

# "Better Products by Design"

## CPI Tap Connector



- Designed for connecting aluminum to aluminum or aluminum to copper conductors for transmission and distribution systems.
- High strength A356 heat treated spring aluminum C-Body ensures constant and consistent mechanical connection.
- 6101 EC grade aluminum interface offers a low resistance conductive path for an efficient electrical connection.
- NO SPECIAL TOOLS NEEDED.

## CPI Pad Tap Connector



- A unique connector that offers a removable connection to a variety of two or four hole NEMA standard devices.
- High strength A356 heat treated spring aluminum C-Body ensures constant and consistent mechanical connection.
- 6101 EC grade aluminum interface offers a low resistance conductive path for an efficient electrical connection.
- NO SPECIAL TOOLS NEEDED.

## CPI Stirrup Connector



- Tin Plated Bail allows for multiple position connections as well as eliminating galvanic reaction.
- High Strength A356 heat treated spring aluminum C-Body ensures constant and consistent mechanical connection.
- 6101 EC grade aluminum interface offers a low resistance conductive path for an efficient electrical connection.
- NO SPECIAL TOOLS NEEDED

## CPI Ground Grid Connector



- Designed for connecting copper wire and rod for a variety of grounding applications in substation and transmission.
- Aluminum-Bronze construction allows the Ground Grid Connector to be directly buried.
- The Ground Grid Connector can be totally installed with a single wrench and does not require the use of Special Molds, Chemicals, Tools, Crimping Dies, or Fire-On Charges.

## CPI HTC Connector



- Full current rated Hot Line Tap Connector.
- Designed as a permanent or temporary device tap connector.
- Installable directly to the main line. No need for using a bail.
- Able to accept a wide range of conductors with only three part numbers.
- Self maintaining spring-wedge connection
- Directly compatible with the Connector Products stirrup connector.
- High conductivity extruded aluminum construction

[www.connectorproducts.com](http://www.connectorproducts.com)

5 Surrey Lane Cinnaminson, NJ 08077 • 856-829-9190 • Fax 856-829-9195





## *Connector Products Inc.*

Connector Products Inc produces innovative, high-quality products for the electrical utility industry. "Better products by design" is our mission and a philosophy that we live by as a trusted industry supplier.

### *Experience*

Since 1980 Connector Products Inc has provided electrical connectors for major power utility transmission and distribution systems across the United States and throughout the world. Our company founder developed the wedge style connector over forty years ago and has contributed to its progress over time. Today, Connector Products offers the only true wedge style bolted connector on the market. The CPI tap connector's ability to be installed or removed without specialized tooling and capability of accommodating a wide range of wire sizes is what makes this product the first choice for some of the largest utility companies across the country.

In addition to the industry proven wedge style tap connector, CPI also offers a full line of grounding grid connectors, fiber optic OPGW connectors, hotline tap connectors and third rail mass transit connectors.

Connector Products understands the importance of producing a reliable product that energy subscribers across the country can count on. Our track record speaks for itself!

### *Highlights*

Supplied tap connectors and third rail running and hot line rail connectors throughout Florida after the destruction caused by hurricane Andrew.

Supplied wedge style tap connectors to rebuild electrical distribution system after the 1998 ice storm upon immediate demand. Connector Products was able to supply 10,000 connectors in a nine day period, quicker than any other supplier or manufacturer.

Supplied material for US forces going into Haiti. CPI provided electrical connectors to reestablish power to government buildings.

Over the last twenty years CPI has played an instrumental role in rebuilding Electrical distribution systems after every major hurricane on the East Coast.

The CPI tap connector's ability to be installed or removed with out specialized tooling and capability of accommodating a wide range of wire sizes is what makes this product the first choice...



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# TAP CONNECTORS





ALUMINUM TAP CONNECTORS, developed by CONNECTOR PRODUCTS INC, are designed for use in connecting aluminum-to-aluminum or aluminum-to-copper conductors for Transmission and Distribution Systems. The Tap Connector line utilizes the industry-proven wedge principle and is quick and easy to apply with a common socket or impact wrench. The Tap Connectors can be easily adapted to standard hot stick tools for hot line applications.

## Features

The "Spring-Like" qualities of the high-strength C-Body ensure permanent connection with consistent pressure on the conductors.

The exclusive high-conductivity Aluminum Alloy Interface offers a low-resistance conductive path for a more efficient connection.

Drive Wedge creates connecting force while maintaining conductors in locked position.

The Connectors can be easily removed with a wrench and reused by the installation of a new Shear Bolt.

The Hot Stick Eye allows the connector to be easily adapted to Hot Stick Tools for Hot Line applications.

The CPI Tap Connector utilizes the industry-proven Wedge Connecting Principal and is quick and easy to apply with a common socket or impact wrench. **NO SPECIAL TOOLS.**

Exclusive high-conductivity Grit Inhibitor. Compound is factory-supplied for ease of installation.

The Tap never mars or damages the conductor.

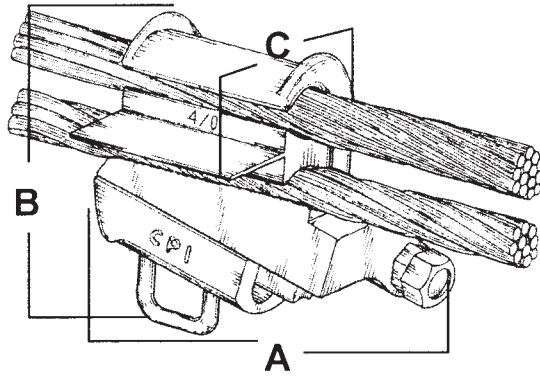
Easy to install with either hot stick or glove.

Superior materials used to accommodate both the mechanical and electrical components of the connection.

See Reverse for product specifications and Part Numbers.



# #4 Thru 4/0 Series Tap Connector Specifications



Dimensions		Materials	
<b>A</b>	3.5"	<b>Connector Body</b>	High-Strength <b>A356</b> Aluminum Alloy <i>Casting</i>
<b>B</b>	3.5"	<b>Interface</b>	High-Conductivity <b>6101 T6</b> Aluminum Alloy <i>Extrusion</i>
<b>C</b>	2.2"	<b>Drive Screw Mechanism</b>	High-Strength <b>2024 T6</b> Aluminum Alloy

## Series Part Number List and Wire Selection Guide

Main Conductor		Tap Conductor		Catalog Number	Total Sum of Conductor's Diameters
Wire Description	Wire Diameter Range	Wire Description	Wire Diameter Range		
#6, #4	.162" - .213"	#6, #4	.162" - .213"	640101	.324" - .426"

## #2 to #4 Series Part Number List and Wire Selection Guide

#4 AAC #4 ACSR #2 AAC #2 ACSR	.250" - .325"	#6, #4	.162" - .204"	240100	.412" - .529"
		#4, #2	.213" - .260"	240101	.463" - .585"
		#2	.281" - .325"	240102	.531" - .650"

## 2/0 to 1/0 Series Part Number List and Wire Selection Guide

1/0 AAC 1/0 ACSR 2/0 AAC	.356" - .414"	#6, #4	.162" - .230"	210103	.527" - .644"
		#4, #2	.250" - .325"	210105	.615" - .739"
		1/0, 2/0	.355" - .414"	210106	.720" - .828"

## 3/0 to 2/0 Series Part Number List and Wire Selection Guide

2/0 ACSR 3/0 AAC 3/0 ACSR	.447" - .502"	#6, #4	.162" - .230"	230107	.609" - .722"
		#4, #2	.250" - .298"	230108	.697" - .800"
		#2, #1	.298" - .355"	230109	.745" - .857"
		1/0, 2/0	.365" - .414"	230110	.812" - .916"
		2/0, 3/0	.447" - .502"	230111	.894" - 1.004"

## 4/0 Series Part Number List and Wire Selection Guide

4/0 AAC 4/0 ACSR 250 KCMILS	.522" - .570"	#6, #4	.162" - .230"	264111	.684" - .800"
		#4, #2	.250" - .325"	264112	.772" - .895"
		1/0, 2/0	.355" - .414"	264113	.877" - .984"
		2/0, 3/0	.447" - .502"	264114	.969" - 1.072"
		4/0	.522" - .570"	264115	1.044" - 1.140"

### Standard Package

Size	Quantity	Weight
Full Carton	75 Units	38 Pounds
Half Carton	50 Units	25 Pounds

*"Better Products by Design"*



ALUMINUM TAP CONNECTORS, developed by CONNECTOR PRODUCTS INC, are designed for use in connecting aluminum-to-aluminum or aluminum-to-copper conductors for Transmission and Distribution Systems. The Tap Connector line utilizes the industry-proven wedge principle and is quick and easy to apply with a common socket or impact wrench. The Tap Connectors can be easily adapted to standard hot stick tools for hot line applications.

## Features

The "Spring-Like" qualities of the high strength C-Body ensure permanent connection with consistent pressure on the conductors.

The exclusive high-conductivity Aluminum Alloy Interface offers a low-resistance conductive path for a more efficient connection.

Drive Wedge creates connecting force while maintaining conductors in locked position.

The Connectors can be easily removed with a wrench and reused by the installation of a new Shear Bolt.

The Hot Stick Eye allows the connector to be easily adapted to Hot Stick Tools for Hot Line applications.

The CPI Tap Connector utilizes the industry-proven Wedge Connecting Principal and is quick and easy to apply with a common socket or impact wrench. **NO SPECIAL TOOLS.**

Exclusive high-conductivity Grit Inhibitor Compound is factory-supplied for ease of installation.

The Tap never mars or damages the conductor.

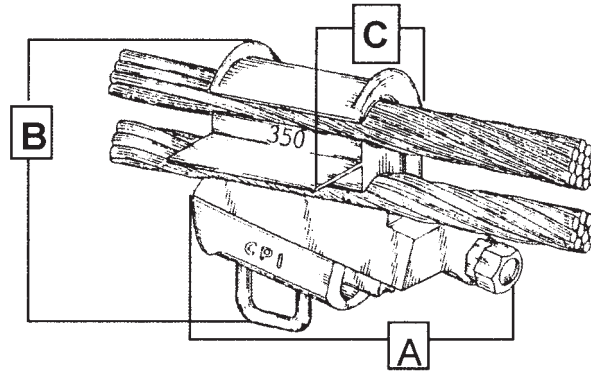
Easy to install with either hot stick or glove.

Superior materials used to accommodate both the mechanical and electrical components of the connection.

See Reverse for product specifications and Part Numbers.



# 350 Series Tap Connector Specifications



Dimensions		Materials	
<b>A</b>	3.5"	<b>Connector Body</b>	High-Strength <b>A356</b> Aluminum Alloy <i>Casting</i>
<b>B</b>	3.5"	<b>Interface</b>	High-Conductivity <b>6101 T6</b> Aluminum Alloy <i>Extrusion</i>
<b>C</b>	2.2"	<b>Drive Screw Mechanism</b>	High-Strength <b>2024 T6</b> Aluminum Alloy

## 350 Series Part Number List and Wire Selection Guide

Main Conductor		Tap Conductor		Catalog Number	Total Sum of Conductor's Diameters
Wire Description	Wire Diameter Range	Wire Description	Wire Diameter Range		
266.8 ACSR 300 KCMILS 336.4 AAC 336.4 ACSR (18/1) 350 KCMILS	.609" - .684"	#6, #4	.162" - .213"	350117	.897" - .737"
	.609" - .684"	#4, #2	.273" - .220"	350118	.957" - .795"
	.609" - .684"	#2, #1	.328" - .276"	350119	1.012" - .851"
	.609" - .684"	#1, 1/0 AAC	.382" - .338"	350120	1.066" - .913"
	.609" - .684"	1/0, 2/0	.447" - .398"	350121	1.131" - .973"
	.609" - .684"	2/0, 3/0	.502" - .460"	350122	1.185" - 1.035"
	.609" - .684"	4/0, 250	.576" - .522"	350123	1.260" - 1.097"
	.609" - .684"	266.8 AAC, 300	.642" - .595"	350124	1.326" - 1.170"
.609" - .684"	266.8 ACSR, 350, 336.4 18/1	.684" - .660"	350125	1.368 - 1.235"	

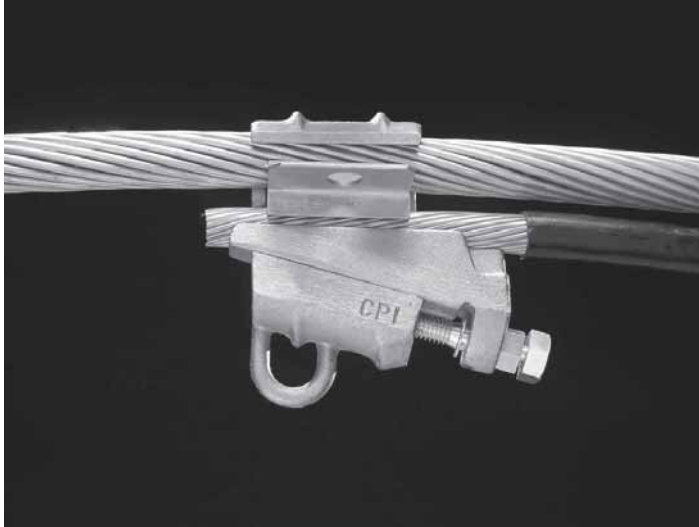
## Standard Package

Size	Quantity	Weight
Full Carton	75 Units	38 Pounds
Half Carton	50 Units	25 Pounds

REPLACEMENT BOLT PART # 102346

# 336.4 Thru 636 AAC Series Tap

*"Better Products by Design"*



ALUMINUM TAP CONNECTORS, developed by CONNECTOR PRODUCTS INC, are designed for use in connecting aluminum-to-aluminum or aluminum-to-copper conductors for Transmission and Distribution Systems. The Tap Connector line utilizes the industry-proven wedge principle and is quick and easy to apply with a common socket or impact wrench. The Tap Connectors can be easily adapted to standard hot stick tools for hot line applications.

## Features

The "Spring-Like" qualities of the high strength C-Body ensure permanent connection with consistent pressure on the conductors.

The exclusive high conductivity Aluminum Alloy Interface offers a low resistance conductive path for a more efficient connection.

Drive Wedge creates connecting force while maintaining conductors in locked position.

The Connectors can be easily removed with a wrench and reused by the installation of a new Shear Bolt.

The Hot Stick Eye allows the connector to be easily adapted to Hot Stick Tools for Hot Line applications.

The CPI Tap Connector utilizes the industry-proven Wedge Connecting Principal and is quick and easy to apply with a common socket or impact wrench. **NO SPECIAL TOOLS.**

Exclusive high-conductivity Grit Inhibitor Compound is factory-supplied for ease of installation.

The Tap never mars or damages the conductor.

Easy to install with either hot stick or glove.

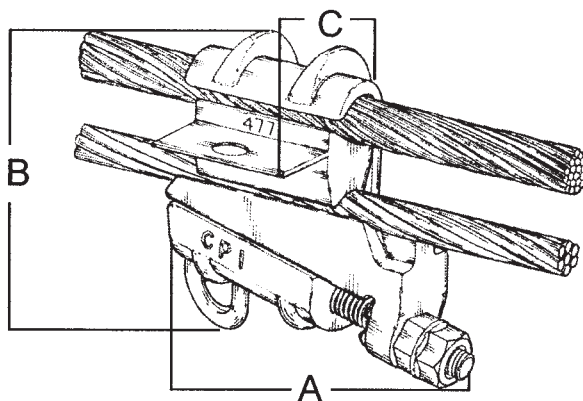
Superior materials used to accommodate both the mechanical and electrical components of the connection.

See Reverse for product specifications and Part Numbers.



