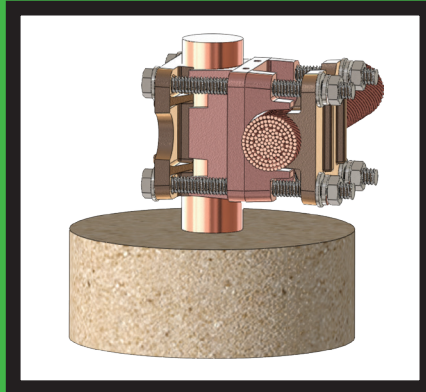
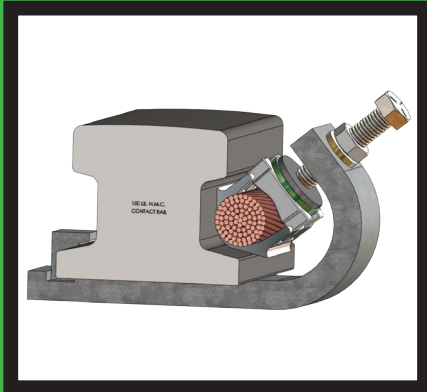
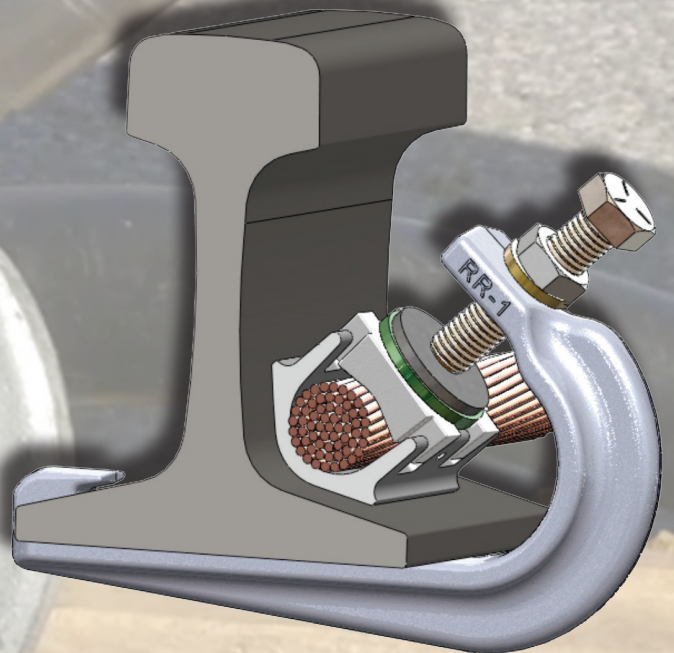


# RAIL BONDING CLAMPS



RAIL SECTOR





## Introduction

The Rail Connector range is designed as a permanent connection for Cu conductor to a variety of rails used in Heavy Rail Mass Transit systems.

Constructed using a Heavy Duty Air Craft quality steel spring member, Copper Cable Nest, Indentor, Hex Head Bolt and Locking Nut.



