




# Industrial Electrical Solutions Guide

**PANDUIT**<sup>®</sup>

infrastructure for a connected world



## From Breaking Ground to Routine Maintenance and Repair Panduit Products Impact Your Entire Project Lifecycle

Partner with a company committed to meeting the daily challenges you face. Panduit offers a full solution of over 30,000 readily available parts – from cable ties to power connectors, terminals to identification – Panduit products are engineered for all aspects of designing, installing and maintaining infrastructures within heavy-duty industrial environments.

- Productivity** Reduce costs and meet deadlines with products and tools engineered to improve efficiency
- Reliability** Ensure performance and design consistency of products that are vital to the success of the job
- Safety** Protect personnel, equipment and infrastructure with product systems that meet/exceed industry standards

# We've Got You Covered

**OG**

## **Oil and Gas:**

The world's appetite for energy grows every day, and oil and gas are still the best options for meeting global demand. Faced with the need to explore in challenging locations, integrate new oil sands and shale capabilities, meet updated safety protocols, and identify new technologies to handle remote environments, energy producers are looking for partners who can help them keep up with changing business conditions and goals.

**SH**

## **Shipbuilding:**

Shipbuilders focusing on ultimate reliability and safety while facing constant cost containment pressures, are looking into ways to increase productivity, minimize unscheduled maintenance, extend global availability and lower overhead expenses.

**MM**

## **Mining and Minerals:**

As the global demand on natural resources continues to increase, efficiency and productivity requirements are pushing all mining systems and components to the limit. Site and operator safety are also extremely important as exposure to harsh chemicals, abrasive environments, and extreme temperature conditions are consistently present in this hectic environment.

**FB**

## **Food and Beverage:**

Food and beverage manufacturers are faced with countless product safety, quality and manufacturing challenges. Maximizing productivity while reducing downtime requires a robust integrated electrical infrastructure that can deliver optimum productivity, reliability and profitability.

**PP**

## **Pulp and Paper:**

From sawmill operations through the manufacturing of the final wood and paper, the Pulp, Paper & Wood industry comprises over 3,500 operational plants worldwide. The Pulping process occurs in a harsh environment and is exposed to high cooking temperatures and a variety of chemicals that require high quality of maintenance, repair and operation products to protect people and infrastructure to ultimately eliminate downtime and improve productivity.

**WW**

## **Water/Wastewater:**

Water treatment facilities are critical for maintaining public sanitation and a healthy environment. Whether the facility treats industrial and residential wastewater to remove impurities, or treats fresh water for consumption, these facilities rely on robust solutions for dependable continuous operation within harsh environments.

\*\* Icons within the pages signifies that products are used heavily within this vertical market.

# Power Connectors

## Proven Reliability for Mission Critical Applications:

- Regulatory Standards Compliant: Meets UL, CSA, IEE Std. 837, ABS, NEBS Level 3 and OSHA
- Enhance Workplace Safety: Protects personnel and equipment throughout the lifecycle with power connections and cable management that are easy to use, install, and maintain safety
- Engineered for Maximum Reliability and Extended Service Life: Provides superior electrical performance in harsh environmental applications



**IEEE**



## One Hole Barrel:

Lowest cost connector option can be used in space constrained applications



Standard Barrel:

- Code: LCA\* Series
- Flex: LCAX\* Series
- Flex Flared: LCAF\* Series
- Metric: LCMA\* Series
- Aluminum: LAA\* Series

Long Barrel:

- Code: LCB\* Series
- Flex: LCBX\* Series
- Metric: LCMB\* Series

## Two Hole Barrel:

Two stud holes provides anti-rotation feature and maximizes electrical conductivity



Standard Barrel:

- Code: LCD\* Series
- Flex: LCDX\* Series
- Metric: LCMD\* Series
- Aluminum: LAB\* Series

Long Barrel:

- Code: LCC\* Series
- Flex: LCCX\* Series
- Flex Flared: LCCF\* Series
- Metric: LCMC\* Series

## Hydraulic Installation tools:

CT-2930/L

Lithium-Ion powered hydraulic 14 Ton Crimping Tool. Up to 63% more crimps per battery charge<sup>^</sup>



CT-2930/L: 14 Ton Crimping Tool

Up to 63% more crimps per battery charge<sup>^</sup>



## Butt Splices:

Facilitate joining of wires to provide a continuous length of conductor



Standard Barrel:

- Code: SCS\* Series
- Flared: SCSF\* Series
- Metric: SCMS\* Series

Short Barrel: SCSS\* Series

Long Barrel: SCL\* Series

Aluminum: SA\* Series

## Splitbolts:

Wide range-taking capability minimizes inventory requirements



Copper: SBC\* Series

Tin Plated: SBCT\* Series

Aluminum: SBA\* Series

<sup>^</sup>Than tools powered with NiCd or NiMH batteries.