**CPI**<sup>TM</sup>

# 336.4 Thru 636 AAC Series Tap Connector Specifications



Dimensions		Materials	
<b>A</b>	5.20"	<b>Connector Body</b>	High-Strength <b>A356</b> Aluminum Alloy <i>Casting</i>
<b>B</b>	4.75"	<b>Interface</b>	High-Conductivity <b>6101 T6</b> Aluminum Alloy <i>Extrusion</i>
<b>C</b>	2.65"	<b>Drive Screw Mechanism</b>	High-Strength <b>2024 T6</b> Aluminum Alloy

## 336.4 Series Part Number List and Wire Selection Guide

Main Conductor		Tap Conductor		Catalog Number	Total Sum of Conductor's Diameters
Wire Description	Wire Diameter Range	Wire Description	Wire Diameter Range		
336 AAC 336 ACSR 350 MCM 397 AAC	.666" - .743"	#6, #2	.162" - .128"	336200	.828" - 1.024"
		#2, 1/0	.289" - .410"	336104	.995" - 1.153"
		2/0, 3/0, 4/0	.414" - .537"	336012	1.080" - 1.280"
		4/0, 266.8	.548" - .660"	336866	1.214" - 1.403"
		336.4, 397.5	.666" - .743"	336718	1.332" - 1.486"

## 477 Series Part Number List and Wire Selection Guide

450 MCM 477 AAC 477 ACSR 500 MCM 556 AAC	.770" - .858"	#6, #2	.162" - .273"	477057	.932" - 1.131"
		#2, 1/0	.281" - .390"	477962	1.051" - 1.248"
		1/0, 2/0, 3/0	.398" - .502"	477853	1.168" - 1.360"
		4/0, 266.8	.571" - .631"	477724	1.287" - 1.489"
		336.4, 397.5	.633" - .743"	477633	1.403" - 1.601"
		477	.770" - .858"	477434	1.540" - 1.716"

## 556.5 Series Part Number List and Wire Selection Guide

556 AAC 556 ACSR 600 MCM 636 AAC 650 MCM 636 ACSR	.856" - .953"	#6, #2	.162" - .281"	556956	1.041" - 1.234"
		#2, 2/0	.289" - .414"	556892	1.168" - 1.367"
		2/0, 3/0, 4/0	.419" - .524"	556783	1.298" - 1.501"
		4/0, 266.8	.522" - .680"	556638	1.435" - 1.633"
		336.4, 397.5	.682" - .806"	556504	1.561" - 1.795"
		477, 556.5	.811" - .930"	556294	1.690" - 1.883"
		556.5, 636	.932" - .953"	556294-1	1.811" - 1.906"

## Standard Package

Size	Quantity	Weight
Full Carton	25 Units	32 Pounds
Half Carton	15 Units	20 Pounds

REPLACEMENT BOLT PART # 347002-3



ALUMINUM TAP CONNECTORS, developed by CONNECTOR PRODUCTS INC, are designed for use in connecting aluminum-to-aluminum or aluminum-to-copper conductors for Transmission and Distribution Systems. The Tap Connector line utilizes the industry-proven wedge principle and is quick and easy to apply with a common socket or impact wrench. The Tap Connectors can be easily adapted to standard hot stick tools for hot line applications.

## Features

The "Spring-Like" qualities of the high strength C-Body ensure permanent connection with consistent pressure on the conductors.

The exclusive high conductivity Aluminum Alloy Interface offers a low-resistance conductive path for a more efficient connection.

Drive Wedge creates connecting force while maintaining conductors in locked position.

The Connectors can be easily removed with a wrench and reused by the installation of a new Shear Bolt.

The Hot Stick Eye allows the connector to be easily adapted to Hot Stick Tools for Hot Line applications.

The CPI Tap Connector utilizes the industry-proven Wedge Connecting Principal and is quick and easy to apply with a common socket or impact wrench. **NO SPECIAL TOOLS.**

Exclusive high-conductivity Grit Inhibitor Compound is factory-supplied for ease of installation.

The TAP never mars or damages the conductor.

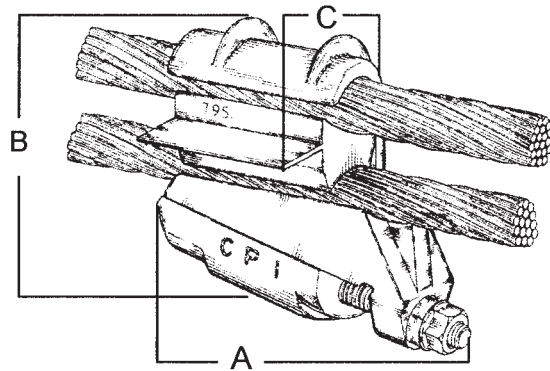
Easy to install with either hot stick or glove.

Superior materials used to accommodate both the mechanical and electrical components of the connection.

See Reverse for product specifications and Part Numbers.



# 795 Thru 1272 AAC Series Tap Connector Specifications



Dimensions		Materials	
<b>A</b>	6.00"	<b>Connector Body</b>	High-Strength <b>A356</b> Aluminum Alloy <i>Casting</i>
<b>B</b>	5.75"	<b>Interface</b>	High-Conductivity <b>6101 T6</b> Aluminum Alloy <i>Extrusion</i>
<b>C</b>	2.85"	<b>Drive Screw Mechanism</b>	High-Strength <b>2024 T6</b> Aluminum Alloy

## 795 Series Part Number List and Wire Selection Guide

Main Conductor		Tap Conductor		Catalog Number	Total Sum of Conductor's Diameters
Wire Description	Wire Diameter Range	Wire Description	Wire Diameter Range		
715 MCM 750 MCM 795 AAC 795 ACSR 900 MCM	1.010" - 1.108"	#6, #2	.162" - .292"	795454	1.190" - 1.400"
		#2, 1/0, 2/0	.296" - .426"	795360	1.324" - 1.534"
		2/0, 3/0, 4/0	.438" - .563"	795218	1.466" - 1.671"
		266.8, 336.4	.574" - .700"	795050	1.602" - 1.808"
		397.5, 477, 556.5	.710" - .843"	795920	1.738" - 1.942"
		556.5, 636, 795AAC	.846" - .977"	795730	1.872" - 2.085"
		715.5, 795ACSR	.990" - 1.108"	795594	2.016" - 2.216"

## 954 Series Part Number List and Wire Selection Guide

954 AAC 954 ACSR 1000 MCM 1033 AAC	1.115" - 1.196"	#6, #4, #2	.182" - .301"	954420	1.297" - 1.497"
		#2, 1/0, 2/0	.316" - .483"	954320	1.431" - 1.634"
		2/0, 3/0, 4/0	.447" - .563"	954175	1.562" - 1.759"
		266.8, 366.4	.574" - .700"	954030	1.689" - 1.896"
		366.4, 397.5, 477	.711" - .843"	954870	1.826" - 2.030"
		477, 636	.846" - .996"	954660	1.961" - 2.112"
		636, 795	.997" - 1.095"	954484	2.092" - 2.291"
		954, 1000 MCM	1.108" - 1.196"	954390	2.223" - 2.392"

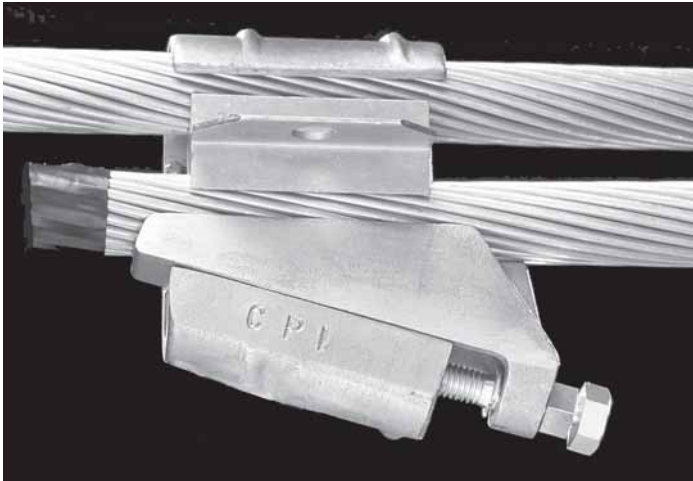
## 1033.5 – 1272 Series Part Number List and Wire Selection Guide

1033.5 AAC 133.5 ACSR 1113 AAC 1113 ACSR 1192 AAC 1272 AAC	1.212" - 1.302"	#6, #2	.182" - .289"	103370	1.349" - 1.600"
		#2, 1/0, 2/0	.301" - .414"	103260	1.513" - 1.716"
		2/0, 3/0, 4/0	.419" - .530"	103110	1.631" - 1.832"
		4/0, 266.8	.548" - .666"	103945	1.760" - 1.968"
		336.4, 397.5	.671" - .783"	103780	1.883" - 2.084"
		477, 556.5	.793" - .904"	119793	2.005" - 2.206"
		636, 715, 795	.904" - 1.036"	103680	2.130" - 2.338"
		715.5, 795, 1000	1.040" - 1.152"	103580	2.252" - 2.454"
		954, 1033.5	1.162" - 1.259"	103380	2.374" - 2.561"
		1272	1.212" - 1.302"	119250	2.424" - 2.604"

## Standard Package

Size	Quantity	Weight
Full Carton	20 Units	36 Pounds
Half Carton	10 Units	18 Pounds

REPLACEMENT BOLT PART # 347002-3



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## Features

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Exclusive high-conductivity Grit Inhibitor Compound is factory-supplied for ease of installation.

The Tap never mars or damages the conductor.

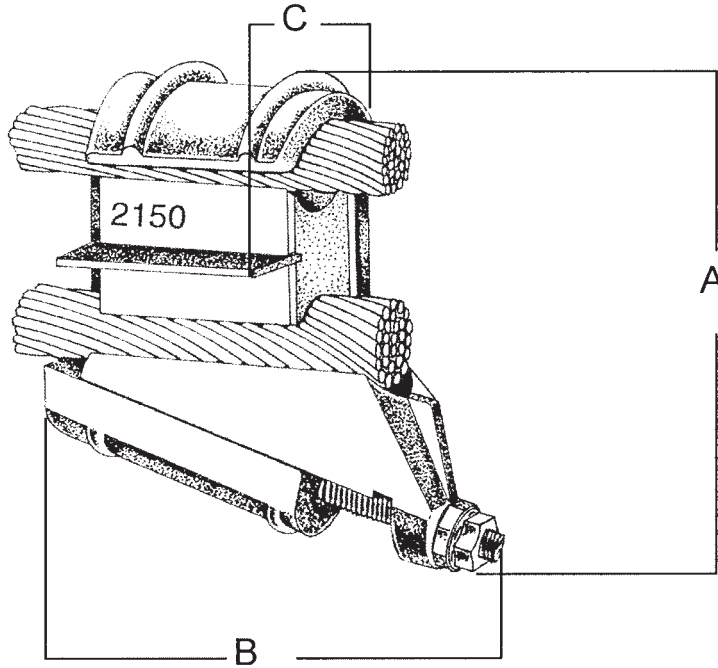
Easy to install with either hot stick or glove.

Superior materials used to accommodate both the mechanical and electrical components of the connection.

See Reverse for product specifications and Part Numbers.



# 1272 ACSR Thru 2150 Series Tap Connector Specifications



Dimensions		Materials	
<b>A</b>	6.25"	<b>Connector Body</b>	High-Strength <b>A356</b> Aluminum Alloy <i>Casting</i>
<b>B</b>	6.50"	<b>Interface</b>	High-Conductivity <b>6101 T6</b> Aluminum Alloy <i>Extrusion</i>
<b>C</b>	4.50"	<b>Drive Screw Mechanism</b>	High-Strength <b>2024 T6</b> Aluminum Alloy

The 1272 Thru 2150 Series Tap Connectors are custom-made to wire specifications.  
Please supply cable specifications with order.

## Standard Package

Size	Quantity	Weight
Full Carton	10 Units	36 Pounds
Half Carton	5 Units	18 Pounds

REPLACEMENT BOLT PART # 347002-3



- 1) Remove existing Snap Ring.**
- Using a small flat head screwdriver,
  - Insert the blade under the Snap Ring.
  - Use a twisting motion to pry the Snap Ring out.



- 4) Install new Snap Ring**
- Align the new Snap Ring onto the existing slot on the Shear Bolt.



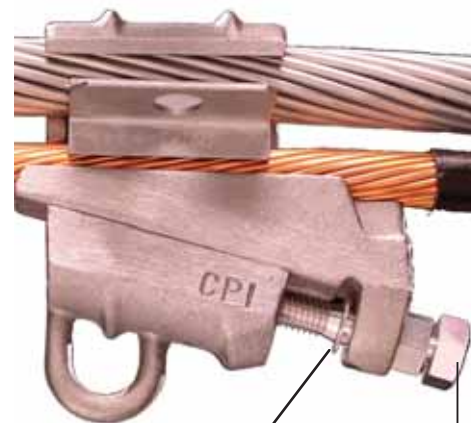
- 2) Remove existing shear bolt.**
- Unscrew the existing Shear Bolt until it becomes free of the connector



- Squeeze the Snap Ring into the slot until it is securely fastened.



- 3) Install new Shear Bolt**
- Make sure the new shear bolt is clean and that there is no contamination in the threads of the connector.



**Snap Ring**

**Shear Bolt**

*"Better Products by Design"*



CPI has become the first manufacturer to successfully integrate the industry accepted wedge-connecting principal into a hotline tap. Through utilization of the wedge principal, the HTC series tap maximizes interfacing force on the conductor and creates a self-maintaining spring wedge connection. This allows the connector to be installed directly to the line and ensures the ability of the HTC series tap to stay tight during service, by overcoming the loosening problems associated with heat cycling.

## Features

Full-current rated connector.

High conductivity extruded aluminum construction.

Anti-Corrosion stainless steel drive screw for easy installation and removal.

Installable directly to the main line. No need for using a bail.

Self-maintaining spring-wedge connection.

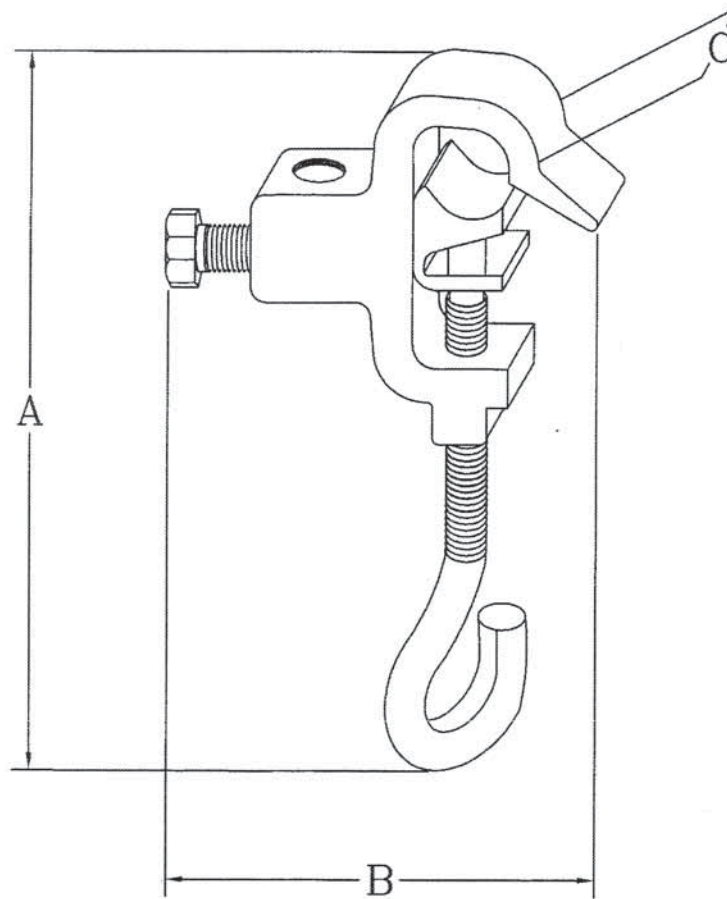
May be used as permanent or temporary tap connection.

Able to accept a wide range of conductors with only three part numbers.

Cost-effective solution for any tap-off connection.