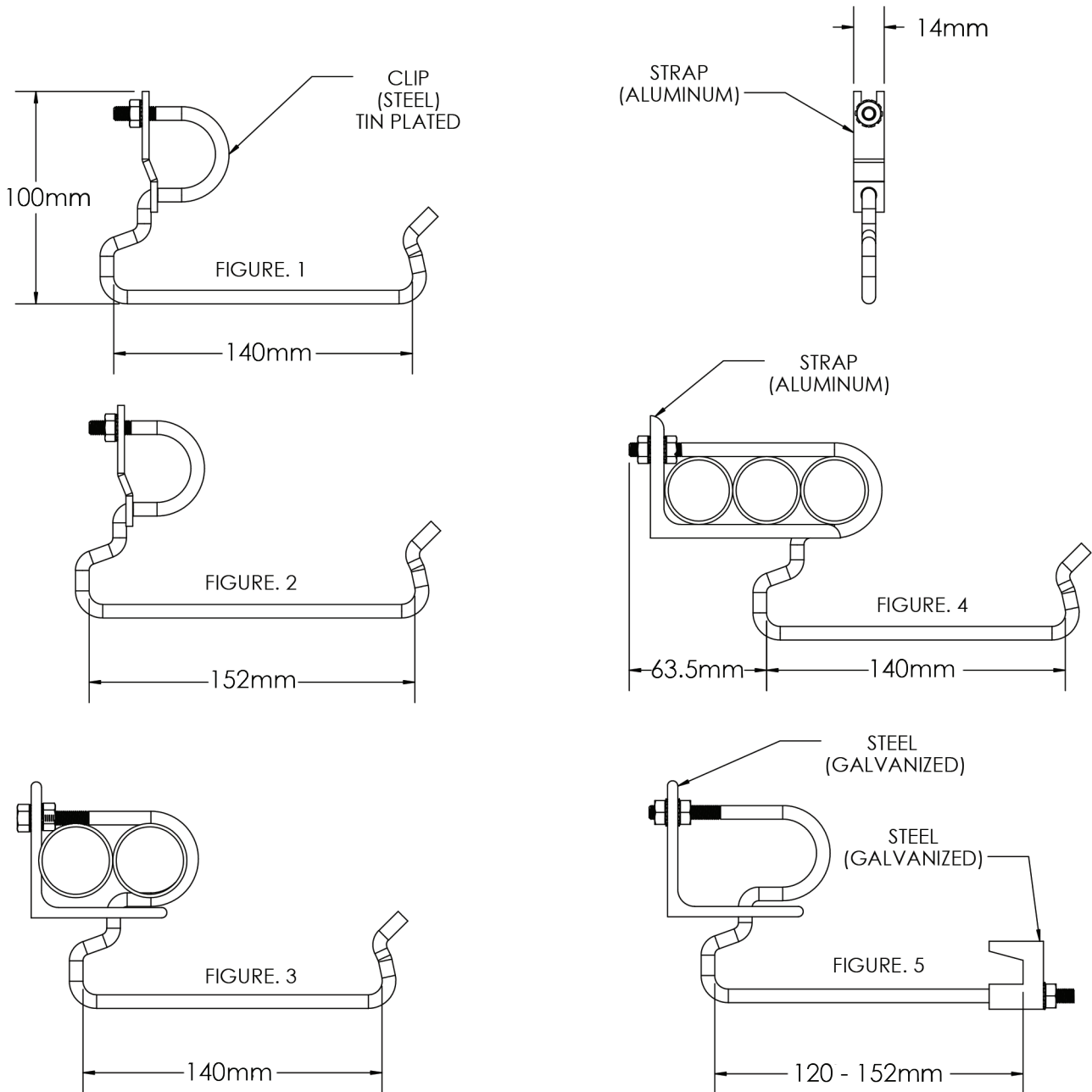
## Overview

- No need to drill holes in the rail
- No need to weld conductor to the rail
- The rail is not subjected to warping by excessive heat or to weakening by drilling
- Labor Saving- Installation time is 1/6 man hours
- Fewer rail connections required because of the large conductor capacity
  - Single conductors up to 1000 MCM
  - Dual conductors up to 750 MCM
- Large conductors can be bent away from the rail after installation without the risk of damaging the connector. Unlike Compression type lugs that can crack during this process
- The Clamp is an active spring that applies a consistent force on the conductor ensuring a positive connection through heat cycling and train vibration
- The "J" shaped spring member of the connector helps overcome loosening problems associated with harsh train vibrations by flexing rather than breaking
- Whereas a Static type connection doesn't have this resiliency and could crack under prolonged vibration
- The consistent spring pressure also prevents moisture and contamination from seeping into the connection
- All Copper components are Tin Plated and Steel Components are Galvanised



