

# **Smart Control Panel Solutions**



# Innovative Products for Reliable Control Panel Performance

Everything you need to enable space optimization, productivity, safety, and security

- 1 Wiring Duct Pages 5 - 9
- 2 Cable Ties
  Page 10



3 Cable Accessories Pages 11 – 13



4 Terminals
Page 13



**5 Ferrules** Page 14



6 Identification Pages 15 – 19, 26



7 SafetyPages 20 – 21



8 Power and Grounding
Pages 22 – 23



Abrasion Protection
Pages 24 – 26



11 Data Access Port
Page 27



12 Industrial
Uninterruptible
Power Supply
(UPS)
Page 28

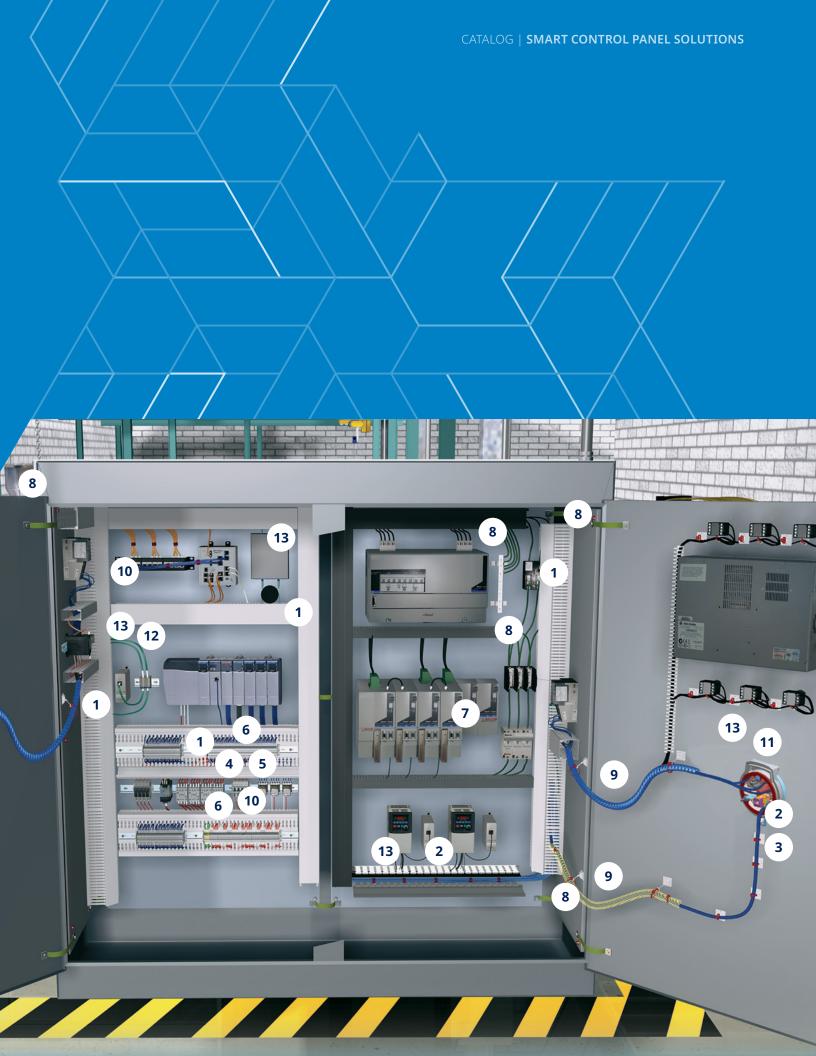


Connectivity

Pages 28 - 31







# Panduit Control Panel Solutions Deliver Reliable System Performance

# Optimizing Space in the Control Panel PAGES 5-9

In manufacturing organizations, real estate is typically one of the biggest expenses associated with running the business. As a result, production facility managers are under pressure to manage their space in the most effective and efficient manner to minimize capital and operational expenses. This can mean placing as much equipment as possible into a given area in the facility, which challenges equipment designers and builders to reduce the size and footprint of the machines they create. This, in turn, challenges the controls engineers to design and build control panels within a smaller footprint or fit more equipment into an existing space. There are many challenges associated with designing smaller control panels. Considerations for cable segregation, thermal management, cable entry, electromagnetic interference (EMI), cable bend radius and space for future expansion must be addressed when attempting to reduce the size of control panels.

# Improving Productivity in Control Panel Applications

**PAGES 10-19** 

Efficiency. Output. Yield. Productivity. Businesses today insist on accomplishing as much as possible in as little time as possible. Products and processes that maximize uptime, reduce costs and meet production deadlines are in high demand as machine designers and builders race to remain competitive and deliver upon their customer's expectations.



# Mitigating Security and Safety Risks PAGES 20-27

Integrating the security element into equipment and enclosures is essential as it allows design/controls engineers to create multiple layers of security that work together to protect the network and equipment without retrofitting or replacing components. Physical security solutions that help control access to automation devices can be effective additions to other layers of security employed in contemporary control systems. Panduit offers diverse and complete solutions for protecting equipment from intentional and unintentional security threats to add value to their customers' physical security needs.

While safety in the workplace is everyone's responsibility, it is particularly crucial that facility managers, electricians, and control panel engineers take all recommended precautions to ensure a safe environment for employees. These precautions not only prevent harm and danger, but also impact the bottom line, both directly and indirectly. Panduit has developed a wide range of solutions designed to protect workers against mechanical, electrical and hazardous situations, as well as products that provide multiple layers of security that work together to protect equipment.

# The Connected Control Panel PAGES 28-31

The manufacturing plant floor is undergoing dramatic changes that require businesses to adopt new strategies to fully utilize Industrial Ethernet through things such as advanced motor controls and control architectures to improve efficiencies, increase productivity and drive out costs.

The increasing number of Ethernet nodes on the plant floor and the need to measure productivity in real-time are frequent challenges. Greater use of Ethernet connected advanced controllers, computers and high-speed motion control and power electronics require new design strategies beyond traditional panel selection and layout to ensure the automation systems deliver improved network performance and accommodate an increasing use of Industrial Ethernet managed switches and networked devices. Copper and fiber connectivity for harsh environment deployments, DIN rail mountable patching devices, Motor Control Center (MCC) Connectivity, and Uninterruptible Power Supplies are integrated into the control panel design for a complete network Connected Control Panel.



Panduit wiring duct is the top choice in the market for efficiently organizing and protecting wires and cables. As a leader in the industry, nearly all our wiring duct is proudly manufactured in the USA, adhering to stringent quality standards and innovative design. Wiring duct products that are BABA (Build America, Buy America) compliant are marked in the headers within this section.

# Space Optimization

Regardless of the challenges encountered, Panduit solutions will provide maximum optimization of the limited space inside a control panel. Optimized control systems increase design flexibility and organization while providing robust, environment-rated solutions that ensure ideal performance, availability and uptime.