# HTC Series Hotline Tap Connector Specifications



## Product Specifications

Part Number	Main Range		Tap Range		Standard Package	
	Wire Size	Length	Wire Size	Length	Quantity	Weight
HTC 100-6	#6 CU - 4/0	.162"-.563"	#6 thru 1/0	0.100"-.398"	QTY	LBS
HTC 100	#6 ACSR - 4/0	.198"-.563"	#6 thru 1/0	.100"-.398"	50	25
HTC 200	2/0 ACSR thru 556.5	.447"-.679"	#6 thru 2/0	.100"-.447"	25	25
HTC 300	336.4 thru 954	.665"-.1.125"	#6 thru 4/0	.100"-.583"	25	38

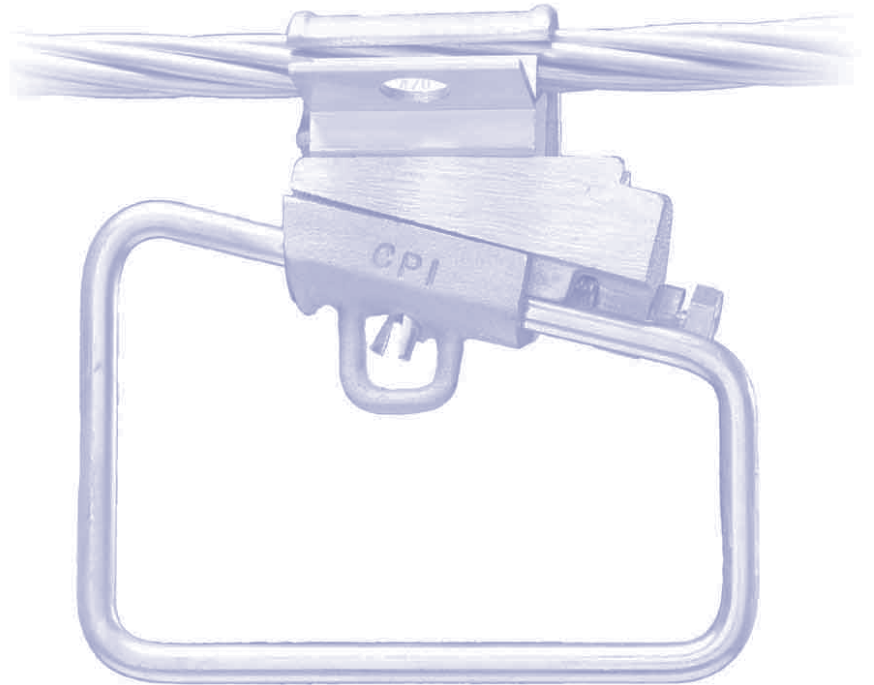
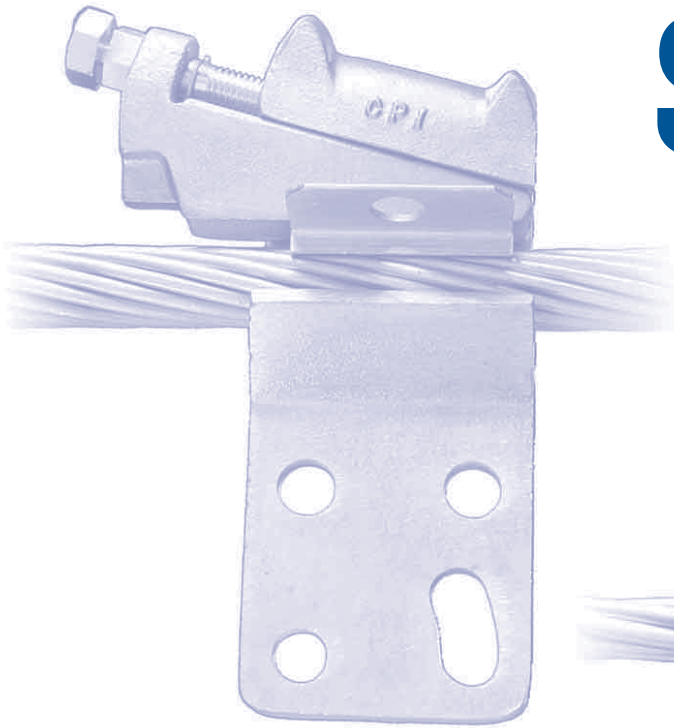
Materials	
Eye Bolt	303 Stainless Steel
"C" Body	6101 T6 ALU
Tap Screw	2024 T5 ALU
Interface	6101 T6 ALU

An increased conductive path between the main line and the tap line allows the connector to be full current rated. Benefits are a cost-effective one step process to create a temporary tap or a permanent connection. The HTC connector is equipped with a high strength stainless steel eyebolt to ensure easy installation or removal and features a high quality 6101 T6 aluminum alloy construction to provide strength and conductivity.

The HTC connector is a versatile product that can accept wires ranging from #4 thru 954, with only three different part numbers, making it a valuable component of any tap connection solution.

# PAD TAPS & STIRRUPS

Pad Taps & Stirrups



*"Better Products by Design"*



ALUMINUM PAD TAP CONNECTORS, developed by CONNECTOR PRODUCTS INC, are designed for use in connecting aluminum conductor to a variety of two-hole or four-hole NEMA standard devices. Some examples of applications are in mounting sectionalizing switches or in connecting compression lugs for risers. The Pad Tap utilizes the industry-proven wedge connecting principle while eliminating the need for expensive fire-on or crimp-on tooling. Pad Taps can be connected with any socket or impact wrench.

## Features

The "Spring-Like" qualities of the high strength C-Body insure permanent connection with consistent pressure on the conductors.

The special Shear Bolt on the drive screw mechanism gives positive indication of a correctly completed connection. It also insures that the same force will be used on each connector.

The Connectors can be easily removed with a wrench and reused by the installation of a new Shear Bolt.

Drive Wedge creates connecting force while maintaining conductors in locked position.

The exclusive high-conductivity Aluminum Alloy C-Body offers a low-resistance conductive path for more efficient connection.

Exclusive high-conductivity Grit Inhibitor Compound is factory-supplied for ease of installation.

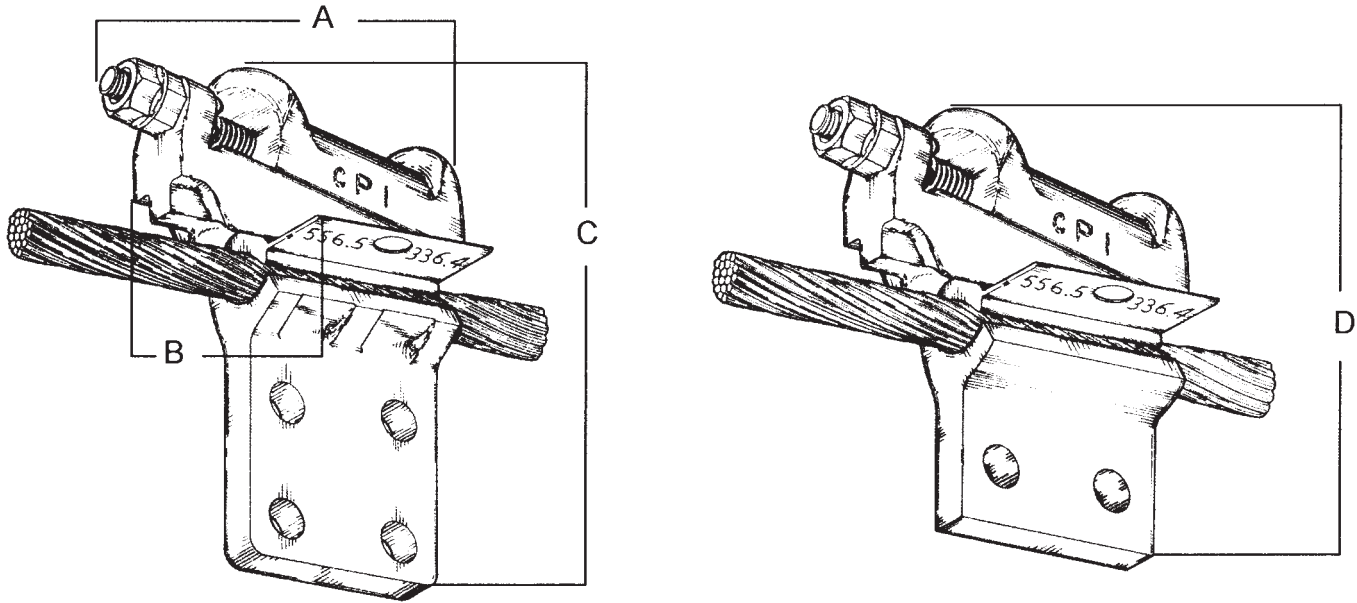
The Tap never mars or damages the conductor.

Easy to install with either hot stick or glove.

NO SPECIAL TOOLS.



# Pad Tap Connector Specifications



Dimensions		Materials	
<b>A</b>	5"	<b>Drive Screw Mechanism</b>	High-Strength <b>2024 T6</b> Aluminum Alloy
<b>B</b>	2.65"	<b>Interface</b>	High-Conductivity <b>6101 T6</b> Aluminum Alloy <i>Extrusion</i>
<b>C</b>	7.55"	<b>Connector Body</b>	High-Strength <b>A356</b> Aluminum Alloy <i>Casting</i>
<b>D</b>	6"	<b>Connector Pad</b>	High-Strength <b>A356</b> Aluminum Alloy <i>Casting</i>

## Pad Tap Part Number Selection Guide

Catalog Number	Main Conductor		Pad Size
	Wire Description	Wire Diameter Range	
723210	#2, 1/0	.292" - .403"	4 Hole
723210-1			2 Hole
723003	2/0, 3/0	.406" - .502"	4 Hole
723003-1			2 Hole
723004	4/0AAC, 350	.522" - .711"	4 Hole
723004-1			2 Hole
723005	336.4 ACSR, 636 AAC	.710" - .918"	4 Hole
723005-1			2 Hole
723006	795 AAC, 954 AAC	1.024" - 1.125"	4 Hole
723006-1			2 Hole
723007	954, 1000	1.125" - 1.196"	4 Hole
723007-1			2 Hole
723008	1033, 1272	1.202" - 1.302"	4 Hole
723008-1			2 Hole

## Standard Package

Size	Quantity	4 Hole	2 Hole
Full Carton	20 Units	37 Lbs	34 Lbs
Half Carton	10 Units	19 Lbs	16 Lbs

REPLACEMENT BOLT PART # 347002-3

# #4 Thru 350 Series Stirrup

*"Better Products by Design"*



ALUMINUM STIRRUP CONNECTORS, developed by CONNECTOR PRODUCTS INC, are designed for use in connecting aluminum or copper conductors for Transmission and Distribution Systems. The Stirrup Connector line utilizes the industry-proven wedge principle and is quick and easy to apply with a common socket or impact wrench. The Stirrup Connectors can be easily adapted to standard hot stick tools for hot line application.

## Features

The "Spring-Like" qualities of the high-strength C-Body insure permanent connection with consistent pressure on the conductors.

The special Shear Bolt on the drive screw mechanism gives positive indication of a correctly completed connection. It also insures that the same force will be used on each connector.

The Connectors can be easily removed with a wrench and reused by the installation of a new Shear Bolt.

The Drive Wedge insures there is constant and consistent force to maintain a connection.

The large loop Tin-Plated Bail allows for multiple position connections as well as eliminating galvanic reaction.

Exclusive high-conductivity Grit Inhibitor Compound is factory-supplied for ease of installation.

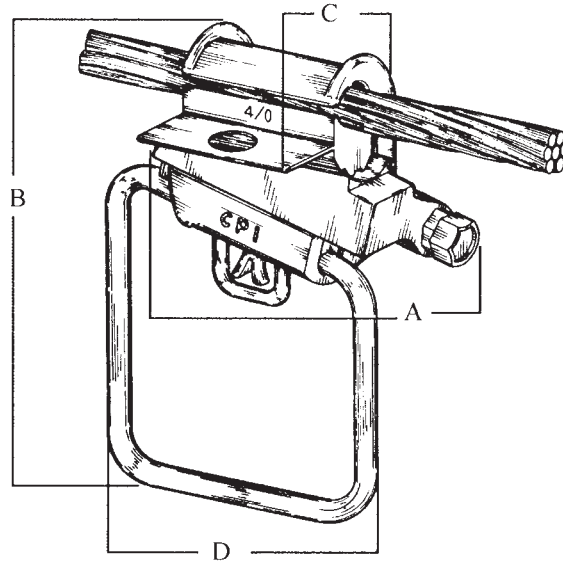
The Stirrup never mars or damages the conductor.

Easy to install with either hot stick or glove. NO SPECIAL TOOLS.



**CPI**<sup>TM</sup>

# #4 Thru 350 Series Stirrup Connector Specifications



Dimensions		Materials	
<b>A</b>	3.5"	<b>Connector Body</b>	High-Strength <b>A356</b> Aluminum Alloy <i>Casting</i>
<b>B</b>	5.65"	<b>Interface</b>	High-Conductivity <b>6101 T6</b> Aluminum Alloy <i>Extrusion</i>
<b>C</b>	2.2"	<b>Drive Screw Mechanism</b>	High-Strength <b>2024 T6</b> Aluminum Alloy
<b>D</b>	5.45"	<b>Bail</b>	CDA <b>110</b> Tin-Plated Copper

## #4 Thru 350 Series Stirrup Part Number List and Wire Selection Guide

Catalog Number	Main Conductor		Bail Size
	Wire Description	Wire Diameter Range	
102011	#4 cu 3 STR, #6AAC	.162" - .292"	1/0
102010	#2 cu 3 STR, 1/0 AAAC	.292" - .403"	1/0
102009	2/0 AAC, 4/0 AAC	.406" - .522"	1/0
264124	3/0 ACSR, 4/0 AAAC	.502" - .570"	1/0
336915-1	266.8 AAC, 336.4 ACSR	.575" - .724"	1/0

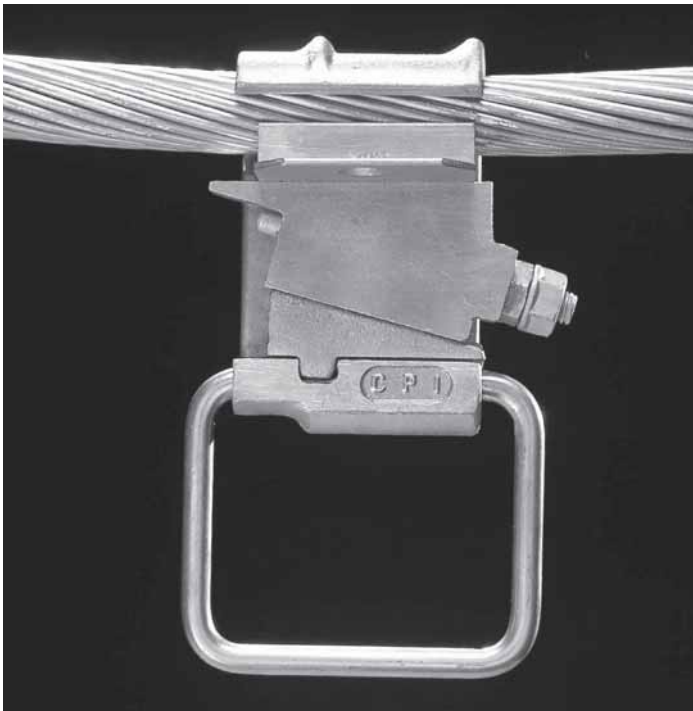
### Standard Package

Size	Quantity	Weight
Full Carton	25 Units	25 Pounds

REPLACEMENT BOLT PART # 102346

# 336.4 Thru 1272 Series Stirrup

*"Better Products by Design"*



ALUMINUM STIRRUP CONNECTORS, developed by CONNECTOR PRODUCTS INC, are designed for use in connecting aluminum or copper conductors for Transmission and Distribution Systems. The Stirrup Connector line utilizes the industry-proven wedge principle and is quick and easy to apply with a common socket or impact wrench. The Stirrup Connectors can be easily adapted to standard hot stick tools for hot line application.

## Features

The "Spring-Like" qualities of the high-strength C-Body insure permanent connection with consistent pressure on the conductors.

The special Shear Bolt on the drive screw mechanism gives positive indication of a correctly completed connection. It also insures that the same force will be used on each connector.

The Connectors can be easily removed with a wrench and reused by the installation of a new Shear Bolt.

Drive Wedge creates connecting force while maintaining conductors in locked position.

The moveable Tin-Plated Bail allows for multiple position connections as well as eliminating galvanic reaction.

Exclusive high-conductivity Grit Inhibitor Compound is factory-supplied for ease of installation.

The Stirrup never mars or damages the conductor.

