-48	26002C-12	26002C-6	1/16"	(.063)	.031	.017"
26003C-BRL	26003C-600 (50')	26003C-48	26003C-12	26003C-6	3/32"	(.093)	.046	.020"
26004C-BRL	26004C-600 (50')	26004C-48	26004C-12	26004C-6	1/8"	(.125)	.062	.020"
26005C-BRL	26005C-600 (50')	26005C-48	26005C-12	26005C-6	3/16"	(.187)	.093	.020"
26006C-BRL	26006C-600 (50')	26006C-48	26006C-12	26006C-6	1/4"	(.250)	.125	.025"
26007C-BRL	26007C-600 (50')	26007C-48	26007C-12	26007C-6	5/16"	(.312)	.156	.025"
26008C-BRL	26008C-600 (50')	26008C-48	26008C-12	26008C-6	3/8"	(.375)	.187	.025"
26009C-BRL	26009C-600 (50')	26009C-48	26009C-12	26009C-6	1/2"	(.500)	.250	.025"
26010C-BRL	26010C-300 (25')	26010C-48	26010C-12	26010C-6	3/4"	(.750)	.375	.030"
26011C-BRL	26011C-300 (25')	26011C-48	26011C-12	26011C-6	1"	(1.000)	.500	.035"
26013C-BRL	26013C-300 (25')	26013C-48	26013C-12	26013C-6	1 1/2"	(1.500)	.750	.040"
26014C-BRL	26014C-300 (25')	26014C-48	26014C-12	26014C-6	2"	(2.000)	1.00	.045"
26015C-BRL		26015C-48	26015C-12	26015C-6	3"	(3.000)	1.50	.050"
26016C-BRL		26016C-48	26016C-12	26016C-6	4"	(4.000)	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: Colors

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

### COLORS

BULK SPOOL	SMALL SPOOL	48"	12"	6"	I.D. IN INCHES		MAX. WALL THICKNESS	
					EXP.	REC.		
26001(cc)-BRL	26001(cc)-600 (50')	26001(cc)-48	26001(cc)-12	26001(cc)-6	3/64"	(.046)	.023	.016"
26002(cc)-BRL	26002(cc)-600 (50')	26002(cc)-48	26002(cc)-12	26002(cc)-6	1/16"	(.063)	.031	.017"
26003(cc)-BRL	26003(cc)-600 (50')	26003(cc)-48	26003(cc)-12	26003(cc)-6	3/32"	(.093)	.046	.020"
26004(cc)-BRL	26004(cc)-600 (50')	26004(cc)-48	26004(cc)-12	26004(cc)-6	1/8"	(.125)	.062	.020"
26005(cc)-BRL	26005(cc)-600 (50')	26005(cc)-48	26005(cc)-12	26005(cc)-6	3/16"	(.187)	.093	.020"
26006(cc)-BRL	26006(cc)-600 (50')	26006(cc)-48	26006(cc)-12	26006(cc)-6	1/4"	(.250)	.125	.025"
26007(cc)-BRL	26007(cc)-600 (50')	26007(cc)-48	26007(cc)-12	26007(cc)-6	5/16"	(.312)	.156	.025"
26008(cc)-BRL	26008(cc)-600 (50')	26008(cc)-48	26008(cc)-12	26008(cc)-6	3/8"	(.375)	.187	.025"
26009(cc)-BRL	26009(cc)-600 (50')	26009(cc)-48	26009(cc)-12	26009(cc)-6	1/2"	(.500)	.250	.025"
26010(cc)-BRL	26010(cc)-300 (25')	26010(cc)-48	26010(cc)-12	26010(cc)-6	3/4"	(.750)	.375	.030"
26011(cc)-BRL	26011(cc)-300 (25')	26011(cc)-48	26011(cc)-12	26011(cc)-6	1"	(1.000)	.500	.035"
26013(cc)-BRL	26013(cc)-300 (25')	26013(cc)-48	26013(cc)-12	26013(cc)-6	1 1/2"	(1.500)	.750	.040"
26014(cc)-BRL	26014(cc)-300 (25')	26014(cc)-48	26014(cc)-12	26014(cc)-6	2"	(2.000)	1.00	.045"
26015(cc)-BRL		26015(cc)-48	26015(cc)-12	26015(cc)-6	3"	(3.000)	1.50	.050"
26016(cc)-BRL		26016(cc)-48	26016(cc)-12	26016(cc)-6	4"	(4.000)	2.00	.055"

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

(example: For Blue 1/4" Exp. I.D. 6" Length; catalog number is 26006BL-6)

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



## Low Shrink Temperature Thin Wall Heat Shrink Tubing: Black

- Ideal for use with sensitive electronic connections
- Polyolefin Material

### BLACK

BULK SPOOL	SMALL SPOOL	48"	12"	6"	I.D. IN INCHES		MAX. WALL THICKNESS	
					EXP.	REC.		
26301-BRL	26301-600 (50')	26301-48	26301-12	26301-6	3/64"	(.046)	.023	.016"
26302-BRL	26302-600 (50')	26302-48	26302-12	26302-6	1/16"	(.063)	.031	.017"
26303-BRL	26303-600 (50')	26303-48	26303-12	26303-6	3/32"	(.093)	.046	.020"
26304-BRL	26304-600 (50')	26304-48	26304-12	26304-6	1/8"	(.125)	.062	.020"
26305-BRL	26305-600 (50')	26305-48	26305-12	26305-6	3/16"	(.187)	.093	.020"
26306-BRL	26306-600 (50')	26306-48	26306-12	26306-6	1/4"	(.250)	.125	.025"
26307-BRL	26307-600 (50')	26307-48	26307-12	26307-6	5/16"	(.312)	.156	.025"
26308-BRL	26308-600 (50')	26308-48	26308-12	26308-6	3/8"	(.375)	.187	.025"
26309-BRL	26309-600 (50')	26309-48	26309-12	26309-6	1/2"	(.500)	.250	.025"
26310-BRL	26310-300 (25')	26310-48	26310-12	26310-6	3/4"	(.750)	.375	.030"
26311-BRL	26311-300 (25')	26311-48	26311-12	26311-6	1"	(1.000)	.500	.035"

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



## 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.	I.D. IN INCHES		MAX. WALL THICKNESS
	EXP.	REC.	
28101	3/64" (.046)	.023	.016"
28102	1/16" (.063)	.031	.017"
28103	3/32" (.093)	.046	.020"
28104	1/8" (.125)	.062	.020"
28105	3/16" (.187)	.093	.020"
28106	1/4" (.250)	.125	.025"
28107	5/16" (.312)	.156	.025"
28108	3/8" (.375)	.187	.025"
28109	1/2" (.500)	.250	.025"
28110	3/4" (.750)	.375	.030"
28111	1" (1.000)	.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	I.D. IN INCHES		MAX. WALL THICKNESS
		EXP.	REC.	
28115	RED	3/16" (.187)	.093	.020"
28116	BLUE	1/4" (.250)	.125	.025"
28117	YELLOW	5/16" (.312)	.156	.025"

## Thin Wall Heat Shrink Tubing Kit

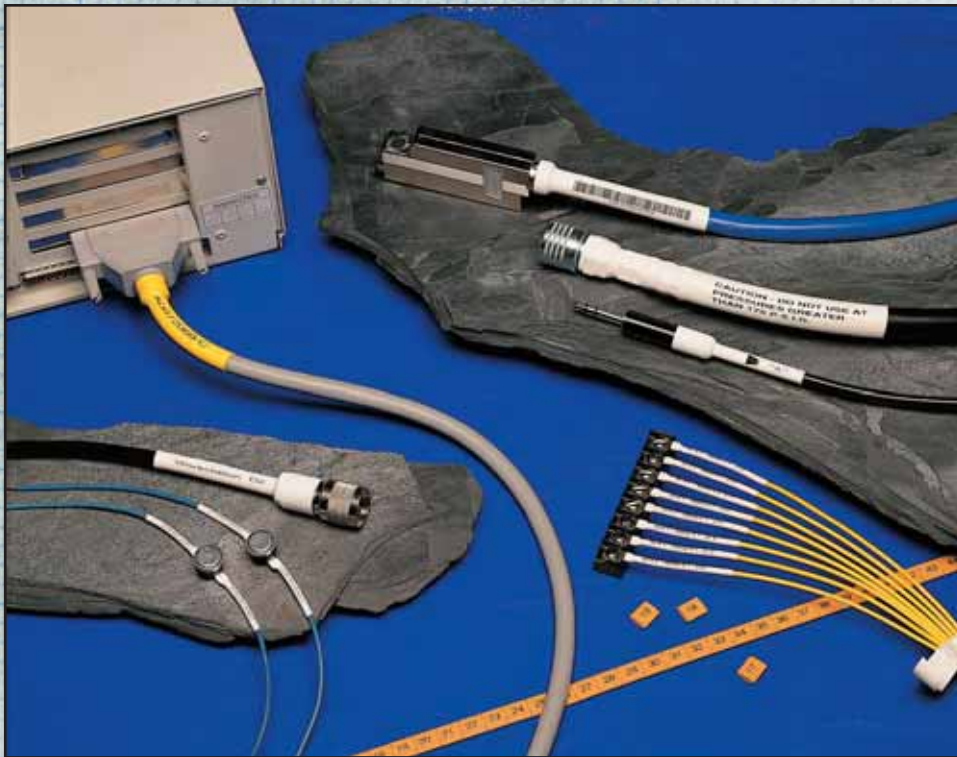
- Assortment of our most popular thin wall sizes and colors
- Handy plastic case keeps your tubing organized and stores easily



CATALOG NO: 28005

KIT CONSISTS OF THE FOLLOWING 6" LENGTHS QUANTITY	ITEM	COLOR	I.D. IN INCHES		MAX. WALL THICKNESS
			EXP.	REC.	
30	26005-6	BLACK	3/16" (.187)	.093	.020"
28	26006W-6	WHITE	1/4" (.250)	.125	.025"
20	26008R-6	RED	3/8" (.375)	.125	.025"
14	26009-6	BLACK	1/2" (.500)	.250	.025"
6	26010W-6	WHITE	3/4" (.750)	.375	.030"
4	26011R-6	RED	1" (1.00)	.500	.035"

# FTZ Industries-Value: Printed Heat Shrink Tubing



## Custom Printing and Cutting

FTZ is capable of printing on a wide range of heat-shrinkable tubing types including general purpose polyolefins, dual wall tubings, high temperature PVDF and fluoroelastomers. FTZ tubing is made to the highest quality standards in the industry, and in addition to providing strain relief and insulation, also provides an excellent surface on which to mark.

### Features/Benefits:

- Create the exact length of marker required without waste, resulting in tremendous inventory savings
- Diameters from 3/64 of an inch to 2 inches are available with shrink ratios of 2:1 and 3:1
- Minimal longitudinal change after shrinking, so marks will not become distorted when installed
- Tubing comes in multiple colors, providing countless possibilities for customizing and color-coding products
- Easily create text, barcodes, sequential numbers, graphics and logos with superior resolution
- Markers can be created up to 18 inches in length in 0.1 inch increments
- The system produces a dry, permanent mark that exceeds the tough mark permanence requirements of SAE-AS81531 for both abrasion and solvent resistance
- No permatizing or other special processes are required
- Tubing meets the most important military and commercial specifications (SAE-DTL-23053, MIL-R46846, UL VW-1 CSA, etc.)

Please call FTZ or your local representative for part number definitions and associated pricing.





# BATTERY TERMINALS AND ACCESSORIES

49-64

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

- **CORRECT**connect™ Battery Terminals
- Post Top Battery Terminals
- Stud Top Battery Terminals
- Heavy Duty Lugs & Splices
- Light Duty Lugs & Splices
- Yellow Brass Terminals
- Solder Accessories
- Cast Lead Terminals
- Safe-Mate Industrial Battery Connectors
- Battery Accessories







# CORRECT<sup>Connect</sup>™

## Bi-Metal Battery Terminals

The CORRECTconnect battery terminal is the latest innovation from FTZ Industries. The patent pending design utilizes new C<sup>2</sup> technology that combines a plated, pure copper, tubular barrel and a cast lead clamp in one terminal.

The bi-metal design provides a highly conductive, corrosion resistant connection that out-performs standard die-cast battery terminals.



Advanced C<sup>2</sup> plated barrel provides superior conductivity & corrosion resistance.

Pure tubular copper barrel permits easier crimping and provides a copper-to-copper connection with the cable.

Deep chamfered barrel accepts the most flexible cable.

Clearest color-coding available for correct identification and die setting.

Solid cast lead clamp provides a corrosion resistant lead-to-lead terminal to post connection.

Longer barrel enables for double crimping ensuring a correct connection everytime.

**Professional Cutters**  
(#94014 page 71)



**Professional Crimp Tools**  
(#94284 page 66)



**Professional Heat Tools**  
(#94905 page 72)



FTZ has the professional tools you need to make a correct connection.





# CORRECT<sup>Connect™</sup> Battery Terminals

- Patent pending bi-metal design (Copper to Copper), (Lead to Lead)
- Exceeds SAE conductivity standard, J-1811
- Pure tubular copper barrel permits easier crimping and provides a copper to copper connection with the cable
- Nuts & bolts are installed on all correct connect battery terminals

## STRAIGHTS

CAT. NO.	SIZE	POLARITY	TOOL DIE
15128	4	UNIVERSAL	GRAY J-H
15143	1-2	NEGATIVE	PINK H-H
15144	1-2	POSITIVE	PINK H-H
15163	1/0	NEGATIVE	BLACK E-A
15164	1/0	POSITIVE	BLACK E-A
15173	2/0	NEGATIVE	ORANGE A-C
15174	2/0	POSITIVE	ORANGE A-C
15183	3/0	NEGATIVE	PURPLE A-B
15184	3/0	POSITIVE	PURPLE A-B
15193	4/0	NEGATIVE	YELLOW A-A
15194	4/0	POSITIVE	YELLOW A-A

## RIGHT ELBOWS

CAT. NO.	SIZE	POLARITY	TOOL DIE
15263	1/0	NEGATIVE	BLACK E-A
15264	1/0	POSITIVE	BLACK E-A
15273	2/0	NEGATIVE	ORANGE A-C
15274	2/0	POSITIVE	ORANGE A-C
15283	3/0	NEGATIVE	PURPLE A-B
15284	3/0	POSITIVE	PURPLE A-B

## LEFT ELBOWS

CAT. NO.	SIZE	POLARITY	TOOL DIE
15363	1/0	NEGATIVE	BLACK E-A
15364	1/0	POSITIVE	BLACK E-A
15373	2/0	NEGATIVE	ORANGE A-C
15374	2/0	POSITIVE	ORANGE A-C
15383	3/0	NEGATIVE	PURPLE A-B
15384	3/0	POSITIVE	PURPLE A-B

## FLAGS

CAT. NO.	SIZE	POLARITY	TOOL DIE
15463	1/0	NEGATIVE	BLACK E-A
15464	1/0	POSITIVE	BLACK E-A
15473	2/0	NEGATIVE	ORANGE A-C
15474	2/0	POSITIVE	ORANGE A-C
15483	3/0	NEGATIVE	PURPLE A-B
15484	3/0	POSITIVE	PURPLE A-B
15493	4/0	NEGATIVE	YELLOW A-A
15494	4/0	POSITIVE	YELLOW A-A

## LEFT ADD-ON TERMINALS – For Military & Heavy Duty Applications

CAT. NO.	SIZE	POLARITY	TOOL DIE
15570	2/0	NEGATIVE	ORANGE A-C
15571	2/0	POSITIVE	ORANGE A-C

## RIGHT ADD-ON TERMINALS – For Military & Heavy Duty Applications

CAT. NO.	SIZE	POLARITY	TOOL DIE
15572	2/0	NEGATIVE	ORANGE A-C
15573	2/0	POSITIVE	ORANGE A-C



15164



15183



15571

# 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



12570

CAT. NO. LEAD PLATED		CAT. NO. TIN PLATED		CABLE SIZE	POLARITY	TOOL DIE CODES
STANDARD	COLOR CODED	STANDARD	COLOR CODED			
12122	12128	12522	12528	4	UNIVERSAL	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	12591	12594	4/0	POSITIVE	YELLOW A-A

## Right Elbows



12770

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

## Left Elbows



12870

CAT. NO. LEAD PLATED		CAT. NO. TIN PLATED		CABLE SIZE	POLARITY	TOOL DIE CODES
STANDARD	COLOR CODED	STANDARD	COLOR CODED			
12360	12363	12860	12863	1/0	NEGATIVE	BLACK E-A
12361	12364	12861	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

## Flags



12970

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

# 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

CAT. NO. 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

CAT. NO. 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

CAT. NO. TIN PLATED		CABLE SIZE	POLARITY	TOOL DIE CODE
STANDARD	COLOR CODED			
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 (Flags)

CAT. NO. TIN PLATED		CABLE SIZE	POLARITY	TOOL DIE CODES
STANDARD	COLOR CODED			
13262	13268	1/0	UNIVERSAL	BLACK E-A
13272	13278	2/0	UNIVERSAL	ORANGE A-C
13282	13288	3/0	UNIVERSAL	PURPLE A-B
13292	13298	4/0	UNIVERSAL	YELLOW A-A



13272



# Yellow Brass Terminals



17180



17129

## Lead Plated Straights

CAT. NO.	CABLE SIZE	POLARITY
17112	6	UNIVERSAL
17113	3-4	UNIVERSAL
17122	1-2	UNIVERSAL
17162	1/0	UNIVERSAL
17133	1/0	NEGATIVE
17132	1/0	POSITIVE
17180	2/0-3/0	NEGATIVE
17181	2/0-3/0	POSITIVE
17128	MARINE TERMINAL	NEGATIVE
17129	MARINE TERMINAL	POSITIVE

## Lead Plated Flags: Split Barrels



17471

CAT. NO.	CABLE SIZE	POLARITY
17120	4	UNIVERSAL
17101	1-2	UNIVERSAL
17126	1/0	NEGATIVE
17125	1/0	POSITIVE
17472	2/0	UNIVERSAL
17470	2/0	NEGATIVE
17471	2/0	POSITIVE
17480	2/0-3/0	NEGATIVE
17481	2/0-3/0	POSITIVE

# Cast Lead Terminals



16012



16022



16032



17138



16035



16052



## Emergency Style Terminals

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

CAT. NO.	DESCRIPTION	CABLE SIZE	POLARITY
16012	Standard duty	6 GA. - 2/0	Universal
16060	Standard duty - Black	6 GA. - 2/0	Universal
16061	Standard duty - Red	6 GA. - 2/0	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

## 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

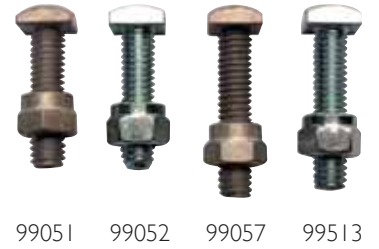


CAT. NO.	DESCRIPTION
99001	SIDE-MOUNT BOLT, OEM, STEEL, ZINC-PLATED
99001L	SIDE-MOUNT BOLT, OEM, STEEL, ZINC PLATED-LONG
99002	SIDE-MOUNT BOLT LONG WITH SCREW, STEEL, ZINC-PLATED
99013	SIDE-MOUNT BOLT WITH 3/8" ACCESSORY BOLT, BRASS



## 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	99502	5/16-18 x 1 1/2" BOLT & SHOULDER NUT, STEEL, ZINC PLATED



## Stud Nuts group 31 batteries

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



## Stud to Post Converter Solid Lead

CAT. NO.	DESCRIPTION	POLARITY
99010	CONVERTER	UNIVERSAL
99007	SET OF 1 NEGATIVE AND 1 POSITIVE CONVERTER	



## Anti-Corrosion Rings

CAT. NO.	BATTERY TYPE	COLOR/POLARITY
99014	POST TOP	GREEN/NEGATIVE
99015	POST TOP	RED/POSITIVE
99015S	STUD TOP	GRAY/UNIVERSAL
99018	SIDE MOUNT	BLACK/UNIVERSAL



99018

# Heavy Duty Lugs and Splices



- Rated for 600 volts applications.