# Panduct® PanelMax™ DIN Rail Wiring Duct

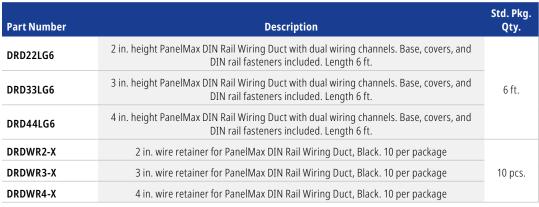
















Product is sold base and cover together in 6 ft., lengths. Part numbers shown in LG (Light Gray); also available in WH (White).



DIN rail wiring duct panel layout with 30% space savings



# **DIN Rail and DIN Component Compatible**

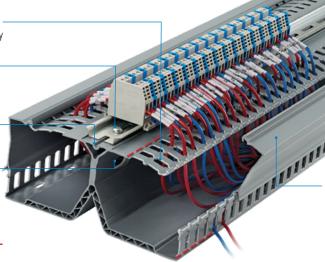
Unique finger/slot progression for aesthetics and maximum slot capacity

Integrated fastener slot accepts supplied screw fasteners to install DIN rail (user supplied rail)

Locating ribs align and center DIN rail during installation

Pass-through holes shorten the wiring path between components on the same DIN rail

Score lines allow finger removal and base sidewall removal with sidewall notching tool



Hinged and flexible cover acts as ledge for wire installation and flexes for easy opening and increased channel access for maintenance

#### Panduct® PanelMax Corner Wiring Duct







PanelMax Corner Wiring Duct is used in the vertical corners of medium to large electrical control panels to route, conceal, and protect electrical wiring. Reclaims up to 20% panel space by utilizing the previously unusable corner space, and improves aesthetics by providing a clean transition of wiring from the back panel to the side panels.

Part Number	Description	W x H In. (mm)	Cover Part Number	Std. Pkg. Qty.
CWD2LG6	One-piece corner wiring duct for use with 2 in. height wiring duct. Cover sold separately	3.35 x 2.57 (85.0 x 65.3)		
CWD3LG6	One-piece corner wiring duct for use with 3 in. height wiring duct. Cover sold separately	4.40 x 3.57 (111.8 x 90.7)	C2LG6	6 ft.
CWD4LG6	One-piece corner wiring duct for use with 4 in. height wiring duct. Cover sold separately	5.33 x 4.58 (135.3 x 115.7)		



Part Number	Description	Screw or Fastener Required	Std. Pkg. Qty.
CDCLP2	Quick mounting clip for installing CWD2 corner wiring duct	#10 – 32 x 1/4 (user supplied)	
CDCLP3	Quick mounting clip for installing CWD3 corner wiring duct	#10 – 32 x 1/2 in.	16 pcs.
CDCLP4	Quick mounting clip for installing CWD4 corner wiring duct	(user supplied)	pcs.
D4H6	4 in. height solid divider wall for use with CWD2, CWD3, or CWD4 corner wiring duct		
SD2H6	2 in. height slotted divider wall for use with CWD2, CWD3, or CWD4 corner wiring duct	Installs directly to PanelMax	C Et
SD3H6	3 in. height slotted divider wall for use with CWD2, CWD3, or CWD4 corner wiring duct	Corner Wiring Duct base	6 ft.
SD4H6	4 in. height slotted divider wall for use with CWD2, CWD3, or CWD4 corner wiring duct		





CWD2LG6 CWD3LG6 CWD4LG6

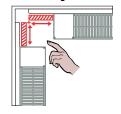


# Examples of Space Savings Using 48 in. W x 24 in. D x 60 in. H Enclosure

Description	Conventional	With PanelMax Corner Wiring Duct	Benefits
SUB-PANEL SPACE SAVINGS			
Usable sub-panel mounting area (assumes 60 in. H enclosure)	28.7 ft. <sup>2</sup>	32.2 ft. <sup>2</sup>	Provides 12% more space, maximizing space utilization for more panel components and greater flexibility in panel layout design
FOOTPRINT SPACE SAVINGS			
Footprint width x depth (square footage)	48 in. x 24 in. (8 ft.²)	43.5 in. x 21.7 in. (6.6 ft.²)	Provides 12% more space, maximizing space utilization for more panel components and greater flexibility in panel layout design
Floor space cost**	\$560	\$462***	18% reduction in enclosure size; ideal for space contained environments
Enclosure and sub-panel costs	\$3,700	\$3,050***	\$650 in enclosure savings

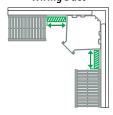
<sup>\*\*</sup>Based on \$70/square foot industrial facility construction cost.

#### Conventional **Wiring Duct**



Need for cover access moves conventional duct outward.

#### **PanelMax Corner Wiring Duct**



Gains up to 5 ft.2 mounting space per enclosure (over 72 in. height)

<sup>\*\*\*</sup>This is a representative application. Actual savings dependent on wiring duct size, component layout and enclosure size and type. Footprint savings is based on commercially available enclosures and may not be achievable in some applications.

## Panduct® PanelMax Shielded Wiring Duct and Noise Shield



Panduit noise shielding solution is designed to reduce the effects of EMI/RFI (electromagnetic interference, radio frequency interference) and provide space optimization within industrial control panels. The shielding provides up to 20dB reduction in noise, or 90% noise voltage reduction (NVR), which is equivalent to 6 inches of air spacing, generating valuable panel space savings of 40% or more.

Part Number	Description	мод
G2X2LG6EMI	2 in. x 2 in. PanelMax Shielded Wiring Duct; 6' length. Foil metal finish includes anti-oxidizing paste. Cover sold separately	
G2X3LG6EMI	2 in. x 3 in. PanelMax Shielded Wiring Duct; 6' length. Foil metal finish includes anti-oxidizing paste. Cover sold separately	24 ft.
G2X4LG6EMI	2 in. x 4 in. PanelMax Shielded Wiring Duct; 6' length. Foil metal finish includes anti-oxidizing paste. Cover sold separately	



Use C2LG6 cover with shielded wiring duct. Standard package quantity in feet.

Part Number	Description	мод
SD2EMI	EMI noise shield kit for 2 in. height Panduit wiring duct; two 3' sections, bonding clips, and anti-oxidizing paste	
SD3EMI	EMI noise shield kit for 3 in. height Panduit wiring duct; two 3' sections, bonding clips, and anti-oxidizing paste	5
SD4EMI	EMI noise shield kit for 4 in. height Panduit wiring duct; two 3' sections, bonding clips, and anti-oxidizing paste	
SDCLIP	Noise shield replacement bonding clips – 2 clips	10



#### **Flexible Wiring Duct**





Flexible Wiring Duct is a one-piece, slotted sidewall, open finger design meant to route/protect wires in applications that require flexibility. It is manufactured from polypropylene material, is light gray in color, and is designed to add/remove wires after termination without special tooling. Mounting holes are provided for a permanent mounting method with fasteners. The factory-applied high bond acrylic adhesive option is provided for easy positioning and for use on control panel doors and areas where other mounting options are not possible.