### Multi-tap Connectors:

Flexible design can be used as a tap, splice, or dead end connector, eliminates need for insulating tape or heat shrink



Dual Sided: PCSB\* Series

Single Sided: PCSB\*S\* Series

In-line splicer reducer: PISR\* Series

With Mounting Holes

Dual Sided: PCSBMT\* Series

Single Sided: PCSBMT\*S Series

### Aluminum Mechanical Lugs:

Dual rated for use with aluminum or copper wire, range taking, reusable, install with common tools



Single barrel lugs: LAMA\*, LAMB\* Series

Two barrel lugs: LAM2\* Series

Three barrel lugs: LAM3\* Series

Four barrel lugs: LAM4\* Series

Splicer - Reducers: SR\* Series

### Copper Mechanical Lugs:

Install with common tools, range taking and re-usable



#### Heavy Duty Cast Copper Lugs and Splices

##### 1-Hole Lugs:

Barrel Post: ML\*-\*Y Series

Straight Tongue: PNL\* Series

Internal Pressure Plate: HL\* Series

##### 2-Hole Lugs:

Straight Tongue: PNL-2\* Series

Two Barrel: H2L\*-\*2N\* Series

##### Splices:

Two-Set Screw: PNLC\* Series

Internal Pressure Plate: HC\* Series

#### Economical Stamped and Formed Copper Lugs



##### 1-Hole Lugs:

Straight Fixed Tongue: CX\*, CXS\* Series

Straight Floating Tongue: CS\* Series

Offset Floating Tongue: CB\* Series

##### 2-Hole Lugs:

Straight Floating Tongue: CD\*Series

Offset Floating Tongue: CO\* Series

### Hydraulic Installation tools:

CT-2980/L 6.2 Ton Dieless Crimping Tool

Up to 135% more crimps per battery charge



\*Signifies different lengths and package size options. Entering \* in the part number on [www.panduit.com](http://www.panduit.com) will give you different size options.

# Grounding Connectors

## StructuredGround™ Direct Burial Compression Grounding System:

- Provides highest performance and most reliable compression connection in the industry. Offers the speed and safety of a compression connection while meeting IEEE Std. 837; UL 467 Listed for grounding and bonding; suitable for direct burial

## Mechanical Grounding Connectors:

- Designed for easy installation – no special tools requires; UL 467 Listed for grounding and bonding; direct burial rated where applicable



## E Style Grounding Connectors:

For connecting: conductor to conductor, conductor to rebar, and conductor to ground rod applications



GCE\* Series

## Grounding Plate Connector:

Allows bonds through concrete

GPC4H250-2



## Universal Beam Grounding Clamp:

Bonds structural steel to grounding conductor system: provides a mounting pad suitable for a two-hole compression lug



GUBC500-6

## Grounding Cross Connectors:

For connecting: conductor to conductor, conductor to rebar, and conductor ground rod applications

GCC\* Series



## Bronze Ground Clamps:

For grounding copper code conductor to water pipe or iron pipe (IPS)

GPC\* Series

Direct Burial Rated with Phos bronze hardware: GPC\*-\*D\* Series

Ground Hub: GHC\* Series



## Aluminum Ground Clamp:

Dual-rated for grounding aluminum or copper code conductors to copper water pipe, galvanized pipe, or steel conduit

GC\* Series



## Hydraulic Installation tools:

CT-2930/L

Lithium-Ion powered hydraulic 14 Ton Crimping Tool. Up to 63% more crimps per battery charge^



^Than tools powered with NiCd or NiMH batteries.