91767



91870

## Heavy Duty Power Lugs

CAT. NO	CABLE SIZE	STUD SIZE	TOOL DIE CODES
91705	8	1/4"	RED M-K
91706	8	5/16"	RED M-K
91707	8	3/8"	RED M-K
91709	8	1/2"	RED M-K
91715	6	1/4"	BLUE K-K
91716	6	5/16"	BLUE K-K
91717	6	3/8"	BLUE K-K
91719	6	1/2"	BLUE K-K
91725	4	1/4"	GRAY J-H
91726	4	5/16"	GRAY J-H
91727	4	3/8"	GRAY J-H
91729	4	1/2"	GRAY J-H
91745	1-2	1/4"	PINK H-H
91746	1-2	5/16"	PINK H-H
91747	1-2	3/8"	PINK H-H
91749	1-2	1/2"	PINK H-H
91756	1/0	5/16"	BLACK E-A
91757	1/0	3/8"	BLACK E-A
91759	1/0	1/2"	BLACK E-A
91766	2/0	5/16"	ORANGE A-C
91767	2/0	3/8"	ORANGE A-C
91769	2/0	1/2"	ORANGE A-C
91776	3/0	5/16"	PURPLE A-B
91777	3/0	3/8"	PURPLE A-B
91779	3/0	1/2"	PURPLE A-B
91786	4/0	5/16"	YELLOW A-A
91787	4/0	3/8"	YELLOW A-A
91789	4/0	1/2"	YELLOW A-A

## Heavy Duty Power Splices

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







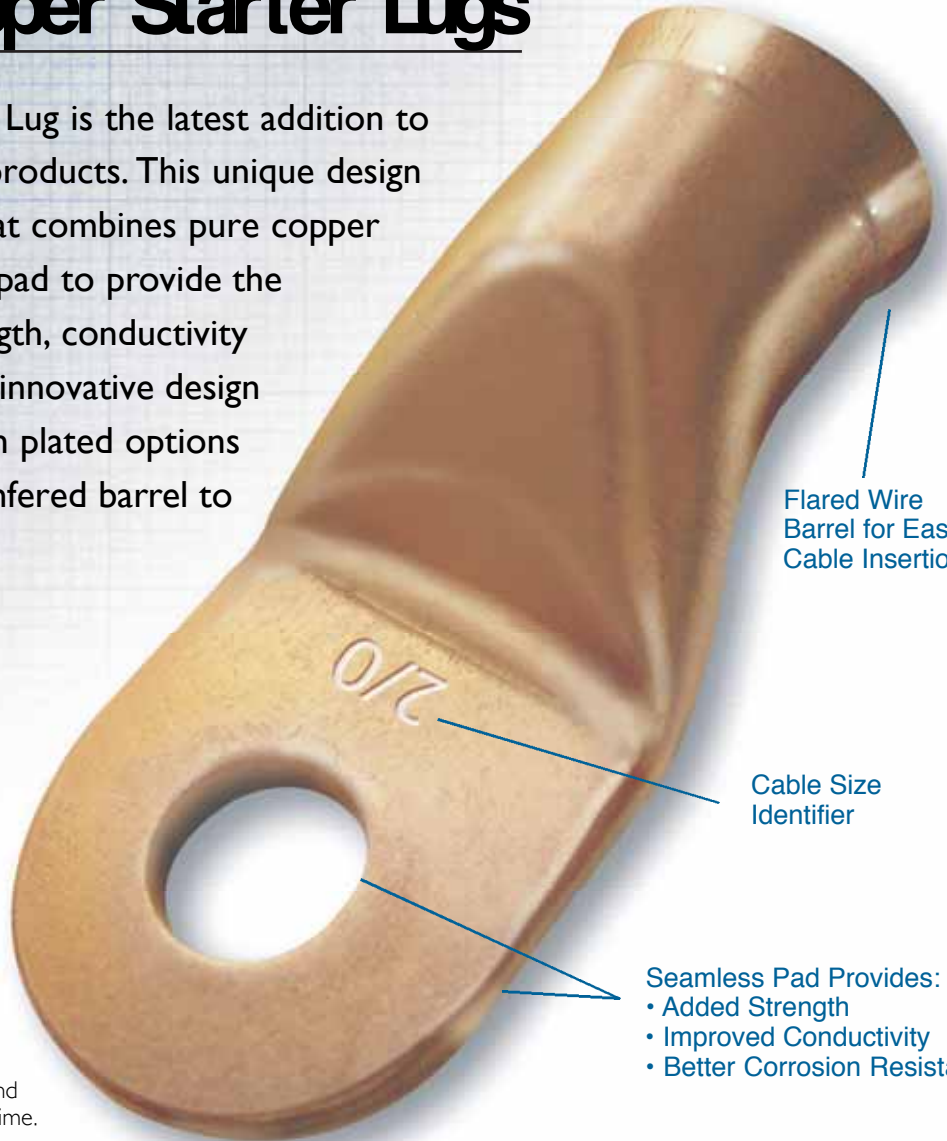
# CORRECT *Connect*™

## 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 C<sup>2</sup> 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



Flared Wire Barrel for Easy Cable Insertion

Cable Size Identifier

Seamless Pad Provides:  
• Added Strength  
• Improved Conductivity  
• Better Corrosion Resistance

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



# Light Duty Lugs and Splices

- UL FILE #E6207
- Available with sight holes, angles, wide pads and color coding.

Please contact FTZ for more information.

## Starter Lugs

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



Bare Copper



Tin Plated

## Cable Splices: Tin Plated

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



91260

# Solder Accessories



## Solder Slugs Pellets

CAT. NO.	WIRE SIZE	COLOR	PKG. QTY.
17900	4	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

## 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
17996	PLASTIC WELD PASTE – WHITE	10 GRAMS	1
17997	PLASTIC WELD PASTE – BLACK	10 GRAMS	1





# 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	.221	1	10
61823	61811	61822	50	GRAY	12-10	.136	1	10
62803	62831	62802	175	GRAY	4	.297	1	10
62813	62831	62812	175	GRAY	1-2	.340	1	10
62233	62231	62832	175	RED	1/0	.437	1	10
62333	62331	62832	175	ORANGE	1/0	.437	1	10
62433	62431	62832	175	YELLOW	1/0	.437	1	10
62633	62631	62832	175	BLUE	1/0	.437	1	10
62833	62831	62832	175	GRAY	1/0	.437	1	10
63243	63241	63842	350	RED	2/0	.484	1	10
63443	63441	63842	350	YELLOW	2/0	.484	1	10
63543	63541	63842	350	GREEN	2/0	.484	1	10
63643	63641	63842	350	BLUE	2/0	.484	1	10
63843	63841	63842	350	GRAY	2/0	.484	1	10
63853	63841	63852	350	GRAY	3/0	.578	1	10
63863	63841	63862	350	GRAY	4/0	.641	1	10

## Safe-Mate™ Accessories

CAT. NO.	DESCRIPTION	AMPERAGE	COLOR	PKG. QTY.
61004	MOUNTING HANDLE	50	RED	1
62004	MOUNTING HANDLE	175	RED	1
63004	MOUNTING HANDLE	350	RED	1
61007	DUST COVER	50	BLACK	1
62007	DUST COVER	175	BLACK	1
63007	DUST COVER	350	BLACK	1



# BATTERY TERMINAL BRUSHES AND BATTERY CARRIERS

## BATTERY TERMINAL BRUSHES

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

### Post & Terminal Brush



94071

- 94071 **Steel**
  - Inner circular bristles clean all sides of battery posts
  - Tapered top brush cleans battery terminal barrels and clamps

### 3-Way Post & Terminal Brush



94072

- 94072
  - Three-piece corrosion-resistant brush provides three tools in one
  - Inner circular bristles clean battery posts
  - Tapered brush cleans battery terminal barrels and clamps
  - Large rectangular brush ideal for terminals, cables, and fasteners

### Power Drill Post & Terminal Brush



94073

94074

94075

- 94073 **Battery Post Brush**
- 94074 **Terminal & Clamp Brush**
- 94075 **Terminal & Clamp Brush**
  - Brushes securely fit in all standard power drills for fast cleaning
  - Made with a heavy duty durable injection molded housing
- 94077 **Plug Cleaner**

## Battery Carriers

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



94078

- 94078 **Adjustable battery carrier**
  - High quality battery carrier for all battery types and sizes
  - Comfort grip handles and sidewall pads provide secure and easy battery removal
  - Adjustable notch system guarantees proper fit

## Aerosols



99011



99012

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

# WIRE, CABLE AND WIRE MANAGEMENT

65-76

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
- Thermoplastic PVC insulation rated at 105°C
- Insulation is color-coded to match correct die code
- SGT Cable

CAT. NO. BLACK	CAT. NO. RED	CABLE SIZE	# STRANDS / STRAND SIZE	O.D.	AMPERAGE	LENGTH
92121	92121R	4	133/.017	.270	120	50'
92131	92131R	2	133/.023	.345	240	50'
92141	92141R	1	247/.018	.385	300	50'
92151	92151R	1/0	247/.020	.430	360	50'
92161	92161R	2/0	333/.020	.500	450	50'
92171	92171R	3/0	259/.022	.545	540	50'
92181	92181R	4/0	361/.024	.601	540	50'

## Welding Cable



- Specially-formulated insulation protects even in the most extreme temperatures and provides superior solvent resistance
- Super-fine stranding ensures maximum flexibility.
- Outer jacket is constructed with specially formulated neoprene.

CAT. NO. BLACK	CAT. NO. RED	CABLE SIZE	# STRANDS/ STRANDS 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'

## Multi-Conductor Truck and Trailer Cable

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'



## Primary Wire – Type GXL

- Conforms to SAE J1128 specifications
- Chemically cross-linked insulation rated at 125°C

CAT. NO.	CABLE SIZE	LENGTH
92318	18	100'
92316	16	100'
92314	14	100'
92312	12	100'
92310	10	100'



Available colors: Black-BK, Red-R, White-W, Green-G, Brown-BR, Blue-BL, Yellow-Y, Orange-O. Add suffix to above part number when ordering: e.g. 92314-R is red 14 ga. wire.

<b>BK</b>	<b>BLACK</b>	<b>R</b>	<b>RED</b>	<b>W</b>	<b>WHITE</b>	<b>G</b>	<b>GREEN</b>
<b>BR</b>	<b>BROWN</b>	<b>BL</b>	<b>BLUE</b>	<b>Y</b>	<b>YELLOW</b>	<b>O</b>	<b>ORANGE</b>

FTZ offers a new complete line of Nylon 6/6 cable ties in lengths 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

## CABLE TIES



### Standard Cable Ties

CAT. NO.	PKG. QTY.	COLOR	TENSILE STRENGTH	LENGTH	WIDTH	BUNDLE DIAMETER
93110	100	NATURAL	18 LBS.	4.0"	0.10"	.75"
93110M	1000	NATURAL	18 LBS.	4.0"	0.10"	.75"
93210	100	UV BLACK	18 LBS.	4.0"	0.10"	.75"
93210M	1000	UV BLACK	18 LBS.	4.0"	0.10"	.75"
93120	100	NATURAL	40 LBS.	5.7"	0.14"	1.25"
93120M	1000	NATURAL	40 LBS.	5.7"	0.14"	1.25"
93220	100	UV BLACK	40 LBS.	5.7"	0.14"	1.25"
93220M	1000	UV BLACK	40 LBS.	5.7"	0.14"	1.25"
93130	100	NATURAL	50 LBS.	8"	0.19"	2.0"
93130M	1000	NATURAL	50 LBS.	8"	0.19"	2.0"
93230	100	UV BLACK	50 LBS.	8"	0.19"	2.0"
93230M	1000	UV BLACK	50 LBS.	8"	0.19"	2.0"
93150	100	NATURAL	50 LBS.	11.8"	0.19"	3.0"
93150M	1000	NATURAL	50 LBS.	11.8"	0.19"	3.0"
93250	100	UV BLACK	50 LBS.	11.8"	0.19"	3.0"
93250M	1000	UV BLACK	50 LBS.	11.8"	0.19"	3.0"
93160	100	NATURAL	50 LBS.	14.6"	0.19"	4.0"
93160M	1000	NATURAL	50 LBS.	14.6"	0.19"	4.0"
93260	100	UV BLACK	50 LBS.	14.6"	0.19"	4.0"
93260M	1000	UV BLACK	50 LBS.	14.6"	0.19"	4.0"
93170	100	NATURAL	120 LBS.	14.5"	0.30"	4.0"
93170D	500	NATURAL	120 LBS.	14.5"	0.30"	4.0"
93270	100	UV BLACK	120 LBS.	14.5"	0.30"	4.0"
93270D	500	UV BLACK	120 LBS.	14.5"	0.30"	4.0"
93185	100	NATURAL	120 LBS.	28"	0.30"	8.0"
93185D	500	NATURAL	120 LBS.	28"	0.30"	8.0"
93285	100	UV BLACK	120 LBS.	28"	0.30"	8.0"
93285D	500	UV BLACK	120 LBS.	28"	0.30"	8.0"

### Heavy Duty Cable Ties

CAT. NO.	PKG. QTY.	COLOR	TENSILE STRENGTH	LENGTH	WIDTH	BUNDLE DIAMETER
93180	100	NATURAL	175 LBS.	25.0"	0.35"	7.0"
93280	100	UV BLACK	175 LBS.	25.0"	0.35"	7.0"
93195	50	NATURAL	175 LBS.	36.5"	0.35"	10.7"
93295	50	UV BLACK	175 LBS.	36.5"	0.35"	10.7"
93199	50	NATURAL	175 LBS.	48.0"	0.35"	15.0"
93299	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	100	NATURAL	250 LBS.	22.0"	0.50"	6.0"
93290	100	UV BLACK	250 LBS.	22.0"	0.50"	6.0"
93196	50	NATURAL	250 LBS.	34.0"	0.50"	10.1"
93296	50	UV BLACK	250 LBS.	34.0"	0.50"	10.1"



## 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
93310	100	NATURAL	18 LBS.	4.5"	.10"	.62"	#4
93410	100	UV BLACK	18 LBS.	4.5"	.10"	.62"	#4
93320	100	NATURAL	40 LBS.	5.9"	.14"	1.25"	#8
93420	100	UV BLACK	40 LBS.	5.9"	.14"	1.25"	#8
93340	100	NATURAL	50 LBS.	8"	.19"	2"	#10
93440	100	UV BLACK	50 LBS.	8"	.19"	2"	#10
93350	100	NATURAL	50 LBS.	12.6"	.19"	3"	#10
93450	100	UV BLACK	50 LBS.	12.6"	.19"	3"	#10
93380	100	NATURAL	50 LBS.	15"	.19"	4"	#10
93480	100	UV BLACK	50 LBS.	15"	.19"	4"	#10
93390	100	NATURAL	120 LBS.	15"	.30"	4"	#10
93490	100	UV BLACK	120 LBS.	15"	.30"	4"	#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"
93445	100	UV BLACK	50 LBS.	7.9"	.19"	2"

## Releasable Cable Ties

CAT. NO.	PKG. QTY.	COLOR	TENSILE STRENGTH	LENGTH	WIDTH	BUNDLE DIAMETER
93620	100	NATURAL	50 LBS.	5.9"	.30"	1.2"
93720	100	UV BLACK	50 LBS.	5.9"	.30"	1.2"
93640	100	NATURAL	50 LBS.	7.8"	.30"	2"
93740	100	UV BLACK	50 LBS.	7.8"	.30"	2"
93650	100	NATURAL	50 LBS.	10.5"	.30"	3"
93750	100	UV BLACK	50 LBS.	10.5"	.30"	3"

## In-line Cable Ties

CAT. NO.	PKG. QTY.	COLOR	TENSILE STRENGTH	LENGTH	WIDTH	BUNDLE DIAMETER
93794	100	UV BLACK	50 LBS.	7.2"	0.35"	1.7"
93795	100	UV BLACK	50 LBS.	10.5"	0.35"	2.7"
93796	100	UV BLACK	50 LBS.	14.1"	0.35"	3.7"



# CABLE TIES (Cont.)



## Stainless Steel Cable Ties

CAT. NO.	PKG. QTY.	COLOR	TENSILE STRENGTH	LENGTH	WIDTH	BUNDLE DIAMETER
93804	100	SS Steel (302/304)	100	8"	.18"	2"
93808	100	SS Steel (302/304)	100	14"	.18"	4"
93812	100	SS Steel (302/304)	100	20"	.18"	6"
93805	100	SS Steel (302/304)	250	8"	.30"	2"
93809	100	SS Steel (302/304)	250	14"	.30"	4"
93813	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	1" x 1" NATURAL MOUNTING BASES	10



# CABLE CLAMPS

## Light Duty Nylon Cable Clamps

CAT. NO.	QTY. PER BAG	COLOR	CABLE DIAMETER	HOLE DIAMETER	WIDTH
60301	100	NATURAL	.187" (3/16)	.17"	.37"
60301BK	100	UV BLACK	.187" (3/16)	.17"	.37"
60302	100	NATURAL	.250" (1/4)	.17"	.37"
60302BK	100	UV BLACK	.250" (1/4)	.17"	.37"
60304	100	NATURAL	.375" (3/8)	.17"	.37"
60304BK	100	UV BLACK	.375" (3/8)	.17"	.37"
60306	100	NATURAL	.500" (1/2)	.17"	.37"
60306BK	100	UV BLACK	.500" (1/2)	.17"	.37"



60306



60306BK

## Heavy Duty Nylon Cable Clamps

CAT. NO.	QTY. PER BAG	COLOR	CABLE DIAMETER	HOLE DIAMETER	WIDTH
60402	100	NATURAL	.250" (1/4)	.20"	.50"
60402BK	100	UV BLACK	.250" (1/4)	.20"	.50"
60404	100	NATURAL	.375" (3/8)	.20"	.50"
60404BK	100	UV BLACK	.375" (3/8)	.20"	.50"
60406	100	NATURAL	.500" (1/2)	.20"	.50"
60406BK	100	UV BLACK	.500" (1/2)	.20"	.50"
60408	100	NATURAL	.750" (3/4)	.20"	.50"
60408BK	100	UV BLACK	.750" (3/4)	.20"	.50"
60410	100	NATURAL	1.000" (1)	.20"	.50"
60410BK	100	UV BLACK	1.000" (1)	.20"	.50"
60411	100	NATURAL	1.25" (1-1/4)	.20"	.50"
60411BK	100	UV BLACK	1.25" (1-1/4)	.20"	.50"

