

Industrial Electrical Solutions Guide



PANDUIT®

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

Panduit provides solutions for a number of industrial applications and markets.



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.

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.

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.

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.

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.

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.

Renewable Energy

From design to deployment, we power the future of energy. We are a leading provider of Balance of System (BOS) components for the Solar, Wind, and Electric Vehicle industries. Our broad portfolio of electrical and data solutions are easy to install and built to last, improving your bottom line from start to finish. Moreover, many of our renewable products are backed by our 20 Year Build Solar Better Warranty.

The Power of Panduit

Panduit offers a comprehensive line of power and grounding products. These products will maintain the quality that Panduit is known for while providing the ultimate productivity, reliability, and safety.



With a comprehensive line of power and grounding solutions, we've got you covered from the ground up.

Structure Ground™
Compression
Grounding

Mechanical
Grounding

Blackfin Power
and Grounding
Installation Tooling

PanLug™
Compression
Connectors

Mechanical
Connector

Flexible
Braid

Heat
Shrink

Oxide
Inhibitor

Cable
Ties

Silicon Bronze
and Stainless Steel
Hardware

BusBar

GTC Series
Cable Clamp

Cable Tray Bonding Clamps

- Listed under UL 467 and CSA 22.2 No. 41. for Grounding Application
- Incorporates a ribbed bolt that holds its place during 1-wrench installation
- Tin-plated to inhibit corrosive effects and improve termination quality of dissimilar metals
- Clear product markings are convenient for ensuring proper installation
- Direct Burial versions include customized hardware for increased strength and corrosion resistance over the competition



GPL Series

- Used to ground copper conductor parallel or at a right angle to a rod, tube, or pipe
- Made from high strength, electrolytic cast bronze
- High strength silicon bronze hardware provides long term reliable assembly
- Accommodates a wide range of pipe, tube, rod and conductor sizes – minimizes inventory requirements, saves cost
- cULus 467 Listed for grounding and bonding and suitable for direct burial in earth or concrete



The Power of Panduit (continued)

Service Post Connector, Type SP1 and SP2

- For grounding two copper code conductors to steel structures, busbars, or transformers or for tapping from busbar with hexnut and washer
- Made from high copper content, hard drawn copper rod provides high strength
- Offered with standard and long stud lengths to accommodate a variety of mounting applications
- Wide wire range-taking capability minimizes inventory requirements
- True hex design for body and nut hex provide correct fit with socket, box, or open end wrenches resulting in proper torqueing of electrical connection
- Pressure bar provides secure connection on a full range of conductor combinations used with each connector providing premium wire pull-out strength



PanLug™ Compression

The substantial offering of Panduit lugs covers most configurations of hole, barrel, and tongue. Made from high-strength electrolytic copper to provide premium electrical and mechanical performance, each lug can take a wide range of wires, minimizing inventory requirements



StructuredGround™ Compression Grounding

The Panduit StructuredGround™ Direct Burial CompressionGrounding System provides the highest performance and most reliable compression connection in the industry. This system offers the speed and safety of a compression connection, while complying with the industry requirements of IEEE Std. 837. The fully inspectable system that is UL 467 Listed and CSA 22.2 Certified, ensures that the installed product operates safely. Wide range-taking and universal designs provide installation flexibility with a minimum number of parts, reducing procurement and inventory costs. Innovative features assure a high quality bond, reducing labor costs and improving crimp quality



BlackFin Tooling

Panduit features battery-powered Bluetooth crimping tools that are the first in the industry to meet the (OSHA) and international safety standards for battery-operated hand tools. Workers have a right to a safe workplace. If you are an employer responsible for the safety and well-being of your employees, you have a responsibility to ensure your employees have a safe work environment, which extends to the tools you use on the job



PanLug™ Compression Lugs and Splices

Proven Reliability for Mission Critical Applications:

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



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

Butt Splices

Facilitate joining of wires to provide a continuous length of conductor

Standard Barrel:

- **Code:** SCS Series
- **Metric:** SCMS Series



Long Barrel:

- SCL Series

Aluminum:

- SA 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
- **Metric:** LCMC Series

Split Bolts

Wide range-taking capability minimizes inventory requirements

Copper: SBC Series

Tin Plated: SBCT Series



BlackFin Hydraulic Installation Tools

CT-3001/CCPBT

Crimps copper lugs up to 600 kcmil and aluminum lugs up to 350 kcmil, cuts cable up to 1" dia. and rod and punches holes in sheet metal. Tool crimp history and maintenance log recorded using Bluetooth technology.