CT-930CH

Remote Hydraulic, 14 Ton Crimp Head Incorporates Parker type quick-connect fitting to ease installation





### Bronze Service Post Mechanical Grounding Connectors:

For grounding copper code conductors to steel structures, busbars, or transformers, direct burial rated



#### Male Stud:

**One Conductor:** SP1\* Series

**Two Conductor:** SP2\* Series

#### Female Thread:

**One Conductor:** SPF1\* Series

**Two Conductor:** SPF2\* Series

### Bronze Ground Rod Clamp:

For grounding copper conductor parallel to ground rods, direct burial rated



**Standard Duty:** GRC\* Series

**Heavy Duty:** GRCH\* Series

### Lay-in Lugs:

For quick installation of a continuous grounding conductor



**Tin Plated Aluminum:** LIAS\* and LIAC\* Series

**Direct Burial Rated:** LICC4\* Series (copper body)

### Bronze Grounding Clamp, U-Bolt style:

For grounding copper code conductors parallel to a rod, tube, or pipe, direct burial rated

**One Conductor:** GPL\* Series

**Two Conductor:** GU\* Series

**Three Conductor:** GPC3250-38-X

**Two Conductor (perpendicular to rod, tube or pipe):**  
GPC2\* Series



### Bronze Ground Clamp for Flat Surfaces:

For grounding copper code conductor to flat surfaces, direct burial rated

#### GM\* Series

- incorporates spacer plate to separate conductor from mounting surface

#### GMS\* Series

GBC2250-12-X

- used to ground two copper code conductors to flat surfaces.



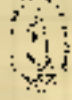
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# Stainless Steel

When strength, vibration, radiation, weathering, corrosion and temperature extremes are a factor, the Pan-Steel® System provides strong, reliable solutions for use in indoor, outdoor, and direct burial applications.

- Improved productivity and worker safety for bundling, fastening, and identification in harsh environments
- Meets and exceeds the most stringent industry standards



## Stainless Steel Cable Ties:

Delivers strength, long life and resistance to chemicals, vibration, radiation, weathering, and extreme temperatures



MLT\* Series

- Variety of sizes available in both AISI 304 and 316 stainless steel

## Fully Coated Stainless Steel Cable Ties:

Superior corrosion resistance providing maximum performance, longer service life and improved reliability



MLTFC\* Series

- Variety of sizes and colors available in AISI 316 stainless steel

## Permanent Identification:

Ideal in harsh and industrial environments, delivers long-term durability and legibility for optimum identification of pipes, conduit, cables and equipment. Use with MLT Series ties for fast installation at lowest installed cost



MMP\* Series

MT\* Series

## Heat Trace Wave-Ty™ Cable Ties:

Use in the installation of Mineral Insulated Electric Heat Trace (MIEHT)



HTMLT\* Series

## Installation Tools:

### RT2HT

Used with extra heavy and super-heavy cross sections



### GS4MT

Standard light-heavy and heavy cross sections



### ST4MT

Installation tool for HTMLT. Built in cutting lever for clean recessed cutoff







## Stainless Steel Strapping:

Ultimate solution for mechanical fastening applications. The buckle design and installation tools offer a quick and safe installation

### MS\* Series (uncoated)

- Variety of sizes available in both AISI 304 and 316 stainless steel

### MSC\* Series (coated)

- AISI 316 stainless steel for the most corrosive environments
- UV resistant, low smoke, halogen-free coating material

### MSB\* Series

- Individual low profile buckles



## Pan-Steel® Short Circuit:

Up to 156kA rated option

### Double Loop – MLT\*D\* Series

- Extra-heavy and super-heavy cross-sections
- Protection up to 70kA peak current



### Strapping – MS\*75\* Series

- Single and Double Loop capability in a single part #
- AISI 316 stainless steel
- Protection up to 156kA peak current



### Metal Unclip Brackets – UC\* Series

- Allows ties and straps to be installed on any style or design cable tray



### Cushion Sleeve – PCSSH\* or PCSS\*Series

- The use of cushion sleeve required in most applications



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## Installation Tools:

### BT2HT

Used with 0.38" (9.5mm), 0.50" (12.7mm), and 0.63" (15.9mm) widths strapping



### PBTMT

Used with heavy, extra-heavy and super heavy cross sections



### BT75SDT

Used with MS75 Strapping Only



# Cable Ties

## Built for Durability:

- A wide range of sizes, styles and materials for fastening, bundling, clamping and identifying in a variety of applications
- Panduit cable ties are designed and manufactured to meet or exceed industry standards to deliver maximum reliability
- Panduit cable ties are engineered from specially selected materials for optimum reliability in the harshest environments including exposure to: acids, bases, chemicals, radiation, and all-weather conditions with operating temperatures up to 500°F (260°C)

## High-temperature PEEK:

Provide excellent performance at continuous operating temperatures of up to 500°F (260°C), best in class strength, in addition to chemical and radiation resistance



PLT\*\*-\*71 Series

MM

## TEFZEL:

Low smoke density and excellent flammability rating of UL 94V-0. Distinct aqua blue color. Ideal for applications requiring resistance to gamma radiation and chemical attack