## Steel Cable Clamps

- Vinyl-dipped or EPDM rubber cushion protects cable
- Mounts quickly and easily

CAT. NO.	HOLDING DIAMETER	STUD SIZE	CUSHION	PKG. QTY.
60102-14	1/4"	1/4"	RUBBER	100
60104-14	3/8"	1/4"	RUBBER	100
60106-38	1/2"	3/8"	RUBBER	100
60107-38	5/8"	3/8"	RUBBER	50
60108-38	3/4"	3/8"	RUBBER	50
60110-38	1"	3/8"	RUBBER	25
60112-38	1 1/2"	3/8"	RUBBER	25
60114-38	2"	3/8"	RUBBER	25
60202-14	1/4"	1/4"	VINYL DIPPED	100
60204-14	3/8"	1/4"	VINYL DIPPED	100
60206-38	1/2"	3/8"	VINYL DIPPED	100
60207-38	5/8"	3/8"	VINYL DIPPED	50
60208-38	3/4"	3/8"	VINYL DIPPED	50
60210-38	1"	3/8"	VINYL DIPPED	25
60212-38	1 1/2"	3/8"	VINYL DIPPED	25
60214-38	2"	3/8"	VINYL DIPPED	25



60108-38



60208-38





DISPENSER BOX



FASTENED COIL

## Polyethylene Split Loom

- Thick wall offers superior crush-resistance and a tight seam enclosure
- Temperature rating: -15° F to 195° F (-26° C to 90° C)
- Flexible cable routing and easy break-out
- Rounded edges prevent cutting cable insulation

CAT. NO.	SIZE	LENGTH	PACKAGE
80002-25BOX	.250	25'	DISPENSER BOX
80002-25COIL	.250	25'	FASTENED COIL
80002-100COIL	.250	100'	FASTENED COIL
80002-BRL	.250	GAYLORD*	BULK BOX
80004-25BOX	.375	25'	DISPENSER BOX
80004-25COIL	.375	25'	FASTENED COIL
80004-100COIL	.375	100'	FASTENED COIL
80004-BRL	.375	GAYLORD8	BULK BOX
80005-25BOX	.4375	25'	DISPENSER BOX
80005-25COIL	.4375	25'	FASTENED COIL
80005-100COIL	.4375	100'	FASTENED COIL
80005-BRL	.4375	GAYLORD*	BULK BOX
80006-25BOX	.500	25'	DISPENSER BOX
80006-25COIL	.500	25'	FASTENED COIL
80006-100COIL	.500	100'	FASTENED COIL
80006-BRL	.500	GAYLORD*	BULK BOX
80007-25BOX	.625	25'	DISPENSER BO
80007-25COIL	.625	25'	FASTENED COIL
80007-100COIL	.625	100'	FASTENED COIL
80007-BRL	.625	GAYLORD*	BULK BOX
80008-25BOX	.750	25'	DISPENSER BOX
80008-25COIL	.750	25'	FASTENED COIL
80008-100COIL	.750	100'	FASTENED COIL
80008-BRL	.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

# SPLIT LOOM ACCESSORIES

## Spiral Wrap – Natural, Nylon

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

## Loom Rosebud Clip Offset

CAT. NO.	SIZE	PKG. QTY.
88003	.350"	10 PCS
88006	.413"/.500"	10 PCS

# 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  
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







## 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

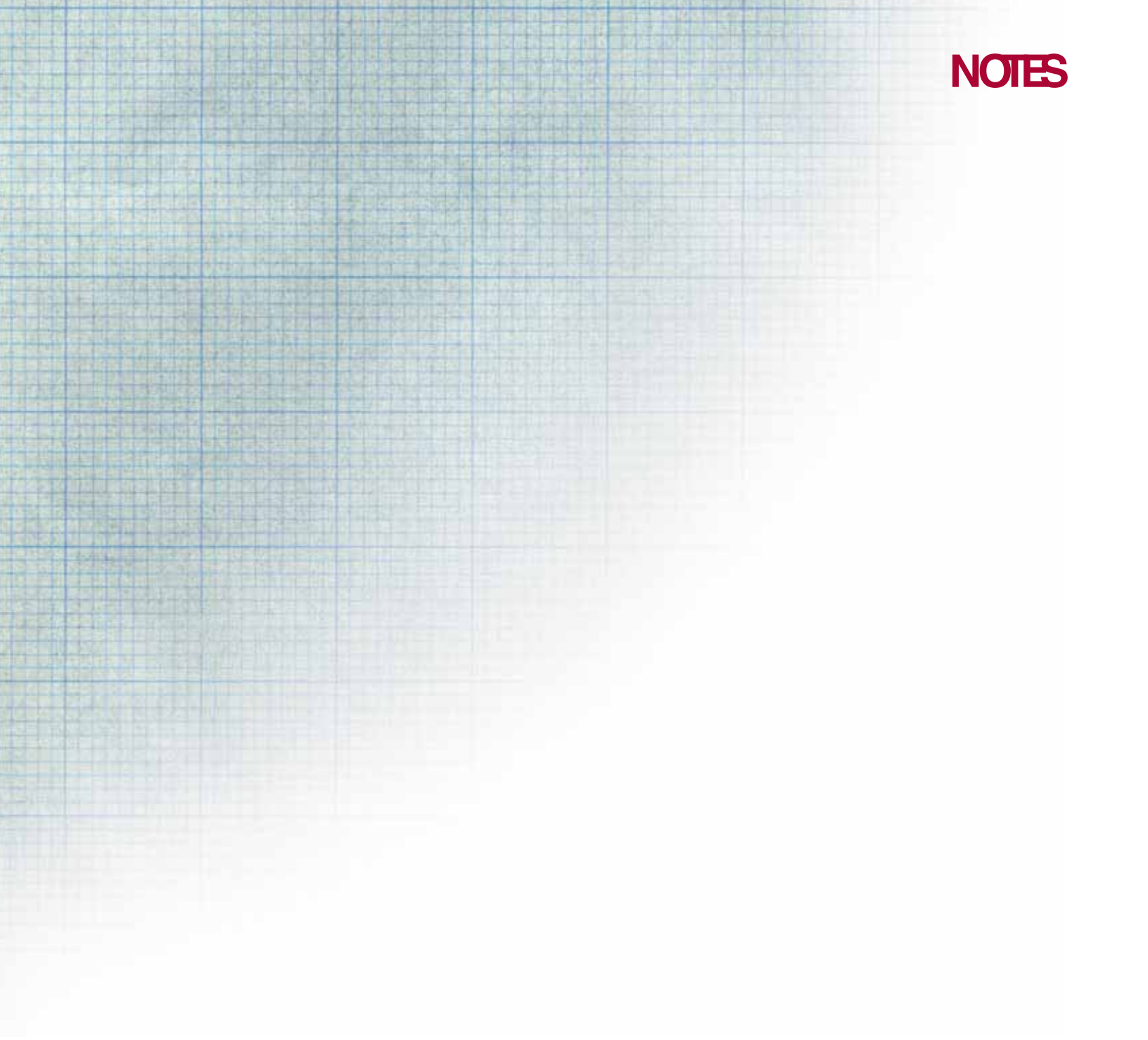
### Specifications:

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

## 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





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





## 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

**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



## CORRECT Crimp Bench Mount Heavy Duty Crimp Tool

**CAT. NO.. 94284-BM**

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. – 250 MCM
- **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 & Blacks



## 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 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

## 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

## Hydraulic Dieless Crimp Tool

### CAT. NO. 94290

This powerful tool delivers 15 tons of force to crimp terminals from 6 AWG. – 1000 MCM. The dieless head uses a calibrated pressure system that automatically changes crimping force for each connector and size. The automatic two speed pump with rapid advance quietly and quickly completes the largest of crimps reducing cycle time.



Features Include:

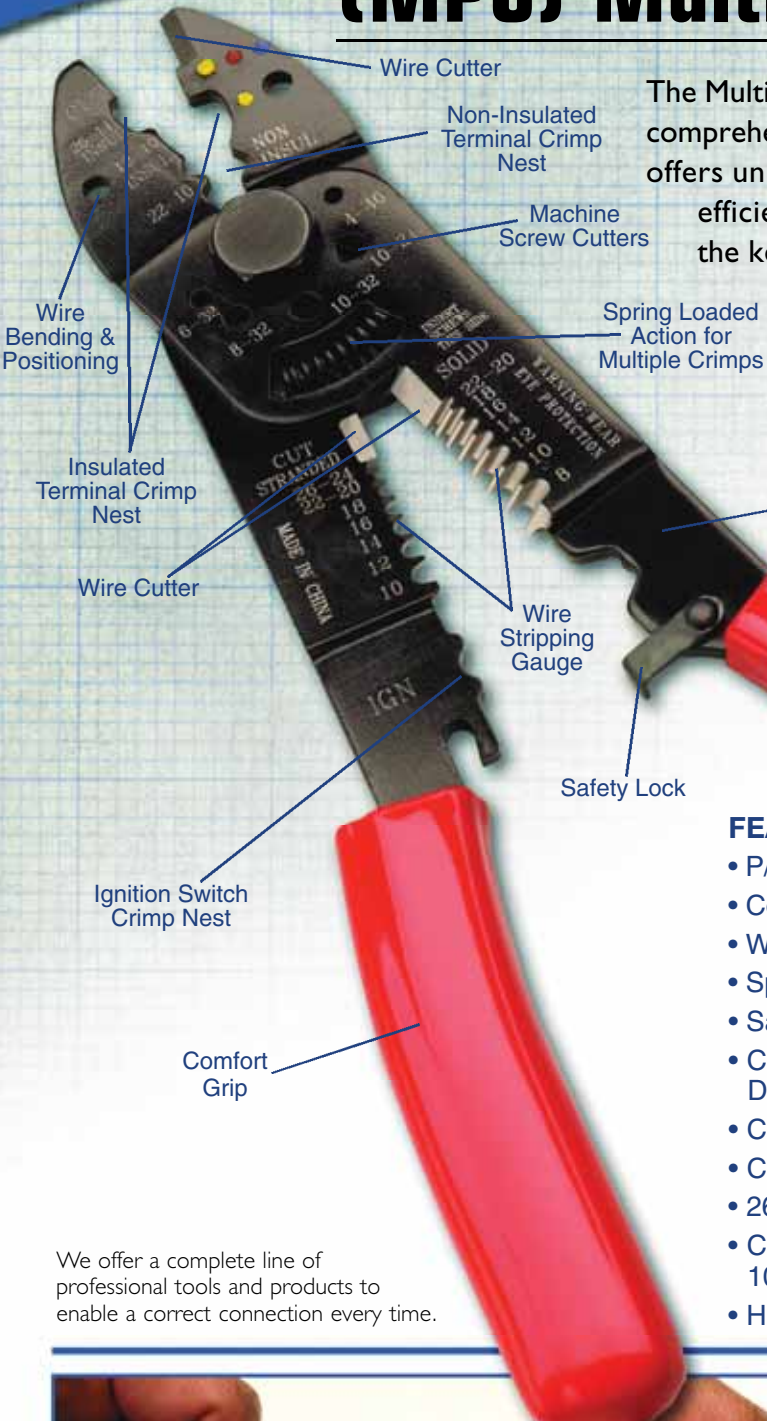
- **6 AWG. – 1000 MCM Conductor Range** one tool for almost any connector size
- **Dieless Operation** pressure system automatically changes crimping force for each connector
- **Automatic Two-Speed Pump** applies up to 15 tons of crimping force
- **Rapid Advance** reduces cycle time
- **Hinged Head** rotates 180° for versatile operation
- **Durable Steel Carrying Case** conveniently stores and protects tool

### Specifications:

Force Developed	15 Tons
Weight	16.5 lbs.
Overall Length	26.5"
Conductor Range	#4 CU/#6 AL – 1000MCM CU/AL
Color	Blue/Black



# (MPC) Multi-Purpose Crimp Tool

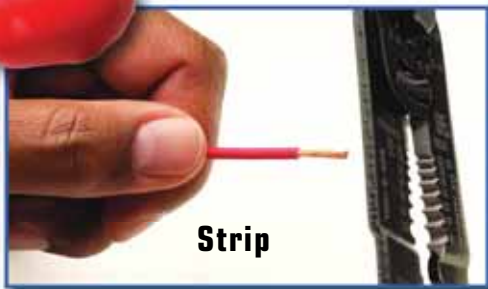
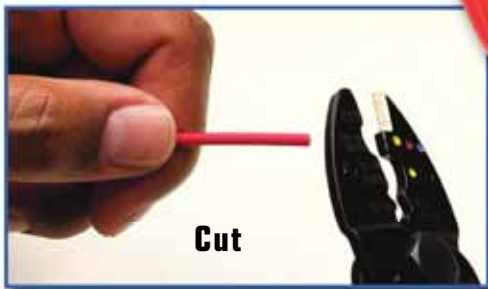


The Multi-Purpose Crimp (MPC) tool is the latest addition to FTZ's comprehensive line of electrical connectivity products. The MPC offers unique features, which provide increased performance and efficiencies while lowering overall cost for the user. One of the key benefits of the MPC compared to legacy 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.



## Controlled Cycle Crimp Tool

### CAT. NO. 94230

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

**CAT. NO. 94330:** Crimps 16-8 AWG wire range

## 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 Blade Included** extends life of tool





## 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 with fuel  
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 with 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 with fuel 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 with 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



## 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



## CAT. NO. 94502 Electric Heat Gun

The durable 94502 offers a high temperature electric heat source 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, this tool has years of successful performance behind it. The dual temperature setting at 750°F & 1100°F offers application specific control and the included deflector attachment evenly distributes heat, making heat shrink tubing installation faster.

Features include:

- **Dual Temperature Settings** adjust to suit your application
- **Fold Down Stand** for safe and convenient hands-free operation
- **Deflector Attachment** circulates heat evenly

### Specifications:

Length	9.75"
Weight	1.9 lbs.
Color	Blue



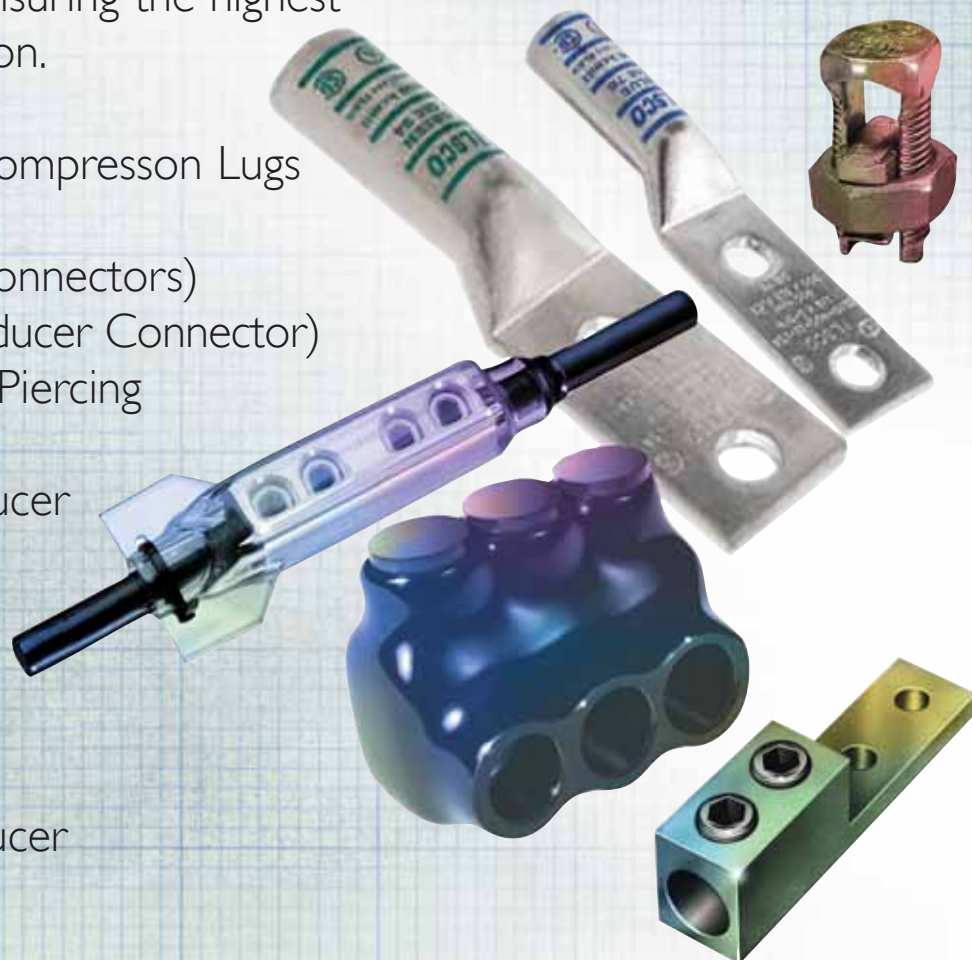


# INDUSTRIAL CONNECTORS

91-135

FTZ offers a wide range of standard industrial connectors and labor-saving specialty products for aluminum and/or 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
- 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

**NEW COPPER  
COMPRESSION  
CONNECTORS**

**SURECRIMP™**

**FTZ**







# SureCrimp®

## Copper Compression Lugs - Standard Barrel

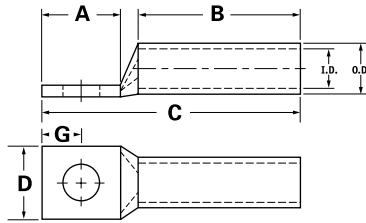
### 1 Hole, w/Sight Hole - Conductor Range: #8 - #1



## 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



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-6-34	#6 AWG	-	-	3/4	0.781	1.687	0.500	2.382	0.411	0.750	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



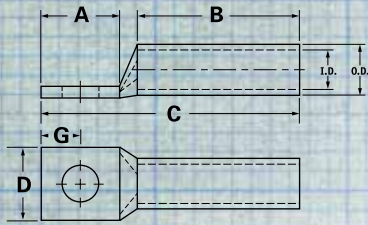
# SureCrimp<sup>®</sup> Copper Compression Lugs - Standard Barrel 1 Hole, w/Sight Hole - Conductor Range: 1/0 - 400kcmil



## 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 E6207



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	1.250	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

\* When installed with specified dieless tools



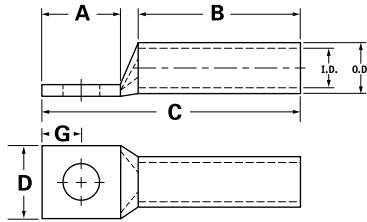
# SureCrimp® Copper Compression Lugs - Standard Barrel 1 Hole, w/Sight Hole - Conductor Range: 500kcmil - 1000kcmil



## 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



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,M FLEX 646.4 DLO	750 kcmil - 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,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,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

INDUSTRIAL CONNECTORS





# SureCrimp®

## Copper Compression Lugs - Standard Barrel

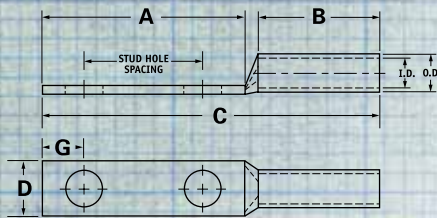
### 2 Hole, w/Sight Hole - Conductor Range: #8 - #6



## 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



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-8-10-58	#8 AWG	#8 FLEX	-	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	-	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	-	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	-	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	-	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	-	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	-	-	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	-	-	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	-	-	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	-	-	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	-	-	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	-	-	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	-	-	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	-	-	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	-	-	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	-	-	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	-	-	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	-	-	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	-	-	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	-	-	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



# SureCrimp®

## Copper Compression Lugs - Standard Barrel

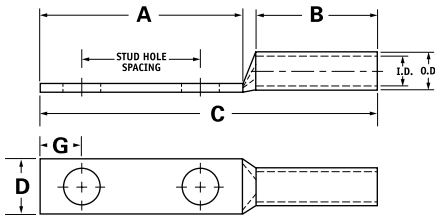
### 2 Hole, w/Sight Hole - Conductor Range: #4 - #3