Part Number	ber Description	
FL12X12LG-AV	Flexible Wiring Duct with high bond acrylic adhesive. 0.49 in. x 0.49 in. x 19.7 in. (12.5mm x 12.5mm x 500mm)	112
FL25X25LG-AV	Flexible Wiring Duct with high bond acrylic adhesive. 0.98 in. x 0.98 in. x 19.7 in. (25.0mm x 25.0mm x 500mm)	70
FL50X50LG-AV	Flexible Wiring Duct with high bond acrylic adhesive. 1.97 in. x 1.97 in. x 19.7 in. (50.0mm x 50.0mm x 500mm)	32



#### **Hinged Cover Wiring Duct**



Hinged cover wiring duct is specially designed to accept hinged covers, which differ from regular covers by remaining attached to either side of the duct even when opened. By opening as wide as 100 degrees, it allows for easy access during maintenance and repair operations, as well as minimizes lost covers. Time and cost savings can be as much as 20% respectively.



Part Number	Duct Size (W x H)* In. (mm)	Slot Width In. (mm)	Cover Part Number	Std. Pkg. Qty.	Base Ctn. Qty.	Cover Ctn. Qty.
H1.5X3LG6	1.75 x 3.06 (44.5 x 77.7)		HC1.5LG6		120	
H2X4LG6	2.17 x 4.10 (55.1 x 104.1)	0.21 (7.0)	IICALCE	6		120
H2X3LG6	2.17 x 3.06 (55.1 x 77.7)	0.31 (7.9)	HC2LG6	р	60	120
H3X4LG6	3.25 x 4.10 (82.6 x 104.1)		HC3LG6			

<sup>\*</sup>Wide Slot Sizes shown, also available in Narrow Slot (Type HN) and Solid Wall (Type HS) options. Part Number shown for LG (Light Gray). Available in BL (Black) and WH (White). Base and cover sold separately. Additional sizes available at panduit.com.

# Panduct® Type F Narrow Slot Wiring Duct





Build America
Buy America

Narrow slot/finger design provides more slots to fit the spacing of high-density terminal blocks and other hardware. Cover sold separately.

	Part Number	Duct Size (W x H) In. (mm)	Slot Width In. (mm)	Cover Part Number	Base Ctn. Qty.	Cover Ctn. Qty.
	F1X1LG6	1.25 x 1.13 (32.0 x 28.7)				
	F1X1.5LG6	1.25 x 1.62 (32.0 x 41.1)			120	
	F1X2LG6	1.25 x 2.12 (32.0 x 53.8)		C1LG6	120	
BEST SELLER *	F1X3LG6	1.25 x 3.13 (32.0 x 79.4)				
	F1X4LG6	1.25 x 4.10 (32.0 x 104.1)			60	
	F1.5X2LG6	1.75 x 2.12 (44.5 x 53.8)			120	
BEST SELLER *	F1.5X3LG6	1.75 x 3.12 (44.5 x 79.2)		C1.5LG6	120	
	F1.5X4LG6	1.75 x 4.10 (44.5 x 104.1)	0.20 (5.0)		60	420
	F2X2LG6	2.25 x 2.12 (57.2 x 53.8)	0.20 (5.0)		120	120
BEST SELLER *	F2X3LG6	2.25 x 3.14 (57.2 x 79.8)		631.66		
BEST SELLER *	F2X4LG6	2.25 X 4.10 (57.2 X 104.1)		C2LG6		
	F2X5LG6	2.25 x 5.10 (57.2 x 129.5)				
BEST SELLER *	F3X4LG6	3.25 X 4.10 (82.6 X 104.1)			60	
	F3X5LG6	3.25 x 5.10 (82.6 x 129.5)		C3LG6		
BEST SELLER *	F4X4LG6	3.25 X 5.10 (82.6 X 129.5)				
B BEST S SELLER *	F4X5LG6	4.25 x 5.10 (108.0 x 129.5)		C4LG6		



# Panduct® Type G Wide Slot Wiring Duct \*\*Build America Buy America\*\* \*\*Build America\*\* Build America\*\*









Wide slot/finger design provides greater sidewall rigidity and can be used with a wide range of wire bundle sizes. Cover sold separately.

Part Number	Duct Size (W x H)* In. (mm)	Slot Width In. (mm)	Cover Part Number	Base Ctn. Qty.	Cover Ctn. Qty.
G1X1LG6	1.25 x 1.12 (32.0 x 28.4)				
G1X1.5LG6	1.25 x 1.62 (32.0 x 41.1)			420	
G1X2LG6	1.25 x 2.12 (32.0 x 53.8)	0.31 (7.9)	C1LG6	120	
G1X3LG6	1.25 x 3.12 (32.0 x 79.2)				
G1X4LG6	1.25 x 4.10 (32.0 x 104.1)			60	
G1.5X2LG6	1.75 x 2.12 (44.5 x 53.8)	108.0 (129.5)	C1.5LG6	120	
G1.5X3LG6	1.75 x 3.12 (44.5 x 79.2)			120	
G1.5X4LG6	1.74 x 4.10 (44.5 x 104.1)			60	
G2X2LG6	2.25 x 2.12 (57.2 x 53.8)	0.31 (7.9)		120	120
G2X3LG6	2.25 x 3.12 (57.2 x 79.2)				
G2X4LG6	2.25 x 4.10 (57.2 X 104.1)		C2LG6		
G2X5LG6	2.25 x 5.10 (57.2 x 129.5)	0.38 (9.7)			
G3X4LG6	3.25 x 4.10 (82.6 x 104.1)	0.31 (7.9)		60	
G3X5LG6	3.25 x 5.10 (82.6 x 129.5)	0.38 (9.7)	C3LG6		
G4X4LG6	4.25 x 4.10 (108.0 x 104.1)	0.31 (7.9)			
G4X5LG6	4.25 x 5.10 (108.0 x 129.5)	0.38 (9.7)	C4LG6		



#### **Panduct® Installation Tools**

Easily install Panduct® Products with the bench mount or hand-held duct cutting tool.

Part Number	Description	Std. Pkg. Qty.
DCT	Hand-held duct cutting tool	
DFCT	Hand-held duct finger cutting tool	1
DNT-100	Hand-held sidewall notching tool	
NR1-M	Nylon rivet for use with TNR rivet tool	1000
PBDCT	Panduit bench-mount duct cutting tool. Cuts slotted wiring ducts and wiring duct covers with up to 6 in. width and up to 5 in. height. Full 78.74 in. (2m) measuring scale. Includes safety guarding	1
TNR	Hand-held nylon rivet installation tool	



#### Wire Basket Overhead Cable Tray Routing System



The Wire Basket Overhead Cable Tray Routing System is comprised of pathways, splices, mounting brackets and accessories that allow the system to be configured in environments where cables are routed to and within control panels. Basket sections are available in 118.33 Inch lengths and can be cut down and configured to meet the required project dimensions. This product is ideal for routing heavy power cables inside switch gear and other panel applications.