CT-3980/BT 6.7 Ton Dieless Crimping Tool

Crimps copper lugs up to 600 kcmil and aluminum lugs up to 350 kcmil. Tool crimp history and maintenance log recorded using Bluetooth technology.



Tested by CSA to Meet OSHA safety requirements.



PanLug™ Compression Lugs and Splices (continued)



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



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**
- **Internal Pressure Plate:** HL* Series



Economical Stamped and Formed Copper Lugs

1-Hole Lugs:

- **Straight Fixed Tongue:** 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

BlackFin Hydraulic Installation Tools

CT-2980/STBT 6.2 Ton Dieless Crimping Tool

Crimps copper lugs up to 750 kcmil with wire range taking capability and aluminum lugs up to 500 kcmil. Tool crimp history and maintenance log recorded and transmitted by Bluetooth technology.



Tested by CSA to Meet OSHA safety requirements.



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; c UL us Listed for use in the U.S. and Canada.

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. Meets IEEE837-2014 requirements (except GCE500-500). UL Listed for direct burial grounding applications in the U.S. and Canada

GCE* Series



Universal Beam Grounding Clamp

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

GUBC500-6



C Style Grounding Connectors

For connecting: conductor to conductor and conductor to ground rod applications UL Listed for Direct Burial Grounding and voltage applications up to 35 KV in the U.S. and Canada

CTAPR Series



Grounding Cross Connectors

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

GCC* 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-2931/STBT 12 Ton Battery Powered Crimping Tool

Crimps GCE/GCC connectors, copper lugs up to 750 kcmil and aluminum lugs up to 600 kcmil. Tool crimp history and maintenance log recorded and transmitted by Bluetooth technology.

 Tested by CSA to Meet OSHA safety requirements.



Grounding Connectors (continued)



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



Bronze Ground Rod Clamp

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

Standard Duty: GRC* 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

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

GBC* Series

GTC Cable Tray Bonding Clamps:

- Used for grounding cable tray for above grade or direct burial applications



*Signifies different lengths and package size options. Entering * in the part number on panduit.com will give you different size options.

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



Metal Locking Cable Ties

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

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

304 Stainless Steel: MLT***-**

Aluminum: MLT**-LPAL



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

Coated Stainless Steel Cable Ties

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

Nylon 11 Selectively Coated:

MLTC**-**316 and Polyester Coated

Stainless Steel: MLTFC**-**316

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



Wave-Ty™

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



HTMLT* Series

MLT*W**-**

- Variety of Sizes available in AISI 304 or AISI 316 stainless steel

Installation Tools

GS4MT-E

Ergonomic manual tool for standard, light-heavy, and heavy cross-sections



RT2HT

Used with extra heavy and super-heavy cross sections



PPTMT

Pneumatic Cable Tie and Custom Length Banding Tool. Use with various sizes and styles of Panduit stainless steel products



Cable Cleats and Accessories

Short Circuit Protection

- Available in a variety of sizes and configurations
- Our extensive line of cable cleat solutions ensure cables remain contained in the event of a short circuit fault.
- Engineered for ease of installation in a range of applications and harsh environments.
- Tested to globally recognized IEC 61914:2015 standards to ensure performance and safety



Locking Strap Cleats

MLT*D* Series

- Heavy, Extra-Heavy, and Super-Heavy cross-sections
- Compatible with Quad, Trefoil, and Multicore cables
- Made from 304 or 316L Stainless Steel



Buckle Strap Cleats

MS*75* Series

- Compatible with Quad, Trefoil, and Multicore cables



Stainless Steel Trefoil Cleats

CCSSTR* Series

- Suitable for Trefoil cable arrangements
- Made from 316L Stainless Steel



Aluminum Cleats

CCAL* Series

- Available as 1-Hole, 2-Hole, and Trefoil configurations
- Suitable for Single Conductor or Trefoil cable arrangements
- Made from Casted Aluminum



Polymer Cleats

CCPL* Series

- Available as 1-Hole, 2-Hole, and Trefoil configurations
- Suitable for Single Conductor or Trefoil cable arrangements
- Made from Nylon



Cushion Sleeving

PCSLSH*, PCSSH*, PCSS*

- Suitable for MLT and MS75 Series Strapping Cleats
- Made from Neoprene or Low Smoke, Halogen Free TPE