## 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



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	#6 FLEX	4-6 AWG	10	0.219	0.625	1.250	0.500	1.984	0.486	0.258	Gray	1-29	0.343	0.250
CSWD-4-10-34	#4 AWG	#6 FLEX	4-6 AWG	10	0.219	0.750	1.437	0.500	2.171	0.486	0.258	Gray	1-29	0.343	0.250
CSWD-4-10-1	#4 AWG	#6 FLEX	4-6 AWG	10	0.219	1.000	1.687	0.500	2.421	0.486	0.258	Gray	1-29	0.343	0.250
CSWD-4-14-58	#4 AWG	#6 FLEX	4-6 AWG	1/4	0.281	0.625	1.437	0.500	2.171	0.486	0.320	Gray	1-29	0.343	0.250
CSWD-4-14-34	#4 AWG	#6 FLEX	4-6 AWG	1/4	0.281	0.750	1.437	0.500	2.171	0.486	0.320	Gray	1-29	0.343	0.250
CSWD-4-14-1	#4 AWG	#6 FLEX	4-6 AWG	1/4	0.281	1.000	1.687	0.500	2.421	0.486	0.320	Gray	1-29	0.343	0.250
CSWD-4-516-1	#4 AWG	#6 FLEX	4-6 AWG	5/16	0.343	1.000	1.937	0.500	2.671	0.486	0.320	Gray	1-29	0.343	0.250
CSWD-4-38-34	#4 AWG	#6 FLEX	4-6 AWG	3/8	0.406	0.750	1.687	0.500	2.421	0.593	0.414	Gray	1-29	0.343	0.250
CSWD-4-38-1	#4 AWG	#6 FLEX	4-6 AWG	3/8	0.406	1.000	1.937	0.500	2.671	0.593	0.414	Gray	1-29	0.343	0.250
CSWD-4-12-134	#4 AWG	#6 FLEX	4-6 AWG	1/2	0.562	1.750	3.000	0.500	3.734	0.750	0.546	Gray	1-29	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	1-29	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	1-29	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	1-29	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	1-29	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	1-29	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	1-29	0.375	0.275

\* When installed with specified dieless tools

INDUSTRIAL CONNECTORS



# SureCrimp®

## Copper Compression Lugs - Standard Barrel

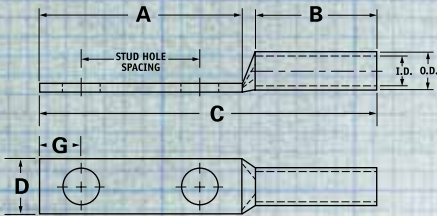
### 2 Hole, w/Sight Hole - Conductor Range: #2 - 1/0



## 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



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

\* When installed with specified dieless tools





# SureCrimp®

## Copper Compression Lugs - Standard Barrel

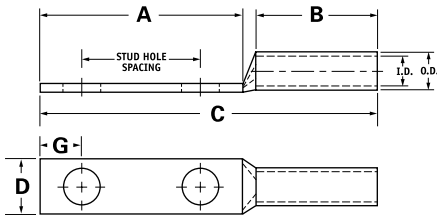
### 2 Hole, w/Sight Hole - Conductor Range: 2/0 - 4/0



## 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 E6207



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



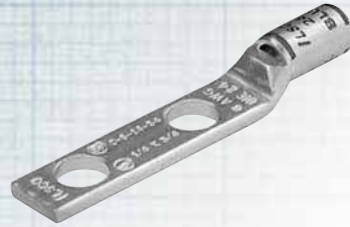
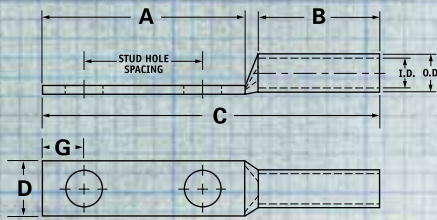
# SureCrimp<sup>®</sup> Copper Compression Lugs - Standard Barrel 2 Hole, w/Sight Hole - Conductor Range: 250kcmil - 500kcmil



## 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



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



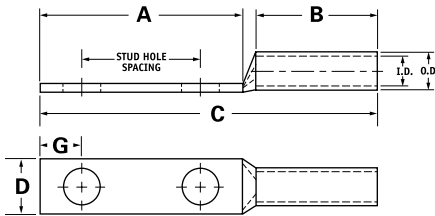
# SureCrimp® Copper Compression Lugs - Standard Barrel 2 Hole w/Sight Hole - Conductor Range: 600kcmil - 1000kcmil



## 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



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

INDUSTRIAL CONNECTORS





# SureCrimp<sup>®</sup>

## Copper Compression Lugs - Long Barrel

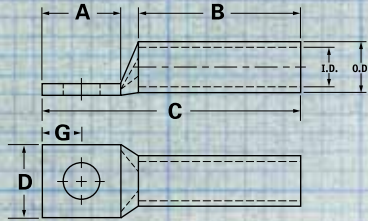
### 1 Hole, w/Sight Hole - Conductor Range: #8 - #1



## 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



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	-	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	-	1/4	0.281	0.680	0.812	1.687	0.486	0.320	Red	I-21	0.272	0.179
CLWS-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
CLWS-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
CLWS-6-10	#6 AWG	-	-	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	-	-	1/4	0.281	0.680	1.125	2.000	0.411	0.320	Blue	I-24	0.295	0.203
CLWS-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
CLWS-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
CLWS-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
CLWS-6-34	#6 AWG	-	-	3/4	0.781	1.687	1.125	3.007	0.411	0.750	Blue	I-24	0.295	0.203
CLWS-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
CLWS-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
CLWS-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
CLWS-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
CLWS-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
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	0.680	1.125	2.060	0.532	0.320	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	1.250	1.125	2.630	0.750	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	0.680	1.125	2.091	0.599	0.320	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	1.250	1.125	2.661	0.750	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	2.580	0.673	0.320	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	2.580	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	2.580	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	1.250	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

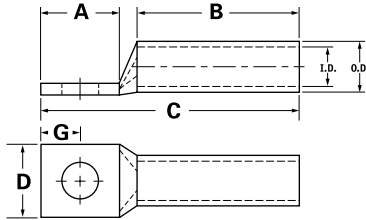
### 1 Hole, w/Sight Hole - Conductor Range: 1/0 - 400kcmil



## 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



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

INDUSTRIAL CONNECTORS





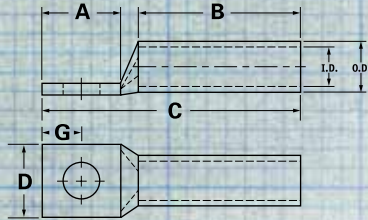
# SureCrimp<sup>®</sup> Copper Compression Lugs - Long Barrel 1 Hole, w/Sight Hole - Conductor Range: 500kcmil - 1000kcmil



## 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



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,K,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,K,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,K,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





# SureCrimp®

## Copper Compression Lugs - Long Barrel

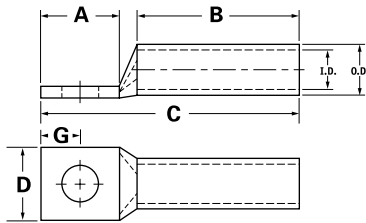
### 1 Hole, w/o Sight Hole - Conductor Range: #8 - #1



## 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



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



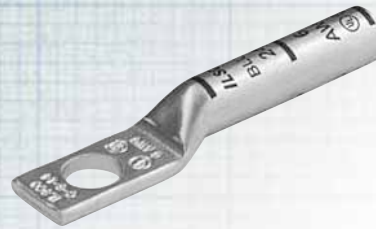
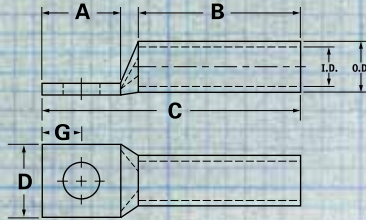
# SureCrimp<sup>®</sup> Copper Compression Lugs - Long Barrel 1 Hole, w/o Sight Hole - Conductor Range: 1/0 - 400kcmil



## 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.
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- IlSCO connectors are UL Listed and CSA Certified with ILSCO and other Manufacturers' tools.\*
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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	1.500	2.418	0.738	0.258	Pink	I-42	0.515	0.390
CLNS-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
CLNS-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
CLNS-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
CLNS-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
CLNS-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
CLNS-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
CLNS-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
CLNS-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
CLNS-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
CLNS-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
CLNS-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
CLNS-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
CLNS-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
CLNS-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
CLNS-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
CLNS-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
CLNS-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
CLNS-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
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	0.750	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	0.750	0.593
CLNS-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
CLNS-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
CLNS-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
CLNS-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
CLNS-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
CLNS-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
CLNS-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
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	0.750
CLNS-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
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	0.750

\* When installed with specified dieless tools



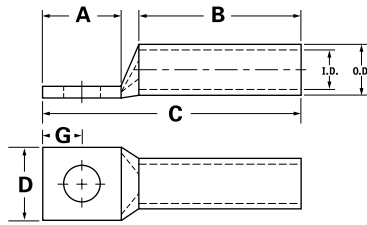
# SureCrimp® Copper Compression Lugs - Long Barrel 1 Hole, w/o Sight Hole - Conductor Range: 500kcmil - 1000kcmil



## 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



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

INDUSTRIAL CONNECTORS





# SureCrimp<sup>®</sup>

## Copper Compression Lugs - Long Barrel

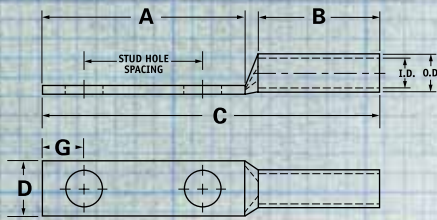
### 2 Hole, w/Sight Hole - Conductor Range: #8 - #4



## 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



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



# SureCrimp®

## Copper Compression Lugs - Long Barrel

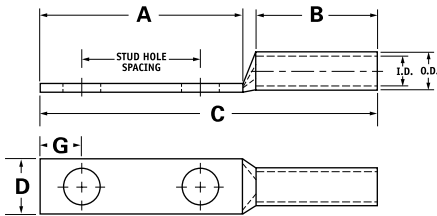
### 2 Hole, w/Sight Hole - Conductor Range: #3 - #1



## 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



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





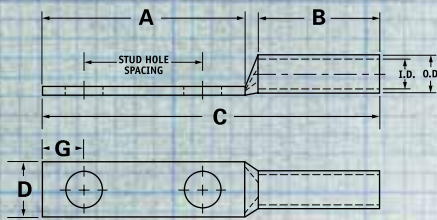
# SureCrimp<sup>®</sup> Copper Compression Lugs - Long Barrel 2 Hole, w/Sight Hole - Conductor Range: 1/0 - 3/0



## 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



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





# SureCrimp®

## Copper Compression Lugs - Long Barrel

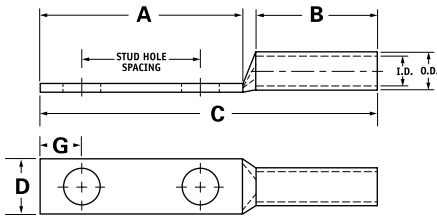
### 2 Hole, w/Sight Hole - Conductor Range: 4/0 - 300kcmil



## 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



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

INDUSTRIAL CONNECTORS



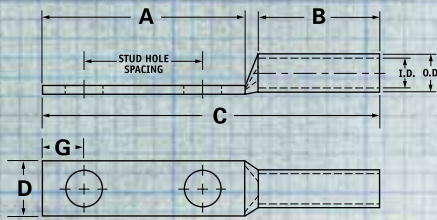
# SureCrimp<sup>®</sup> Copper Compression Lugs - Long Barrel 2 Hole, w/Sight Hole - Conductor Range: 350kcmil - 650kcmil



## 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



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	2.687	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



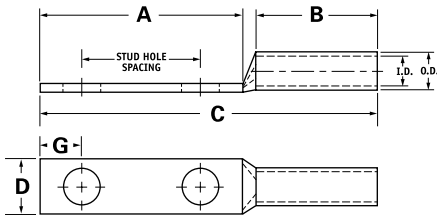
# SureCrimp® Copper Compression Lugs - Long Barrel 2 Hole, w/Sight Hole - Conductor Range: 700kcmil - 1000kcmil



## 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



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

INDUSTRIAL CONNECTORS





# SureCrimp®

## Copper Compression Lugs - Long Barrel

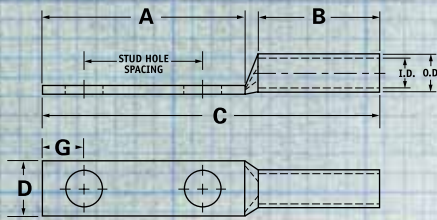
### 2 Hole, w/o Sight Hole - Conductor Range: #8 - #6



## 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



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



# SureCrimp®

## Copper Compression Lugs - Long Barrel

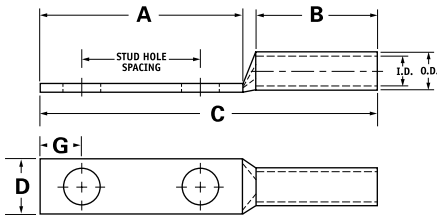
### 2 Hole, w/o Sight Hole - Conductor Range: #4 - #3



## 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



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

INDUSTRIAL CONNECTORS



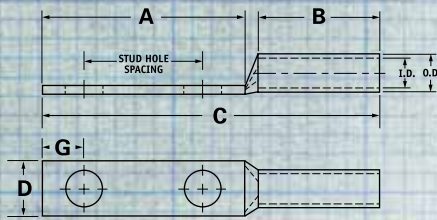
# SureCrimp<sup>®</sup> Copper Compression Lugs - Long Barrel 2 Hole, w/o Sight Hole - Conductor Range: #2 - 1/0



## 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



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





# SureCrimp®

## Copper Compression Lugs - Long Barrel

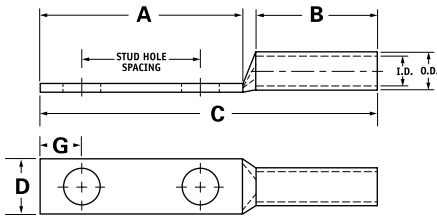
### 2 Hole, w/o Sight Hole - Conductor Range: 2/0 - 250kcmil



## 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



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

INDUSTRIAL CONNECTORS



# SureCrimp<sup>®</sup>

## Copper Compression Lugs - Long Barrel

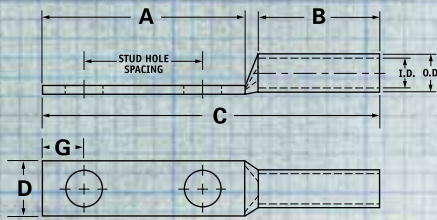
### 2 Hole, w/o Sight Hole - Conductor Range: 300kcmil - 600kcmil



## 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



Catalog Number	Wire Size	Alt Wire Size	Expanded* Wire Range	Bolt Size	Stud Hole Dia.	Stud Hole Spacing	Dimensions					Color Code	Die Die Index	O.D.	I.D.
							A	B	C	D	G				
CLND-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
CLND-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
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



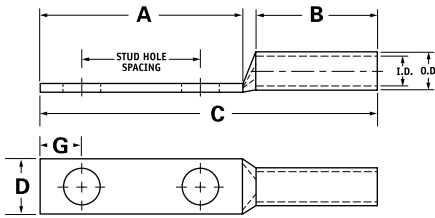
# SureCrimp® Copper Compression Lugs - Long Barrel 2 Hole, w/o Sight Hole - Conductor Range: 650kcmil - 1000kcmil



## 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



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

INDUSTRIAL CONNECTORS



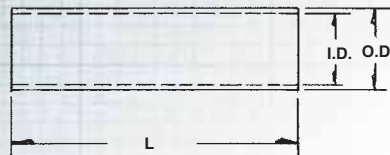
# Copper Compression Splices

## 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

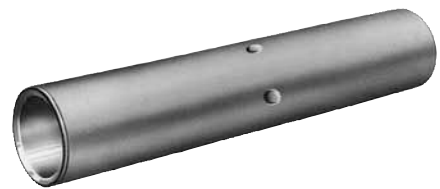
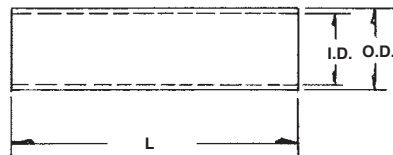


## Copper Compression Splices - Short Barrel



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.
53010	8	-	No. 8 Weld	1-1/8	Red	1	9/32	11/64
53020	6	6	No. 6 Weld	1-3/4	Blue	2	19/64	13/64
53030	4	4-6	No. 4 Weld	1-7/8	Gray	3	11/32	1/4
53035	3	3-6	-	1-3/4	White	3	3/8	9/32
53040	2	2-6	-	1-7/8	Brown	4	27/64	5/16
53050	1	1-6	No. 2 Weld	1-7/8	Green	4	15/32	23/64
53060	1/0	1/0-6	No. 1 Weld	1-7/8	Pink	5	33/64	25/64
53070	2/0	2/0-4	1/0 Weld	2	Black	6	9/16	7/16
53080	3/0	3/0-2	2/0 Weld	2-1/8	Orange	9	39/64	31/64
53090	4/0	4/0-1	3/0 Weld	2-1/8	Purple	10	11/16	35/64
53100	250MCM	250MCM-1/0	4/0 Weld	2-1/4	Yellow	11	3/4	19/32
53200	300MCM	300MCM-2/0	-	2-1/4	White	12	13/16	21/32
53300	350MCM	350MCM-3/0	-	2-3/8	Red	13	7/8	11/16
53400	400MCM	400MCM-4/0	-	2-1/2	Blue	14	15/16	3/4
53500	500MCM	500MCM-4/0	-	2-7/8	Brown	15	1-1/16	53/64
53600	600MCM	600MCM-250MCM	-	2-7/8	Green	16	1-3/16	59/64
53700	750MCM	750MCM-500MCM	-	3-3/8	Black	17	1-5/16	1-1/32
53800	1000MCM	1000MCM-750MCM	-	3-7/8	White	18	1-1/2	1-11/64

# 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.
56020	6	6	No. 6 Weld	2-3/8	Blue	2	19/64	13/64
56030	4	4-6	No. 4 Weld	2-3/8	Gray	3	11/32	1/4
56035	3	3-6	-	2-3/8	White	3	3/8	9/32
56040	2	2-6	-	2-5/8	Brown	4	27/64	5/16
56050	1	1-6	No. 2 Weld	2-7/8	Green	4	15/32	23/64
56060	1/0	1/0-6	No. 1 Weld	2-7/8	Pink	5	33/64	25/64
56070	2/0	2/0-4	1/0 Weld	3-1/8	Black	6	9/16	7/16
56080	3/0	3/0-2	2/0 Weld	3-1/8	Orange	9	39/64	31/64
56090	4/0	4/0-1	3/0 Weld	3-3/8	Purple	10	11/16	35/64
56100	250MCM	250MCM-1/0	4/0 Weld	3-3/8	Yellow	11	3/4	19/32
56200	300MCM	300MCM-2/0	-	4-1/8	White	12	13/16	21/32
56300	350MCM	350MCM-3/0	-	4-1/8	Red	13	57/64	45/64
56400	400MCM	400MCM-4/0	-	4-3/8	Blue	14	15/16	3/4
56500	500MCM	500MCM-4/0	-	4-5/8	Brown	15	1-1/16	53/64
56600	600MCM	600MCM-250MCM	-	4-5/8	Green	16	1-3/16	59/64
56700	750MCM	750MCM-500MCM	-	5-7/8	Black	17	1-5/16	1-1/32
56800	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

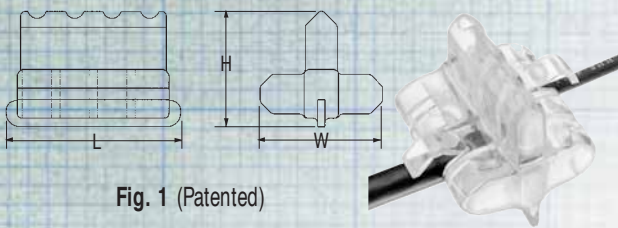


Fig. 1 (Patented)

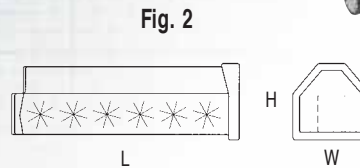


Fig. 2



## Multi-Tap Connectors - Clea



Catalog Number	Connector Shape	Figure No.	No. Of Ports	Wire Range	Dimensions			Hex Size
					L	W	H	
58697		1	2	4-14	1.46	1.63	1.61	slot
58698		1	4	4-14	2.46	1.63	1.61	slot
58699		1	6	4-14	3.46	1.63	1.61	slot
58700		1	8	4-14	4.46	1.63	1.61	slot
58701		2	2	2/0-14	2.61	2.30	1.97	3/16
58702		2	4	2/0-14	4.30	2.30	1.97	3/16
58703		2	6	2/0-14	5.98	2.30	1.97	3/16
58704		2	8	2/0-14	7.67	2.30	1.97	3/16
58705		2	2	4/0-6	2.75	2.49	2.25	5/16
58706		2	4	4/0-6	4.61	2.49	2.25	5/16
58707		2	6	4/0-6	6.47	2.49	2.25	5/16
58708		2	8	4/0-6	8.33	2.49	2.25	5/16
58709		2	2	350 MCM-6	3.31	2.69	2.65	5/16
58710		2	4	350 MCM-6	5.62	2.69	2.65	5/16
58711		2	6	350 MCM-6	7.93	2.69	2.65	5/16
58712		2	8	350 MCM-6	10.24	2.69	2.65	5/16
58713		2	2	600 MCM-4	3.90	3.43	3.27	1/2
58714		2	4	600 MCM-4	6.64	3.43	3.27	1/2
58715		2	6	600 MCM-4	9.39	3.43	3.27	1/2
58716		2	8	600 MCM-4	12.14	3.43	3.27	1/2
58717		2	2	800MCM-250MCM	4.25	3.43	3.40	1/2
58718		2	4	800MCM-250MCM	7.40	3.43	3.40	1/2
58719		2	6	800MCM-250MCM	10.50	3.43	3.40	1/2

UL Listed 486 B. Not suitable for direct burial.