Part Number	Description	Std. Pkg. Qty.
PWB2X4EZ	Wire Basket 2 in. H x 4 in. W x 118.33 in. L, Electro Zinc	
PWB4X4EZ	Wire Basket 4 in. H x 4 in. W x 118.33 in. L, Electro Zinc	1 pc.
PWB2X6EZ	Wire Basket 2 in. H x 6 in. W x 118.33 in. L, Electro Zinc	
PWBSPLEZ	Wire Basket Bolt-On Splice, Electro Zinc	E0 ncc
PWBHKEZ	Wire Basket Hardware Kit, Electro Zinc	50 pcs.
PWBCB4EZ	Wire Basket Cantilever Bracket 4 in., Electro Zinc	2 ncc
PWBCB6EZ	Wire Basket Cantilever Bracket 6 in., Electro Zinc	2 pcs.
PWBTSBEZ	Wire Basket Trapeze Hanger Bracket, Electro Zinc	FOnce
PWBSCEZ Wire Basket Strut Clip, Electro Zinc		50 pcs.
<b>PWBWMBVEZ</b> Wire Basket Vertical Wall Mount Bracket, Electro Zinc		1 pc.
PWBWFNEZ	Wire Basket Narrow Bottom Waterfall, Electro Zinc	5 pcs.







NOTE: Replace EZ with BL for Black or WH for White

# Productivity

Panduit has never stopped improving, advancing or reinventing its products to meet modern challenges. We are committed to providing manufacturers with the keys to efficient and effective productivity. Panduit products tap into a 60-year legacy of knowledge, experience, and innovation to provide high quality tools and products that allow designers and builders to be more competitive, more productive, more flexible and, more profitable.

#### **Cable Ties**







Fasten, bundle, clamp and manage wiring with cable ties and tools designed to speed installation and improve operator safety.

Part Number	Description	Std. Pkg. Qty.
вт1м-с	Dome-Top® barb ty cable tie, miniature cross section, 4.0 in. (102mm) length, nylon 6.6, natural, standard package	100 pcs.
BT1.5M-M	Dome-Top barb ty cable tie, miniature cross section, 6.3 in. (160mm) length, nylon 6.6, natural, bulk package	
BT2I-M0	Dome-Top barb ty cable tie, intermediate cross section, 8.0 in. (203mm) length, weather resistant nylon 6.6, black, bulk package	1000 pcs.
вт2м-м	Dome-Top barb ty cable tie, miniature cross section, 7.9 in. (201mm) length, nylon 6.6, natural, bulk package	
BT2S-C	Dome-Top barb ty cable tie, standard cross section, 8.0 in. (203mm) length, nylon 6.6, natural, standard package	100 pcs.
BT3I-M	Dome-Top barb ty cable tie, intermediate cross section, 11.3 in. (287mm) length, nylon 6.6, natural, bulk package	1000 pcs.
BT3S-C0	Dome-Top barb ty cable tie, standard cross section, 12.0 in. (305mm) length, weather resistant nylon 6.6, black, standard package	100 pcs.
BT4S-M0	Dome-Top barb ty cable tie, standard cross section, 15.1 in. (384mm) length, weather resistant nylon 6.6, black, bulk package	1000 pcs.
PLF1M-C	Panduit flag style marker tie, miniature cross section, 4.3 in. (109mm) length, nylon 6.6, natural, standard package	
PLT1M-C	Panduit® Locking Tie, Miniature cross section, 3.9 in. (99mm) length, nylon 6.6, Natural	
PLT1.5M-M	Panduit locking tie, miniature cross section, 5.6 in. (142mm) length, nylon 6.6, natural, bulk package	1000 pcs
PLT2I-M	Panduit locking tie, intermediate cross section, 8.0 in. (203mm) length, nylon 6.6, natural, bulk package	1000 pcs.
PLT2M-C	Panduit Locking Tie, Miniature cross section, 8.0 in. (203mm) length, nylon 6.6, Natural	100
PLT2S-C	Panduit Locking Tie, Standard cross section, 7.4 in. (188mm) length, nylon 6.6, Natural	100 pcs.
PLT3I-M0	Panduit Locking Tie, intermediate cross section, 11.4 in. (290mm) length, weather resistant nylon 6.6, black, bulk package	1000 pcs.
PLT3S-C	Panduit Locking Tie, standard cross section, 11.5 in. (292mm) length, nylon 6.6, natural, standard package	100 ncs
PLT4S-C0	Panduit Locking Tie, standard cross section, 14.5 in. (368mm) length, weather resistant nylon 6.6, black, standard package	100 pcs.
GTS-E	Ergonomic cable tie hand tool; installs Subminiature, Miniature, Intermediate, Standard cable tie cross sections; material: impact resistant resin	1 pc.





 $\label{lem:presentative} \textbf{Representative list only. Please visit } \textbf{panduit.com} \ \textbf{for full offering.}$ 

BEST \*

BEST \*

BEST \*

## 4-Way Adhesive Backed Cable Tie Mounts



Panduit adhesive backed cable tie mounts are a product the control panel industry depends upon to secure wires and cables where mounting holes cannot be drilled. Rubber-based adhesive provides relative quick set compared to acrylic options and provides good static load capacity for a long-term reliable bond. For stronger bond, for use in areas where dynamic movement comes into play (such as wire routing inside control panel doors that are frequently accessed), high bond adhesive mounts are choice. Multiple sizes, available in natural or black, and adhesive options allow for a selection of mounts to meet customer dependent applications.