PLT\*\*-\*76 Series

Tefzel is a registered trademark of E.I. du Pont de Nemours and Company

OG

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## Polypropylene:

Provide superior chemical resistance to acids, bases, and salts making them ideal for chemical plants



PLT\*\*-\*109 Series

PP

## Weather Resistant Acetal:

Provides excellent ultra-violet resistance, strength and durability for long service life



DT\*\*-\*0 Series

## Stainless Steel:

Delivers strength, long life and resistance to chemicals, vibration, radiation, weathering, and extreme temperatures



316 Stainless Steel: MLT\*\*\*-\*\*316 Series

Polyester Coated Stainless Steel: MLFC\*\*-\*316

Nylon 11 Selectively Coated: MLTC\*\*-\*316

Aluminum: MLT\*\*-\*LPAL

OG

MM

## Installation Tools:

GTS-E

Installs subminiature, miniature, intermediate and standard cross section cable ties



GTH

Installs standard, heavy-standard, light-heavy, and heavy cross section cable ties





### Weather Resistant Nylon 12:

A material with 12-15 years of weathering life expectancy and resistance to zinc chlorides and dilute acids. Ideal for wire management on galvanized steel cable trays

- PLT\*\*-\*120 Series
- Weather resistant Nylon 6.6 also available
- PLT\*\*-\*0 Series



### Metal Barb Tie Weather Resistant Nylon 6.6:

Stainless steel lock barb provides consistent performance, reliability, and infinite adjustability through entire bundle range applications

- BT\*\*-\*0 Series
- Heat Stabilized option available up to 239°F (115°C): BT\*\*-\*30 Series



**OG MM**

### HALAR:

Identifiable maroon colored parts UL listed for use in plenum or air handling spaces per NEC, Section 300-22 (C) and (D) UL62275 AH2 rating

- PLT\*\*-\*702Y Series

HALAR is a registered trademark of Ausimont USA, Inc.



### Releasable Tie:

Release tab permits easy release and re-use where changes are anticipated

- PRT\*\* Series



### Flame Retardant Nylon 6.6:

Ties are UL94V-0 rated for applications requiring resistance to flame propagation

- PLT\*\*-\*69 Series



### Metal Detectable:

Unique metal impregnated material allows identification by metal detectors or x-ray inspection to meet food and beverage industry FDA requirements by helping to reduce product contamination

- PLT\*\*-\*86 Series
- Also available in polypropylene:
- PLT\*\*-\*186 Series



**FB PP**

### Installation Tools:

GS4MT

Installs stainless steel standard, light-heavy, and heavy cross section cable ties



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# Abrasion Protection and Cable Accessories

## Protect Your Connections:

Insulate, harness and identify electrical/electronic components and cable with Panduit abrasion protection and cable accessories.

- A wide variety of sizes, materials and designs are available to meet a broad range of indoor and outdoor applications
- Panduit abrasion protection products are designed and manufactured to meet applicable quality standards including UL and CSA
- Comprehensive offering of wire management securing devices speed installation and improve reliability for any application



## Slotted Grommet Edging:

Slotted nylon performs up to 149°F (65°C) operation temperature and slotted polyethylene performs up to 122°F (50°C)

Nylon: GEE\*\*N-\* Series

Polyethylene: GEE\*\*F-\* Series

Adhesive Lined Polyethylene: GE\*\*F-A-\* Series



## Spiral Wrap:

Provides weather resistant abrasion protection to hoses/cables while harnessing multiple hoses/cables into a single manageable bundle

Polyethylene: T\*\*F-\*0 Series

Nylon 6.6: T\*\*N-\*0 Series

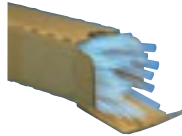
Polypropylene: T\*\*P-\*0 Series



## Thin Wall TFE Heat Shrink Tubing:

Dry shrink applications up to 482°F (260°C) operating temperatures

HSTTT\* Series



## Thin Wall KYNAR Heat Shrink Tubing:

Dry shrink applications up to 347°F (175°C)

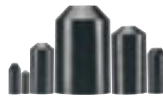
HSTTK\* Series



## Heat Shrink End Caps:

Adhesive lined inner wall seals and provides excellent protection against moisture

HSEC\*\* Series



## Thick Wall Heat Shrink:

UL listed for direct burial and recognized for sunlight resistance and VW-1 flammability with an operating temp of 230°F (110°C)