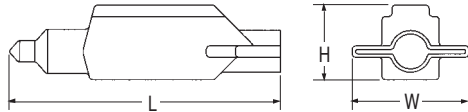
### Features

- 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	.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.

### 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

## Insulation Piercing Connectors - Dual Rated

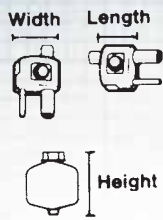


Fig. 1



Fig. 2



Fig. 3



Fig. 4

Catalog Number	Figure Number	Wire Range		Volts	Current Rating		Dimensions			Torque Ft. Lbs.	Bolt Head Size
		Main	Tap		CU	AL	L	W	H		
50110	3	1/0-8	2-8	300 (480 Grounded Y System)	130	100	1-7/32	1-15/32	2-5/16	16	1/2
50120	2	4/0-4	6-14	600	75	60	1-27/64	1	1-7/8	13	1/2
50119	3	4/0-2	2/0-6	600	195	150	1-21/32	1-7/8	2-7/8	25	1/2
50130	2	250MCM-1	4/0-6	600	260	205	1-7/8	2-11/32	3-11/32	30	5/8
50140	3	350MCM-4/0	4/0-10	300 (480 Grounded Y System)	260	205	1-43/64	2-7/16	3-1/8	25	5/8
50141	4	350MCM-4/0	350MCM-4/0	300 (480 Grounded Y System)	350	280	2-43/64	2-23/32	3-1/4	25	5/8
50149	1	500MCM-250MCM	10-12	300 (480 Grounded Y System)	40	35	1-43/64	2-7/16	3-1/4	25	5/8
50152	1	500MCM-250MCM	250MCM-4	600	290	230	2-27/64	2-29/32	3-3/4	55	5/8-11/16
50151	1	500MCM-300MCM	500MCM-250MCM	600	430	350	3-3/16	3-5/8	5	75	7/8-7/8
50160	1	750MCM-500MCM	500MCM-350MCM	600	430	350	3-3/16	3-5/8	5	75	7/8-7/8

### 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

Nimbus™



Fig. 1

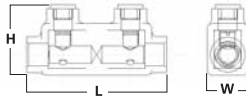
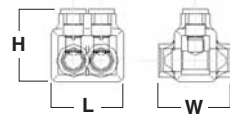


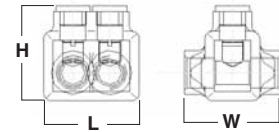
Fig. 2



## Two Wire In-Line and Offset - Insulated Splicer-Reducer Connectors

Catalog Number	Figure No.	No. Of Ports	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 Ports	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 Ports	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

## Direct Burial and Above Grade.

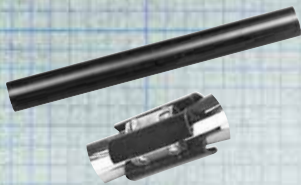


Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5

Catalog Number	Figure Number	UF Cable Range		Wire Range	Testing Certification
		Minimum	Maximum		
57000	1	14/2 with Ground	8/3 with Ground	-	
57001	2	-	-	2-8	
57002	3	-	-	250MCM-1	

### ABOVE GRADE SPLICE KITS

57003	4	-	-	2-8	
57004	5	-	-	250MCM-1	

\* Not UL Listed for direct burial.

# Ground Clamps

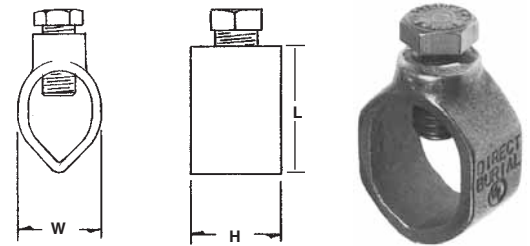
## Features

- 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
58000	3/8	#3	4-10	4-10	1/2	11/16	1
58001	1/2	#4	2-10	2-10	5/8	27/32	1-13/16
58002	5/8	#5	2-10	4-10	5/8	15/16	1-1/32
58003	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
58011	1/2	--	2-10	--	7/8	3/4	1-1/4
58012	5/8	#5	1/0-8	1/0-8	1-1/32	29/32	1-13/32
58013	3/4	--	1/0-8	--	1	1	1-5/8

# Split Bolts

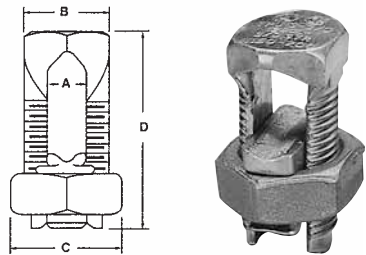
**Features**

- 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.					
50001	12Str.	10Str.	16Str.	.15	.38	.50	.85
50062	16Str.	8Str.	16Str.	.15	.38	.50	.85
50063	10Sol.	6Sol.	16Sol.	.17	.50	.63	1.05
50064	8Sol.	4Sol.	16Sol.	.22	.56	.69	1.05
50065	6Sol.	2Sol.	12Sol.	.33	.69	.82	1.32
50066	6Sol.	2Str.	14Str.	.33	.69	.82	1.32
50067	4Sol.	1/0Str.	14Sol.	.38	.75	.88	1.64
50068	2Sol.	2/0Str.	14Str.	.42	.82	1.00	1.82
50071	1/0Sol.	250MCM	10Sol.	.58	1.00	1.31	2.08
50073	4/0Str.	350MCM	8Sol.	.75	1.50	1.63	2.63
50076	250MCM	500MCM	8Sol.	.83	1.63	1.82	3.00
50019	350MCM	750MCM	8Sol.	1.03	1.94	2.13	3.44
50020	500MCM	1000MCM	8Sol.	1.22	2.25	2.50	4.00



# Split Bolts

## Tin Plated Copper.

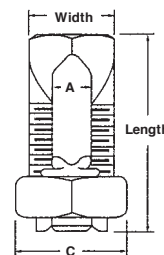


### Features

- 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



Catalog Number	Wire Range		Wire Range		Dimensions			
	Main Copper & Aluminum	ACSR-AAAC 5005	Tap Copper & Aluminum	ACSR-AAAC 5005	A	Width	C	Length
50084	8Str.-14Str.	8(6-1)	8Str.-14Str.	8(6-1)	.166	1/2	5/8	1-7/64
50085	6Str.-10Str.	6(6-1)	6Str.-10Str.	6(6-1)	.217	9/16	11/16	1-17/64
50081	4Str.-8Sol./Str. AL 2Sol.-8Sol./Str. CU	6(6-1)-4(7-1)	4Str.-8Sol./Str. AL 2Sol.-8Sol./Str. CU	6(6-1)-4(7-1)	.326	11/16	13/16	1-35/64
50086	2Str.-8Sol./Str.	3(6-1)-2(6-1)	2Str.-8Sol./Str.	6(6-1)-2(7-1)	.326	11/16	13/16	1-35/64

\* UL 486B Listed, Dual Rated

Catalog Number	Wire Range		Aluminum Range Not UL Listed		Dimensions			
	Main Copper	Tap Copper	Main	Tap	A	Width	C	Length
50087	1/0Str.-6Sol./Str.	1/0Str.-10Sol./Str.	3(6-1)-1(6-1)	6(6-1)-1(6-1)	.376	3/4	7/8	1-41/64
50088	2/0Str.-6Str.	2/0Str.-10Sol./Str.	1(6-1)-1/0(6-1)	6(6-1)-1/0(6-1)	.420	13/16	1	1-53/64
50089	3/0Str.-4Str.	3/0Str./6Sol./Str.	1(6-1)-2/0(6-1)	8(6-1)-2/0(6-1)	.466	7/8	1-1/8	2
50091	250MCM-4Str.	250MCM-4Str.	2/0(6-1)-4/0(6-1)	4(7-1)-4/0(6-1)	.577	1	1-15/16	2-21/64
50093	350MCM-3/0Str.	350MCM-1Sol./Str.	3/0(6-1)-4/0(6-1)	4(6-1)-4/0(6-1)	.746	1-1/2	1-5/8	2-5/8
50096	500MCM-3/0Str.	500MCM-1/0Str.	336.4(30-7)- 477(18-1)	2/0(6-1)-477(18/1)	.834	1-5/8	1-13/16	3

# Split Bolts



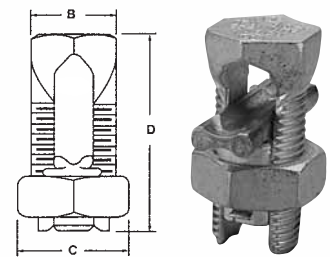
## Aluminum Dual Rated

### 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



Catalog Number	Wire Range		Recommended Tightening Torque	Dimensions		
	Main	Tap		B	C	D
50043	6 Str.-10 Sol.	6 Str.-10 Sol.	165	.56	.75	1.88
50044	4 Str.-8 Sol.	4 Str.-10 Sol.	165	.62	.81	1.38
50046	2 Str.-6 Str. Compact	2 Str.-8 Str.	275	.69	.94	1.58
50047	1/0 Str.-2 Str. Compact	1/0 Str.-8 Str.	385	.75	1.00	1.92
50048	2/0 Str.-2 Str. Compact	2/0 Str.-8 Str.	385	.88	1.12	1.92
50050	4/0 Str.-2 Str. Compact	4/0 Str.-6 Str.	500	1.13	1.49	2.54
50053	350MCM-1/0 Str. Compact	350MCM-4 Str.	50	1.50	1.69	3.24
50056	500MCM-400MCM Compact	500MCM-2 Str. Compact	825	1.73	2.00	3.62

DE-OX Inhibitor is recommended for all aluminum terminations.

# 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

## Copper - Offset Tongue. One Conductor, One Hole.

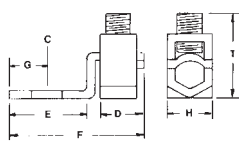


Fig. 1

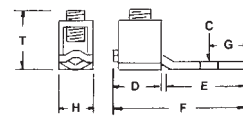


Fig. 2



Catalog Number	Screw Type	Figure Number	Wire Range Copper	Bolt Size	Dimensions							Hex Size
					C	D	E	F	G	H	T	
50301	⊖	1	10-14	#6	5/32	9/32	7/16	1	3/16	5/16	21/32	Slot
50303	⊖	1	6-14 & List Comb. (A)	#10	13/64	7/16	15/32	1-3/16	7/32	3/8	3/4	Slot
50302	⊖	1	6-14 & List Comb. (A)	#10	13/64	7/16	15/32	1-3/16	7/32	3/8	3/4	Slot
50304	⊖	1	4-14	1/4	17/64	7/16	17/32	1-5/16	1/4	1/2	13/16	Slot
50306	⊖	1	2-8 & List Comb. (B)	1/4	17/64	1/2	21/32	1-17/32	1/4	1/2	1	Slot
50305	⊖	1	2-8 & List Comb. (B)	1/4	17/64	1/2	21/32	1-17/32	1/4	1/2	1	Slot
50307	⊖	1	1/0-6	1/4	17/64	5/8	13/16	1-31/32	7/16	5/8	1-11/32	Slot
50309	⬡	1	3/0-4	3/8	13/32	3/4	15/16	2-3/16	7/16	3/4	1-9/16	3/16
50310	⬡	1	4/0-2	5/16	11/32	1	1-5/32	2-5/8	1/2	1	1-13/16	7/32
50312	⬡	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
50313	⬡	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
50315	⬡	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
50502	⊖	2	10-14	#6	5/32	9/32	19/32	61/64	3/16	5/16	19/32	Slot
50504	⊖	2	6-14 & List Comb. (A)	#10	13/64	7/16	41/64	1-9/64	7/32	3/8	11/16	Slot
50505	⊖	2	4-14	1/4	17/64	7/16	23/32	1-1/4	1/4	1/2	27/32	Slot
50506	⊖	2	2-8 & List Comb. (B)	1/4	17/64	1/2	13/16	1-15/32	1/4	1/2	31/32	Slot
50507	⊖	2	1/0-6	1/4	17/64	5/8	1-3/16	1-15/16	7/16	5/8	1-1/4	Slot
50508	⬡	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
50510	⬡	2	4/0-2	5/16	11/32	1	1-7/32	2-3/8	1/2	1	1-21/32	7/32
50512	⬡	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
50513	⬡	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
50514	⬡	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

## Copper - Straight Tongue. One Conductor, One Hole.

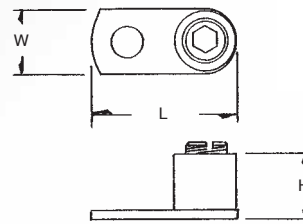


### Features

- 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



Catalog Number	Wire Range	Bolt Size	Stud Hole Size	Dimensions			Hex Size
				L	W	H	
50341	8-14	10	13/64	51/64	3/8	27/64	Slot
50342	4-14	1/4	17/64	1-3/32	17/32	35/64	Slot
50344	1/0-14	5/16	11/32	1-1/2	3/4	5/8	1/4
50347	250MCM-6	3/8	13/32	1-31/32	15/16	1-1/16	1/4
50349*	500MCM-4/0	1/2	17/32	2-31/32	1-3/8	1-7/16	3/8
50351	1000MCM-500MCM	17/32	17/32	3-31/32	2-1/32	2-3/16	1/2

\* Not CSA Certified

# Mechanical Lugs

## Features

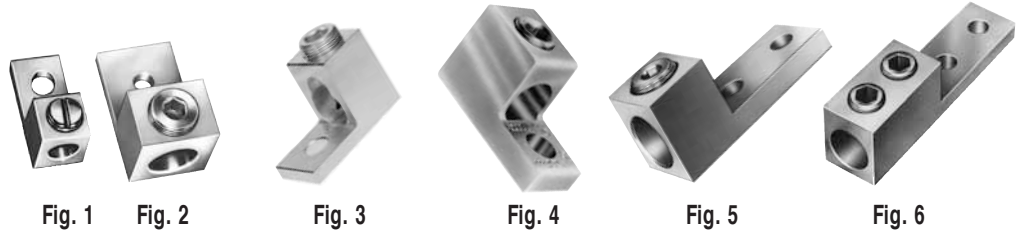
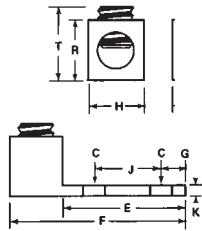
- Manufactured from high strength 6061-T6 aluminum alloy
- Electro-tin plated
- Chamfered wire entry
- UL Listed and CSA Certified for 600 volts, 90° C

## 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	
50201	1	4-14	1/4	17/64	11/16	1-1/16	1/4	1/2	-	3/32	1/2	41/64	S
50202	1	2-14	1/4	17/64	11/16	1-5/32	5/16	1/2	-	7/64	9/16	3/4	S
50203	1	1/0-14	1/4	17/64	27/32	1-15/32	7/16	5/8	-	3/16	25/32	29/32	S
50204	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
50205	2	250MCM-6	5/16	21/64	1	2	15/32	1	-	1/4	1-1/8	1-21/64	5/16
50206	2	300MCM-6	1/4	9/32	1	2	1/2	55/64	-	1/4	1-1/8	1-11/32	5/16
50207	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
50208	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
50209	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
50210	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
50211	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
50212	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
50213	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
50214	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
50221	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
50223	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
50225	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
50227	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
50222	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
50224	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
50226	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
50228	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



## Aluminum- Dual Rated Two Conductor.

### 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

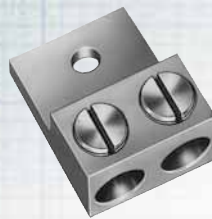
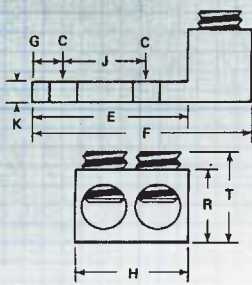


Fig. 1

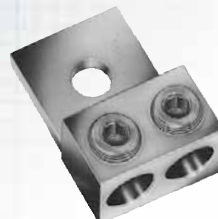


Fig. 2

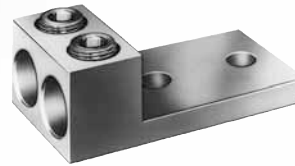


Fig. 3



Fig. 4

Catalog Number	Figure Number	Wire Range	Bolt Size	Dimensions									Hex Size
				C	E	F	G	H	J	K	R	T	
50253	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
50254	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
50255	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
50257	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
50259	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
50260	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
50261	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
50262	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
50263	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
50264	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
50265	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
50266	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
50267	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
50268	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.