Easy to install with either hot stick or glove. NO SPECIAL TOOLS

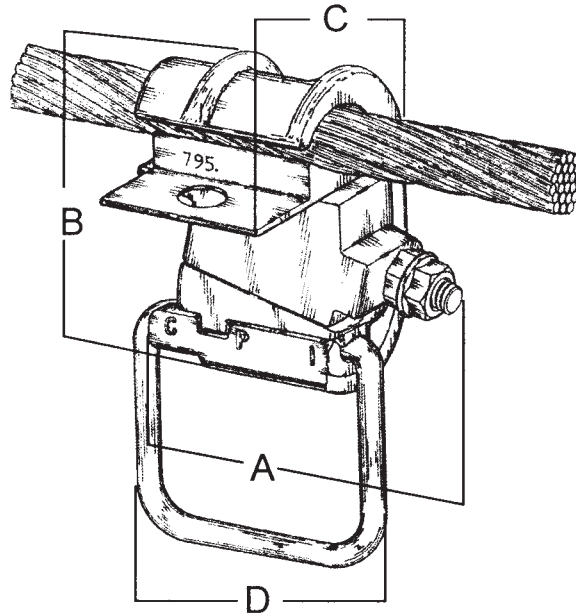


**CPI**<sup>TM</sup>

[www.connectorproducts.com](http://www.connectorproducts.com)

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# 336.4 Thru 1272 Series Stirrup Connector Specifications



Dimensions		Materials	
<b>A</b>	4"	<b>Connector Body</b>	High-Strength <b>A356</b> Aluminum Alloy <i>Casting</i>
<b>B</b>	5"	<b>Interface</b>	High-Conductivity <b>6101 T6</b> Aluminum Alloy <i>Extrusion</i>
<b>C</b>	2.75"	<b>Drive Screw Mechanism</b>	High-Strength <b>2024 T6</b> Aluminum Alloy
<b>D</b>	4.5"	<b>Bail</b>	CDA <b>110</b> Tin-Plated Copper

## 336.4 Thru 1272 Series Stirrup Part Number List and Wire Selection Guide

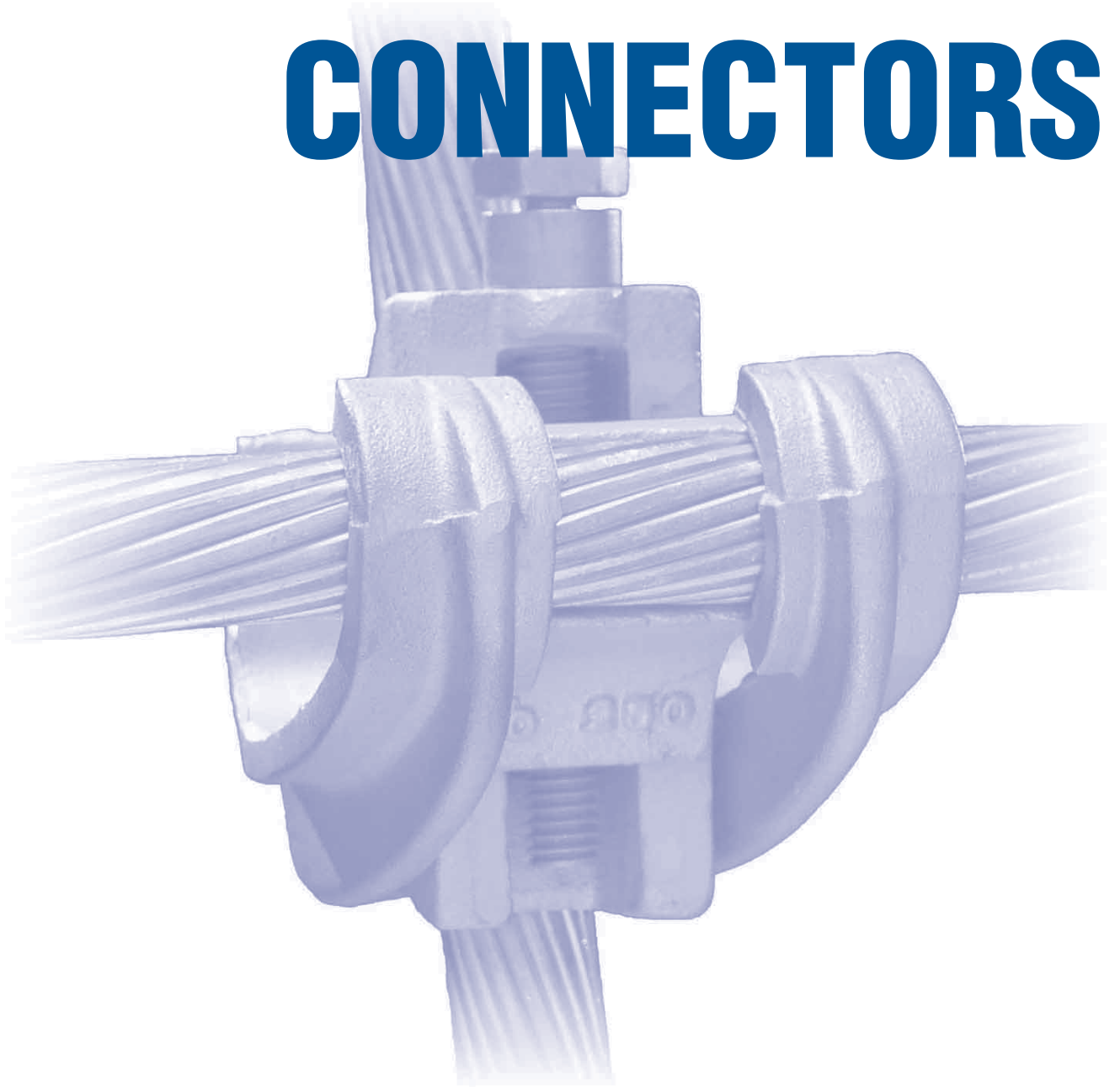
Catalog Number	Main Conductor		Bail Size
	Wire Description	Wire Diameter Range	
336875	266.8 ACSR, 336.4 ACSR	.640" - .741"	2/0
336780			4/0
556580	397.5 ACSR, 477 ACSR	.772" - .883"	2/0
556595			4/0
636556	556.5, 636 ACSR	.883" - .990"	2/0
636556-1			4/0
795500	636 ACSR, 795 ACSR	.990" - 1.108"	2/0
795405			4/0
103228	715.5 ACSR, 954 ACSR	1.036" - 1.165"	4/0
119375	1033.5 - 1272 AAC	1.170" - 1.302"	2/0
119375-1			4/0

### Standard Package

Size	Quantity	Weight
Full Carton	20 Units	44 Pounds
Half Carton	10 Units	22 Pounds

REPLACEMENT BOLT PART # 347002-4

# GROUND CONNECTORS





GROUNDING GRID CONNECTORS, developed by CONNECTOR PRODUCTS INC, are designed for use in connecting copper wire and rod for a variety of grounding applications in both Substation and Transmission. The Connector Products Grounding Grid Connector is a safe, fast, and dependable method of making permanent wire-to-wire and wire-to-ground rod connections. Fully tested to IEEE Standards the Connector Products Ground Grid Connector will provide a cost-effective reliable answer to your grounding questions.

## Features

Requires No Special Molds, Chemicals, Tools, Crimping Dies, or Fire-On Charges. The product can be totally installed with a wrench.

There are no temperature or weather restrictions for this product. This connector can be installed no matter what environment exists at the job site.

The Shear-head bolt ensures consistency of application and positive verification of a completed connection.

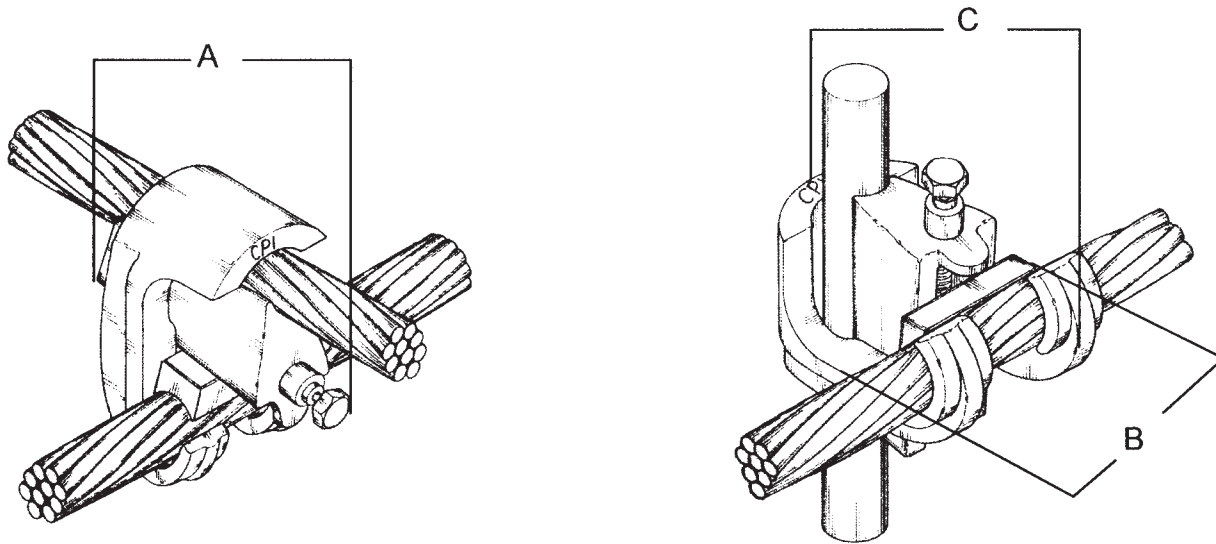
The high strength "Spring C" Member ensures constant and consistent connecting force to positively and permanently grip to the wires and rods.

The Industry-Proven Wedge Style connecting principle is used to ensure that rods and wires are locked in place for a permanent connection.

The highest quality Copper and Bronze Alloys are used to ensure conductivity and durability for reliable performance.



# 4/0 Series Ground Grid Connector Specifications



Dimensions		Materials	
<b>A</b>	3"	<b>Drive Screw Mechanism</b>	Silicon Bronze
<b>B</b>	2.13"	<b>Interface</b>	High-Conductivity <b>319</b> Contact Copper <i>Casting</i>
<b>C</b>	2.7"	<b>Connector Body</b>	High-Strength <b>415</b> Aluminum Bronze <i>Casting</i>

## 4/0 Series Ground Grid Connector Part Number List and Wire Selection Guide

Catalog Number	FROM	TO	Total Sum of Conductor's Diameters
	Wire Description	Wire Description	
900100	350 MCM (.681") 3/4" ROD (.680")	250 MCM (.575") 5/8" ROD (.556")	1.256" - 1.150"
	300 MCM (.630")	4/0 STR (.522")	
	250 CM (.575")	250 MCM (.575")	
900101	250 MCM (.575") 4/0 STR (.522")	250 MCM (.575") 5/8" ROD (.556") 4/0 STR (.522")	1.044" - 1.150"
	250 MCM (.575")	1/2" ROD (.472")	
900102	250 MCM (.575") 5/8" ROD (.556")	2/0 MCM (.419") 1/0 STR (.368")	.890" - .994"
	4/0 STR (.522")	2/0 STR (.368")	
900103	1/2" ROD (.472")	2/0 STR (.419") 1/0 STR (.368")	.736" - .838"
	2/0 STR (.419") 1/0 STR (.368")	#2 STR (.292")	
900104	5/8 ROD (.556") 1/2 ROD (.472") 4/0 STR (.522")	#4 STR (.232") #6 STR (.184")	.706" - .825"
	250 MCM (.575") 4/0 STR (.522")	#1 STR (.328")	
900105	#1 STR (.328")	#4 STR (.232") #2 STR (.282")	.464" - .564"

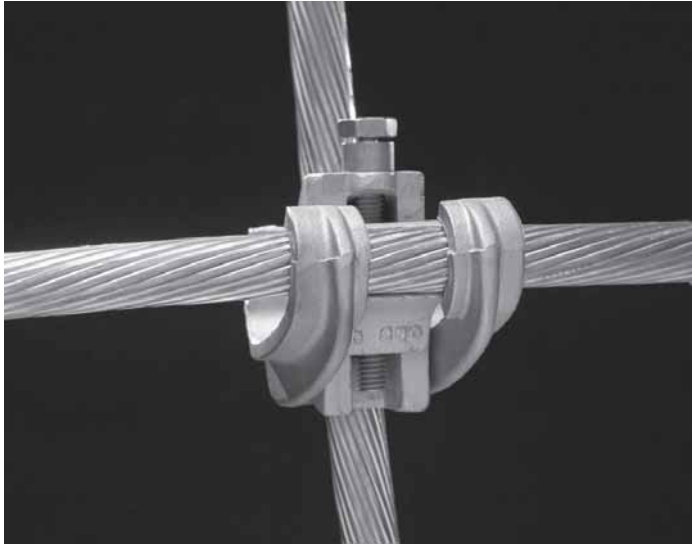
### Standard Package

Size	Quantity	Weight
Full Carton	40 Units	49 Pounds



# 500 MCM Series Ground Grid Connector

*"Better Products by Design"*



GROUNDING GRID CONNECTORS, developed by CONNECTOR PRODUCTS INC, are designed for use in connecting copper wire and rod for a variety of grounding applications in both Substation and Transmission. The Connector Products Grounding Grid Connector is a safe, fast, and dependable method of making permanent wire-to-wire and wire-to-ground rod connections. Fully tested to IEEE Standards the Connector Products Ground Grid Connector will provide a cost effective reliable answer to your grounding questions.

## Features

Requires No Special Molds, Chemicals, Tools, Crimping Dies, or Fire-On Charges. The product can be totally installed with a wrench.

There are no temperature or weather restrictions for this product. This connector can be installed no matter what environment exists at the job site.

The Shear-head bolt ensures consistency of application, and positive verification of a completed connection.

The high-strength "Spring C" Member ensures constant and consistent connecting force to positively and permanently grip to the wires and rods.

The Industry-Proven Wedge Style connecting principle is used to ensure that rods and wires are locked in place for a permanent connection.

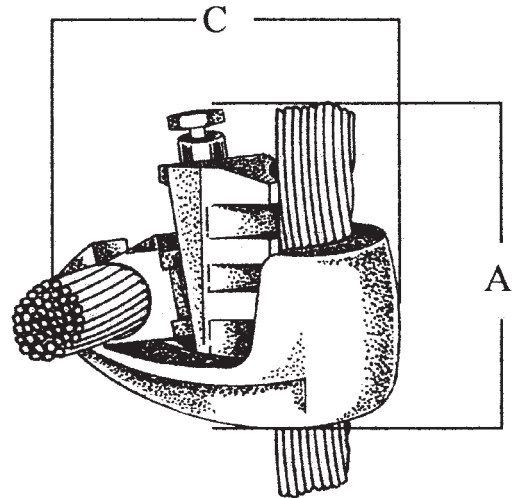
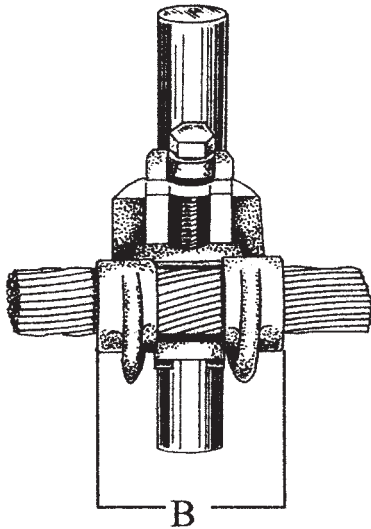
The highest-quality Copper and Bronze Alloys are used to ensure conductivity and durability for reliable performance.



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# 500 MCM Series Ground Grid Connector Specifications



Dimensions		Materials	
<b>A</b>	3.4"	<b>Drive Screw Mechanism</b>	Silicium Bronze
<b>B</b>	2.4"	<b>Interface</b>	High-Conductivity <b>319</b> Contact Copper <i>Casting</i>
<b>C</b>	3.4"	<b>Connector Body</b>	High-Strength <b>415</b> Aluminum Bronze <i>Casting</i>

## 500 MCM Series Ground Grid Connector Part Number List and Wire Selection Guide

Catalog Number	FROM	TO	Total Sum of Conductor's Diameters
	Wire Description	Wire Description	
900200	500 MCM 450 MCM	500 MCM 450 MCM	1.504" - 1.624"
	500 MCM)	400 MCM	
900201	500 MCM 450 MCM	350 MCM 300 MCM 3/4 ROD	1.402" - 1.500"
	450 MCM 400 MCM	400 MCM	
900202	500 MCM 450 MCM	250 MCM 5/8 ROD 4/0 STR	1.284" - 1.387'
	350 MCM	350 MCM 300 MCM 3/4 ROD	
	400 MCM	250 MCM 5/8 ROD	
900203	500 MCM 450 MCM	1/0 STR 2/0 STR	1.231" - 1.145"

### Standard Package

Size	Quantity	Weight
Full Carton	24 Units	48 Pounds

# Ground Grid Connector

## Installation Instructions



1) Withdraw drive screw to end point of wedge as shown.