	Part Number	Description	Std. Pkg. Qty.
	ABM100-A-C	Adhesive backed cable tie mount, 1 in. x 1 in. (25.4mm x 25.4mm); Rubber-based adhesive; Fits M, I, S cable ties; Nylon 6.6, Natural	
BEST SELLER *	ABM100-AV-C	Adhesive backed cable tie mount, 1 in. x 1 in. (25.4mm x 25.4mm); High bond adhesive (twice the static load of ABM100-A); Fits M, I, S cable ties; Nylon 6.6, Natural	
	ABM100-AV-C0	Adhesive backed cable tie mount, 1 in. x 1 in. (25.4mm x 25.4mm); High bond adhesive (twice the static load of ABM100-A); Fits M, I, S cable ties; Nylon 6.6, Black	
	ABM112-A-C	Adhesive backed cable tie mount, 1.12 in. x 1.12 in. (28.5mm x 28.5mm); Rubber-based adhesive; Fits M, I, S cable ties; Nylon 6.6, Natural	
BEST SELLER *	ABM112-AV-C	Adhesive backed cable tie mount, 1.12 in. x 1.12 in. (28.5mm x 28.5mm); High bond adhesive (twice the static load of ABM112-A); Fits M, I, S cable ties; Nylon 6.6, Natural	
	ABM112-AV-C0	Adhesive backed cable tie mount, 1.12 in. x 1.12 in. (28.5mm x 28.5mm); High bond adhesive (twice the static load of ABM112-A); Fits M, I, S cable ties; Nylon 6.6, Black	100 pcs.
	ABM1M-A-C	Adhesive backed cable tie mount, 0.50 in. x 0.50 in. (12.7mm x 12.7mm); Rubber-based adhesive; Fits M cable ties; Nylon 6.6, Natural	
BEST SELLER *	ABMM-A-C	Adhesive backed cable tie mount, 0.75 in. x 0.75 in. (19.1mm x 19.1mm); Rubber-based adhesive; Fits M, I cable ties; ABS, Natural	
	ABMM-AV-C	Adhesive backed cable tie mount, 0.75 in. x 0.75 in. (19.1mm x 19.1mm); High bond adhesive (twice the static load of ABMM-A); Fits M, I cable ties; ABS, Natural	
	ABMM-AV-C0	Adhesive backed cable tie mount, 0.75 in. x 0.75 in. (19.1mm x 19.1mm); High bond adhesive (twice the static load of ABMM-A); Fits M, I cable ties; ABS, Black	
BEST SELLER *	ABM2S-A-C	Adhesive backed cable tie mount, 1 in. x 1 in. (25.4mm x 25.4mm); Rubber-based adhesive; Fits M, I, S cable ties; ABS, Natural	
	ABM3H-A-L	Adhesive backed cable tie mount, 1.5 in. x 1.5 in. (38.1mm x 38.1mm); Rubber-based adhesive; Fits M, I, S, LH, H cable ties; Nylon 6.6, Natural	
	ABM3H-AV-L	Adhesive backed cable tie mount, 1.5 in. x 1.5 in. (38.1mm x 38.1mm); High bond adhesive (twice the static load of ABM3H-A); Fits M, I, S, LH, H cable ties; Nylon 6.6, Natural	F0 non
	ABM3H-AV-L0	Adhesive backed cable tie mount, 1.5 in. x 1.5 in. (38.1mm x 38.1mm); High bond adhesive (twice the static load of ABM3H-A); Fits M, I, S, LH, H cable ties; Nylon 6.6, Black	50 pcs.
	ABM4H-A-L	Adhesive backed cable tie mount, 2 in. x 2 in. (50.8mm x 50.8mm); Rubber-based adhesive; Fits M, I, S, LH, H cable ties; Nylon 6.6, Natural	



Representative list only. Please visit panduit.com for full offering.

\*For cable ties, M = Miniature, I = Intermediate, S = Standard, LH = Light Heavy, H = Heavy cross-section

# **ABMQ Multiple Bridge Mount**



The large adhesive surface area of the Multiple Bridge Mount provides a secure mounting method for up to four cable bundles.

The dovetail feature allows multiple mounts to be perfectly aligned, providing an aesthetically pleasing solution with more cable routing capabilities for complex control panel systems. The score in the middle of the mount allows the user to cleanly break the mount in half if all four attachment points are not necessary. The rubber-based tape provides a high quick tack solution to improve adhesive performance in indoor applications.





Part Number	Description	Std. Pkg. Qty.
ABMQS-A-C	4-way adhesive backed multiple bridge cable tie mount, ABS, used with Miniature, Intermediate and Standard cable ties. White	100 pcs.

#### **Dynamic Cable Manager**

The Panduit dynamic cable manager provides an engineered solution to secure cable bundles that require routing across the enclosure door hinge. The ball-in-socket design provides a reliable and cost-effective solution to secure the cable bundle that minimizes excessive strain on the mount and the wiring. The rubber-based tape provides a high quick-tack solution to improve adhesive performance in indoor applications.

Part Number	Description	Std. Pkg. Qty.
ABDCM30-A-C	Dynamic cable manager for panel strain relief, 1.12 in. x 1.12 in. (28.4mm x 28.4mm), nylon 6.6, White	100 pcs.



Representative list only. Please visit panduit.com for full offering.

#### **Non-Adhesive Cable Tie Mounts**



Panduit non-adhesive cable tie mounts are available for screw-mount or push mount applications. Non-adhesive cable tie mounts are also available in a wide selection of specialty materials for resistance to severe environmental conditions. A variety of styles allow for the user to select the most appropriate mount for their application. Mounts should be used with compatible Panduit cable ties for a complete wire routing solution.

Part Number	Description	Std. Pkg. Qty.
PBMS-H25-C	The push button cable tie mount requires a 0.25 in. (6.4 mm) hole and is natural color. It is made of nylon 6.6, which increases mechanical strength, heat and wear resistance, and stiffness	
PP2S-S10-C	The pan-post standoff is natural color and requires a #10 (M5) screw. It measures 1.06 in. L x .72 in. W x 4.60 in. H (26.9 x 18.3 x 116.9 mm). It is used with miniature, intermediate, and standard cable ties	
PWMS-H25-C	The winged push barb cable tie mount requires a 0.250 in. (6.5 mm) hole and is natural color. It is made of nylon 6.6, which increases mechanical strength, heat and wear resistance, and stiffness	100 pcs.
TM3S10-C	The cable tie mount in natural color is applied with a #10 (M5) screw and is 0.61 in. (15.5 mm) wide. It is made of nylon 6.6, which increases mechanical strength, heat and wear resistance, and stiffness in indoor environments	
TMEH-S25-Q0	The extra heavy cable tie mount in black is applied with a 1/4 in. (M6) screw. It is made of weather-resistant nylon 6.6, which increases mechanical strength, heat and wear resistance, and stiffness in outdoor environments	25 pcs.



All mounts shown in the table are cULus Listed except PWMS-H25-C which is cURus.

#### **Control Panel Mounts**

Panduit control panel mounts are designed to provide strain relief for cables that terminate to a control panel switch. These mounts are intended for installation behind a control panel switch and provide a way to secure the terminated cables with a cable tie to maintain a reliable connection. Two sizes are available for the most common sizes of control panel switch designs.

Part Number	Description	Std. Pkg. Qty.
CPM87S-C	Control panel switch cable tie mount, 0.89 in. (22.6mm) hole, material zinc plated steel, used with Miniature, Intermediate and Standard cable ties.	100
CPM122S-C	Control panel switch cable tie mount, 1.22 in. (31.0mm) hole, material zinc plated steel, Miniature, Intermediate and Standard cable ties	100 pcs.