# 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			
50292	2-14	1-3/16	29/64	9/16	2	3/8	Slot
50293	1/0-14	1-29/32	5/8	11/16	2	7/16	Slot
50295	250MCM-6	2-5/16	1	1-1/32	2	7/16	5/16
50297	350MCM-6	4-11/32	1	1-3/32	4	11/16	5/6
50298	500MCM-3/0	4-25/32	1-1/4	1-3/8	4	13/16	3/8
50299	750MCM-250MCM	6-1/16	1-7/16	1-5/8	4	15/16	1/2
50300	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	.015625	33/64	.515625
1/32	.03125	17/32	.53125
3/64	.046875	35/64	.546875
1/16	.0625	9/16	.5625
5/64	.078125	37/64	.578125
3/32	.09375	19/32	.59375
7/64	.109375	39/64	.609375
1/8	.125	5/8	.625
9/64	.140625	41/64	.640625
5/32	.15625	21/32	.65625
11/64	.171875	43/64	.671875
3/16	.1875	11/16	.6875
13/64	.203125	45/64	.703125
7/32	.21875	23/32	.71875
5/64	.234375	47/64	.734375
1/4	.25	3/4	.75
17/64	.265625	49/64	.765625
9/32	.28125	25/32	.78125
19/64	.296875	51/64	.796875
5/16	.3125	13/16	.8125
21/64	.328125	53/64	.828125
11/32	.34375	27/32	.84375
23/64	.359375	55/64	.859375
3/8	.375	7/8	.875
25/64	.390625	57/64	.890625
13/32	.40625	29/32	.90625
27/64	.421875	59/64	.921875
7/16	.4375	15/16	.9375
29/64	.453125	61/64	.953125
15/32	.46875	31/32	.96875
31/64	.484375	63/64	.984375
1/2	.5	1	1.0

## Stud and Hole Chart Sizes

Standard Stud Size	Screw Diameter (in.)	Hole Diameter (in.)
 #0	.060 (1.52 mm)	0.094 (2.39 mm)
 #1	.073 (1.83 mm)	
 #2	.086 (2.18 mm)	
 #3	.099 (2.51 mm)	0.120 (3.05 mm)
 #4	.112 (2.85 mm)	
 #5	.125 (3.18 mm)	0.146 (3.71 mm)
 #6	.138 (3.50 mm)	
 #8	.164 (4.17 mm)	0.173 (4.39 mm)
 #10	.190 (4.83 mm)	0.198 (5.03 mm)
 #12	.216 (5.50 mm)	17/64 (6.75 mm)
 #14	.242 (6.15 mm)	
 1/4" (6.35 mm)	.250 (6.35 mm)	
 5/16" (7.93 mm)	.312 (7.93 mm)	21/64 (8.33 mm)
 3/8" (9.53 mm)	.375 (9.53 mm)	25/64 (9.92 mm)
 7/16" (11.1 mm)	.437 (11.10 mm)	29/64 (11.51 mm)
 1/2" (12.70 mm)	.500 (12.70 mm)	33/64 (13.10 mm)
 5/8" (15.90 mm)	.625 (15.90 mm)	21/32 (16.70 mm)
 3/4" (19.10 mm)	.750 (19.10 mm)	25/32 (19.80 mm)
 7/8" (22.23 mm)	.875 (22.23 mm)	29/32 (23.03 mm)
 1" (25.40 mm)	1.000 (25.40 mm)	1-1/32 (25.43 mm)

### 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	.460	12	.081	27	.0142
3/0	.410	13	.072	28	.0126
2/0	.365	14	.064	29	.0113
1/0	.325	15	.057	30	.0100
1	.289	16	.051	31	.0089
2	.258	17	.045	32	.0080
3	.229	18	.040	33	.0071
4	.204	19	.036	34	.0063
5	.182	20	.032	35	.0056
6	.162	21	.0285	36	.0050
7	.144	22	.0253	37	.0045
8	.128	23	.0226	38	.0040
9	.114	24	.0201	39	.0035
10	.102	25	.0179	40	.0031
11	.091	26	.0159		

### 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

### 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
<b>12122</b>	<b>52</b>	12543	52	13182	53	15128	51	17139	55
12128	52	12544	52	13188	53	15143	51	17162	54
12140	52	12560	52	13192	53	15144	51	17180	54
12141	52	12561	52	13198	53	15163	51	17181	54
12143	52	12563	52	13262	53	15164	51	17470	54
12144	52	12564	52	13268	53	15173	51	17471	54
12160	52	12570	52	13272	53	15174	51	17472	54
12161	52	12571	52	13278	53	15183	51	17480	54
12163	52	12573	52	13282	53	15184	51	17481	54
12164	52	12574	52	13288	53	15193	51	17900	62
12170	52	12580	52	13292	53	15194	51	17901	62
12171	52	12581	52	13298	53	15263	51	17902	62
12173	52	12583	52	13322	53	15264	51	17903	62
12174	52	12584	52	13328	53	15273	51	17904	62
12180	52	12590	52	13352	53	15274	51	17905	62
12181	52	12591	52	13358	53	15283	51	17906	62
12183	52	12593	52	13362	53	15284	51	17907	62
12184	52	12594	52	13368	53	15363	51	17999	62
12190	52	12760	52	13372	53	15364	51	<b>20112</b>	<b>38</b>
12191	52	12761	52	13378	53	15373	51	20148	38
12193	52	12763	52	13382	53	15374	51	20212	38
12194	52	12764	52	13388	53	15383	51	20248	38
12260	52	12770	52	13392	53	15384	51	20312	38
12261	52	12771	52	13398	53	15463	51	20348	38
12263	52	12773	52	13562	53	15464	51	20501	38
12264	52	12774	52	13568	53	15473	51	20501R	38
12270	52	12780	52	13572	53	15474	51	20506	38
12271	52	12781	52	13578	53	15483	51	20506R	38
12273	52	12783	52	13582	53	15484	51	20512	38
12274	52	12784	52	13588	53	16009	54	20512R	38
12280	52	12860	52	13592	53	16012	55	20548	38
12281	52	12861	52	13598	53	16016	55	20548R	38
12283	52	12863	52	13862	53	16018	55	20606	38
12284	52	12864	52	13868	53	16020	55	20612	38
12360	52	12870	52	13872	53	16022	55	20648	38
12361	52	12871	52	13878	53	16023	55	20706	38
12363	52	12873	52	13882	53	16032	55	20712	38
12364	52	12874	52	13888	53	16035	55	20748	38
12370	52	12880	52	13892	53	16036	55	21006	38
12371	52	12881	52	13898	53	16050	55	21012	38
12373	52	12883	52	13922	53	16051	55	21048	38
12374	52	12884	52	13928	53	16052	55	21106	38
12380	52	12960	52	13952	53	16060	55	21112	38
12381	52	12961	52	13958	53	16061	55	21148	38
12383	52	12963	52	13962	53	17101	54	21201	38
12384	52	12964	52	13968	53	17112	54	21206	38
12520	52	12970	52	13972	53	17113	54	21212	38
12461	52	12971	52	13978	53	17120	54	21248	38
12463	52	12973	52	13982	53	17122	54	21268	39
12464	52	12974	52	13988	53	17125	54	21301	38
12470	52	12980	52	13992	53	17126	54	21306	38
12471	52	12981	52	13998	53	17128	54	21312	38
12473	52	12983	52	14022	56	17129	54	21348	38
12474	52	12984	52	14032	56	17132	54	21401	38
12480	52	12990	52	14052	56	17133	54	21406	38
12481	52	12991	52	14062	56	17138	55	21412	38
12483	52	12993	52						
12484	52	12994	52						
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12491	52	13128	53						
12493	52	13152	53						
12494	52	13158	53						
12522	52	13162	53						
12528	52	13168	53						
12540	52	13172	53						
12541	52	13178	53						

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
21448	30	26002-6	44	26003Y-600	45	26005W-BRL	45	26007W-12	45
21468	39	26002-600	44	26003Y-BRL	45	26005Y-12	45	26007W-48	45
21501	38	26002BL-12	45	26004-12	44	26005Y-48	45	26007W-6	45
21506	38	26002BL-48	45	26004-48	44	26005Y-6	45	26007W-600	45
21512	38	26002BL-6	45	26004-6	44	26005Y-600	45	26007W-BRL	45
21548	38	26002BL-600	45	26004-600	44	26005Y-BRL	45	26007Y-12	45
21606	38	26002BL-BRL	45	26004BL-12	45	26006-12	44	26007Y-48	45
21612	38	26002-BRL	44	26004BL-48	45	26006-48	44	26007Y-6	45
21648	38	26002C-12	44	26004BL-6	45	26006-6	44	26007Y-600	45
21706	38	26002C-48	44	26004BL-600	45	26006-600	44	26007Y-BRL	45
21712	38	26002C-6	44	26004BL-BRL	45	26006BL-12	45	26008-12	44
21748	38	26002C-600	44	26004-BRL	44	26006BL-48	45	26008-48	44
21768	39	26002C-BRL	44	26004C-12	44	26006BL-6	45	26008-6	44
21806	38	26002G-12	45	26004C-48	44	26006BL-600	45	26008-600	44
21812	38	26002G-48	45	26004C-6	44	26006BL-BRL	45	26008BL-12	45
21848	38	26002G-6	45	26004C-600	44	26006-BRL	44	26008BL-48	45
21906	38	26002G-600	45	26004C-BRL	44	26006C-12	44	26008BL-6	45
21912	38	26002G-BRL	45	26004G-12	45	26006C-48	44	26008BL-600	45
21948	38	26002R-12	45	26004G-48	45	26006C-6	44	26008BL-BRL	45
24106	42	26002R-48	45	26004G-6	45	26006C-600	44	26008-BRL	44
24112	42	26002R-6	45	26004G-600	45	26006C-BRL	44	26008C-12	44
24115	42	26002R-600	45	26004G-BRL	45	26006G-12	45	26008C-48	44
24206	42	26002R-BRL	45	26004R-12	45	26006G-48	45	26008C-6	44
24212	42	26002W-12	45	26004R-48	45	26006G-6	45	26008C-600	44
24215	42	26002W-48	45	26004R-6	45	26006G-600	45	26008C-BRL	44
24306	42	26002W-6	45	26004R-600	45	26006G-BRL	45	26008G-12	45
24312	42	26002W-600	45	26004R-BRL	45	26006R-12	45	26008G-48	45
24315	42	26002W-BRL	45	26004W-12	45	26006R-48	45	26008G-6	45
26001-12	44	26002Y-12	45	26004W-48	45	26006R-6	45	26008G-600	45
26001-48	44	26002Y-48	45	26004W-6	45	26006R-600	45	26008G-BRL	45
26001-6	44	26002Y-6	45	26004W-600	45	26006R-BRL	45	26008R-12	45
26001-600	44	26002Y-600	45	26004W-BRL	45	26006W-12	45	26008R-48	45
26001BL-12	45	26002Y-BRL	45	26004Y-12	45	26006W-48	45	26008R-6	45
26001BL-48	45	26003-12	44	26004Y-48	45	26006W-6	45	26008R-600	45
26001BL-6	45	26003-48	44	26004Y-6	45	26006W-600	45	26008R-BRL	45
26001BL-600	45	26003-6	44	26004Y-600	45	26006W-BRL	45	26008W-12	45
26001BL-BRL	45	26003-600	44	26004Y-BRL	45	26006Y-12	45	26008W-48	45
26001-BRL	44	26003BL-12	45	26005-12	44	26006Y-48	45	26008W-6	45
26001C-12	44	26003BL-48	45	26005-48	44	26006Y-6	45	26008W-600	45
26001C-48	44	26003BL-6	45	26005-6	44	26006Y-600	45	26008W-BRL	45
26001C-6	44	26003BL-600	45	26005-600	44	26006Y-BRL	45	26008Y-12	45
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26001G-600	45	26003C-600	44	26005-BRL	44	26007BL-48	45	26009-48	44
26001G-BRL	45	26003C-BRL	44	26005C-12	44	26007BL-6	45	26009-6	44
26001R-12	45	26003G-12	45	26005C-48	44	26007BL-600	45	26009-600	44
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26001W-600	45	26003R-600	45	26005G-BRL	45	26007G-12	45	26009C-48	44
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26001Y-BRL	45	26003W-BRL	45	26005W-12	45	26007R-48	45	26009G-6	45
26002-12	44	26003Y-12	45	26005W-48	45	26007R-6	45	26009G-600	45
26002-48	44	26003Y-48	45	26005W-6	45	26007R-600	45	26009G-BRL	45
		26003Y-6	45	26005W-600	45	26007R-BRL	45	26009R-12	45

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
26009R-48	45	26011G-48	45	26014C-6	44	26016R-12	45	26311-BRL	45
26009R-6	45	26011G-6	45	26014C-BRL	44	26016R-48	45	26404-12	43
26009R-600	45	26011G-BRL	45	26014G-12	45	26016R-6	45	26404-48	43
26009R-BRL	45	26011R-12	45	26014G-300	45	26016R-BRL	45	26404-6	43
26009W-12	45	26011R-300	45	26014G-48	45	26016W-12	45	26405-12	43
26009W-48	45	26011R-48	45	26014G-6	45	26016W-48	45	26405-48	43
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26009Y-600	45	26011W-BRL	45	26014W-12	45	26301-12	45	26408-6	43
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26010-12	44	26011Y-300	45	26014W-48	45	26301-6	45	26409-48	43
26010-300	44	26011Y-48	45	26014W-6	45	26301-600	45	26409-6	43
26010-48	44	26011Y-6	45	26014W-BRL	45	26301-BRL	45	26410-12	43
26010-6	44	26011Y-BRL	45	26014Y-12	45	26302-12	45	26410-48	43
26010BL-12	45	26013-12	44	26014Y-300	45	26302-48	45	26410-6	43
26010BL-300	45	26013-300	44	26014Y-48	45	26302-6	45	26411-12	43
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26010-BRL	44	26013BL-300	45	26015-48	44	26303-48	45	27100-48	39
26010C-12	44	26013BL-48	45	26015-6	44	26303-6	45	27100-6	39
26010C-300	44	26013BL-6	45	26015BL-12	45	26303-600	45	27101-12	39
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26010C-BRL	44	26013C-12	44	26015BL-BRL	45	26304-48	45	27102-12	39
26010G-12	45	26013C-300	44	26015-BRL	44	26304-6	45	27102-48	39
26010G-300	45	26013C-48	44	26015C-12	44	26304-600	45	27102-6	39
26010G-48	45	26013C-6	44	26015C-48	44	26304-BRL	45	27103-12	39
26010G-6	45	26013C-BRL	44	26015C-6	44	26305-12	45	27103-48	39
26010G-BRL	45	26013G-12	45	26015C-BRL	44	26305-48	45	27103-6	39
26010R-12	45	26013G-300	45	26015G-12	45	26305-6	45	27104-12	39
26010R-300	45	26013G-48	45	26015G-48	45	26305-600	45	27104-48	39
26010R-48	45	26013G-6	45	26015G-6	45	26305-BRL	45	27104-6	39
26010R-6	45	26013G-BRL	45	26015G-BRL	45	26306-12	45	27105-12	39
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26010W-48	45	26013R-6	45	26015R-BRL	45	26306-BRL	45	27201-36	39
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26010Y-12	45	26013W-300	45	26015W-6	45	26307-6	45	27203-12	39
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26011-12	44	26013Y-300	45	26015Y-BRL	45	26308-6	45	27205-36	39
26011-300	44	26013Y-48	45	26016-12	44	26308-600	45	27206-12	39
26011-48	44	26013Y-6	45	26016-48	44	26308-BRL	45	27206-36	39
26011-6	44	26013Y-BRL	45	26016-6	44	26309-12	45	27601-12	41
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26011BL-BRL	45	26014BL-12	45	26016-BRL	44	26310-12	45	27601C-6	41
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26011C-BRL	44	26014C-12	44	26016G-48	45	26311-300	45	27602C-6	41
26011G-12	45	26014C-300	44	26016G-6	45	26311-48	45	27603-12	41
26011G-300	45	26014C-48	44	26016G-BRL	45	26311-6	45	27603-48	41



ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
27603-6	41	29004BL-12	41	29008C-12	40	29011G-12	41	3011M	15
27603C-12	41	29004BL-48	41	29008C-48	40	29011G-48	41	3011M-P50	15
27603C-48	41	29004BL-6	41	29008C-6	40	29011G-6	41	3011MS	15
27603C-6	41	29004C-12	40	29008G-12	41	29011R-12	41	3011MS-P50	15
27604-12	41	29004C-48	40	29008G-48	41	29011R-48	41	30122	17
27604-48	41	29004C-6	40	29008G-6	41	29011R-6	41	30122FL	17
27604-6	41	29004G-12	41	29008R-12	41	29011W-12	41	30122FL-P50	17
27604C-12	41	29004G-48	41	29008R-48	41	29011W-48	41	30122-P50	17
27604C-48	41	29004G-6	41	29008R-6	41	29011W-6	41	30123	17
27604C-6	41	29004R-12	41	29008W-12	41	29011Y-12	41	30123FL	17
27804-12	42	29004R-48	41	29008W-48	41	29011Y-48	41	30123FL-P50	17
27804-48	42	29004R-6	41	29008W-6	41	29011Y-6	41	30123-P50	17
27804-6	42	29004W-12	41	29008Y-12	41	29012-12	40	30124	17
27804BR-12	43	29004W-48	41	29008Y-48	41	29012-48	40	30124FL	17
27804BR-48	43	29004W-6	41	29008Y-6	41	29012-6	40	30124FL-P50	17
27804BR-6	43	29004Y-12	41	29009-12	40	29012BL-12	41	30124-P50	17
27805-12	42	29004Y-48	41	29009-48	40	29012BL-48	41	30130	15
27805-48	42	29004Y-6	41	29009-6	40	29012BL-6	41	30130-P50	15
27805-6	42	29005-12	40	29009BL-12	41	29012C-12	40	30133	15
27805GY-12	43	29005-48	40	29009BL-48	41	29012C-48	40	30133-P50	15
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27806-12	42	29005BL-48	41	29009C-48	40	29012G-48	41	30143	17
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27806-6	42	29005C-12	40	29009G-12	33	29012R-12	41	30144	17
27806W-12	43	29005C-48	40	29009G-48	41	29012R-48	41	30144-P50	17
27806W-48	43	29005C-6	40	29009G-6	41	29012R-6	41	30168	19
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27809-6	42	29005Y-12	41	29010-12	40	29013BL-12	41	30184	19
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27809BL-48	43	29005Y-6	41	29010-6	40	29013BL-6	41	30185	11 & 18
27809BL-6	43	29006-12	40	29010BL-12	41	29013C-12	40	30185-P50	11 & 18
27810-12	42	29006-48	40	29010BL-48	41	29013C-48	40	30186	11 & 18
27810-48	42	29006-6	40	29010BL-6	41	29013C-6	40	30186-P50	11 & 18
27810-6	42	29006BL-12	41	29010C-12	40	29013G-12	41	30187	11 & 18
27810Y-12	43	29006BL-48	41	29010C-48	40	29013G-48	41	30187-P50	11 & 18
27810Y-48	43	29006BL-6	41	29010C-6	40	29013G-6	41	30188	11 & 18
27810Y-6	43	29006C-12	40	29010G-12	41	29013R-12	41	30188-P50	11 & 18
27811-12	42	29006C-48	40	29010G-48	41	29013R-48	41	30191	19
27811-48	42	29006C-6	40	29010G-6	41	29013R-6	41	30191-P50	19
27811-6	42&43	29006G-12	41	29010R-12	41	29013W-12	41	30193	19
28101	46	29006G-48	41	29010R-48	41	29013W-48	41	30193-P50	19
28102	46	29006G-6	41	29010R-6	41	29013W-6	41	30194	19
28103	46	29006R-12	41	29010W-12	41	29013Y-12	41	30194-P50	19
28104	46	29006R-48	41	29010W-48	41	29013Y-48	41	30195	18
28105	46	29006R-6	41	29010W-6	41	29013Y-6	41	30195-P50	18
28106	46	29006W-12	41	29010Y-12	41	<b>30112</b>	<b>16</b>	30196	18
28107	46	29006W-48	41	29010Y-48	41	30112-P50	16	30196-P50	18
28108	46	29006W-6	41	29010Y-6	41	30113	16	30197	18
28109	46	29006Y-12	41	29011-12	40	30113-P50	16	30197-P50	18
28110	46	29006Y-48	41	29011-48	40	30114	16	30198	18
28111	46	29006Y-6	41	29011-6	40	30114-P50	16	30198-P50	18
28115	46	29008-12	40	29011BL-12	41	30115	16	30312	16
28116	46	29008-48	40	29011BL-48	41	30115-P50	16	30312-P50	16
28117	46	29008-6	40	29011BL-6	41	30116	16	30313	16
29004-12	40	29008BL-12	41	29011C-12	40	30116-P50	16	30313-P50	16
29004-48	40	29008BL-48	41	29011C-48	40	30117	16	30314	16
29004-6	40	29008BL-6	41	29011C-6	40	30117-P50	16	30314-P50	16