Metal Unclip Brackets

UC* Series

- Compatible with MLT and MS75 Series Strapping Cleats
- Available in multiple configurations to accommodate various cable tray designs



Metal Cable Cleat Brackets

CBH* Series

- Compatible with CCALTR and CCSSTR Series Cleats
- Available in multiple configurations to accommodate various rung heights



Installation Tools

PBTMT and PBTMT/E

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

BT75SDT

Used with MS75 Strapping Only



BT2HTI

Used for Buckle Strap Cleats and MS strapping with 0.38" (9.5mm), 0.50" (12.7mm), and 0.63" (15.9mm) widths



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)

Suitability for Securement and Support:

- Select ties meet the 2017 NEC Code for support and secureness of various cable types identified in the Code
- Select Standard cross-section ties (PLT, BT) and Light-Heavy ties (BT)
- Ties meeting this requirement are designated as UL 62275 Type 2S, 21S



High-temperature PEEK

Provide excellent performance at continuous operating temperatures of up to 464°F (240°C), best in class strength, in addition to chemical and radiation resistance



PLT**-*71 Series

Polypropylene

Provide superior chemical resistance to acids, bases, and salts making them ideal for chemical plants. Temperatures of up to 239°F (115°C)



PLT**-*109 Series: Green, Indoor Use

PLT**-*100 Series: Black, Weather Resistant

Weather Resistant Acetal

Provides excellent ultra-violet resistance, strength and durability for long service life. Temperatures of up to 185°F (85°C)



DT**-*0 Series

TEFZEL

Excellent flammability rating of UL 94V-0. Distinct aqua blue color. Ideal for applications requiring resistance to gamma radiation and chemical attack. Temperatures of up to 338°F (170°C)



PLT**-*76 Series

Tefzel is a registered trademark of The Chemours Company

Installation Tools

GTS-E

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



GTH-E

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



Cable Ties (continued)



Weather Resistant Nylon 612

A material with 20 years of weathering life expectancy and resistance to UV rays and chemical attack when exposed to various concentrations of salts, hydrocarbons, chlorinate hydrocarbons and acid rain. Ideal for wire management on galvanized surfaces/frames. Temperatures of up to 194°F (90°C)

PLT-*6120 Series**



Releasable Tie

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

PRT Series**



Metal Barb Tie

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

BT-* Series:** Natural, Indoor use, up to 185°F (85°)

BT-*0 Series:** Black, Weather Resistant, up to 185°F (85°)

BT-*30 Series:** Black, Heat Stabilized up to 239°F (115°C)



Antimicrobial Metal Detectable Nylon 6.6 and Metal Detectable Polypropylene

Unique metal impregnated material allows identification by metal detectors to meet food and beverage industry FDA requirements by helping to reduce product contamination. Unique EPA-registered antimicrobial additive and metal-impregnated material allows identification by metal detectors to reduce product contamination. Complies with U.S. Food and Drug Administration (FDA) HACCP and European Union (EU) hygiene regulations

PLT-*96A Series,** up to 185°F (85°C)

Also available in polypropylene:

PLT-*186 Series,** up to 239°F (115°C)



Flame Retardant Nylon 6.6

Ties are UL94V-0 rated for applications requiring resistance to flame propagation. Temperatures of up to 212°F (100°C)

PLT-*69 Series**



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



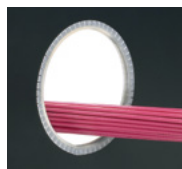
Slotted Grommet Edging

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

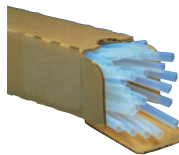
Polypropylene: T**P-*0 Series



Thin Wall TFE Heat Shrink Tubing

Dry shrink applications up to 482°F (250°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

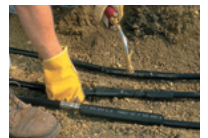
HSEC Series**



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



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-*RO Series



Abrasion Protection and Cable Accessories (continued)



Corrugated Loom Tubing

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

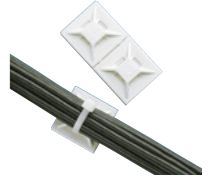
CLTF Series**



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*S*-*76 Series



Screw Applied Cable Tie Mounts

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

TM*S*-* Series



PEEK Cable Tie Mounts

Operating temperature range up to 464°F (240°C); maintains good tensile strength in high temperature environments

TM*S*-*71 Series



Metal Detectable Cable Tie Mounts

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

Polypropylene: TM*S*-*186 Series

Antimicrobial Nylon: TM*S*-*96A



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

PVS0305W* Series



Voltage and Pipe Markers

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

Voltage Adhesive Markers:

PCV* Series

Pipe Markers:

T*X*V* Series

Contact your Panduit Sales Rep for further details.