## The Range

### Signal Cable Support Spring Rail Clips



#### SPRING RAIL CLIPS

Part No.	Rail Size & Type	Cable OD & Capacity	Figure#
<b>115-250</b>	<b>115 lb AREA</b>	1.25" x 1	1
<b>140-375</b>	<b>140 lb AREA</b>	1.375" x 1	2
<b>115-250-2S</b>	<b>115 lb AREA</b>	1.095" x 2 - 1.365" x 2	3
<b>115-250-3</b>	<b>115 lb AREA</b>	1.302" x 3	4
<b>100-ARA-B-250-2</b>	<b>100 ARA-B</b>	1.095" x 2 -	5

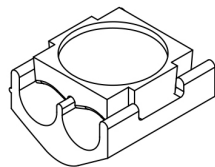
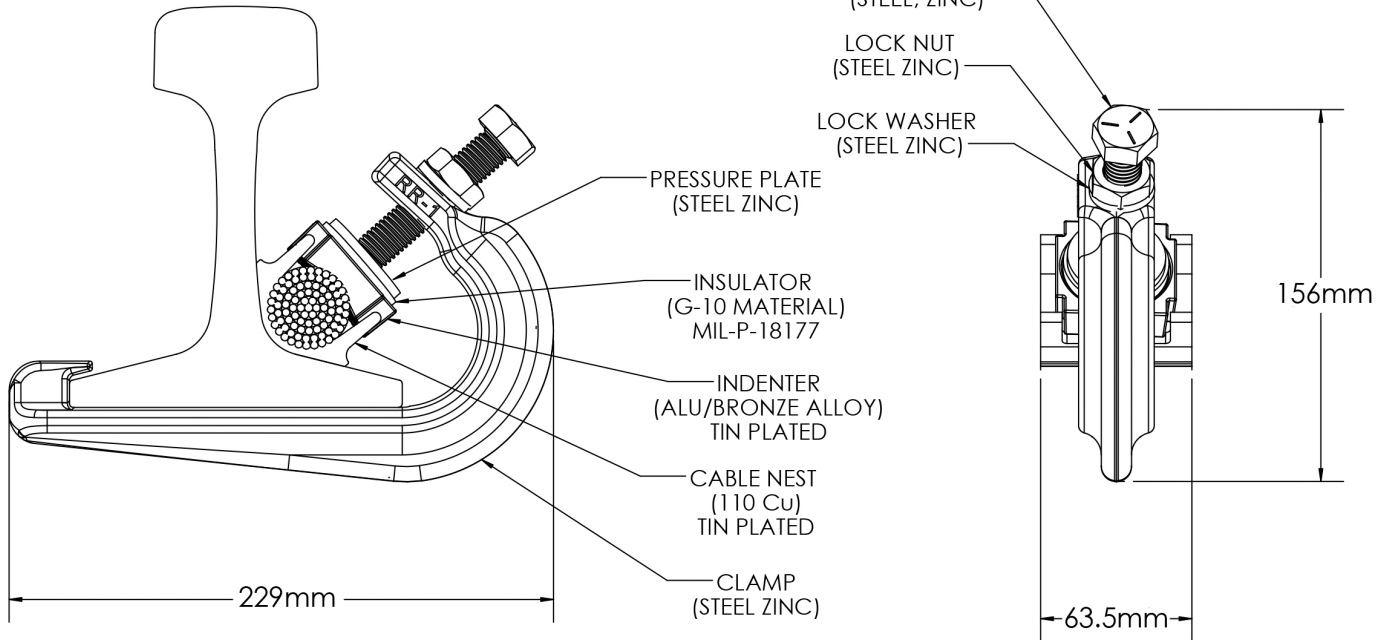
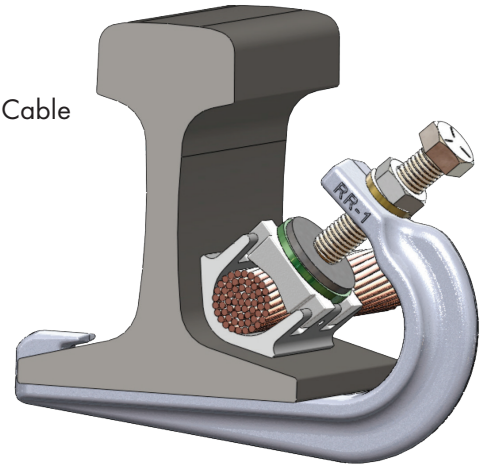
NOTE: ALL PART NUMBERS ARE SUPPLIED WITH STANDARD ZINC PLATED KEPT NUTS.  
ADD SUFFIX 'N' TO PART NUMBER TO SPECIFY A STAINLESS STEEL NYLON INSERT NUT