BEST SELLER \*

#### **Adhesive Cable Accessories**



Adhesive backed cable accessories allow the user to route and secure control panel wiring quickly and reliably with a single piece cable management solution. A wide range of styles and sizes can be used to secure a variety of cables, from individual small diameter wires to large cable bundles. Products are available with designs that use friction to hold a few cables, or with more secure releasable latching designs. The adhesive backed cable accessories use premium Panduit adhesive for a long-term reliable bond.

Part Number	Description	Std. Pkg. Qty.	
ACC38-A-C	Adhesive backed cord clip, .38 in. (9.7mm) bundle, natural	100 ncc	
ACC62-A-C	Adhesive backed cord clip, .62 in. (15.8mm) bundle, natural	100 pcs.	
BEC62-A-T	Adhesive backed bevel entry clip, .62 in. (15.8mm) bundle, natural	200 pcs.	
BEC75-A-L	Adhesive backed bevel entry clip, .75 in. (19.1mm) bundle, natural		
LWC50-A-L14	Adhesive backed latching wire clip, .50 in. (12.7mm) bundle, gray	50 pcs.	
LWC75-A-L14	Adhesive backed latching wire clip, .75 in. (19.1mm) bundle, gray		



# **Terminals**





Panduit terminals are designed and manufactured for fast assembly and reliable performance. Panduit provides an extensive line of tooling designed specifically to provide optimum performance.

	Part Number Description		Std. Pkg. Qty.	
BEST *	BSN14-C	Butt splice; 16 – 14 AWG; nylon insulated	100 ncc	
	BSN18-C	Butt splice; 22 – 18 AWG; nylon insulated	100 pcs.	
	BSV10X-Q	Butt splice; 12 – 10 AWG, vinyl insulated	25 pcs.	
BEST SELLER *	DNF14-250FIB-C	Female disconnect; 16 – 14 AWG, 0.250 x 0.032 tab size, nylon fully insulated, funnel entry	100 pcs.	
	DNF14-250FIB-M	Female disconnect; 16 – 14 AWG, 0.250 x 0.032 tab size, nylon fully insulated, funnel entry	1000 ncc	
	DNF18-250FIB-M	Female disconnect; 22 – 18 AWG, 0.250 x 0.032 tab size, nylon fully insulated, funnel entry	1000 pcs.	
	PN10-10R-D	Ring terminal; 12 – 10 AWG; stud size #10 nylon insulated	500 pcs.	
	PN14-10R-M	Ring terminal; 18 – 14 AWG; stud size #10 nylon insulated	1000 pcs.	
	PNF10-10R-D	Ring terminal; 12 – 10 AWG; stud size #10 nylon insulated, funnel entry	500 pcs.	
BEST *	PV10-10F-L	Fork terminal, 12 – 10 AWG, #10 stud size, vinyl insulated, funnel entry		
BEST *	PV10-10R-L	Ring terminal: 12 - 10 AWG, stud size #10, vinyl insulated, funnel entry	50 pcs.	
	PV10-14R-L	Ring terminal; 12 – 10 AWG; stud size 1/4 in., vinyl insulated, funnel entry		
	PV14-10R-M	Ring terminal; 16 – 14 AWG; stud size #10, vinyl insulated, funnel entry	1000 pcs.	
BEST SELLER ★	CT-1550	Crimps most Pan-Term® #22 – 10 AWG Nylon and Vinyl Insulated Terminals, Splices, and Disconnects. The CT-1550 has the Red/Blue pocket closest to the pivot which provides a reduced crimp effort for those who make Red/Blue terminations		
BEST SELLER *	CT-2300/ST	The Panduit BlackFin® Battery Powered Micro-crimping Tool crimps 65% faster than a manual crimping tool thanks to an innovative trigger with power sensing technology. The lightweight, ergonomic design requires less hand force, reducing the risk of injury. The 4.7 in. (120mm) jaw with a force of 1.7 tons crimps a range of #22 – 10 AWG terminals, #26 – 10 AWG single wire ferrules, #22 – 12 AWG twin wire ferrules, and #14 – 10 AWG copper lugs. Includes battery powered micro-crimping tool, one 10.8 V, 1.5 Ah Li-ion battery, battery charger with USA Type A plug, case. Crimp dies (Panduit CD-525, CD-550, CD-570 and CD-090) sold separately	1	







# **Ferrules**





Panduit ferrule end sleeves terminate stranded wire into terminal blocks with superior termination performance. A wide assortment of ferrule styles and tool designs provide a proven way to make reliable connections. Meets UL486F, CSA-C22.2, and DIN standards. Automated solutions also available for high-volume applications.