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 or PSL-PCBNT



Safety Tags

Pre-printed Plastic Tags

PVT* Series



Metal Embossing Hand Tool

Lightweight, compact, portable embossing tool

MEHT187



Nylon Marker Plates

Clearly identify cable bundles

MP175-C



Safety Signs

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

Vinyl: PVS* Series

Polyester: PPS* Series

Polypropylene Rigid: PRS* Series



Pre-Printed Solar Labels

Identify hazardous energy sources quickly and efficiently in photovoltaic applications and environments

PPS* Series



Thermal Transfer Labels and Ribbons

Available in both cassettes for mobile printers and in rolls for desktop printers

Self-laminating: S*X*V* Series

Heat shrink: H*X*H* Series



PES400

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

PES400



Identification and Safety (continued)

Electrician Lockout Kit

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

PSL-PK-EA

PSL-PK-EAP



Lockout Stations

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

PSL-SWCA**



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



Electrical Tape

Suitable for primary insulation and splicing up to 600V and can be used as protective jacketing. Offering protects against an array of abrasive and corrosive materials, while providing quality adhesion properties, as well as resistance to UV rays and cold weather



Thermal Transfer Desktop Printer

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

DP4300M

Easy-Mark Plus™ Labeling Software:

EMPLUS-DL and EMPLUS-2GO



Multiple Lockout Device

Only one device needed to perform a variety of lockout functions

PSL-MLD



Lockout Padlocks

Each lock keyed differently and some styles are supplied with 2 keys

PSL-*



OSHA Compliance Training Program

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

Contact your Panduit Sales Rep for further details.



VeriSafe - Absence of Voltage Tester (AVT)

Automate and simplifies the process of absence of voltage verification testing. Retrofit kit available as well

VS2-AVT-* Series



PXE™ Mobile Printers

QWERTY keypad designed for easier typing

MP* Series



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



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**-*R 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



Fork Terminals

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

Nylon: PN*-*F Series

- **Flanged Forks:** PN*-*FF Series
- **Locking Forks:** PN*-*LF Series

Vinyl: PV*-*F Series

- **Flanged Forks:** PV*-*FF Series
- **Locking Forks:** PV*-*LF Series

Non-Insulated: P*-*F Series

- **Flanged Forks:** P*-*FF Series
- **Locking Forks:** P*-*LF 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-1525, CT-1550, CT-1570

The CT-1500 series of control-cycle tools crimp most Panduit insulated and non-insulated terminals, splices and disconnects



CT-2300/ST

This termination tool has a 65% faster crimping cycle vs. a manual crimp tool. This compact, light-weight design reduces hand force from 53 pounds to 6 pounds – maximizing efficiency



Terminals and Ferrules (continued)



Ferrules

Designed with a seamless barrel to contain loose wire strands for superior termination[^]

Bare Single-wire Ferrules:

- F** Series

Polypropylene Covered Single-wire Ferrules

- 26 AWG-300 kcmil: FSD* Series

Polypropylene Covered, Twin-wire Ferrules

- 22 AWG-6 AWG: FTD* 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



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



Installation Tools

Ferrule Crimping Tools

The ferrule tools crimp most single and twin-wire, covered and bare ferrules



CT-2300/ST

This termination tool has a 65% faster crimping cycle vs. a manual crimp tool. This compact, light-weight design reduces hand force from 53 pounds to 6 pounds – maximizing efficiency



*Signifies different lengths and package size options. Entering * in the part number on panduit.com will give you different size options.

[^] UL486F is applicable sizes.

Industrial Network Infrastructure

Future Proof Your Network:

- As network components are deployed further into the industrial space, the need for diagnostic test points and future expansion is essential
- Panduit infrastructure solutions adhere to network architectures such as Converged Plantwide Ethernet (CPwE), providing a reliable end-to-end network physical layer infrastructure
- Standards-based solutions are available in many performance levels and configurations, offering flexibility and fast installation for a variety of demanding industrial applications

Harsh Environment Copper Solutions

The Panduit Shielded Copper Cabling Solutions for Harsh Environment Applications provide a superior infrastructure with a Channel Headroom Guarantee exceeding the TIA/ISO Standards.