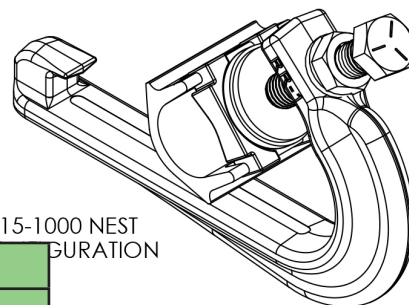
## Running Rail Connector

The CPI Running Rail Connector is designed as a permanent connection for Cu conductor to a variety of rails used in Heavy Rail Mass Transit systems.

Constructed using a Heavy Duty Air Craft quality steel spring member, Copper Cable Nest, Indenter, Hex Head Bolt and Locking Nut.



115-2-500 NEST CONFIGURATION



115-1000 NEST CONFIGURATION

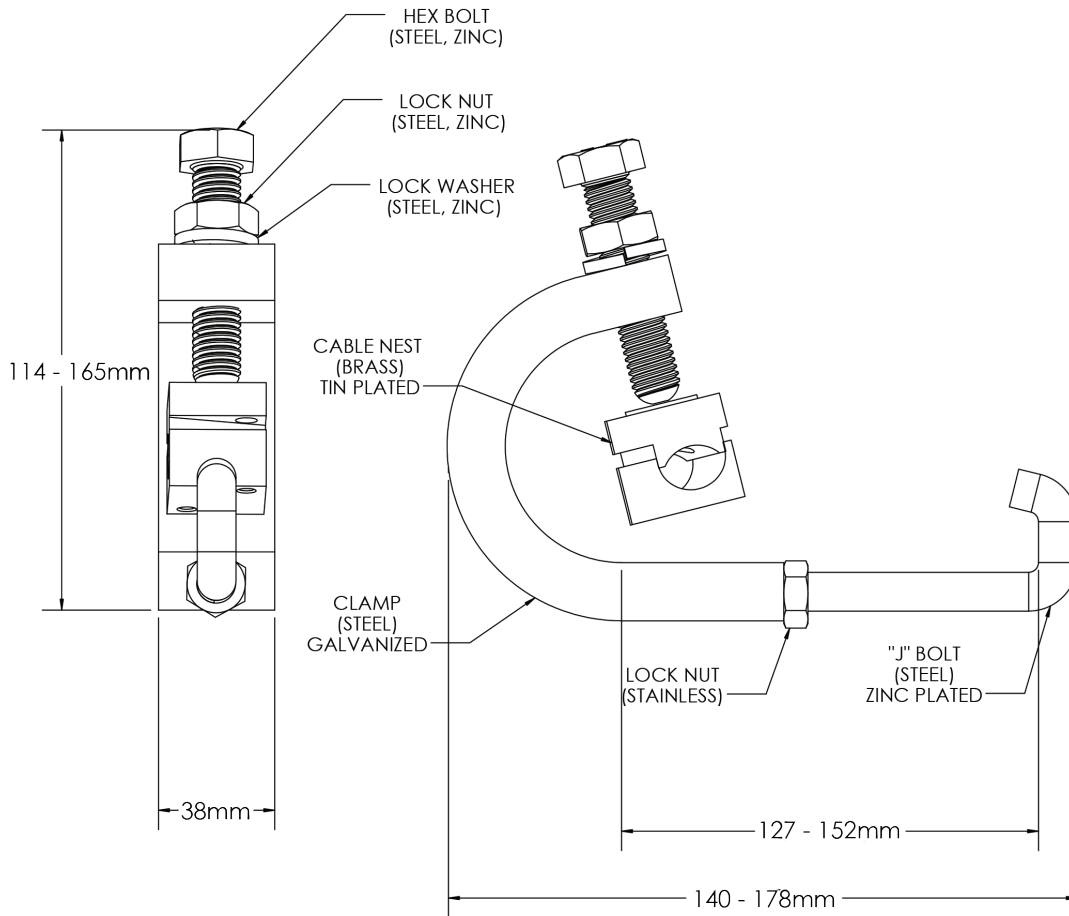
Single Conductor Connectors		
Part No.	Rail Size & Type	Conductor Size & Range
115-1000	115lb AREA	1000MCM - 1250MCM
Two Conductor Connections		
115-2-500	115 lb AREA	2250MCM - 2500MCM