Part Number	Description	Std. Pkg. Q	
F78-8-M	Ferrule, 16 AWG (1.5mm <sup>2</sup> ) wire range, 0.31 in. (8.0mm) pin length	1000 pcs.	
FSD74-8-D	Single wire DIN end sleeve covered ferrule; Turquoise funnel entry; 22 AWG (0.34mm²); 0.49 in. (12.5mm) pin length		
FSD75-8-D	Single wire DIN end sleeve covered ferrule; White funnel entry; 20 AWG (0.5mm²); 0.53 in. (13.5mm) pin length	500 pcs.	
FSD75-8-DSL10	Covered ferrules, on strip, single wire white DIN end sleeve, 20 AWG (0.50mm²), 0.31 in. (8.0mm) pin length		
FSD75-8-K Covered ferrules, single wire white DIN end sleeve on mini-reel, 20 AWG (0.50mm²), 0.31 in. (8.0mm) pin length		1000 pcs	
FSD76-8-D	Single wire DIN end sleeve covered ferrule; Gray funnel entry; 18 AWG (0.75mm²); 0.55 in. (14 mm) pin length	F00 pcc	
FSD76-8-DSL8	Covered ferrules, on strip, single wire gray DIN end sleeve, 18 AWG (0.75mm²), 0.31 in. (8.0mm) pin length	500 pcs.	
FSD76-8-K	Covered ferrules, single wire gray DIN end sleeve on mini-reel, 18 AWG (0.75mm²), 0.31 in. (8.0mm) pin length	1000 pcs	
FSD77-8-D	Single wire DIN end sleeve insulated ferrule; Red funnel entry; 1.0mm <sup>2</sup> ; 0.57 in. (14.5mm) pin length	F00 ncc	
FSD77-8-DSL2	Covered ferrules, on strip, single wire red DIN end sleeve, 18 AWG (1.0mm²), 0.31 in. (8.0mm) pin length	500 pcs.	
FSD77-8-K	Covered ferrules, single wire red DIN end sleeve on mini-reel, (1.0mm²), 0.31 in. (8.0mm) pin length	1000 pcs	
FSD77-10-D	Polypropylene covered ferrules single wire red DIN end sleeve, 18 AWG (1.0mm²), 0.39 in. (10.0mm) pin length		
FSD77-12-D	Single wire DIN end sleeve covered ferrule; red funnel entry; 1.0mm²; 0.73 in. (18.5mm) length	E00 n==	
FSD78-8-D	Single wire DIN end sleeve covered ferrule; Black funnel entry; 16 AWG (1.5mm²); 0.57 in. (14.5mm) length	500 pcs.	
FSD78-8-DSL0	Covered ferrules, on strip, single wire black DIN end sleeve, 16 AWG (1.5mm²), 0.31 in. (8.0mm) pin length		
FSD78-8-K	Covered ferrules, single wire black DIN end sleeve on mini-reel, 16 AWG (1.5mm²), 0.31 in. (8.0mm) pin length	1000 pcs	
FSD78-10-D	Polypropylene covered ferrules single wire black DIN end sleeve, 16 AWG (1.5mm²), 0.39 in. (10.0mm) pin length	500	
FSD78-12-D	Single wire DIN end sleeve covered ferrule; black funnel entry; 16 AWG (1.5mm²); 0.73 in. (18.5mm) pin length		
FSD80-8-D	Single wire DIN end sleeve covered ferrule; blue funnel entry; 14 AWG (2.5mm²); 0.59 in. (15mm) pin length		
FSD80-8-DK	Covered ferrules, single wire blue DIN end sleeve on mini-reel, 14 AWG (2.5mm²), 0.31 in. (8.0mm) pin length		
FSD80-8-DSL6	Covered ferrules, on strip, single wire blue DIN end sleeve, 14 AWG (2.5mm²), 0.31 in. (8.0mm) pin length	500 pcs	
FSD80-12-D	Single wire DIN end sleeve covered ferrule; blue funnel entry; 14 AWG (2.5mm²); 0.75 in. (19.0mm) length		
FSD81-10-D	Single wire DIN end sleeve covered ferrule; gray funnel entry; 12 AWG (4mm²); 0.69 in. (17.5mm) length		
FTD78-8-D	Polypropylene covered ferrules twin wire black DIN color end sleeve, 16 AWG (1.5mm²), 0.31 in.(8.0mm) pin length		
FTD80-10-TL	Twin wire DIN end sleeve covered ferrule: Blue funnel entry, 14 AWG (2.5mm²), 0.39 in. (10.0mm) pin length	250 pcs.	
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. This tool is used with Panduit continuously molded #20–14 AWG (0.5–2.5mm²) DIN ferrules on mini-reels of 500–3000 pieces for quality, medium to high volume terminations		
CP-991	A bowl-fed 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. This tool is used with #24–12 AWG (1.25–4.0mm²) DIN ferrules for quality, medium to high volume terminations	1 nc	
CT-1000	Controlled cycle crimp tool with trapezoid profile for #20–14 AWG (0.50–2.5mm²) covered continuously molded ferrules on strips. Also cuts and strips wire	1 pc.	
CT-1170	Controlled cycle ferrule crimp tool with square profile for 28–5 AWG (0,08–16mm²) covered and non-covered single wire ferrules and 23–10 AWG (2 x 0.25mm²–2x 6mm²) covered twin ferrules		
CTFP-40	Bench-top pneumatic loose piece ferrule tool; ferrule range = #24–12 AWG (0.25–4mm²)		



# **Military Grade Two-Sided Heat Shrink Labels**



Permanent, one-piece, heat shrink sleeve designed to provide clear, durable identification of wires and cables. Print using Easy-Mark Plus Labeling Software and DP4300M thermal transfer desktop printer on **pages 18-19**.

Part Number	Description	Wire Range	Std. Pkg. Qty.
H200X025H1T-2	2-sided Military Grade printable heat shrink label, White, 1/8 in. (3.1 mm) diameter polyolefin. 500 labels per roll	22 – 18 AWG	1 Roll
H200X034H1T-2	2-sided Military Grade printable heat shrink label, White, 3/16 in. (4.7mm) diameter polyolefin. 500 labels per roll	18 – 12 AWG	1 Roll
H200X044H1T-2	2-sided Military Grade printable heat shrink label, White, 1/4 in. (6.3 mm) diameter polyolefin. 500 labels per roll	16 – 10 AWG	1 Roll
H200X064H1T-2	2-sided Military Grade printable heat shrink label, White, 3/8 in. (9.7mm) diameter polyolefin. 500 labels per roll	12 – 6 AWG	1 Roll
H200X084H1T-2	2-sided Military Grade printable heat shrink label, White, 1/2 in. (12.7mm) diameter polyolefin. 500 labels per roll	8 – 1 AWG	1 Roll
H200X122H1T-2	2-sided Military Grade printable heat shrink label, White, 3/4 in. (19.1mm) diameter polyolefin. 250 labels per roll	8 – 4/0 AWG	1 Roll
H200X165H1T-2	2-sided Military Grade printable heat shrink label, White, 1 in. (25.4 mm) diameter polyolefin. 250 labels per roll	4 AWG – 500 kcmil	1 Roll



Representative list only. Please visit panduit.com for full offering.

# **Vinyl Self-Laminating Labels**



Includes a colored print-on area and clear over-laminate to protect the legend for clear and durable identification. Print using Easy-Mark Plus Labeling Software and DP4300M thermal transfer desktop printer on **pages 18-19**.

Part Number	Description	Std. Pkg. Qty.
S100X075VATY	Thermal Transfer, Vinyl, 1.00 in. W x 0.75 in. H, 0.25 in. POA, Clear/White, 3 in. Core, 18 – 14 AWG wire/cable	
S100X125VATY	Thermal Transfer, Vinyl, 1.00 in. W x 1.25 in. H, 0.38 in. POA, Clear/White, 3 in. Core, 12 – 10 AWG wire/cable	F000 ncc
<b>■</b> S100X150VATY	Thermal Transfer, Vinyl, 1.00 in. W x 1.50 in. H, 0.50 in. POA, Clear/White, 3 in. Core, 10 – 6 AWG wire/cable	5000 pcs.
<b>■</b> S100X225VATY	Thermal Transfer, Vinyl, 1.00 in. W x 2.25 in. H, 0.75 in. POA, Clear/White, 3 in. Core, 8 – 4 AWG wire/cable	
<b>S100X400VATY</b>	Thermal Transfer, Vinyl, 1.00 in. W x 4.00 in. H, 1.00 in. POA, Clear/White, 3 in. Core, 2 – 1 AWG wire/cable	2500 pcs.
S100X650VATY	Thermal Transfer, Vinyl, 1.00 in. W x 6.50 in. H, 1.50 in. POA, Clear/White, 3 in. Core, 1/0 – 250 MCM wire/cable	1000 pcs.



Representative list only. Please visit panduit.com for full offering.

BEST SELLER

#### Turn-Tell™ Labels

BEST SELLER Innovative label design allows labels to rotate for visibility from any angle, and for repositioning on the wire/cable to align legends and improve aesthetics. Print using Easy-Mark Plus Labeling Software and DP4300M thermal transfer desktop printer on pages 18-19.