Category 6A Shielded Solution

- **Horizontal Cable:** PSM7004IG-KEM
- **Jack:** CJS6X88TGY

Category 6A Shielded MUD Resistant Solution

- **Non-Armored:** PSMD7004BL-LED
- **Armored:** PSMDA7004BL-LED
- **Jack:** CJS6X88TG



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 Double Jacketed Fiber (DDJ):** FOJDZ* Series



Connector

- **LC (OM3 and OM4):** FLCDCXQY



Patch Cords

- **LC to LC (OM3):** FX2ERLNLNSNM* Series
- **LC to LC (OM4):** FZ2ELLNLNSNM* Series



IndustrialNet™ Fiber DIN Rail Mount Patch Panels

- **Standard Depth:** FDPPSIG
- **Extended Depth:** FDPPEIG



Opticom® Fiber Adapter Panel

- **LC Duplex (OM4):** FAP6WAQDLCZ



Opticom® Fiber Cassette

- **OM4, 12 Fiber, Universal:** FC2ZO-12-10U



Industrial Copper Solutions

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

Category 6A Copper Cables

- **Shielded:** IFRH6X04BL-UG
- **Unshielded:** IURH6X04BL-UG



Category 6A Armored Copper Cables

- **PURCA6X04BU-CG**
- **PURCA26X04BU-CG (2x 4-pair)**



Category 6A High Flex Copper Cables

- **ISFCH6X04A**-UG**
- **ISFCH6X04B**-UG**



Category 6A RJ45 Plugs

(UTP and STP copper cable compatible):

- **Shielded Field Term Plug:** FPS6X88MTG
- **Unshielded Field Term Plug:** FP6X88MTG



Mini-Com DIN Rail Patching Devices

(UTP and STP copper cable compatible):

- **DIN-Rail Adapter:** CADIN1IG, CADIN1IG-S
- **DIN-Rail Panel:** CDPP8RG, CDPP8RG-S



Category 6A Connectors

- **Mini-Com® Module Shielded:** CJS6X88* Series
- **Mini-Com® Module Unshielded:** CJ6X88* Series
- **Mini-Com® with Bulkhead Shielded:** IAEBH6XS
- **Mini-Com® with Bulkhead Unshielded:** IAEBH6X
- **IndustrialNet™ Shielded Bulkhead RJ45 Coupler:** IAEBHC6XS



Category 6A M12 X-Code Connectors

- **Field Terminable Connector:** ISPS6A88MFA
- **Panel Mount Adapter:** ICAM12XRJS



Category 5e M12 D-Code Connectors

- **Field Terminable Connector:** ISPS5E44MFA
- **Panel Mount Adapter:** ICAM12DRJS



Category 6A Bulkhead Patch Cords

- **Shielded:** ISTP6X* Series
- **Unshielded:** IUTP6X* Series



IndustrialNet™ Category 6A Shielded Patch Cord

- **600 V-Rated:** ISTPH6X* Series



Industrial Network Infrastructure (continued)

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*LG6EMI
- 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



Industrial Network Zone System

Designed for deploying a reliable and secure Ethernet network on the plant floor. Includes cable management, copper and fiber connectivity, grounding, high voltage barrier, redundant power supplies, UPS, PoE power speeds installation time by up to 75%.

24" Height: Z22U* Series

36" Height: Z23U* Series



Industrial Distribution Frame

Engineered to deploy and protect rack-mount Ethernet switches in industrial applications. 316 stainless steel and mild steel options are available.

12U: ZDF48*

26U: ZDF242430*

Low Profile/Vertical Mount 6U: IDFLP6



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.

NEMA Type 12, 42RU:

MDC82N* Series



Industrial Network Uninterruptible Power Supply (UPS)

No-battery, maintenance-free UPS delivers uninterrupted power and decreased risk of downtime for critical industrial applications including managed network switches, micro PLCs, and HMIs.

UPS: UPS00100DC

Load Sense Module: UPS003LSM



NEMA Wireless Enclosure

Wireless enclosures protect wireless networks from tampering and theft by enclosing WAPs; specifically designed for use in outdoor and industrial environments.

PoE applications: PZNWE12

AC power applications: PZNWE14





We have the knowledge
and experience to help you
make the most of your
infrastructure investment.

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