2) Place "C" Body around conductor.



3) Place conductor designated by markings on cable nest within "C" body.



4) Insert wedge assembly while holding conductors in place.



5) Push the wedge forward to lock the conductors in place.



6) Use a 9/16" socket to drive the screw in.



7) When shear head breaks off installation is complete. Any socket, speed, or impact wrench can be used.

# SPLICES & DEAD ENDS



# The Jaws Series AutoSplice

*"Better Products by Design"*



The CPI AutoSplice is the fastest and most user-friendly way to splice AAC or ACSR conductor. CPI offers the first Automatic splice design that allows the installer to visually see when the wire has been fully inserted. This open design also prevents moisture from becoming trapped within the splice body causing corrosion. The CPI AutoSplice raises the bar by using an exclusive opposing cable gripper design that enables this splice to greatly exceed the ANSI C119.4 requirements for ACSR cable.

## Features

Open design gives visual confirmation of proper installation.

Lightning-quick installation.

Shark-like opposing cable gripper design.

Greatly exceeds ANSI C119.4 requirements for a full tension Class A connector.

Widest range-taking ability of any other splice.

Overheating risk averted through use of highly conductive alloy and greater surface contact area.

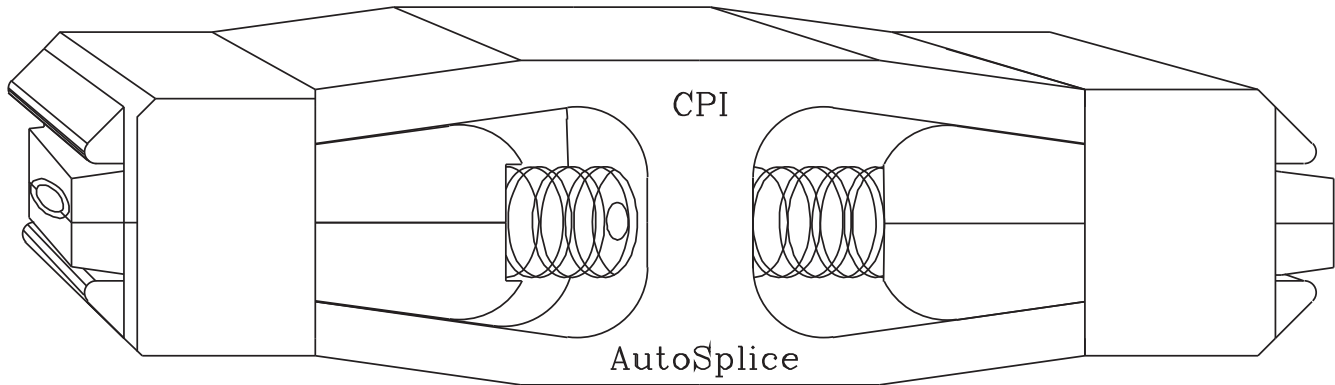
Open design prevents corrosion.

Can be removed and reset to adjust wire sag.

Factory applied inhibitor.

Full-current rated at 5% RBS.

# The Jaws Series AutoSplice



## The Top Reasons...

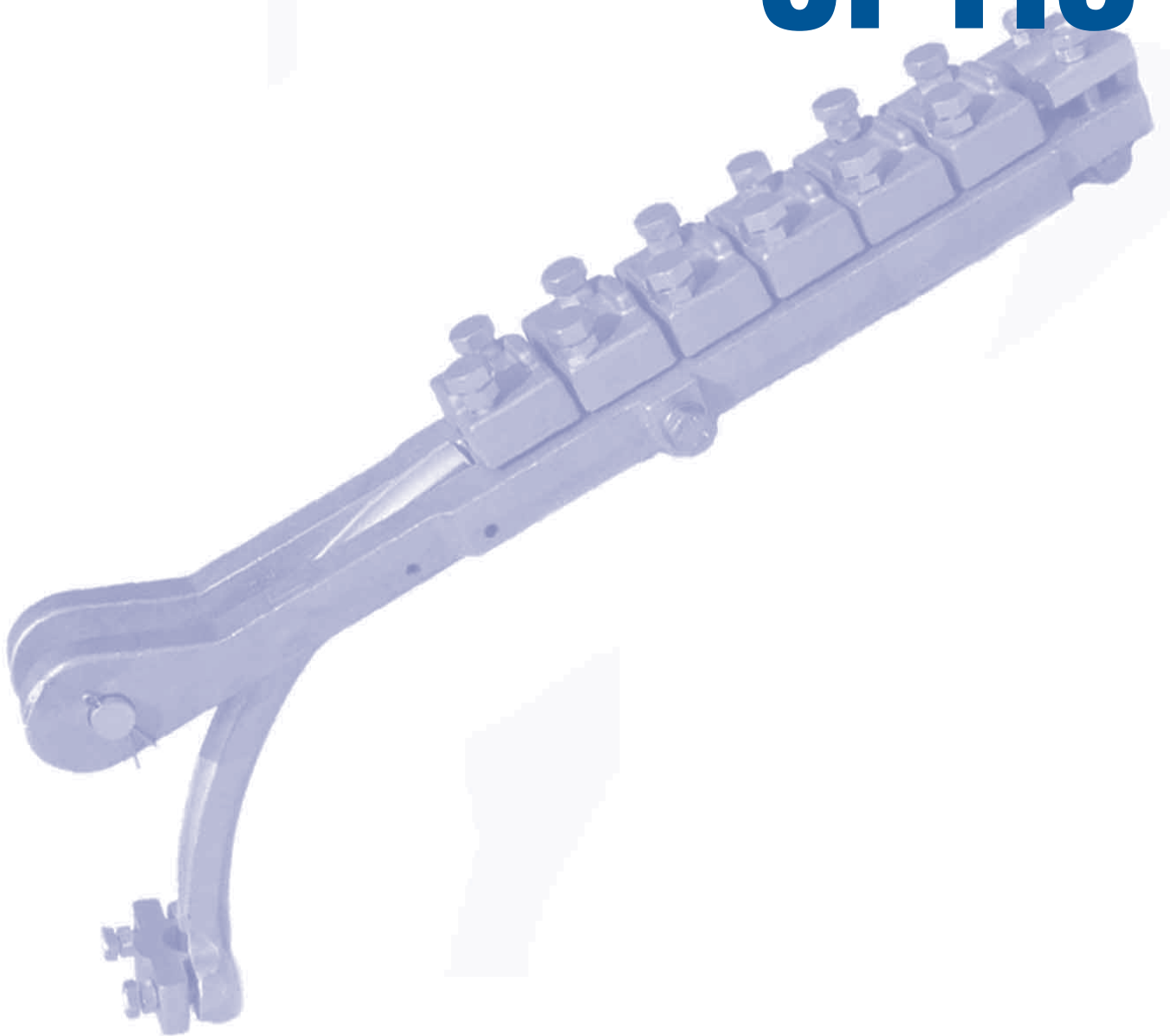
1. Open design gives visual confirmation of proper installation.
2. Shark-like opposing cable gripper design.
3. Exceeds ANSI C119.4 requirements for a full tension Class A connector.
4. Overheating risk averted through use of highly conductive alloy and greater surface contact area.
5. Open design prevents corrosion.
6. Can be removed and reset to adjust wire sag.
7. Factory applied inhibitor.
8. Full-current rated at 5% of RBS.

The CPI AutoSplice is the fastest and most user-friendly way to splice AAC or ACSR conductor. CPI offers the first Automatic splice design that allow the installer to visually see when the wire has been fully inserted. This open design also prevents moisture from becoming trapped within the splice body causing corrosion. The CPI Auto Splice raises the bar by using an exclusive opposing cable gripper design that enables this splice to exceed the ANSI C119.4 requirements for ACSR cable.

<b>CPI Part #</b>	<b>Name</b>	<b>Wire Dia Range</b>	<b>Wire Description</b>
S500	MIGHTY MINNOW	.184"-.257"	#6AAC/ACSR #4AAC/ACSR
S750	SNAPPER	.250"-.316"	#4ACSR/AAC/AAAC #2AAC/ACSR/AAAC
S1000	PIRANHA	.292"-.414"	#2AAC/ACRS/AAAC 1/0AAC/ACSR/AAAC 2/0AAC
S1500	MAKO 2	.414"-.563"	2/0AAC/ACSR/AAAC 3/0AAC/ACSR/AAAC 4/0AAC/ACSR/AAAC
S2000	MAKO	.464"-.586"	3/0AAC/ACSR/AAAC 4/0AAC/ACSR/AAAC 266.8AAC
S3000	HAMMERHEAD	.609"-.743"	266.4ACSR/AAAC 336.4AAC/ACSR 18/1/AAAC 397.5AAC/ACSR 18/1

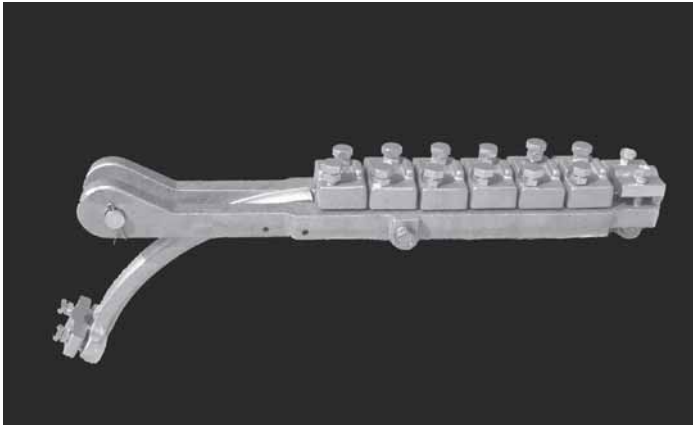
100% Made in USA

# FIBER OPTIC



# Fiber Optic Bolted Dead End

*"Better Products by Design"*



The CPI Bolted OPGW Dead End is designed for Dead End Applications of Optical Grounding Wire Spans. The Patented Left and Right Hand Gripper design allows the Dead End to hold up to 95% of the cable's RTS without damaging the Fibers.

## Features

Pulling eye allows convenient sagging attachment for tensioning device.

Rubber grommets suppress aeolian vibration fatigue at the exit point.

Compact length allows for complete installation from the structure.

Shear-head bolts ensure proper torquing necessary to achieve maximum holding strength.

Cable guide ensures that the minimum bend radius is not exceeded.

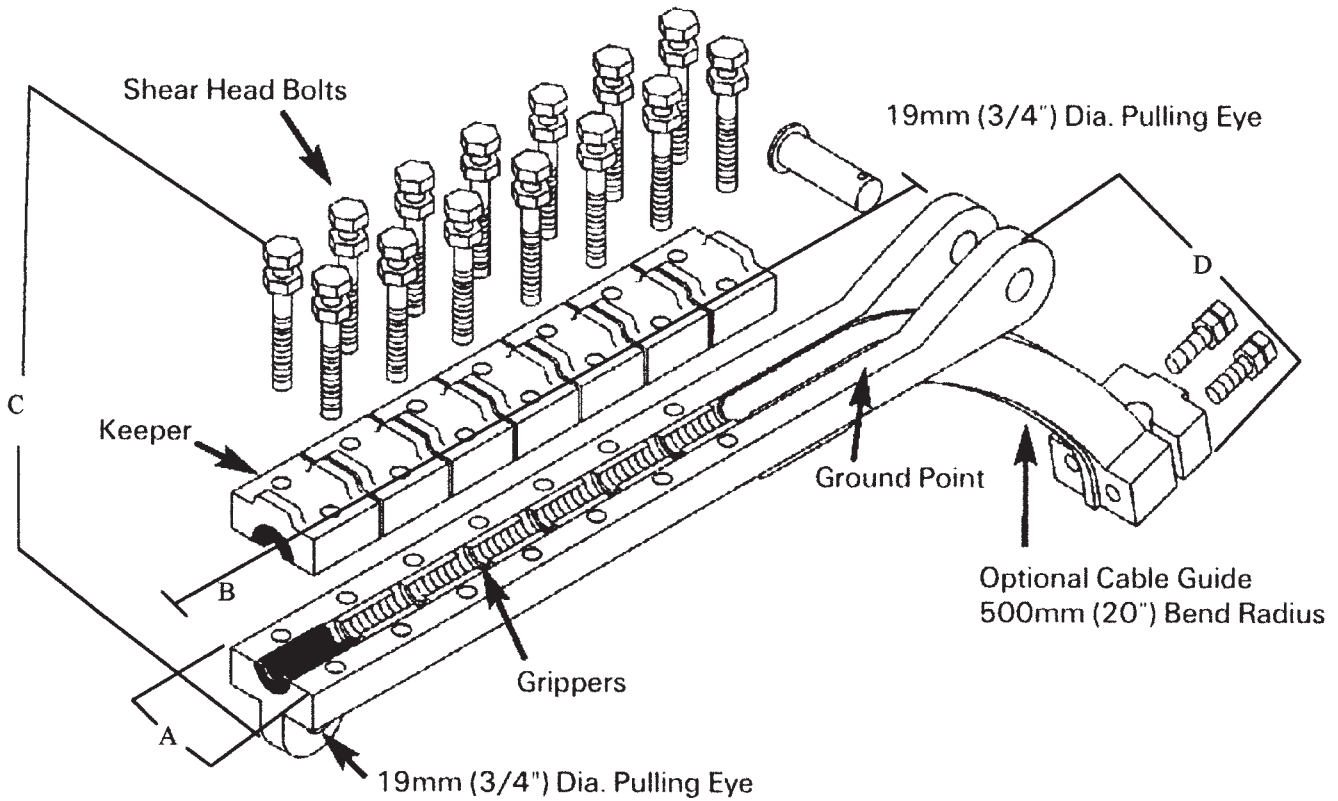
Design Criteria - Maximum-rated Holding Strength is 95% of the OPGW RTS.

Note: Cable spec. sheet must be supplied with order.



# OPGW Dead End Specifications

(Optical Ground Wire)



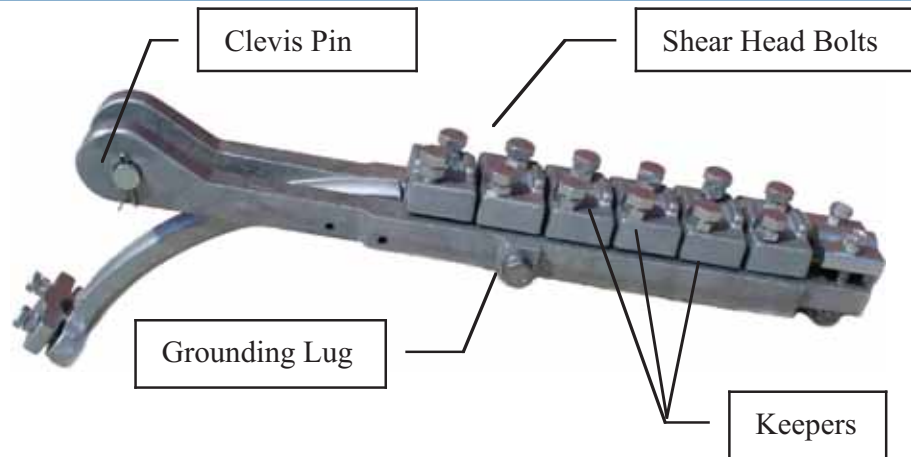
CPI OPGW DEAD-END				
Metric Range		Standard Range		
Min	Max	Min	Max	
CPI Part #				
Outside Diameter of Cable				
OBDE 8.98-9.75	8.98 mm	9.75 mm	0.354"	0.384"
OBDE 9.75-10.7	9.75 mm	10.7 mm	0.384"	0.422"
OBDE 10.7-11.5	10.7 mm	11.5 mm	0.422"	0.453"
OBDE 11.5-12.7	11.5 mm	12.7 mm	0.453"	0.500"
OBDE 12.6-13.6	12.6 mm	13.6 mm	0.496"	0.536"
OBDE 13.7-14.2	13.7 mm	14.2 mm	0.540"	0.559"
OBDE 14.3-14.7	14.3 mm	14.7 mm	0.563"	0.579"
OBDE 14.8-15.5	14.8 mm	15.5 mm	0.583"	0.611"
OBDE 15.4-16.2	15.4 mm	16.2 mm	0.607"	0.638"
OBDE 16.2-17.0	16.2 mm	17.0 mm	0.638"	0.670"
OBDE 17.1-17.9	17.1 mm	17.9 mm	0.674"	0.705"
OBDE 17.9-19.0	17.9 mm	19.0 mm	0.705"	0.750"

Dimensions	
A	4"
B	22"
C	4.55"
D	8"

Weight: 14 lbs.