FOR ANY RAIL CONDUCTOR CONNECTION NOT LISTED ABOVE, CONSULT TEN GROUP.



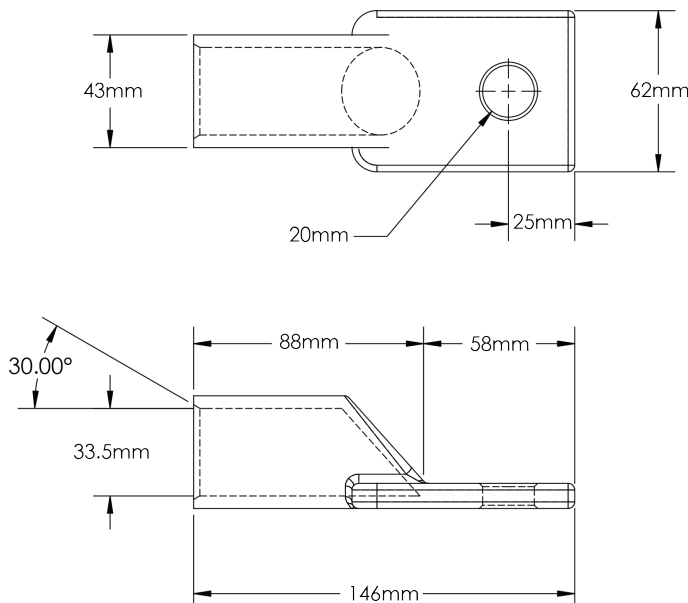
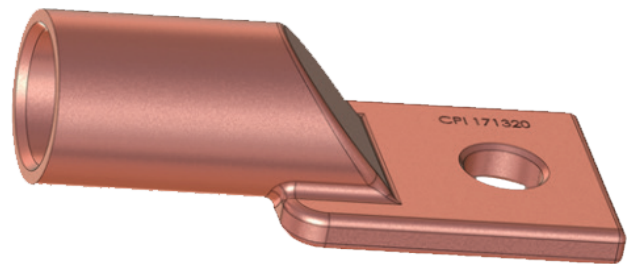


## Running Rail Bonding Connector



## 1000 MCM Heavy Wall Terminal Lug

<b>Part No.</b>	171320
<b>Material</b>	1/8 Hard DLP Copper Tubing
<b>Capacity</b>	1000MCM Conductor
<b>Finish</b>	Tin Plated
<b>Performance</b>	UL 486 & NEMA 500 Cycle Standards