HST\* Series Black

OG

MM



## Pan-Wrap™ Split Harness Wrap:

Patented slot pattern provides improved flexibility and cable abrasion protection with reduced installation time

PW\*F\*-\* Series



## Pan-Wrap™ Braided Sleeving:

Highly flexible, does not trap heat or humidity and the slit allows easy install and access for further upgrades or repairs

SE\*PS-\*R0 Series

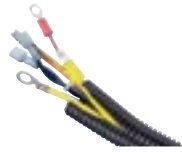




### Corrugated Loom Tubing:

Provides protection for cables. Slit for easier install onto a bundle of wires or a pre-assembled harness assembly

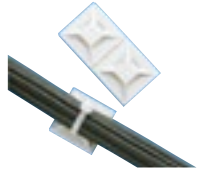
CLT\*\*F Series



### Adhesive Cable Tie Mounts:

Provide maximum adhesion even in high-temperature and outdoor environments

ABM\* Series



### J-Pro™ Cable Support System:

Provide standards-compliant method for routing communication cables throughout the plant infrastructure

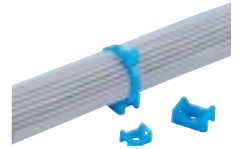
JP\*\* Series



### TEFZEL Cable Tie Mounts:

Ideal for applications requiring resistance to gamma radiation and chemical attack

TM\*\*-\*76 Series



OG

### Screw Applied Cable Tie Mounts:

Available in a broad selection of materials, sizes, and styles

TM\*S\*-\* Series



### Metal Detectable Cable Tie Mounts:

Unique metal impregnated material allows identification by metal detectors or x-ray inspection to meet food, beverage, and pharmaceutical safety standards by helping to reduce product contamination

TM\*\*-\*86 Series



FB PP

### PEEK Cable Tie Mounts:

Operating temperature range up to 500°F (260°C); maintains good tensile strength in high temperature environments

TM\*\*-\*71 Series

OG MM



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# Identification and Safety

## Safety is a Top Priority

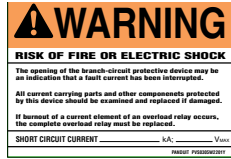
In today's environment, workplace safety is a key concern for all production operations. Managing these concerns and the associated energy sources can be challenging. Panduit brings to market a broad portfolio of solutions that help to achieve workplace safety on industrial construction and MRO sites

- Expertise in Workplace Safety Compliance: Meeting requirements of stringent regulatory bodies (OSHA, ANSI, and NFPA)
- Complete Safety Solution: To control and identify energy in a workplace with lockout/tagout devices, facility signage, and labeling systems
- Training and Tools: Available to help you understand and comply with workplace safety regulations

### Arc Flash Labels:

Pre-printed and blank label voltage adhesive markers

PVS0507W\* Series



### Voltage and Pipe Markers:

Identify voltage, pipe content, and flow direction for safety and compliance

Voltage Adhesive Markers:  
PCV\* Series

Pipe Markers:  
GPMU\* Series



### Pre-Printed Marker Books:

Pre-assembled convenient, pocket-sized books

PCMB\* Series



### Circuit Breaker Lockout Device:

Quick, effective lockout of energy sources controlled by circuit breakers

PSL-PCB



### Metal Embossing Hand Tool:

Lightweight, compact, portable embossing tool

MEHT187



### Safety Tags:

Pre-printed Plastic Tags

PVT\* Series



### Nylon Marker Plates:

Clearly identify cable bundles

MP175-C0



### Safety Signs:

High quality signs for use indoors and outdoors to inform of hazards

Vinyl: PVS\* Series

Polyester: PPS\* Series

Polypropylene Rigid: PRS\* Series



### Thermal Transfer Labels and Ribbons:

Available in both cassettes for hand-held printers and in rolls for desktop printers

Self-laminating: S\*X\*V\* Series

Heat shrink: H\*\*X\*\*H\* Series



### Portable Embossing System:

Delivers maximum usability for medium to high volume applications that are exposed to dirt and paint

PES197





### Electrician Lockout Kit:

Contains a variety of lockout/tagout devices commonly used by an individual electrician

PSL-PK-EA



### Multiple Lockout Device:

Only one device needed to perform a variety of lockout functions

PSL-MLD



### Lockout Stations:

Conveniently store padlocks, tags, and lockout devices in one common area

PSL-\*\*SWCA



### Lockout Padlocks:

Each lock keyed differently and supplied with 2 keys

PSL-\*



### Permanent Identification:

Ideal in harsh and industrial environments, delivers long-term durability and legibility for optimum identification of pipes, conduit, cables and equipment. Use with MLT Series ties for fast installation at lowest installed cost.