Please consult factory for other wire sizes not listed. All Deadends are available with or without optional cable downguide.

NOTE: Please provide cable spec. sheet with each order.



## INSTALLATION INSTRUCTIONS



1) Remove all Keepers and Clevis Pin from the Dead-End Body.



2) Pull OPGW into Desired position in the Dead-End.



3) Replace Keepers with arrow in the direction of cable pull.

-Hand tighten each bolt evenly.



4) Tighten all Keeper bolts until Shear Head Bolts break off.



5) Install Grounding Lug to side Dead-End Body



INSTALLATION IS COMPLETE



# TECHNICAL INFORMATION

Certificate US07/986

The management system of

## Connector Products Inc.

5 Surrey Lane  
Cinnaminson, NJ 08077  
United States



has been assessed and certified as meeting the requirements of

## ISO 9001:2000

For the following activities

**The design and manufacture of connectors for the power utility industry, excluding 7.5.4.**

Further clarifications regarding the scope of this certificate and the applicability of ISO 9001:2000 requirements may be obtained by consulting the organization

This certificate is valid from 12 July 2007 until 11 July 2010.  
Issue 1.

Authorized by

A handwritten signature in black ink, appearing to read "D. T. ...", is written over a faint background of a handprint.



Vice President

SGS Systems & Services Certification  
Division of SGS U.S. Testing Company Inc.  
Meadows Office Complex 201 Route 17 North Rutherford NJ 07070  
t (201) 508-3000 f (201) 935-4555 www.us.sgs.com

Page 1 of 1





United States Department of Agriculture  
Rural Development

September 20, 2005

Mr. Nick Polidori  
Connector Products Inc.  
P. O. Box 2516  
Cannaminson, New Jersey 08077

Dear Mr.Polidori:

Your application for acceptance of the S1000 automatic conductor splice has been brought to the attention of Technical Standards Committee "A" (Electric).

The Committee found your S1000 automatic splice to be acceptable on a conditional basis. The S1000 automatic splice will appear on page bx(1) of the Conditional List of Materials as follows:

**Conditional List**  
**bx(1)**

bx - Splice, automatic

Manufacturer	Conditions
--------------	------------

DISTRIBUTION

2 ACSR	(S1000)	1. To obtain experience.
#1 ACSR	(S1000)	2. For use on distribution systems only.
#2 AAC	(S1000)	
1/0 AAC	(S1000)	
2/0 AAC	(S1000)	
#2 AAAC	(S1000)	
1/0 AAAC	(S1000)	

This acceptance does not relieve the manufacturer of any responsibility for the satisfactory performance of the item and its conformity to guarantees, specifications, or other provisions of contracts covering its sale. This acceptance is made with the further understanding that no changes in design or workmanship affecting the quality, strength, or electrical characteristics of the item will be made without the knowledge of the Technical Standards Committees. You are also asked to notify the Technical Standards Committees of any change in manufacturing plant location or locations.

A representative list should be kept of our borrowers purchasing these S1000 automatic splices. This information will be needed at the time you apply for full acceptance after the trial period. The selection of conditionally accepted materials and equipment is at the option of the borrower.

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United States  
Department  
of Agriculture

Rural  
Electrification  
Administration

Washington  
D.C.  
20250

MAY 20 1987

Mr. Thomas Polidori  
Connector Products, Inc.  
P.O. Box 534  
Pennsauken, New Jersey 08110

Dear Mr. Polidori:

The connectors referred to in your letters dated February 20 and April 27, 1987, have been brought to the attention of Technical Standards Committee "A" (Electric).

Your request for listing of its aluminum tap connector was accepted. Your listing will appear as follows on page p-11 of the List of Materials.

p-11

p - Connectors

<u>Manufacturer</u>	<u>Aluminum-to-</u>	<u>Aluminum-to-</u>	<u>Copper-to-</u>	<u>Tap Connections</u>
<u>Connector</u>	<u>Aluminum</u>	<u>Copper</u>	<u>Copper</u>	<u>(Al to Al, Al to Cu)</u>
Connector	Aluminum Tap	Aluminum Tap	- - - - -	Aluminum
Products,	Connector	Connector		Tap
Inc.				Connector

This acceptance does not relieve the manufacturer of any responsibility for the satisfactory performance of the item and its conformity to guarantees, specifications or other provisions of contracts covering its sale. This acceptance is made with the further understanding that no changes in design or workmanship affecting the quality, strength or electrical characteristics of the item will be made without the knowledge of the Technical Standards Committees.

JAMES C. ARNOLD, JR., Chairman  
Technical Standards Committee "A"  
Electric Staff Division



# Conductor Specifications

## Aluminum Cable, Steel Reinforced Bare

Code Word	Cross Section Aluminum Cir. Mils or AWG	Copper Equivalent Based on Equal DC Resistance	Stranding Number and Diameter of strands		Diameter - Inches						Ultimate Strength Lbs.	Weight Per 1000 Ft. Pounds
					Complete Cable	Steel Core	Over Armor Rods					
							Straight	Tapered	Preformed			
Aluminum	Steel			Alum. Alloy	Galv. Steel							
TURKEY	6	8	6x0.0661	1x0.0661	0.198	0.0661	0.434		0.440		1170	36.1
SWAN	4	6	6x0.0834	1x0.0834	.250	0.0834	0.548		0.542	0.438	1830	57.4
SWANTE	4	6	7x0.0772	1x0.1029	0.257	0.1029	0.555		0.549	0.438	2288	67.1
SPARROW	2	4	6x0.1052	1x0.1052	0.316	0.1052	0.586		0.608	0.504	2790	91.3
SPARATE	2	4	7x0.0974	1x0.1299	0.325	0.1299	0.595		0.617	0.504	3525	106.7
ROBIN	1	3	6x0.1182	1x0.1182	0.355	0.1182	0.657		0.647	0.543	3480	115.2
RAVEN	1/0	2	6x0.1327	1x0.1327	0.398	0.1327	0.744		0.732	0.606	4280	145.2
QUAIL	2/0	1	6x0.1490	1x0.1490	0.447	0.1490	0.745	0.835	0.781	0.651	5345	183.1
PIEGON	3/0	1/0	6x0.1672	1x0.1672	0.502	0.1672	0.386	0.938	0.863	0.782	6675	230.9
PENGUIN	4/0	2/0	6x0.1878	1x0.1878	0.563	0.1878	0.939	1.051	0.927	0.843	8420	291.1
WAXWING	266800	3/0	18x0.1217	1x0.1217	0.609	0.1217	0.999	1.125	0.973		7100	289.7
OWL	266800	3/0	6x0.2109	7x0.0703	0.633	0.2109		1.179	0.997	0.929	9645	343.3
PARTRIDGE	266800	3/0	26x0.1013	7x0.0788	0.642	0.2364		1.188	1.006	0.938	11250	367.3
OSTRICH	300000	188700	26x0.1074	7x0.0835	0.680	0.2505		1.258	1.088	1.004	12650	412.9
MERLIN	336400	4/0	18x0.1367	1x0.1367	0.684	0.1367	1.046	1.262	1.092		8950	336.0
LINNET	336400	4/0	26x0.1138	7x0.0885	.0721	0.2655		1.349	1.129	1.045	14050	463.0
ORIOLE	336400	4/0	30x0.1059	7x0.1059	0.741	0.3177		1.369	1.149	1.065	17040	527.1
CHICKADEE	397500	250000	18x0.1486	1x0.1486	0.743	0.1486	1.057	1.371	1.151		10400	432.0
BRANT	397500	250000	24x0.1287	7x0.0858	0.772	0.2574		1.436	1.272		14690	512.1
IBIS	397500	250000	26x0.1236	7x0.0961	0.783	0.2883		1.447	1.283		16190	547.2
LARK	397500	250000	30x0.1151	7x0.1151	0.806	0.3453		1.490	1.306		19980	622.8
PELICAN	477000	300000	18x0.1628	1x0.1628	0.814	0.1628	1.180	1.518	1.314		12300	518.0
FLICKER	477000	300000	24x0.1410	7x0.0940	0.846	0.2820		1.570	1.346		17200	514.0
HAWK	477000	300000	26x0.1355	7x0.1054	0.858	0.3162		1.602	1.358		19430	656.0
HEN	477000	300000	30x0.1261	7x0.1261	0.883	0.3783		1.649	1.383		23300	747.3
OSPREY	556500	350000	18x0.1758	1x0.1758	0.879	0.1758		1.623	1.379		13850	604.0
PARAKEET	556500	350000	24x0.1523	7x0.1015	0.914	0.3045		1.702	1.414		19850	717.0
DOVE	556500	350000	26x0.1463	7x0.1138	0.927	0.341		1.715	1.427		22400	766.0
EAGLE	556500	350000	30x0.1362	7x0.1362	0.953	0.409		1.763	1.453		27200	872.0
PEACOCK	605000	380500	24x0.1588	7x0.1059	0.953	0.318		1.763	1.453		2150	780.0
SQUAB	605000	380500	26x0.1525	7x0.1186	0.966	0.356		1.798	1.466		24100	833.0
TEAL	605000	380500	30x0.1420	19x0.0852	0.994	0.426		1.850	1.614		30000	939.0
SWIFT	636000	400000	36x0.1329	1x0.1329	0.930	0.1329		1.718	1.430		13450	644.0
KINGBIRD	636000	400000	18x0.1880	1x0.1880	0.940	0.1880		1.750	1.440		15830	691.0
ROOK	636000	400000	24x0.1628	7x0.1085	0.977	0.326		1.809	1.597		22600	819.0
GROSBEAK	636000	400000	26x0.1564	7x0.1216	0.990	0.365		1.846	1.610		25000	875.0
EGRET	636000	400000	30x0.1456	19x0.0874	1.019	0.437		1.901	1.639		31500	988.0
FLAMINGO	666600	419000	24x0.1667	7x0.1111	1.000	0.333		1.856	1.620		23700	859.0
STILT	715500	450000	24x0.1727	7x0.1151	1.036	0.345		1.918	1.656		25500	921.0
STARLING	715500	450000	26x0.1659	7x0.1290	1.051	0.387		1.959	1.671		28100	985.0
REDWING	715500	450000	30x0.1544	19x0.0926	1.081	0.463		2.013	1.701		34600	1111.0
COOT	795000	500000	36x0.1486	1x0.1486	1.040	0.1486		1.922	1.660		16540	805.0
TERN	795000	500000	45x0.1329	7x0.0886	1.063	0.266		1.971	1.683		22900	896.0
CUCKOO	795000	500000	24x0.1820	7x0.1214	1.092	0.364		2.025	1.713		27900	1024.0
CONDOR	795000	500000	54x0.1214	7x0.1214	1.093	0.364		2.025	1.713		28500	1024.0
DRAKE	795000	500000	26x0.1749	7x0.1360	1.108	0.408		2.040	1.728		31200	1094.0
MALLARD	795000	500000	30x0.1628	19x0.0977	1.140	0.489		2.128	1.760		38400	1235.0
RUDDY	900000	556000	45x0.1414	7x0.0943	1.131	0.283		2.063	1.740		25400	1015.0
CANARY	900000	556000	54x0.1291	7x0.1291	1.162	0.387		2.150	1.782		32300	1159.0
CATBIRD	954000	600000	36x0.1628	1x0.1628	1.140	0.1628		2.120	1.760		19520	966.0
RAIL	954000	600000	45x0.1456	7x0.0971	1.165	0.291		2.153	1.785		26900	1075.0
CARDINAL	954000	600000	54x0.1329	7x0.1329	1.196	0.399		1.984	1.816		34200	1229.0
TANAGER	1033500	650000	36x0.1694	1x0.1694	1.186	0.1694		1.974	1.850		21100	1046.0
ORTLAN	1033500	650000	45x0.1516	7x0.1011	1.213	0.303		2.023	1.943		28900	1165.0
CURLEW	1033500	650000	54x0.1384	7x0.1384	1.246	0.415		2.078	1.976		37100	1331.0
BLUEJAY	1113000	700000	45x0.1573	7x0.1049	1.259	0.315		2.091	1.989		30900	1255.0
FINCH	1113000	700000	54x0.1436	19x0.0862	1.293	0.431		2.149	2.023		40200	1431.0
BUNTING	1192500	750000	45x0.1628	7x0.1085	1.302	0.326		2.158	2.032		33200	1344.0
GRACKLE	1192500	750000	54x0.1486	19x0.0892	1.333	0.446		2.220	2.068		43100	1533.0
BITTERN	1272000	800000	45x0.1681	7x0.1121	1.345	0.336		2.227	2.075		35400	1434.0

CONTINUED ON BACK



# Conductor Specifications

## Aluminum Cable, Steel Reinforced Bare

Code Word	Cross Section Aluminum Cir. Mils or AWG	Copper Equivalent Based on Equal DC Resistance	Stranding Number and Diameter of strands		Diameter - Inches						Ultimate Strength Lbs.	Weight Per 1000 Ft. Pounds
					Complete Cable	Steel Core	Over Armor Rods					
							Straight	Tapered	Preformed			
Aluminum	Steel			Alum. Alloy	Galv. Steel							
PHEASANT	1272000	800000	54x0.1535	19x0.0921	1.382	0.461		2.290	2.030		44800	1635.0
DIPPER	1351500	850000	45x0.1733	7x0.1151	1.385	0.345		2.152	2.116		37600	1523.0
MARTIN	1351500	850000	54x0.1582	19x0.0949	1.424	0.475		2.190	2.296		47600	1737.0
BOBOLINK	1431000	900000	45x0.1783	7x0.1189	1.427	0.357		2.215	2.299		39800	1613.0
PLOVER	1431000	900000	54x0.1628	19x0.0977	1.465	0.489					50400	1840.0
NUTHATCH	1510500	950000	45x0.1832	7x0.1211	1.4766	0.366		2.276	2.338		41600	1702.0
PARROT	1510500	950000	54x0.1675	19x0.1004	1.506	0.502		2.316	2.378		53200	1942.0
LAPWING	1590000	1000000	45x0.1878	7x0.1252	1.502	0.376		2.312	2.374		43800	1792.0
FALCON	1590000	1000000	54x0.1716	19x0.1030	1.545	0.515					56000	2044.0
CHUKAR	1780000	1119000	84x0.1456	19x0.0874	1.602	0.437		2.474	2.474		53600	2074.0
BLUEBIRD	2156000	1352000	84x0.1602	19x0.0961	1.762	0.481		*2.462			63400	2512.0
KIWI	2167000	1361000	72x0.1735	7x0.1157	1.737	0.347		*2.437	2.609		53000	2304.0

\* Using 18 rod sets

The conductors listed below have a high ratio of mechanical strength to current carrying capacity. They are used largely for overhead ground wires or for special long span construction such as river crossings. Generally speaking, they are of interest where mechanical requirements are of primary importance. These conductors are in every respect standard types of ACSR.