# RAIL BONDING CLAMPS

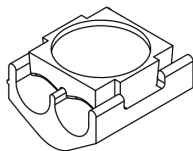
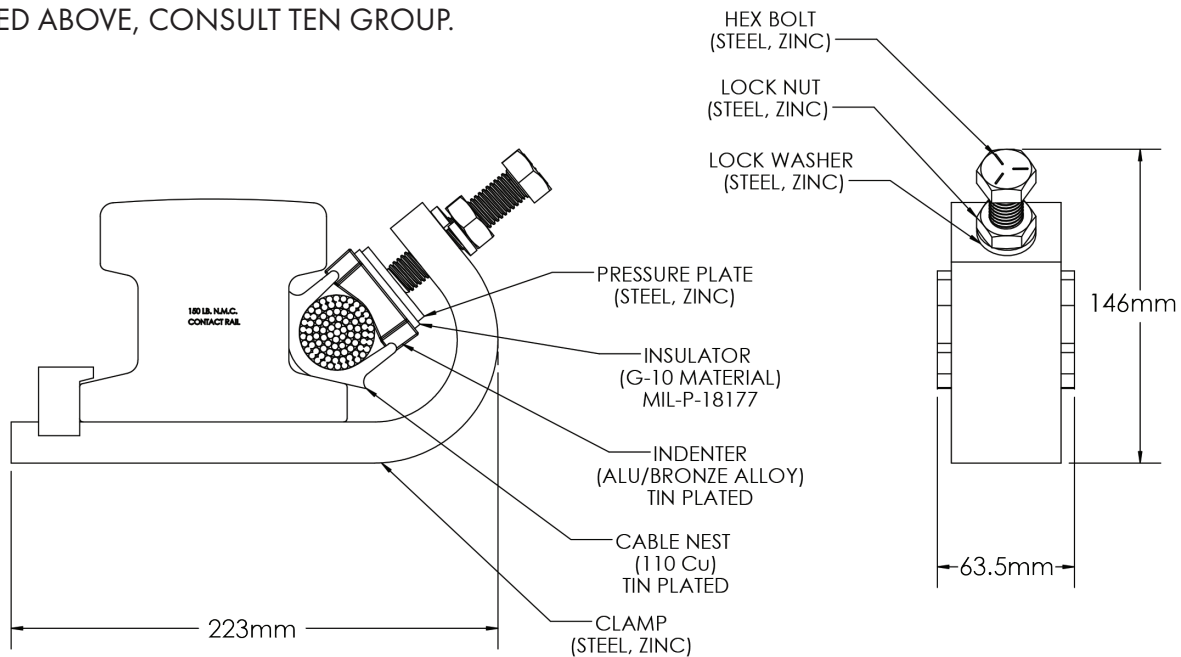
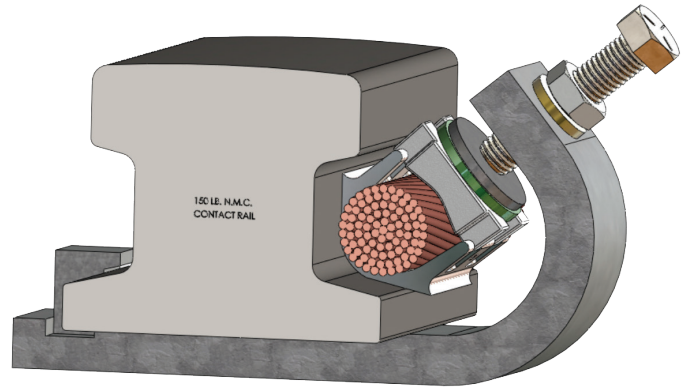


## Contact Rail Connector

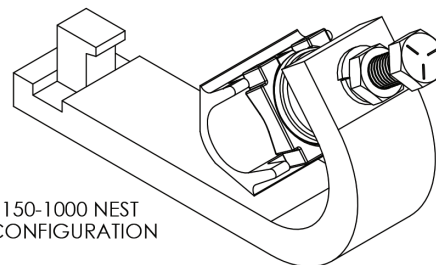
The CPI Contact Rail Connector is designed as a permanent connection for Cu conductor to a variety of rails used in Heavy Rail Mass Transit systems. Constructed using a Heavy Duty Air Craft quality steel spring member, Copper Cable Nest, Indenter, Hex Head Bolt and Locking Nut.