MMP\* Series  
MT\* Series



### OSHA Compliance Training Program:

Complete lockout/tagout program to help your organization enhance safety in the workplace

PSL-LOTO-TRAIN



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### Thermal Transfer Desktop Printer:

Compact, lightweight, and rugged design for use at the job site

TDP43ME

**Easy-Mark™ Labeling Software:**  
PROG-EMCD3 and PROG-EM2G0



### Hand-Held Thermal Transfer Printer:

QWERTY keypad designed for easier typing

LS8EQ

Kit version: LS8EQ-KIT



# Terminals and Ferrules

## Meeting Application Challenges at the Lowest Installed Costs:

- Panduit terminals, disconnects and ferrules are designed and manufactured for superior electrical performance. A complete line of high quality insulated and non-insulated terminals, disconnects, splices, wire joints and ferrules offered in loose piece, reel fed, and various other configurations with worldwide availability
- Applicable sizes are UL Listed and CSA Certified, RoHS compliant, ABS Approved, Class 1E Nuclear Rated, DFARS252.225-7014 Compliant and meet Military Specifications MS25036 and MS20659



**RoHS**

### Ring Terminals:

Ring tongue design assures a secure connection in high vibration applications

Nylon: PN\*-R\* Series

Heavy Duty: PN12-\*\*HDR-\* Series



Vinyl: PV\*-R\* Series

Heavy Duty: PV12-\*HDR-\* Series

Heat Shrink: PH\*\*-\*R\* Series

Kynar Insulated: PK\*-R\* Series

Non-Insulated: P\*\*-\*R\* Series

Heavy Duty: P12-\*HDR-L Series

High Temp: P\*\*-\*RHT\*-\* Series

### Fork Terminals:

Fork design provides for fast and easy installation, without the need to remove fastener

Nylon: PN\*-F\* Series

Vinyl: PV\*-F\* Series

Non-Insulated: P\*-F\* Series



### Disconnects:

Designed and precision made to function as a reliable method of making quick, repeatable interconnections

Nylon: DN\* Series

Vinyl: DV\* Series

Heat Shrink: DNH\* Series

Non-Insulated: D\*\* Series

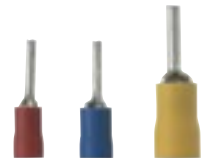


### Pin Terminals:

Solid pin designed to prevent damage to the wire from over tightening, resulting in a reliable electrical connection

Vinyl: PV\*-P\* Series

Non-Insulated: P\*-P\* Series



### Installation Tools:

CT-1550

Crimps most Panduit \*22-10 AWG nylon and vinyl insulated terminals, splices and disconnects



CT-3001(Crimp Dies CD-2001-F\* Series)

UL Listed and CSA Certified terminations with Panduit compression connectors







### Ferrules:

Designed with a seamless barrel to contain loose wire strands for superior termination<sup>^</sup>

Non-Insulated 24 AWG-500kcmil:  
F\*\* Series

Polypropylene Covered Insulated  
26 AWG-300 kcmil:  
FSD\* Series

Twin Polypropylene Covered  
22 AWG-6 AWG:  
FTD\* Series



### Splices:

Designed and manufactured for fast assemble, and long reliable performance

Nylon:

Butt Splice: BSN\* Series  
Parallel Splice: PSN\* Series  
Wire Joint: JN\* Series



Vinyl:

Butt Splice: BSV\* Series

Heat Shrink:

Butt Splice: BSH\* Series

Non-Insulated:

Butt Splice: BS\* Series  
Parallel Splice: PS\* Series  
Wire Joint: J\*\*\* Series

### Industrial Maintenance Kits:

Steel kits have individual compartments for storage of terminals, disconnects and splices

Nylon: K1-PNKIT

Vinyl: K2-PVKITY

Ferrule 100 Piece Kit: KP-FSD3

Terminal Kit: KP-1075Y



### Installation Tools:

Contour Crimp™ Controlled Cycle Tools CT-\* Series

Ergonomic hand tool design assures operator comfort, safety, and performance



CP-881

A semi-automated tool that provides a quick three step process (wire stripping, ferrule placement, and ferrule crimping) with a cycle time of 1.5 seconds



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<sup>^</sup>UL46F is for applicable sizes.