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
30315	16	30412	16	3111M	8	31322FL	9	31423FL-P25	9
30315-P50	16	30412-P25	16	3111M-P50	8	31322FL-P50	9	31423-P25	8
30316	16	30413	16	3111MS	8	31322-P50	8	31424	8
30316-P50	16	30413-P25	16	3111MS-P50	8	31323	8	31424FL	9
30317	16	30414	16	31122	8	31323FL	9	31424FL-P25	9
30317-P50	16	30414-P25	16	31122FL	9	31323FL-P50	9	31424-P25	8
3031M	15	30415	16	31122FL-P50	9	31323-P50	8	31430	6
3031M-P50	15	30415-P25	16	31122-P50	8	31324	8	31430-P25	6
3031MS	15	30416	16	31123	8	31324FL	9	31430-P250	6
3031MS-P50	15	30416-P25	16	31123FL	9	31324FL-P50	9	31442	9
30322	17	30417	16	31123FL-P50	9	31324-P50	8	31442-P25	9
30322FL	17	30417-P25	16	31123-P50	8	31330	6	31443	9
30322FL-P50	17	30419	16	31124	8	31330-P50	6	31443-P25	9
30322-P50	17	30419-P25	16	31124FL	9	31330-P500	6	31444	9
30323	17	3041M	15	31124FL-P50	9	31342	9	31444-P25	9
30323FL	17	3041M-P25	15	31124-P50	8	31342-P50	9	31445	9
30323FL-P50	17	30422	17	31130	6	31343	9	31445-P25	9
30323-P50	17	30422FL	17	31130-P50	6	31343-P50	9	31452	10
30324	17	30422FL-P25	17	31130-P500	6	31344	9	31452-P25	10
30324FL	17	30422-P25	17	31142	9	31344-P50	9	31453	10
30324FL-P50	17	30423	17	31142-P50	9	31352	10	31453-P25	10
30324-P50	17	30423FL	17	31143	9	31352-P50	10	31454	10
30330	15	30423FL-P25	17	31143-P50	9	31353	10	31454-P25	10
30330-P50	15	30423-P25	17	31144	9	31353-P50	10	31465	12
30333	15	30424	17	31144-P50	9	31354	10	31465-P25	12
30333-P50	15	30424FL	17	31152	10	31354-P50	10	31469	12
30342	17	30424FL-P25	17	31152-P50	10	31365	12	31469-P25	12
30342-P50	17	30424-P25	17	31153	10	31365-P50	12	31483	11
30343	17	30430	15	31153-P50	10	31368	12	31483-P25	11
30343-P50	17	30430-P25	15	31154	10	31368-P50	12	31493	11
30344	17	30433	15	31154-P50	10	31369	12	31493-P25	11
30344-P50	17	30433-P25	15	31165	12	31369-P50	12	31514	7
30368	19	30442	17	31165-P50	12	31383	11	31514-P25	7
30368-P50	19	30442-P25	17	31168	12	31383-P50	11	31515	7
30369	19	30443	17	31168-P50	12	31384	11	31515-P25	7
30369-P50	19	30443-P25	17	31169	12	31384-P50	11	31516	7
30378	19	30444	17	31169-P50	12	31391	12	31516-P25	7
30378-P50	19	30444-P25	17	31183	11	31391-P50	12	31517	7
30379	19	30445	17	31183-P50	11	31393	11	31517-P25	7
30379-P50	19	30445-P25	17	31184	11	31393-P50	11	31519	7
30383	19	30483	19	31184-P50	11	31394	11	31519-P25	7
30383-P50	19	30483-P25	19	31191	12	31394-P50	11	31530	6
30384	19	30487	18	31191-P50	12	31403	6	31530-P25	6
30384-P50	19	30487-P25	18	31193	11	31404	6	33130	6
30385	18	30488	18	31193-P50	11	31412	7	33130-P50	6
30385-P50	18	30488-P25	18	31194	11	31412-P25	7	33130-P500	6
30386	18	30493	19	31194-P50	11	31413	7	33330	6
30386-P50	18	30493-P25	19	31303	6	31413-P25	7	33330-P50	6
30387	18	30497	18	31304	6	31414	7	33330-P500	6
30387-P50	18	30497-P25	18	31312	7	31414-P25	7	33430	6
30388	18	30498	18	31312-P50	7	31415	7	33430-P25	6
30388-P50	18	30498-P25	18	31313	7	31415-P25	7	33430-P250	6
30391	19	31103	6	31313-P50	7	31416	7	37103	6
30391-P50	19	31104	6	31314	7	31416-P25	7	37104	6
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30394-P50	19	31113-P50	7	31316	7	31419-P25	7	37113-P50	7
30395	18	31114	7	31316-P50	7	3141M	8	37114	7
30395-P50	18	31114-P50	7	31317	7	3141M-P25	8	37114-P50	7
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30397	18	31116	7	3131M-P50	8	31422FL-P25	9	37116	7
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30398	18	31117	7	3131MS-P50	8	31423	8	37117	7
30398-P50	18	31117-P50	7	31322	8	31423FL	9		

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
37117-P50	7	37322FL	9	37423FL-P25	9	40315-P100	24	4511MSN	25
3711M	8	37322FL-P50	9	37423	8	40330	22	4511MSN-P100	25
3711M-P50	8	37322	8	37423-P25	8	40330-P100	22	4511MS-P100	25
3711MS	8	37322-P50	8	37424FL	9	40330-P1000	22	45122	25
3711MS-P50	8	37323FL	9	37424FL-P25	9	40414	24	45122FL	26
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37122FL-P50	9	37323	8	37424-P25	8	40415	24	45122FLN-P100	26
37122	8	37323-P50	8	37430	6	40415-P50	24	45122FL-P100	26
37122-P50	8	37324FL	9	37430-P25	6	40416	24	45122N	25
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37123FL-P50	9	37324	8	37442	9	40417	24	45122-P100	25
37123	8	37324-P50	8	37442-P25	9	40417-P50	24	45123	25
37123-P50	8	37330	6	37443	9	40430	22	45123FL	26
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37124FL-P50	9	37330-P500	6	37444	9	40430-P500	22	45123FLN-P100	26
37124	8	37342	9	37444-P25	9	40515	24	45123FL-P100	26
37124-P50	8	37342-P50	9	37445	9	40515-P50	24	45123N	25
37130	6	37343	9	37445-P25	9	40516	24	45123N-P100	25
37130-P50	6	37343-P50	9	37452	10	40516-P50	24	45123-P100	25
37130-P500	6	37344	9	37452-P25	10	40517	24	45124	25
37142	9	37344-P50	9	37453	10	40517-P50	24	45124FL	26
37142-P50	9	37352	10	37453-P25	10	41101	31	45124FLN	26
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37143-P50	9	37353	10	37454-P25	10	41132	31	45124FL-P100	26
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37144-P50	9	37354	10	37465-P25	12	41136	31	45124N-P100	25
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37152-P50	10	37365	12	37469-P25	12	41142	31	45130	22
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37153-P50	10	37368	12	37483-P25	11	41146	31	45130N-P100	22
37154	10	37368-P50	12	37493	11	41148	31	45130N-P1000	22
37154-P50	10	37369	12	37493-P25	11	41152	31	45130-P100	22
37165	12	37369-P50	12	37514	7	41154	31	45130-P1000	22
37165-P50	12	37383	11	37514-P25	7	41156	31	45131	23
37168	12	37383-P50	11	37515	7	41203	31	45131-P100	18
37168-P50	12	37384	11	37515-P25	7	41205	31	45133N	22
37169	12	37384-P50	11	37516	7	41305	31	45133N-P100	22
37169-P50	12	37391	12	37516-P25	7	45112	24	45142	26
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37183-P50	11	37393	11	37517-P25	7	45112N-P100	24	45142N-P100	26
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37194-P50	11	37413	7	35530-P25	6	45114N-P100	24	45144N-P100	26
37303	6	37413-P25	7	<b>40112</b>	<b>24</b>	45114-P100	24	45144-P100	26
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37317-P50	7	37422FL	9	40313	24	4511M	25	45165	29
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3731MS	8	37422-P25	8	40314-P100	19	4511M-P100	25	45165-P100	29
3731MS-P50	8	37423FL	9	40315	24	4511MS	25	45168	29



ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
45168N	29	45313	24	45342N-P100	26	45393N	28	45423-P50	25
45168N-P100	29	45313N	24	45342-P100	26	45393N-P100	28	45424	25
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45178-P100	29	45316	24	45352N-P100	26	45397N-P100	27	45430N-P500	22
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45312-P100	24	45342N	26	45393	28	45423N-P50	25	45493N	28

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
45493N-P50	28	45633-P25	22	46130	22	46342	26	46444-P50	26
45493-P50	28	45714	24	46130-P100	22	46342-P100	26	46445	26
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45514-P50	24	45716	24	46144	26	46353-P100	26	46465	29
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45517-P50	24	45730	22	46169	29	46384-P100	28	46517	24
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45519-P50	24	45900	30	46184	28	46394-P100	28	46530	22
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45530-P50	22	45905	30	46194	28	46413-P50	24	46533	22
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45531-P50	23	45909	30	46313	24	46415-P50	24	46615	24
45533	22	45910	30	46313-P100	24	46416	24	46615-P25	24
45533-P50	22	45911	30	46314	24	46416-P50	24	46616	24
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45614-P25	24	46115	24	4631M-P100	25	46422FL-P50	26	46714-P25	24
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45616N-P25	24	4611M-P100	25	46323	25	46424FL	26	46719	24
45616-P25	24	4611MS	25	46323FL	26	46424FL-P50	26	46719-P25	24
45617	24	4611MS-P100	25	46323FL-P100	26	46424-P50	25	<b>50001</b>	<b>128</b>
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45617-P25	24	46122FL-P100	26	46324FL	26	46430-P500	22	50043	130
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45619-P25	24	46123FL-P100	26	46330-P100	22	46433-P50	22	50048	130
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45633	22	46124-P100	25	46333-P100	22	46444	26	50063	128

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
50064	128	56500	121	60206-38	71	63863	63	91047	61
50065	128	56600	121	60207-38	71	<b>80002-100COIL 72</b>		91049	61
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50067	128	56800	121	60210-38	71	80002-25COIL	72	91056	61
50068	128	57000	126	60212-38	71	80002-BRL	72	91057	61
50069	128	57001	126	60214-38	71	80004-100COIL	72	91059	61
50071	128	57002	126	60301	71	80004-25BOX	72	91065	61
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50076	128	57004	126	60302	71	80004-BRL	72	91067	61
50081	129	57025	88	60302BK	71	80005-100COIL	72	91069	61
50084	129	57035	88	60304	71	80005-25BOX	72	91075	61
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50086	129	57046	88	60306	71	80005-BRL	72	91077	61
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50091	129	57089	88	60404	71	80006-BRL	72	91087	61
50093	129	57099	88	60404BK	71	80007-100COIL	72	91089	61
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50119	124	57309	88	60408	71	80007-BRL	72	91106	61
50120	124	57400	88	60408BK	71	80008-100COIL	72	91107	61
50130	124	57500	88	60410	71	80008-25BOX	72	91109	61
50140	124	57600	88	60410BK	71	80008-25COIL	72	91114	61
50141	124	57700	88	60411	71	80008-BRL	72	91115	61
50149	124	57800	88	60411BK	71	80010-25BOX	72	91116	61
50151	124	58000	127	61004	63	80010-25COIL	72	91117	61
50152	124	58001	127	61007	63	80011-25COIL	72	91119	61
50160	124	58002	127	61811	63	80012-15COIL	72	91124	61
50201	133	58003	127	61812	63	85001	73	91125	61
50202	133	58011	127	61813	63	85002	73	91126	61
50203	133	58012	127	61822	63	85004	73	91127	61
50204	133	58013	127	61823	63	85005	73	91129	61
50205	133	58697	122	62004	63	85006	73	91135	61
50206	133	58698	122	62007	63	85007	73	91136	61
50207	133	58699	122	62231	63	85008	73	91137	61
50208	133	58700	122	62233	63	86004	73	91139	61
50209	133	58701	122	62331	63	86005	73	91145	61
50210	133	58702	122	62333	63	86006	73	91146	61
50211	133	58703	122	62431	63	87003	73	91147	61
50212	133	58704	122	62433	63	87004	73	91149	61
50213	133	58705	122	62631	63	87006	73	91155	61
50214	133	58706	122	62633	63	87008	73	91156	61
50221	133	58707	122	62802	63	88003	73	91157	61
50222	133	58708	122	62803	63	88006	73	91159	61
50223	133	58709	122	62812	63	<b>91004</b>	<b>61</b>	91165	61
50224	133	58710	122	62813	63	91005	61	91166	61
50225	133	58711	122	62831	63	91006	61	91167	61
50226	133	58712	122	62832	63	91007	61	91169	61
50227	133	58713	122	62833	63	91009	61	91175	61
50228	133	58714	122	63004	63	91014	61	91176	61
50253	134	58715	122	63007	63	91015	61	91177	61
50254	134	58716	122	63241	63	91016	61	91179	61
50255	134	58717	122	63243	63	91017	61	91185	61
50257	134	58718	122	63441	63	91019	61	91186	61
50259	134	58719	122	63443	63	91024	61	91187	61
50260	134	<b>60102-14</b>	<b>71</b>	63541	63	91025	61	91189	61
50261	134	60104-14	71	63543	63	91026	61	91200	61
50262	134	60106-38	71	63641	63	91027	61	91210	61
50263	134	60107-38	71	63643	63	91029	61	91220	61
50264	134	60108-38	71	63841	63	91035	61	91230	61
50265	134	60110-38	71	63842	63	91036	61	91240	61
50266	134	60112-38	71	63843	63	91037	61	91250	61
50267	134	60114-38	71	63852	63	91039	61	91260	61
50268	134	60202-14	71	63853	63	91045	61	91270	61
50292		60204-14	71	63862	63	91046	61	91280	61



ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
91705	58	92185	66	93160M	68	93808	70	99012	58
91706	58	92185R	66	93170	68	93809	70	99013	58
91707	58	92310BK	67	93170D	68	93812	70	99014	57
91709	58	92310BL	67	93180	68	93813	70	99015	57
91715	58	92310BR	67	93185	68	94000	70	99015S	57
91716	58	92310G	67	93185D	68	94012	83	99017	57
91717	58	92310R	67	93190	68	94014	83	99018	57
91719	58	92310W	67	93195	68	94014BM	83	99051	57
91725	58	92310Y	67	93196	68	94015	83	99052	57
91726	58	92312BK	67	93199	68	94031	83	99053	57
91727	58	92312BL	67	93210	68	94040	83	99054	57
91729	58	92312BR	67	93210M	68	94071	64	99055	57
91745	58	92312G	67	93220	68	94072	64	99056	57
91746	58	92312R	67	93220M	68	94073	64	99057	57
91747	58	92312W	67	93230	68	94074	64	99058	57
91749	58	92312Y	67	93230-BL	69	94075	64	99102	20
91756	58	92314BK	67	93230-GR	69	94078	64	99110	20
91757	58	92314BL	67	93230M	69	94143	82	99112	20
91759	58	92314BR	67	93230-OR	69	94145	82	99120	20
91766	58	92314G	67	93230-R	69	94230	82	99125	20
91767	58	92314O	67	93230-Y	69	94284	78	99165	21
91769	58	92314R	67	93250	68	94284BM	78	99166	21
91776	58	92314W	67	93250M	68	94285	78	99200	75
91777	58	92314Y	67	93260	68	94290	80	99201	75
91779	58	92316BK	67	93260M	68	94296	79	99202	75
91786	58	92316BL	67	93270	68	94297	78	99203	75
91787	58	92316BR	67	93270D	68	94298	79	99204	75
91789	58	92316G	67	93280	68	94330	82	99205	75
91800	58	92316O	67	93285	68	94400	70	99206	75
91810	58	92316R	67	93285D	68	94502	90	99207	75
91820	58	92316W	67	93290	68	94600	84	99208	75
91840	58	92316Y	67	93295	68	94700	86	99209	75
91850	58	92318BK	67	93296	68	94701	86	99211	75
91860	58	92318BL	67	93299	68	94800	87	99300	20
91870	58	92318BR	67	93310	69	94840	79	99305	20
91880	58	92318G	67	93320	69	94841	79	99502	57
92105	66	92318R	67	93340	69	94900	87	99513	57
92105R	66	92318W	67	93345	69	94901K	89	ILC-10-N	80
92115	66	92318Y	67	93350	69	94902	85	CLND-1/0-12-1	116
92115R	66	92400	67	93380	69	94905	84	CLND-1/0-12-134	116
92121	66	92401	67	93390	69	94907K	89	CLND-1/0-14-1	116
92121R	66	92402	67	93403	69	94940	86	CLND-1/0-14-34	116
92125	66	92403	67	93410	69	95242	56	CLND-1/0-14-58	116
92125R	66	92404	67	93420	69	95243	56	CLND-1/0-38-1	116
92131	66	92405	67	93440	69	95246	56	CLND-1/0-38-134	116
92131R	66	92406	67	93445	69	95247	56	CLND-1/0-516-1	116
92135	66	92407	67	93450	69	95262	56	CLND-1/0-516-34	116
92135R	66	92408	67	93480	69	95263	56	CLND-1/0-516-78	116
92141	66	92409	67	93490	69	95266	56	CLND-1000-12-114	119
92141R	66	92410	67	93510	70	95267	56	CLND-1000-12-134	119
92145	66	92412	67	93511	70	95342	56	CLND-1000-38-1	119
92145R	66	92413	67	93512	70	95352	56	CLND-1000-58-112	119
92151	66	93110	68	93513	70	95901	56	CLND-1-12-134	116
92151R	66	93110-BL	69	93514	70	95902	56	CLND-1-14-1	116
92155	66	93110-GR	69	93515	70	99001	56	CLND-1-14-34	116
92155R	66	93110M	69	93620	69	99001L	56	CLND-1-14-58	116
92161	66	93110-OR	69	93640	69	99002	56	CLND-1-38-1	116
92161R	66	93110-R	69	93650	69	99003	57	CLND-1-516-1	116
92165	66	93110-Y	69	93720	69	99004	57	CLND-1-516-78	116
92165R	66	93120	68	93740	69	99005	57	CLND-2/0-12-1	117
92171	66	93120M	68	93750	69	99007	57	CLND-2/0-12-134	117
92171R	66	93130	68	93794	69	99010	57	CLND-2/0-14-1	117
92175	66	93130M	68	93795	69	99011	58		
92175R	66	93150	68	93796	69				
92181	66	93150M	68	93804	70				
92181R	66	93160	68	93805	70				