Code Word	Cross Section		Copper Equivalent Based on Equal DC Resistance Cop. 97% Alum. 61%	Stranding Number and Diameter of strands		Diameter - Inches					Ultimate Strength Lbs.	Weight Per 1000 Ft. Pounds
	Aluminum					Complete Cable	Steel Core	Over Armor Rods				
	Cir. Mils	Square Inches						Straight	Tapered	Preformed Alum. Alloy		
		Aluminum	Steel									
GROUSE	80000	0.0628	50310	8x0.1000	1x0.1670	0.367	0.1670	0.687		0.659	5206	149.0
PETREL	101800	0.0800	64160	12x0.0921	7x0.0921	0.461	0.2763		0.861	0.795	9860	254.1
MINORCA	110800	0.0870	69700	12x0.0961	7x0.0961	0.481	0.2883		0.893	0.815	10730	276.6
LEGHORN	134600	0.1057	84600	12x0.1059	7x0.1059	0.530	0.3177		0.990	0.864	12920	336.0
GUINEA	159000	0.1249	1000000	12x0.1151	7x0.1151	0.576	0.3453		1.078	0.940	15200	396.8
DOTTEREL	176900	0.1389	111200	12x0.1214	7x0.1214	0.607	0.3642		1.123	0.971	16440	441.5
DORKING	190800	0.1499	120000	12x0.1261	7x0.1261	0.631	0.3783		1.177	0.995	17730	476.3
COCHIN	211300	0.1660	132900	12x0.1327	7x0.1327	0.663	0.3981		1.241	1.027	19640	527.5
BRAHMA	203200	0.1596	127800	16x0.1127	19x0.0977	0.714	0.4885		1.324	1.122	27500	676.7



# Conductor Specifications

## Stranded Aluminum Conductor, Bare-Classes AA and A Hard-Drawn (EC-H19)

Code Word	Conductor Size		Copper equivalent based on equal dc resistance Cu-97% Al- 61%	Stranding		Cable dia. Inches	D.C. resistance at 20°C ohms per 1,000 ft (61%)	Ultimate Strength Pounds	Weight per 1,000 Ft. Pounds
	Circular mils or AWG	Square Inches		Class	Number and dia of wires, inches				
PEACHBELL	6	0.0206	8	A	7x0.0612	0.184	0.6606	528	24.6
ROSE	4	0.0328	6	A	7x0.0772	0.232	0.4155	826	39.2
LILY	3	0.0413	5	A	7x0.0867	0.260	0.3295	1022	49.4
IRIS	2	0.0521	4	"AA, A"	7x0.0974	0.292	0.2613	1266	62.3
PANSY	1	0.0657	3	"AA, A"	7x0.1094	0.328	0.2072	1537	78.5
POPPY	1/0	0.0829	2	"AA, A"	7x0.1228	0.368	0.1643	1865	99.1
ASTER	2/0	0.1045	1	"AA, A"	7x0.1379	0.414	0.1303	2350	124.9
PHLOX	3/0	0.1318	1/0	"AA, A"	7x0.1548	0.464	0.1033	2845	157.5
OXLIP	4/0	0.1662	2/0	"AA, A"	7x0.1739	0.522	0.08195	3590	198.6
DAISY	266800	0.2095	3/0	—	7x0.1953	0.586	0.06500	4525	250.4
LAUREL	266800	0.2095	3/0	A	19x0.1185	0.593	0.06500	4800	250.4
TULIP	336400	0.2642	4/0	"AA, A"	19x0.1331	0.666	0.05155	5940	315.8
CANNA	397500	0.3122	250000	"AA, A"	19x0.1447	0.724	0.04363	6880	372.5
COSMOS	477000	0.3746	300000	"AA, A"	19x0.1585	0.793	0.03636	8090	477.8
SYRINGA	477000	0.3746	300000	A	37x0.1135	0.759	0.03636	8600	477.8
DAHLIA	556500	0.4371	350000	—	19x0.1711	0.856	0.03116	9440	522.4
MISTLETOE	556500	0.4371	350000	"AA, A"	37x0.1226	0.858	0.03166	9830	597.0
ORCHID	636000	0.4995	400000	"AA, A"	37x0.1311	0.918	0.02727	12240	671.6
VIOLET	715000	0.5620	450000	AA	37x0.1391	0.974	0.02424	12640	671.6
NASTURTIUM	715000	0.5620	450000	A	61x0.1083	0.975	0.02424	13150	671.6
ARBUS	795000	0.6244	500000	AA	37x0.1466	1.026	0.02181	13770	746.3
LILAC	795000	0.6244	500000	A	61x0.1142	1.028	0.02181	14330	746.6
ANEMONE	874500	0.6868	550000	AA	37x0.1538	1.077	0.01983	14830	820.9
CROCUS	874500	0.6868	550000	A	61x0.1198	1.078	0.01983	15760	820.9
MAGNOLIA	954000	0.7493	600000	AA	37x0.1606	1.124	0.01818	16180	895.5
GOLDENROD	954000	0.7493	600000	A	61x0.1251	1.126	0.01818	16860	895.5
BLUEBELL	1033500	0.8177	650000	AA	37x0.1672	1.170	0.01678	17530	970.1
LARKSPUR	1033500	0.8177	650000	A	61x0.1302	1.172	0.01678	18260	970.1
MARIGOLD	1113000	0.8741	700000	"AA, A"	61x0.1351	1.216	0.01558	19660	1045.
HAWTHORN	1192500	0.9366	750000	"AA, A"	61x0.1398	1.258	0.01454	21000	1119.
NARCISSUS	1272000	0.999	800000	"AA, A"	61x0.1444	1.300	0.01363	22000	1193.
COLUMBINE	1351500	1.062	850000	"AA, A"	61x0.1489	1.340	0.01283	23400	1269.
CARNATION	1431000	1.124	900000	"AA, A"	61x0.1532	1.379	0.01212	24300	1343.
GLADIOLUS	1510500	1.186	950000	"AA, A"	61x0.1574	1.417	0.01148	25600	1418.
COREOPSIS	1590000	1.249	1000000	AA	61x0.1615	1.454	0.01091	27000	1493.
DOGWOOD	1590000	1.249	1000000	A	91x0.1322	1.454	0.01091	28100	1493.



# Conductor Specifications

## High Strength Aluminum Alloy (6201) Conductor, AAAC

Code Word	Area			Stranding		Conductor Diameter Inches	D.C. resistance at 20°C ohms per 1,000 ft.	Minimum Ultimate Strength Lbs.	Weight per 1,000 Ft. Lbs.
	CM	Square Inches	Approx. EC Equivalent AWG or CM	No.	Dia. Inch				
AKRON	"30,580"	0.02402	6	7	0.0661	0.198	0.6588	"1,095"	28.7
ALTON	"48,690"	0.03824	4	7	0.0834	0.25	0.4138	"1,744"	45.7
AMES	"77,470"	0.06084	2	7	0.1055	0.316	0.2601	"2,775"	72.7
AZUSA	"123,300"	0.09681	1/0	7	0.1327	0.398	0.1635	"4,415"	115.7
ANAHEIM	"155,400"	0.1221	2/0	7	0.149	0.447	0.1297	"5,334"	145.9
AMHERST	"195,700"	0.1537	3/0	7	0.1672	0.502	0.103	"6,717"	183.7
ALLIANCE	"246,900"	0.1939	4/0	7	0.1878	0.563	0.08161	"8,473"	231.8
BUTTE	"312,800"	0.2456	"266,800"	19	0.1283	0.642	0.06442	"10,610"	293.6
CANTON	"394,500"	0.3099	"336,400"	19	0.1441	0.721	0.05107	"12,830"	370.3
CAIRO	"465,400"	0.3655	"397,500"	19	0.1565	0.783	0.0433	"15,130"	436.9
DARIEN	"559,500"	0.4394	"477,000"	19	0.1716	0.858	0.03601	"18,190"	525.2
ALIGN	"652,400"	0.5124	"556,500"	19	0.1853	0.927	0.03089	"21,210"	612.4
FLINT	"740,800"	0.5818	"636,000"	37	0.1415	0.991	0.0272	"24,090"	695.4
GREELEY	"927,200"	0.7282	"795,000"	37	0.1583	1.108	0.02173	"30,150"	870.4

Data prepared on the basis of the ASTM Specifications for Alloy 6201 Conductor (ASTM B 398-63T, "Aluminum Alloy 6201-T81 Wire for Electrical Purposes" and ASTM 399-63T, "Concentric-Lay Stranded 6201-T81 Aluminum Alloy Conductors")

## High Strength Aluminum Alloy (5005) Conductor, AAAC

Code Word	Size, MCM	Stranding		ACSR of Equal OD Size & Std.	Area, Square Inches	Outside Dia. Inches	Rated Strength Pounds	Resistance		Approx. EC Equiv. MCM	Weight per 1000 Feet (Lbs.)
		No.	Dia. Inch					Ohms 1000 Ft. DC @ 20°C	AC @ 50°C		
KAZOO	30.58	7	.0661	6 - 6/1	.0240	.198	915	.6466	.7151	26.39	28.7
KAKI	48.69	7	.0834	4 - 6/1	.0382	.250	"1,415"	.4061	.4491	42.01	45.7
KENCH	77.47	7	.1052	2 - 6/1	.0608	.316	"2,195"	.2552	.2823	66.85	72.7
KIBE	123.3	7	.1327	1/0 - 6/1	.0968	.398	"3,405"	.1604	.1774	106.4	115.7
KAYAK	155.4	7	.1490	2/0 - 6/1	.1221	.447	"4,230"	.1272	.1408	134.1	145.9
KOPECK	195.7	7	.1672	3/0 - 6/1	.1537	.502	"4,965"	.1010	.1118	168.9	183.7
KITTLE	246.9	7	.1878	4/0 - 6/1	.1939	.563	"6,262"	.08008	.08869	213.1	231.8
RATCH	281.4	19	.1217	266.8 - 18/1	.2210	.609	"7,360"	.07027	.07793	242.8	264.2
RAMIE	312.8	19	.1283	266.8 - 26/7	.2456	.642	"8,180"	.06321	.07006	296.9	293.6
RADAR	355.1	19	.1367	336.4 - 18/1	.2789	.684	"9,290"	.05568	.06176	306.4	333.3
RADIAN	394.5	19	.1441	336.4 - 26/7	.3099	.721	"10,180"	.05012	.05562	340.4	370.3
REDE	419.6	19	.1486	397.5 - 18/1	.3295	.743	"10,830"	.04712	.05232	362.1	393.9
RAGOUT	465.4	19	.1565	397.5 - 26/7	.3655	.783	"11,840"	.04249	.04722	401.6	436.9
REX	503.6	19	.1628	477.0 - 18/1	.3955	.814	"12,100"	.03926	.04367	434.6	472.7
REMEX	559.5	19	.1716	477.0 - 26/7	.4394	.858	"13,450"	.03534	.03936	482.8	525.2
RUBLE	587.2	19	.1758	556.5 - 18/1	.4612	.879	"14,110"	.03367	.03753	506.7	551.2
RUNE	652.4	19	.1853	556.5 - 26/7	.5124	.927	"15,680"	.03031	.03384	563.0	612.4
SURAL	704.6	37	.1380	605.0 - 26/7	.5534	.966	"18,430"	.02755	.03089	615.4	661.4
SPAR	740.8	37	.1415	636.0 - 26/7	.5818	.990	"19,110"	.02620	.02940	647.0	695.4
SORA	833.6	37	.1501	715.5 - 26/7	.6547	1.051	"21,210"	.02328	.02626	728.1	782.5
SOLAR	927.2	37	.1583	795.0 - 26/7	.7282	1.108	"23,590"	.02093	.02366	809.8	870.4



# Conductor Specifications

## Bare Copper Wire

Conductor Size	Wire Diameter	Cross-Sectional Area		Weight		Hard-Drawn	
						Min. Ultimate Strength	D.C. Resistance at 20°C (68°F)
Awg	inch	circular mills	square inch	lb per M ft	lb per mile	pounds	ohms per M ft
20	.0320	1020	.000804	3.10	16.4		
19	.0359	1290	.00101	3.90	20.6		
18	.0403	1620	.00128	4.92	26.0	85.5	6.64
17	.0453	2050	.00161	6.21	32.8	108	5.26
16	.0508	2580	.00203	7.81	41.2	135	4.18
15	.0571	3260	.00256	9.87	52.1	170	3.31
14	.0641	4110	.00323	12.4	65.7	214	2.63
13	.0720	5180	.00407	15.7	82.9	268	2.08
12	.0808	6530	.00513	19.8	104	337	1.65
11	.0907	8230	.00646	24.9	131	423	1.31
10	.1019	10380	.008155	31.43	166.0	529.3	1.039
9	.1144	13090	.01028	39.61	209.2	660.9	.8241
8	.1285	16510	.01297	49.98	263.9	826.1	.6532
7	.1443	20820	.01635	63.03	332.8	1030	.5180
6	.1620	26240	.02061	79.44	419.4	1280	.4110
5	.1819	33090	.02599	100.2	528.8	1590	.3260
4	.2043	41740	.03278	126.3	667.1	1970	.2584
3	.2294	52620	.04133	159.3	841.1	2439	.2050
2	.2576	66360	.05212	200.9	1061	3002	.1625
1	.2893	83690	.06573	253.3	1338	3688	.1289
1/0	.3249	105600	.08291	319.5	1687	4518	.1022
2/0	.3648	133100	.1045	402.8	2127	5519	.08021
3/0	.4096	167800	.1318	507.8	2681	6720	.06362
4/0	.4600	211600	.1662	640.5	3385	8143	.05045

## BARE COPPER CABLE CONCENTRIC STRAND

Conductor Size		Stranding Class	Total Number of Wires	Wire Diameter	Cable Diameter	Cross sectional	Minimum Breaking	Weight	
Mem	Awg			Inch	Inch	Sq. Inch	Lbs. (Hard)	Lb. per M Feet	Lb. per Mile
1.02	20	B	7	.0121	.0363	.0008023	50.04	3.154	16.65
1.62	18	B	7	.0152	.0456	.001276	78.99	5.015	26.48
2.58	16	B	7	.0192	.0576	.002028	124.7	7.974	42.10
4.11	14	B	7	.0242	.0726	.003225	197.1	12.68	66.95
6.53	12	B	7	.0305	.0915	.005129	311.1	20.16	106.5
10.38	10	B	7	.0385	.116	.008155	491.7	32.09	169.3
13.09	9	B	7	.0432	.130	.01028	618.2	40.42	213.4
16.51	8	B	7	.0486	.146	.01297	777.2	50.97	269.1
20.82	7	B	7	.0545	.164	.01635	977.1	64.28	339.4
26.24	6	B	7	.0612	.184	.02062	"1,288"	81.05	427.9
33.09	5	B	7	.0688	.206	.02600	"1,542"	102.2	539.6
41.74	4	AA	3	.1180	.254	.03278	"1,879"	127.6	673.8
41.74	4	B&A	7	.0772	.232	.03278	"1,938"	128.9	680.5
52.62	3	AA	3	.1325	.286	.04134	"2,359"	160.9	849.6
52.62	3	B&A	7	.0867	.260	.04134	"2,433"	162.5	858.0
66.36	2	AA	3	.1487	.320	.05213	"2,913"	202.9	1071
66.36	2	B&A	7	.0974	.292	.05213	"3,045"	204.9	1082
83.69	1	AA	3	.1670	.360	.06573	"3,621"	255.9	1351
83.69	1	AA	7	.1093	.328	.06573	"3,804"	258.4	1364
83.69	1	B	19	.0664	.332	.06573	"3,899"	258.4	1364
105.6	1/0	AA&A	7	.1228	.368	.08289	"4,752"	325.8	1720
105.6	1/0	-	12*	.0938	.390	.08289	"4,841"	325.8	1720
105.6	1/0	B	19	.0745	.372	.08289	"4,901"	325.8	1720
133.1	2/0	A&AA	7	.1379	.414	.1045	"5,962"	410.9	2169
133.1	2/0	-	12*	.1053	.438	.1045	"6,048"	410.9	2169
133.1	2/0	B	19	.0837	.419	.1045	"6,152"	410.9	2169
167.8	3/0	A&AA	7	.1548	.464	.1318	"7,366"	518.1	2736
167.8	3/0	-	12*	.1183	.492	.1318	"7,556"	518.1	2736
167.8	3/0	B	19	.0940	.470	.1318	"7,698"	518.1	2736
211.6	4/0	A&AA	7	.1739	.522	.1662	"9,154"	653.3	3450
211.6	4/0	-	12*	.1328	.552	.1662	"9,483"	653.3	3450
211.6	4/0	B	19	.1055	.528	.1662	"9,617"	653.3	3450
250		AA	12	.1443	.600	.1963	"11,130"	771.9	4076
250		A	19	.1147	.574	.1963	"11,360"	771.9	4076