# Industrial Automation Infrastructures

## Future Proof Your Network:

- Panduit Industrial Automation Infrastructure solutions adhere to network architectures such as CPwE, providing a reliable end-to-end network physical layer infrastructure — from the enterprise to the edge
- As network components are deployed further into the industrial space, the need for diagnostic test points and future expansion is essential

## Harsh Environment Copper Solutions:

The Panduit® TX6000™ and TX6A™ 10Gig™ Shielded Copper Cabling Solutions for Harsh Environment Applications provide a superior infrastructure with a Channel Headroom Guarantee exceeding the TIA/ISO Standards.

### TX6000™ Category 6 Shielded Solution

Horizontal Cable: PSM6004BU-LED  
Jack: CJS688TG



### TX6A™ Category 6A Shielded Solution

Horizontal Cable: PSM7004BU-KEM  
Jack: CJS6X88TGY

### TX6A™ Category 6A Shielded MUD Resistant Solution

Non-Armored: PSMD7004WG-LED  
Armored: PSMDA7004WG-LED  
Jack: CJS6X88TG



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## Fiber Connectivity Solutions:

A complete offering of fiber optic cabling and connectivity for harsh environments

### Horizontal Cable (OM3 and OM4)

Outside Plant (OSP) Armored: FOWN\* Series

Indoor Distribution Cable: FODP\* Series

Armored: FOPP\* Series

Dielectric Conduit Fiber (DCF): FOAD\* Series

### Polymer Coated Fiber (PCF)

Interconnect cable: FIID\* Series

Indoor/outdoor breakout cable: FI2D\* Series



### Connector

LC (OM3 and OM4): FLCDCXAQY

### Patch Cords

LC to LC (OM3): FX2ERLNLSN\* Series

LC to LC (OM4): FZ2ELLNLSN\* Series



## Industrial Copper Solutions:

Panduit has a comprehensive line of copper physical layer solutions for the industrial Ethernet.

### Category 6 Copper Cables

Shielded: IFC6C04BBL-CEG

Unshielded: IUC6C04ABL-CEG



### Category 6 RJ45 Plugs

(UTP and STP copper cable compatible):

Conductor Diameter 0.85-1.0mm: ISPS688FAS

Replacement Wire Manager: ISPS688FAS-WM

Conductor Diameter 1.0-1.6mm: ISPS688FA

Replacement Wire Manager: ISPS688FA-WM



### Category 6 DIN-Rail Patching Devices

(UTP and STP copper cable compatible):

DIN-Rail Adapter: CADIN11G

DIN-Rail Panel: CDPP8RG



### Category 6 Connectors

Mini-Com® Module Shielded: CJS688\* Series

Mini-Com® Module Unshielded: CJ688\* Series

Mini-Com® with bulkhead Shielded: IAEBH6S

Mini-Com® with bulkhead Unshielded: IAEBH6



### Category 6 Patch Cords

Shielded: ISTPSP\* Series

Unshielded: IUTPSP\* Series





## Control Panel Solutions:

### Space Optimization

#### PanelMax™ DIN Rail Wiring Duct:

Up to 30% space savings vs. conventional duct/rail layouts

DRD\*LG\* Series



#### PanelMax™ Corner Duct:

Up to 20% space savings in layouts with side and back panels

CWD\*LG\* Series



### Noise Mitigation

#### PanelMax™ Shielded Wiring Duct and Noise Shield:

Deliver approximately 20dB of noise reduction across common industrial noise frequencies at 30mm wire separation with an approximate 1-meter coupling length

Shielded Wiring Duct: G\*LG\*EMI Series

Noise Shield: SD\*EMI Series



## Network Security Copper and Fiber Lock-In/Block-out:

The innovative designs of the block-out and lock-in devices ensure the safety and security of the network infrastructure.

Jack module block-out device: PSL-DCJB

RJ45 Plug lock-in device: PSL-DCPL

LC duplex adapter block-out device: PSL-LCAB



## Integrated Network Zone System:

Factory-integrated solution designed for deploying a reliable and secure EtherNet/IP^ network on the plant floor.

14" Height: Z11N\* Series

24" Height: Z22N\* Series

36" Height: Z23N\* Series



## Pre-Configured Industrial Distribution Frame:

Engineered to deploy and protect rack mount Ethernet switches in industrial applications.

NA and LATAM: ZDF48-RA



## Pre-Configured Micro Data Center:

Provides the link between the Corporate and Industrial Networks in order to maintain network uptime and security, segregate networks and speed changes and troubleshooting.