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
99012	58	CLND-2/0-14-34	117	CLND-4-12-134	115	CLNS-1-12	105	CLNS-650-516	107
99013	58	CLND-2/0-14-58	117	CLND-4-14-34	115	CLNS-1-14	105	CLNS-650-58	107
99014	57	CLND-2/0-38-1	117	CLND-4-14-58	115	CLNS-1-38	105	CLNS-6-516	105
99015	57	CLND-2/0-38-134	117	CLND-4-38-1	115	CLNS-1-516	105	CLNS-700-12	107
99015S	57	CLND-2/0-516-1	117	CLND-4-38-34	115	CLNS-2/0-10	106	CLNS-700-38	107
99017	57	CLND-2-10-34	116	CLND-4-516-1	115	CLNS-2/0-12	106	CLNS-700-58	107
99018	57	CLND-2-12-134	116	CLND-4-516-34	115	CLNS-2/0-14	106	CLNS-750-12	107
99051	57	CLND-2-14-1	116	CLND-500-12-114	118	CLNS-2/0-38	106	CLNS-750-38	107
99052	57	CLND-2-14-34	116	CLND-500-12-134	118	CLNS-2/0-516	106	CLNS-750-58	107
99053	57	CLND-2-14-58	116	CLND-500-14-34	118	CLNS-2-10	105	CLNS-8-10	105
99054	57	CLND-2-38-1	116	CLND-500-38-1	118	CLNS-2-12	105	CLNS-8-14	105
99055	57	CLND-2-38-134	116	CLND-600-12-134	118	CLNS-2-14	105	CLNS-8-38	105
99056	57	CLND-2-38-34	116	CLND-600-38-1	118	CLNS-2-38	105	CLNS-8-38	105
99057	57	CLND-2-38-78	116	CLND-6-10-1116	114	CLNS-250-12	106	CLNS-8-516	105
99102	20	CLND-250-12-114	117	CLND-6-10-12	114	CLNS-250-38	106	CLWD-1/0-12-1	110
99110	20	CLND-250-12-134	117	CLND-6-10-34	114	CLNS-250-516	106	CLWD-1/0-12-134	110
99112	20	CLND-250-14-34	117	CLND-6-10-58	114	CLNS-2-516	105	CLWD-1/0-14-1	110
99120	20	CLND-250-38-1	117	CLND-6-12-134	114	CLNS-3/0-10	106	CLWD-1/0-14-34	110
99125	20	CLND-250-38-134	117	CLND-6-14-1	114	CLNS-3/0-12	106	CLWD-1/0-14-58	110
99165	21	CLND-2-516-1	116	CLND-6-14-12	114	CLNS-3/0-14	106	CLWD-1/0-38-1	110
99166	21	CLND-2-516-34	116	CLND-6-14-34	114	CLNS-3/0-38	106	CLWD-1/0-38-134	110
99200	75	CLND-3/0-12-134	117	CLND-6-14-58	114	CLNS-3/0-516	106	CLWD-1/0-516-1	110
99201	75	CLND-3/0-14-34	117	CLND-6-38-1	114	CLNS-300-12	106	CLWD-1/0-516-34	110
99202	75	CLND-3/0-14-58	117	CLND-6-38-34	114	CLNS-300-38	106	CLWD-1/0-516-78	110
99203	75	CLND-3/0-38-1	117	CLND-6-38-78	114	CLNS-300-516	106	CLWD-1000-12-114	113
99204	75	CLND-3/0-516-1	117	CLND-650-12-114	119	CLNS-3-10	105	CLWD-1000-12-134	113
99205	75	CLND-300-12-134	118	CLND-650-12-134	119	CLNS-3-12	105	CLWD-1000-38-1	113
99206	75	CLND-300-38-1	118	CLND-650-38-1	119	CLNS-3-14	105	CLWD-1000-58-112	113
99207	75	CLND-3-12-134	115	CLND-650-38-118	119	CLNS-3-38	105	CLWD-1-12-134	109
99208	75	CLND-3-14-34	115	CLND-650-516-1	119	CLNS-350-12	106	CLWD-1-14-1	109
99209	75	CLND-3-14-58	115	CLND-6-516-1	114	CLNS-350-38	106	CLWD-1-14-34	109
99211	75	CLND-3-38-1	115	CLND-6-516-34	114	CLNS-350-58	106	CLWD-1-14-58	109
99300	20	CLND-3-38-34	115	CLND-700-12-112	119	CLNS-3-516	105	CLWD-12-134	112
99305	20	CLND-350-12-114	118	CLND-700-12-134	119	CLNS-4/0-12	106	CLWD-1-38-1	109
99502	57	CLND-350-12-134	118	CLND-700-12-178	119	CLNS-4/0-14	106	CLWD-1-516-1	109
99513	57	CLND-350-14-34	118	CLND-700-38-1	119	CLNS-4/0-38	106	CLWD-1-516-78	109
ILC-10-N	80	CLND-350-38-1	118	CLND-700-38-118	119	CLNS-4/0-516	106	CLWD-2/0-12-1	110
CLND-1/0-12-1	116	CLND-350-516-134	118	CLND-750-12-112	119	CLNS-400-12	106	CLWD-2/0-12-134	110
CLND-1/0-12-134	116	CLND-3-516-1	115	CLND-750-12-134	119	CLNS-400-38	106	CLWD-2/0-14-1	110
CLND-1/0-14-1	116	CLND-3-516-58	115	CLND-750-38-1	119	CLNS-400-58	106	CLWD-2/0-14-34	110
CLND-1/0-14-34	116	CLND-4/0-12-1	117	CLND-750-38-118	119	CLNS-4-10	105	CLWD-2/0-14-58	110
CLND-1/0-14-58	116	CLND-4/0-12-114	117	CLND-750-58-112	119	CLNS-4-12	105	CLWD-2/0-38-1	110
CLND-1/0-38-1	116	CLND-4/0-12-134	117	CLND-8-10-34	114	CLNS-4-14	105	CLWD-2/0-38-134	110
CLND-1/0-38-134	116	CLND-4/0-14-1	117	CLND-8-10-58	114	CLNS-4-38	105	CLWD-2/0-516-1	110
CLND-1/0-516-1	116	CLND-4/0-14-34	117	CLND-8-14-1	114	CLNS-4-516	105	CLWD-2-10-34	109
CLND-1/0-516-34	116	CLND-4/0-14-58	117	CLND-8-14-34	114	CLNS-500-12	107	CLWD-2-12-134	109
CLND-1/0-516-78	116	CLND-4/0-38-1	117	CLND-8-14-58	114	CLNS-500-38	107	CLWD-2-14-1	109
CLND-1000-12-114	119	CLND-4/0-38-134	117	CLND-8-38-1	114	CLNS-500-58	107	CLWD-2-14-34	109
CLND-1000-12-134	119	CLND-4/0-516-1	117	CLNS-1/0-10	106	CLNS-600-12	107	CLWD-2-14-58	109
CLND-1000-38-1	119	CLND-4/0-516-134	117	CLNS-1/0-12	106	CLNS-600-38	107	CLWD-2-38-1	109
CLND-1000-58-112	119	CLND-400-12-134	118	CLNS-1/0-14	106	CLNS-600-58	107	CLWD-2-38-134	109
CLND-1-12-134	116	CLND-400-38-1	118	CLNS-1/0-38	106	CLNS-6-10	105	CLWD-2-38-34	109
CLND-1-14-1	116	CLND-400-38-116	118	CLNS-1/0-516	106	CLNS-6-12	105	CLWD-2-38-58	109
CLND-1-14-34	116	CLND-4-10-1	115	CLNS-1000-12	107	CLNS-6-14	105	CLWD-2-38-78	109
CLND-1-14-58	116	CLND-4-10-34	115	CLNS-1000-38	107	CLNS-6-38	105	CLWD-250-12-114	111
CLND-1-38-1	116	CLND-4-10-58	115	CLNS-1000-58	107	CLNS-650-12	107	CLWD-250-12-134	111
CLND-1-516-1	116			CLNS-1-10	105	CLNS-650-38	107	CLWD-250-14-34	111
CLND-1-516-78	116								
CLND-2/0-12-1	117								
CLND-2/0-12-134	117								
CLND-2/0-14-1	117								

ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE	ITEM	PAGE
CLWD-250-38-1	111	CLWD-6-10-12	108	CLWS-250-516	103	CSWD-1/0-12-1	98	CSWD-350-12-134	100
CLWD-250-38-134	111	CLWD-6-10-34	108	CLWS-2-516	102	CSWD-1/0-12-134	98	CSWD-350-14-34	100
CLWD-2-516-1	109	CLWD-6-10-58	108	CLWS-3/0-10	103	CSWD-1/0-14-1	98	CSWD-350-38-1	100
CLWD-2-516-34	109	CLWD-6-12-134	108	CLWS-3/0-12	103	CSWD-1/0-14-34	98	CSWD-350-516-134	100
CLWD-2-516-58	109	CLWD-6-14-1	108	CLWS-3/0-14	103	CSWD-1/0-14-58	98	CSWD-3-516-1	97
CLWD-3/0-12-134	110	CLWD-6-14-12	108	CLWS-3/0-38	103	CSWD-1/0-38-1	98	CSWD-4/0-12-1	99
CLWD-3/0-14-34	110	CLWD-6-14-34	108	CLWS-3/0-516	103	CSWD-1/0-38-134	98	CSWD-4/0-12-114	99
CLWD-3/0-14-58	110	CLWD-6-14-58	108	CLWS-300-12	103	CSWD-1/0-516-1	98	CSWD-4/0-12-134	99
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CLWD-300-12-134	111	CLWD-6-38-78	108	CLWS-3-10	102	CSWD-1000-12-114	101	CSWD-4/0-14-58	99
CLWD-300-38-1	111	CLWD-650-12-114	112	CLWS-3-12	102	CSWD-1000-12-134	101	CSWD-4/0-38-1	99
CLWD-3-12-134	109	CLWD-650-38-1	112	CLWS-3-14	102	CSWD-1000-38-1	101	CSWD-4/0-38-134	99
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CLWD-3-14-58	109	CLWD-650-516-1	112	CLWS-350-12	103	CSWD-1-12-134	98	CSWD-4/0-516-34	99
CLWD-3-38-1	109	CLWD-6-516-1	108	CLWS-350-38	103	CSWD-1-14-1	98	CSWD-400-12-134	100
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CLWD-350-12-114	112	CLWD-700-12-112	113	CLWS-3-516	102	CSWD-1-14-58	98	CSWD-400-38-116	100
CLWD-350-12-134	112	CLWD-700-12-134	113	CLWS-4/0-12	103	CSWD-1-38-1	98	CSWD-4-10-1	97
CLWD-350-14-34	112	CLWD-700-12-178	113	CLWS-4/0-14	103	CSWD-1-516-1	98	CSWD-4-10-34	97
CLWD-350-38-1	112	CLWD-700-38-1	113	CLWS-4/0-38	103	CSWD-1-516-78	98	CSWD-4-10-58	97
CLWD-350-516-134	112	CLWD-700-38-118	113	CLWS-4/0-516	103	CSWD-2/0-12-1	99	CSWD-4-12-134	97
CLWD-3-516-1	109	CLWD-750-12-112	113	CLWS-400-12	103	CSWD-2/0-12-134	99	CSWD-4-14-1	97
CLWD-3-516-58	109	CLWD-750-12-134	113	CLWS-400-38	103	CSWD-2/0-12-34	99	CSWD-4-14-58	97
CLWD-4/0-12-1	111	CLWD-750-38-1	113	CLWS-400-58	103	CSWD-2/0-14-1	99	CSWD-4-38-1	97
CLWD-4/0-12-114	111	CLWD-750-38-118	113	CLWS-4-10	102	CSWD-2/0-14-58	99	CSWD-4-38-34	97
CLWD-4/0-12-134	111	CLWD-750-58-112	113	CLWS-4-12	102	CSWD-2/0-38-1	99	CSWD-4-516-1	97
CLWD-4/0-14-1	111	CLWD-8-10-34	108	CLWS-4-14	102	CSWD-2/0-38-134	99	CSWD-500-12-114	100
CLWD-4/0-14-34	111	CLWD-8-10-58	108	CLWS-4-38	102	CSWD-2/0-516-1	99	CSWD-500-12-134	100
CLWD-4/0-14-58	111	CLWD-8-14-1	108	CLWS-4-516	102	CSWD-2/0-516-78	99	CSWD-500-14-34	100
CLWD-4/0-38-1	111	CLWD-8-14-34	108	CLWS-500-12	104	CSWD-2-10-34	98	CSWD-500-38-1	100
CLWD-4/0-38-134	111	CLWD-8-14-58	108	CLWS-500-38	104	CSWD-2-12-134	98	CSWD-600-12-134	101
CLWD-4/0-516-1	111	CLWD-8-38-1	108	CLWS-500-58	104	CSWD-2-14-1	98	CSWD-600-38-1	101
CLWD-4/0-516-134	111	CLWS-1/0-10	103	CLWS-600-12	104	CSWD-2-14-34	98	CSWD-6-10-1116	96
CLWD-4/0-516-34	111	CLWS-1/0-12	103	CLWS-600-38	104	CSWD-2-14-58	98	CSWD-6-10-12	96
CLWD-400-12-134	112	CLWS-1/0-14	103	CLWS-600-58	104	CSWD-2-38-1	98	CSWD-6-10-34	96
CLWD-400-38-1	112	CLWS-1/0-38	103	CLWS-6-10	102	CSWD-2-38-134	98	CSWD-6-10-58	96
CLWD-400-38-116	112	CLWS-1/0-516	103	CLWS-6-12	102	CSWD-2-38-34	98	CSWD-6-12-134	96
CLWD-4-10-1	108	CLWS-1000-12	104	CLWS-6-14	102	CSWD-2-38-78	98	CSWD-6-14-1	96
CLWD-4-10-34	108	CLWS-1000-38	104	CLWS-6-14	102	CSWD-250-12-114	100	CSWD-6-14-12	96
CLWD-4-10-58	108	CLWS-1000-58	104	CLWS-6-34	102	CSWD-250-12-134	100	CSWD-6-14-34	96
CLWD-4-12-145	108	CLWS-1-10	102	CLWS-6-38	102	CSWD-250-14-34	100	CSWD-6-14-58	96
CLWD-4-14-1	108	CLWS-1-12	102	CLWS-650-12	104	CSWD-250-38-1	100	CSWD-6-38-1	96
CLWD-4-14-34	108	CLWS-1-14	102	CLWS-650-38	104	CSWD-250-38-134	100	CSWD-6-38-34	96
CLWD-4-14-58	108	CLWS-1-38	102	CLWS-650-516	104	CSWD-2-516-1	98	CSWD-6-38-78	96
CLWD-4-38-1	108	CLWS-1-516	102	CLWS-650-58	104	CSWD-2-516-34	98	CSWD-650-12-114	101
CLWD-4-38-34	108	CLWS-2/0-10	103	CLWS-6-516	102	CSWD-3/0-12-134	99	CSWD-650-12-134	101
CLWD-4-516-1	108	CLWS-2/0-12	103	CLWS-700-12	104	CSWD-3/0-14-34	99	CSWD-650-38-1	101
CLWD-4-516-34	108	CLWS-2/0-14	103	CLWS-700-38	104	CSWD-3/0-14-58	99	CSWD-650-38-118	101
CLWD-4-516-58	108	CLWS-2/0-38	103	CLWS-700-58	104	CSWD-3/0-38-1	99	CSWD-650-516-1	101
CLWD-500-12-114	112	CLWS-2/0-516	103	CLWS-750-12	104	CSWD-3/0-516-1	99	CSWD-6-516-1	96
CLWD-500-12-134	112	CLWS-2-10	102	CLWS-750-38	104	CSWD-300-12-134	100	CSWD-700-12-114	101
CLWD-500-14-34	112	CLWS-2-12	102	CLWS-750-58	104	CSWD-300-38-1	100	CSWD-700-12-134	101
CLWD-500-38-1	112	CLWS-2-14	102	CLWS-8-10	102	CSWD-3-12-134	97	CSWD-700-12-178	101
CLWD-600-12-134	112	CLWS-2-38	102	CLWS-8-14	102	CSWD-3-14-34	97	CSWD-700-38-1	101
CLWD-600-38-1	112	CLWS-250-12	103	CLWS-8-38	102	CSWD-3-38-1	97	CSWD-750-12-112	101
CLWD-6-10-1116	108	CLWS-250-38	103	CLWS-8-516	102	CSWD-350-12-114	100	CSWD-750-12-134	101



<b>ITEM</b>	<b>PAGE</b>	<b>ITEM</b>	<b>PAGE</b>	<b>ITEM</b>	<b>PAGE</b>
CSWD-700-38-1	101	CSWS-4/0-38	94	PBTS-3-4	125
CSWD-750-12-112	101	CSWS-4/0-516	94	PBTS-4-4	125
CSWD-750-12-134	101	CSWS-400-12	94	SPAR-1/0	123
CSWD-750-38-1	101	CSWS-400-38	94	SPAR-2	123
CSWD-750-38-118	101	CSWS-400-58	94	SPAR-250	123
CSWD-750-58-112	101	CSWS-4-10	93	SPAR-350	123
CSWD-8-10-34	96	CSWS-4-12	93	SPAR-4	123
CSWD-8-10-58	96	CSWS-4-14	93	SPAR-500	123
CSWD-8-14-1	96	CSWS-4-38	93		
CSWD-8-14-34	96	CSWS-4-516	93		
CSWD-8-14-58	96	CSWS-500-12	95		
CSWD-8-38-1	96	CSWS-500-38	95		
CSWS-1/0-10	94	CSWS-500-58	95		
CSWS-1/0-12	94	CSWS-600-12	95		
CSWS-1/0-14	94	CSWS-600-38	95		
CSWS-1/0-38	94	CSWS-600-58	95		
CSWS-1/0-516	94	CSWS-6-10	93		
CSWS-1000-12	95	CSWS-6-12	93		
CSWS-1000-38	95	CSWS-6-14	93		
CSWS-1000-58	95	CSWS-6-34	93		
CSWS-1-10	93	CSWS-6-38	93		
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CSWS-1-14	93	CSWS-650-38	95		
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CSWS-2/0-12	94	CSWS-700-12	95		
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CSWS-2/0-38	94	CSWS-700-58	95		
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CSWS-2-38	93	CSWS-8-14	93		
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CSWS-250-38	94	CSWS-8-516	93		
CSWS-250-516	94	PBT-1/0	125		
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CSWS-3/0-14	94	PBTD-2-250	125		
CSWS-3/0-38	94	PBTD-2-350	125		
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CSWS-300-12	94	PBTD-3-250	125		
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CSWS-300-516	94	PBTD-3-500	125		
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CSWS-350-38	94	PBTD-8-350	125		
CSWS-350-58	94	PBTD-8-500	125		
CSWS-3-516	93	PBTO-1/0	125		
CSWS-4/0-12	94	PBTO-3/0	125		
CSWS-4/0-14	94	PBTS-2-1/0	125		
		PBTS-2-3/0	125		
		PBTS-2-4	125		
		PBTS-3-1/0	125		