# Conductor Specifications

## Physical and Electrical Characteristics of Alumoweld Wire and Strand

No. and Size of Wire	Nominal Diameter Inch	Breaking Load lbs.	Weight		Resistance Ohms per 1000 Ft. at	Cross-Section	
			Lbs per 1000 ft.	Lbs per Mile		Cir. Mils	Sq. In.
<b>STRAND</b>							
37 No. 5 Awg	1.27	"142,800"	2802	"14,800"	0.04247	"1,225,000"	0.9619
37 No. 6 Awg	1.13	"120,200"	2222	"11,730"	0.05356	"971,300"	0.7629
37 No. 7 Awg	1.01	"100,700"	1762	9305	0.06754	"770,300"	0.605
37 No. 8 Awg	0.899	"84,200"	1398	7379	0.08516	"610,900"	0.4798
37 No. 9 Awg	0.801	"66,770"	1108	5852	0.1074	"484,400"	0.3805
37 No. 10 Awg	0.713	"52,950"	879	4641	0.1354	"384,200"	0.3017
19 No. 5 Awg	0.91	"73,350"	1430	7552	0.08224	"628,900"	0.494
19 No. 6 Awg	0.81	"61,700"	1134	5990	0.1037	"498,800"	0.3917
19 No. 7 Awg	0.721	"51,730"	899.5	4750	0.1308	"395,500"	0.3107
19 No. 8 Awg	0.642	"43,240"	713.5	3767	0.1649	"313,700"	0.2464
19 No. 9 Awg	0.572	"34,290"	565.8	2987	0.2079	"248,800"	0.1954
19 No. 10 Awg	0.509	"27,190"	448.7	2369	0.2622	"197,300"	0.1549
7 No. 5 Awg	0.546	"27,030"	524.9	2772	0.2264	"231,300"	0.182
7 No. 6 Awg	0.486	"22,730"	416.3	2198	0.2803	"183,800"	0.1443
7 No. 7 Awg	0.433	"19,060"	330	1743	0.3535	"145,700"	0.1145
7 No. 8 Awg	0.385	"15,930"	261.8	1382	0.4458	"115,600"	0.09077
7 No. 9 Awg	0.343	"12,630"	207.6	1096	0.5621	"91,650"	0.07198
7 No. 10 Awg	0.306	"10,020"	164.7	869.4	0.7088	"72,680"	0.05708
7 No. 11 Awg	0.272	"7,945"	130.6	689.4	0.8938	"57,640"	0.04527
7 No. 12 Awg	0.242	"6,301"	103.6	546.8	1.127	"45,710"	0.0359
3 No. 5 Awg	0.392	"12,230"	224.5	1186	0.5177	"99,310"	0.078
3 No. 6 Awg	0.349	"10,280"	178.1	940.2	0.6528	"78,750"	0.06185
3 No. 7 Awg	0.311	"8,621"	141.2	745.6	0.8232	"62,450"	0.04905
3 No. 8 Awg	0.277	"7,206"	112	591.3	1.038	"49,530"	0.0389
3 No. 9 Awg	0.247	"5,715"	88.81	468.9	1.309	"39,280"	0.03085
3 No. 10 Awg	0.22	"4,532"	70.43	371.8	1.651	"31,150"	0.02446
<b>SOLID WIRE</b>							
4 AWG	0.2043	"5,081"	93.63	494.3	1.222	"41,740"	0.03278
5 AWG	0.1819	"4,290"	74.25	392	1.541	"33,100"	0.026
6 AWG	0.162	"3,608"	58.88	310.9	1.943	"26,250"	0.02062
7 AWG	0.1443	"3,025"	46.69	246.6	2.45	"20,820"	0.01635
8 AWG	0.1285	"2,529"	37.03	195.6	3.089	"16,510"	0.01297
9 AWG	0.1144	"2,005"	29.37	155.1	3.896	"13,090"	0.01028
10 AWG	0.1019	"1,590"	23.29	123	4.912	"10,380"	0.008155
11 AWG	0.09074	"1,261"	18.47	97.52	6.194	8234	0.006467
12 AWG	0.08081	"1,000"	14.65	77.33	7.811	"6,530"	0.005129

"Modulus of Elasticity: Strand, 23,000,000; Solid Wire, 23,500,000. "

"Coefficient of Linear Expansion: .000,007.2 per degree Fahrenheit"

### COPPERWELD 3-WIRE STRANDED CONDUCTORS FOR SPECIAL LONG SPANS

Conductor	Diameter Inch	Breaking Strength Lbs.	Weight		Resistance Ohms per 1000 Ft. at	Cross Section
			Lbs per 1000 ft.	Lbs per Mile		
No. 6 Awg E.H.S. 30% Cond.	0.349	9754	220.3	116.3	0.4513	0.06185
No. 8 Awg E.H.S. 30% Cond.	0.277	6282	138.5	731.5	0.7176	0.0389
No. 10 Awg E.H.S. 30% Cond.	0.22	4160	87.13	460	1.141	0.02446
No. 12 Awg E.H.S. 30% Cond.	0.174	2565	54.8	289.3	1.814	0.01539



# Part Number List and Wire Selection Guide

Main Conductor		Tap Conductor		Total Sum of Conductor's Diameters	Catalog Number
Wire Description	Wire Diameter Range	Wire Description	Wire Diameter range		
#6, #4	.162" - .213"	#6, #4	.162" - .213"	.324" - .426"	640101
#4 AAC	.250" - .325"	#6, #4	.162" - .204"	.412" - .529"	240100
#4 ACSR		#4, #2	.213" - .260"	.463" - .585"	240101
#2 AAC		#2	.281" - .325"	.531" - .650"	240102
#2 ACSR		#6, #4	.162" - .230"	.527" - .644"	210103
1/0 AAC	.356" - .414"	#4, #2	.250" - .325"	.615" - .739"	210105
1/0 ACSR		#2	.355" - .414"	.720" - .828"	210106
2/0 AAC		#6, #4	.162" - .230"	.609" - .722"	230107
2/0 ACSR,	.447" - .502"	#4, #2	.250" - .298"	.697" - .800"	230108
3/0 AAC,		#2, #1	.298" - .355"	.745" - .857"	230109
3/0 ACSR		1/0, 2/0	.365" - .414"	.812" - .916"	230110
		2/0, 3/0	.447" - .502"	.894" - 1.004"	230111
		#6, #4	.162" - .230"	.684" - .800"	264111
4/0 AAC	.502" - .570"	#4, #2	.250" - .325"	.772" - .895"	264112
4/0 ACSR		1/0, 2/0	.355" - .414"	.877" - .984"	264113
250 KCMILS		2/0, 3/0	.447" - .502"	.969" - 1.072"	264114
		4/0,	.522" - .570"	1.044" - 1.140"	262115
		#6, #4	.162" - .213"	.897" - .737"	350117
266.8 ACSR	.609" - .684"	#4, #2	.273" - .220"	.957" - .795"	350118
300 KCMILS		#2, #1,	.328" - .276"	1.012" - .851"	350119
336.4 AAC		#1, 1/0 AAC	.382" - .338"	1.066" - .913"	350120
336.4 ACSR(18/1)		1/0, 2/0	.447" - .398"	1.131" - .973"	350121
350 KCMILS		2/0, 3/0	.502" - .460"	1.185" - 1.035"	350122
		4/0, 250	.576" - .522"	1.260" - 1.097"	350123
		266.8, 300	.642" - .595"	1.326" - 1.170"	350124
		350, 336.4 (18/1)	.684" - .660"	1.368" - 1.235"	350125
		#6 - #2	.162" - .289"	.828" - 1.024"	336200
336 AAC		.666" - .743"	#2 - 1/0	.289" - .410"	.995" - 1.153"
336 ACSR	2/0-3/0-4/0		.414" - .537"	1.080" - 1.280"	336012
350MCM	4/0-266.8		.548" - .660"	1.214" - 1.403"	336866
397AAC	336.4-397.5		.666" - .743"	1.332" - 1.486"	336718
450MCM	.770" - .858"	#6 - #2	.162" - .273"	.932" - 1.131"	477057
477AAC		#2 - 1/0	.281" - .390"	1.051" - 1.248"	477962
477 ACSR		1/0-2/0-3/0	.398" - .502"	1.168" - 1.360"	477853
500MCM		4/0 - 266.8	.571" - .631"	1.287" - 1.489"	477724
556AAC		336.4 - 397.5	.633" - .743"	1.403" - 1.601"	477633
		477	.770" - .858"	1.540" - 1.716"	477434
556AAC	.856" - .953"	#6 - #2	.162" - .281"	1.041" - 1.234"	556956
556 ACSR		#2 - 2/0	.289" - .414"	1.168" - 1.367"	556892
600MCM		2/0-3/0-4/0	.419" - .524"	1.298" - 1.501"	556783
636AAC		4/0 - 266.8	.522" - .680"	1.435" - 1.633"	556638
650MCM		336.4 - 397.5	.682" - .806"	1.561" - 1.795"	556504
636 ACSR		477 - 556.5	.811" - .930"	1.690" - 1.883"	556294
		556.5 - 636	.932" - .953"	1.811" - 1.906"	556294-1
715MCM	1.010" - 1.108"	#6 - #2	.162" - .292"	1.190" - 1.400"	795454
750MCM		#2 - 1/0 - 2/0	.296" - .426"	1.324" - 1.534"	795360
795AAC		2/0 - 3/0 - 4/0	.438" - .563"	1.466" - 1.671"	795218
795 ACSR		266.8 - 336.4	.574" - .700"	1.602" - 1.808"	795050
900MCM		397.5 - 477 - 556.5	.710" - .843"	1.738" - 1.942"	795920
		556.5 - 636 - 795AAC	.846" - .977"	1.872" - 2.085"	795730
		715.5 - 795ACSR	.990" - 1.108"	2.016" - 2.216"	795594
		#6 - #4 - #2	.182" - .301"	1.297" - 1.497"	954420
954AAC	1.115" - 1.196"	#2 - 1/0 - 2/0	.316" - .483"	1.431" - 1.634"	954320
954 ACSR		2/0 - 3/0 - 4/0	.447" - .563"	1.562" - 1.759"	954175
1000 MCM		266.8 - 366.4	.574" - .700"	1.689" - 1.896"	954030
1033AAC		366.4 - 397.5 - 477	.711" - .843"	1.826" - 2.030"	954870
		477 - 636	.846" - .996"	1.961" - 2.112"	954660
		636 - 795	.997" - 1.095"	2.092" - 2.291"	954448
		954-1000MCM	1.108" - 1.196"	2.223" - 2.392"	954390
		#6 - #2	.182" - .289"	1.349" - 1.600"	103370
1033.5AAC	1.212" - 1.302"	#2 - 1/0 - 2/0	.301" - .414"	1.513" - 1.716"	103260
133.5ACSR		2/0 - 3/0 - 4/0	.419" - .530"	1.631" - 1.832"	103110
1113AAC		4/0 - 266.8	.548" - .666"	1.760" - 1.968"	103945
1113 ACSR		336.4 - 397.5	.671" - .783"	1.883" - 2.084"	103780
1192AAC		477 - 556.5	.793" - .904"	2.005" - 2.206"	119793
1272AAC		636 - 715 - 795	.904" - 1.036"	2.130" - 2.338"	103680
		715.5 - 795 - 1000	1.040" - 1.152"	2.252" - 2.454"	103580
		954 - 1033.5	1.162" - 1.259"	2.374" - 2.561"	103380
		1272	1.212" - 1.302"	2.424" - 2.604"	119250

NOTE: To determine any part number match any of the conductors in the "Main" column with the desired wire in the "Tap" column. To ensure proper part number selection make certain that the total sum of the OD of both conductors falls within the corresponding range for that part number.

Replacement Bolt Part # 102346

Replacement Bolt Part #347002-3



# Part Number List and Wire Selection Guide

Main Conductor		Pad Size	Catalog Number	Replacement Bolt Part # 347002-3	Pad Tap
Wire Description	Wire Diameter Range				
#2 - 1/0	.292" - .403"	4 Hole	723210		
		2 Hole	723210-1		
2/0 - 3/0	.406" - .522"	4 Hole	723003		
		2 Hole	723003-1		
4/0AAC - 350	.522" - .711"	4 Hole	723004		
		2 Hole	723004-1		
336.4ACSR - 636AAC	.721" - .918"	4 Hole	723005		
		2 Hole	723005-1		
795 AAC - 954AAC	.953" - 1.125"	4 Hole	723006		
		2 Hole	723006-1		
954 - 1000	1.125" - 1.196"	4 Hole	723007		
		2 Hole	723007-1		
1033 - 1272	1.202" - 1.302"	4 Hole	723008		
		2 Hole	723008-1		

Main Conductor		Bail Size	Catalog Number	Replacement Bolt Part # 102346	#4 Thru 350 Stirrup
Wire Description	Wire Diameter Range				
#4 cu 3 STR - #6AAC	.162" - .292"	1/0	102011		
#2 cu 3 STR - 1/0 ACSR	.292" - .502"	1/0	102010		
2/0 AAC - 3/0 ACSR	.406" - .502"	1/0	102009		
3/0 ACSR - 4/0 ACSR	.502" - .570"	1/0	264124		
266.8 ACSR-336.4 ACSR(18/1)	.630" - .724"	1/0	336915-1		
266.8 ACSR - 336.4 ACSR	.640" - .741"	2/0	336875		
		4/0	336780		
397.5 ACSR - 477 ACSR	.772" - .883"	2/0	556580		
		4/0	556595		
556.5 - 636 ACSR	.883" - .990"	2/0	636556		
		4/0	636556-1		
636 ACSR - 795 ACSR	.990" - 1.108"	2/0	795500		
		4/0	795405		
715.5 ACSR - 954 ACSR	1.036" - 1.165"	2/0	103228		
		4/0	103228-1		
1033.5 - 1272 AAC	1.170" - 1.302"	2/0	119375		
		4/0	119375		

## 4/0 Series Ground Grid Connector Part Number List and Wire Selection Guide

FROM		TO		Total Sum of Conductor's Diameters	Catalog Number
Wire Description	Wire Description	Wire Description	Wire Description		
350 MCM	(.681")	250 MCM	(.575")	1.152"-1.256"	900100
3/4" ROD	(.680")	5/8" ROD	(.556")		
300 MCM	(.630")	4/0 STR	(.522")		
250 MCM	(.575")	250 MCM	(.575")	1.150"	
250 MCM	(.575")	250 MCM	(.575")	1.044" - 1.150	900101
5/8" ROD	(.556")	5/8" ROD	(.556")		
4/0 STR	(.522")	4/0 STR	(.522")		
250 MCM	(.575")	1/2" ROD	(.472")	1.047"	
250 MCM	(.575")	2/0 STR	(.419")	.890" - .994"	900102
5/8" ROD	(.556")	1/0 STR	(.368")		
4/0 STR	(.522")				
1/2" ROD	(.472")	2/0 STR	(.419")	.736"-838"	900103
2/0 STR	(.419")	2/0 STR	(.419")		
1/0 STR	(.368")	1/0 STR	(.368")		
5/8" ROD	(.556")	#2 STR	(.292")	.764"-848"	900104
4/0 STR	(.522")				
1/2" ROD	(.472")				
250 MCM	(.575")	#4 STR	(.232")	.706" - .825"	900104
4/0 STR	(.522")	#6 STR	(.184")		
#1 STR	(.328")	#1 STR	(.328")	.656"	
#4 STR	(.232")	#4 STR	(.232")	.464" - .584"	900105
#2 STR	(.292")	#2 STR	(.292")		

## 500 MCM Series Ground Grid Connector Part Number List and Wire Selection Guide

FROM		TO		Catalog Number	
Wire Description	Wire Description	Wire Description	Wire Description		
500 MCM 450 MCM	500 MCM 450 MCM			1.504" - 1.624"	900200
500 MCM	400 MCM				
500 MCM 450 MCM	350 MCM 300 MCM 3/4 ROD			1.402" - 1.500"	900201
450 MCM 400 MCM	400 MCM				
500 MCM 450 MCM	250 MCM 5/8 ROD 4/0 STR			1.284" - 1.387"	900202
350 MCM	350 MCM 300 MCM 3/4 ROD				
400 MCM	250 MCM 5/8 ROD				
500 MCM 450 MCM	1/0 STR 2/0 STR			1.231" - 1.145"	900203