Single Conductor Connectors		
Part No.	Rail Size & Type	Conductor Size & Range
150-1000	150lb NMC	1000MCM
150-2000	150lb NMC	2000MCM
Two Conductor Connections		
150-2-500	150 lb NMC	2250MCM - 2500MCM

FOR ANY RAIL OR CONDUCTOR COMBINATION NOT LISTED ABOVE, CONSULT TEN GROUP.



150-2-500 NEST CONFIGURATION



150-1000 NEST CONFIGURATION

Copyright 2015 - TEN Group

This document is copyright and should not be copied or replicated in any form. TEN Group as the Distributor for CPI Connectors reserves the right to change the specifications and designs of these products without notice. TEN Group does not accept any responsibility of loss or damage incurred by any persons as a result of use, or not using, information from this product guide.



**TEN Group : Australia**  
**The Energy Network (Australia) Pty Ltd**  
 ABN 72 093 052 441

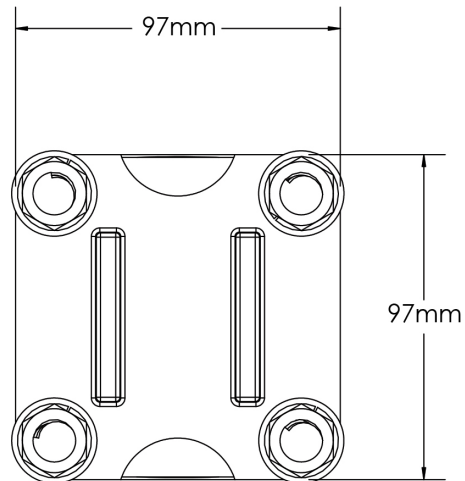
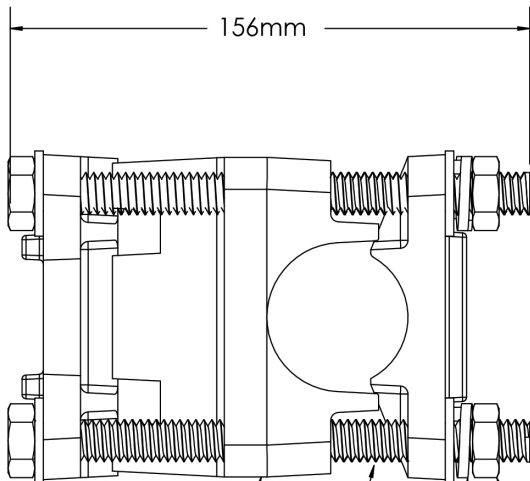
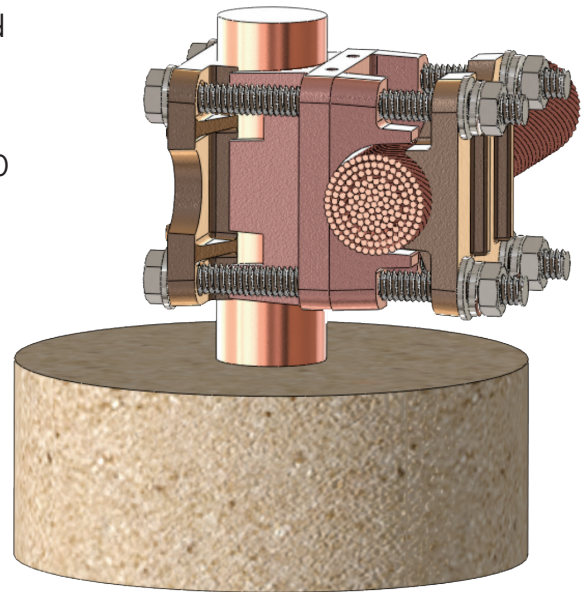