CQSMDC\* Series



\*Signifies different lengths and package size options. Entering \* in the part number on [www.panduit.com](http://www.panduit.com) will give you different size options.  
^EtherNet/IP is a trademark of ODVA.

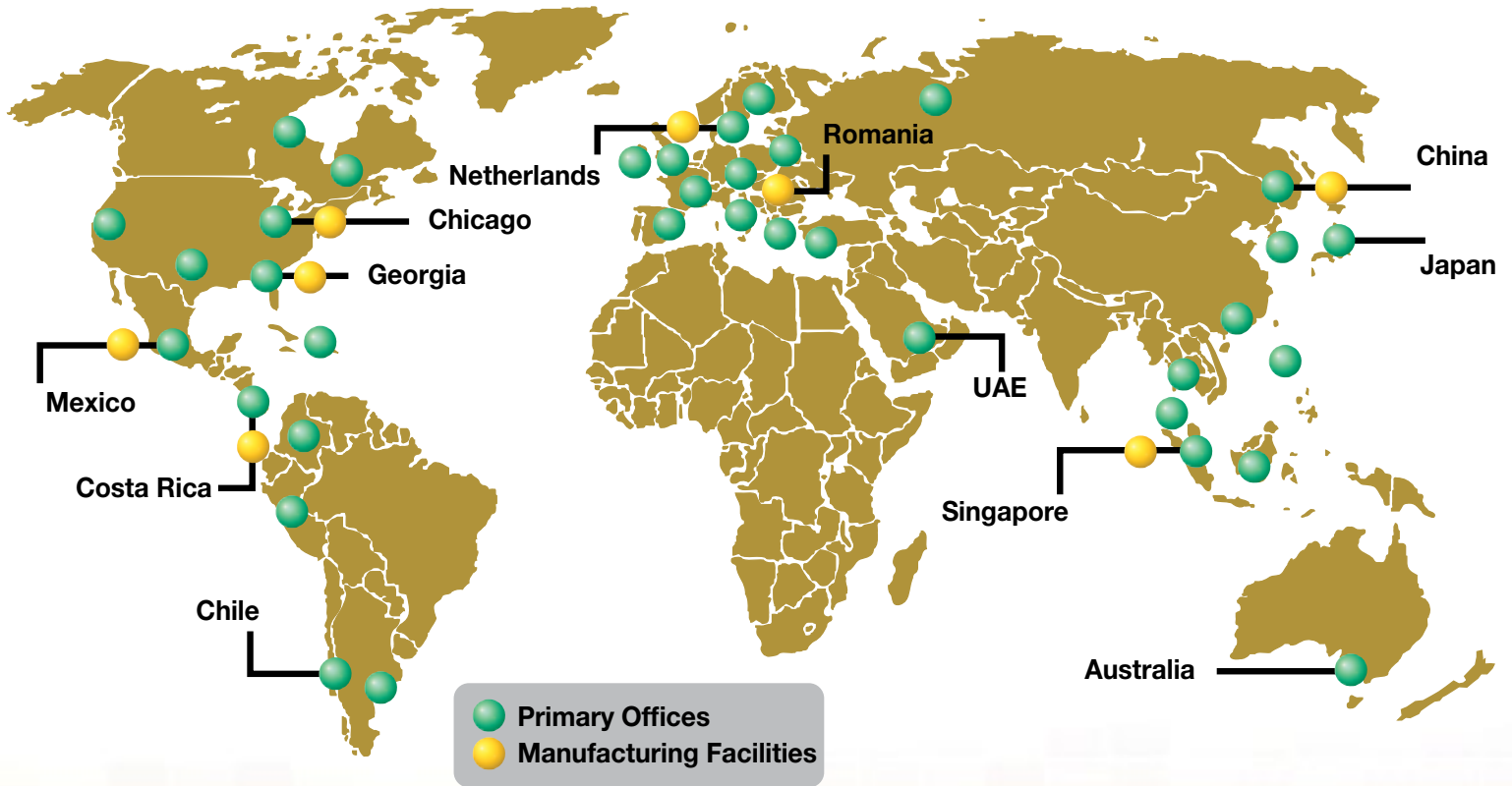
# Global Capabilities

## Global Expertise and Support

Global distribution, manufacturing, sales and technical support teams make Panduit solutions readily accessible, allowing the right products to be delivered when and where they are needed.

## Worldwide Certifications

Panduit solutions hold a variety of the most common heavy industry certifications and approvals worldwide.



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