## 2000 MCM Cathode Connector

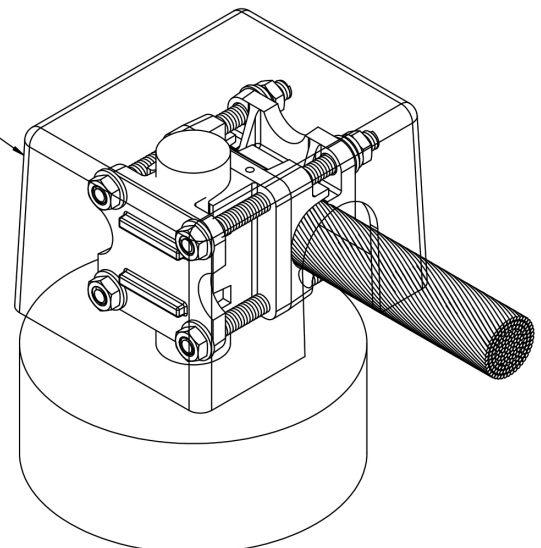
The CPI Cathode Connector aka "Pot Head Connector" is designed to connect a single 2000 MCM conductor from the main feeder directly to the Third Rail. When used in conjunction with the CPI Contact Rail Clamp, a Pot Head connector can replace the need for having 4 separate 500 MCM connections with one single 2000 MCM connection.

- Constructed of High Conductivity Copper.
- The assembly comes standard with a Tin Plated Finish (not pictured).
- Incorporates the use of a Stainless Steel hardware for increased strength and corrosion resistance.
- Optional molded fiberglass Insulation Cover available upon request.
- Simple 4 bolt installation.
- Eliminates the need for any welding.
- Recommended for use with the CPI 2000 MCM contact rail connector.



- CASTING (COPPER ALLOY) TIN PLATED
- DRIVE BOLT (STAINLESS STEEL)
- LOCK WASHER (STAINLESS STEEL)
- HEX NUT (STAINLESS STEEL)

OPTIONAL FIBERGLASS INSULATING COVER



2000 MCM Cathode Connector 'Pot Head Connector'

Single Conductor Connectors	
Part No.	Conductor Size
22000	2000MCM

SALES • SERVICE • MANUFACTURE • HIRE

# TEN

the energy network



**SCI QUAL**  
INTERNATIONAL  
QUALITY APPROVED TO  
AS/NZS ISO 9001:2008  
REGN. Number 551



**SCI QUAL**  
INTERNATIONAL  
OHS SYSTEM CERTIFIED TO  
AS/NZS 4801:2001  
REGN. Number 3567



**SCI QUAL**  
INTERNATIONAL  
ENVIRONMENTAL SYSTEM CERTIFIED TO  
AS/NZS ISO 14001:2004  
REGN. Number 4279

## TEN Group : Australia

The Energy Network (Australia) Pty Ltd

ABN 72 093 052 441

HEAD OFFICE - QUEENSLAND

65 Wentworth Place BANYO QLD 4014

PO Box 851 VIRGINIA BC QLD 4014

P|F +61 7 3212 8999 | 8998

W [www.tengroup.com.au](http://www.tengroup.com.au)

E [sales@tengroup.com.au](mailto:sales@tengroup.com.au)



**QLD/NT**  
65 Wentworth Place  
BANYO 4014  
P|F +61 7 3212 8999 | 8998  
M 0400 077 819

**WORKSHOP**

**VIC/TAS/SA**  
24 Deans Court  
DANDENONG STH 3175  
P|F +61 3 9793 1622 | 1644  
M 0408 228 473 | 0499 988 240

**WORKSHOP**

**WA**  
4/15 Baile Rd  
CANNING VALE 6155  
P +61 8 9455 5574  
M 0400 029 026

**WORKSHOP**

**NSW/ACT**  
M 0407 009 316



*Our diversity is your solution.*