	Part Number	Description	Std. Pkg. Qty.
	R100X075V1T	Thermal transfer, vinyl, 1.00 in. W x 0.75 in. H, 0.25 in. POA, Clear/White, 3 in. Core, 18 – 14 AWG wire/cable	
	R100X125V1T	Thermal transfer, vinyl, 1.00 in. W x 1.25 in. H, 0.38 in. POA, Clear/White, 3 in. Core, $12-10$ AWG wire/cable	
*	R100X150V1T	Thermal transfer, vinyl, 1.00 in. W x 1.50 in. H, 0.50 in. POA, Clear/White, 3 in. Core, Category 5e wire/cable	2500 pcs.
	R100X225V1T	Thermal transfer, vinyl, 1.00 in. W x 2.25 in. H, 0.75 in. POA, Clear/White, 3 in. Core, Category 6 wire/cable	
	R100X400V1T	Thermal transfer, vinyl, 1.00 in. W x 4.00 in. H, 1.00 in. POA, Clear/White, 3 in. Core, 2 – 1 AWG wire/cable	1000 pcs.



Representative list only. Please visit panduit.com for full offering.

# **LabelCore™ Fiber Optic Cable Identification System**

Provides a larger surface on small fiber cables and allows legends to be clearly seen.

Part Number	Description	Std. Pkg. Qty.
NWSLC-2Y	Yellow cable identification sleeve for 2mm simplex fiber cable, 1 in. long: Use with labels S100X150YAJ (laser/inkjet), S100X150VAM for MP300 mobile printer, S100X150VA1Y or S100X150VATY (thermal transfer printer)	
NWSLC-2Y-AQ	Aqua cable identification sleeve for 2mm simplex fiber cable, 1 in. long: Use with labels S100X150YAJ (laser/inkjet), S100X150VAM for MP300 mobile printer, S100X150VA1Y or S100X150VATY (thermal transfer printer)	100
NWSLC-3Y	Orange cable identification sleeve for 3mm simplex fiber cable, 1 in. long: Use with labels S100X150YAJ (laser/inkjet), S100X150VAM for MP300 mobile printer, S100X150VA1Y or S100X150VATY (thermal transfer printer)	100 pcs.
NWSLC-7Y	White cable identification sleeve for 3mm duplex cable, 1 in. long: Use with labels S100X225YAJ (laser/inkjet), S100X225VAM for MP300 mobile printer, and S100X225VA1Y or S100X225VATY (thermal transfer printer)	



#### **Standard Marker Plates**

Non-adhesive and halogen-free; used to identify wires, cables, equipment, and many other applications. Print using Easy-Mark Plus Labeling Software and DP4300M thermal transfer desktop printer on **pages 18-19**.

Part Number	Description	Std. Pkg. Qty.
M200X050Y6T	Yellow, thermal transfer marker plate, 2.00 in. x 0.50 in., 500 labels per roll	
M200X050Y7T	White, thermal transfer marker plate, 2.00 in. x 0.50 in., 500 labels per roll	
M200X100Y6T	Yellow, thermal transfer marker plate, 2.00 in. x 1.00 in., 500 labels per roll	
M200X100Y7T	White, thermal transfer marker plate, 2.00 in. x 1.00 in., 500 labels per roll	1 Roll
M300X050Y6T	Yellow, thermal transfer marker plate, 3.00 in. x 0.50 in., 500 labels per roll	I KOII
M300X050Y7T	White, thermal transfer marker plate, 3.00 in. $\times$ 0.50 in., 500 labels per roll	
M300X100Y6T	Yellow, thermal transfer marker plate, 3.00 in. x 1.00 in., 500 labels per roll	
M300X100Y7T	White, thermal transfer marker plate, 3.00 in. x 1.00 in., 500 labels per roll	



Representative list only. Please visit panduit.com for full offering.

#### **Raised Panel Labels**



Raised thermal transfer printable surface with high-tack adhesive for strong holding power on rough, textured, painted, and powder coated surface areas. Print using Easy-Mark Plus Labeling Software and DP4300M thermal transfer desktop printer on pages 18-19.

Part Number	Description	Std. Pkg. Qty.
C100X050APT	Thermal transfer raised panel component label, 1.00 in. W x 0.50 in. H, raised panel, White	
C120X190APT-22	Thermal transfer raised panel push button label, 1.20 in. W x 1.90 in. H, 22mm hole, raised panel, White	
C180X180APT-30	Thermal transfer raised panel push button label, 1.80 in. W x 1.80 in. H, 30mm hole, raised panel, White	500 pcs.
C180X130APT-30H	Thermal transfer raised panel half push button label, 1.80 in. W x 1.30 in. H, 30mm hole, raised panel, White	
C200X100APT	Thermal transfer raised panel component label, 2.00 in. W x 1.00 in. H, raised panel, White	



Representative list only. Please visit panduit.com for full offering.

# **Super-Tack Polyester Labels**



Super-Tack Polyester labels are used on rough, textured, painted, and coated surface areas. Print using Easy-Mark Plus Labeling Software and DP4300M thermal transfer desktop printer on pages 18-19.

Part Number	Description	Std. Pkg. Qty.
C100X050YPT	Thermal transfer component label, 1.00 in. W x 0.50 in. H, super-tack polyester, White	10000 pcs.
C200X100YPT	Thermal transfer component label, 2.00 in. W x 1.00 in. H, super-tack polyester, White	2500
C400X300YPT	Thermal transfer component label, 4.00 in. W x 3.00 in. H, super-tack polyester, White	2500 pcs.



#### Easy-Mark Plus™ Labeling Software

- Powerful, easy-to-use, and affordable software that provides innovative features and functionality to address unique labeling needs
- Quickly create simple or complex labels with text boxes, lines, frames, or tables, and other useful tools
- Design detailed labels with multiple zones and objects for applications such as rating plates, arc flash labels and fiber optic enclosures
- Simple user interface shows labels on the screen as they will be printed
- Create and print labels using QR codes, or any of the other 21 included barcode symbologies
- Free demo version available at panduit.com/emp.

Part Number	Description	Std. Pkg. Qty.	Std. Ctn. Qty.
EMPLUS-DL	Easy-Mark Plus Labeling Software, online download*		
EMPLUS-2GO	Easy-Mark Plus Portable Application, USB flash drive		10
EMPLUS-CD	Easy-Mark Plus Labeling Software, CD-ROM	1	10
EMPLUS-SERVER	Easy-Mark Plus Labeling Software, networkable server based version		



^WINDOWS is a registered trademark of Microsoft Corporation in the United States and/or other countries. System Requirements: 300 MB hard drive space and 2 GB Memory, Windows Vista, 7, 8, 8.1, 10, or 11^,

32 or 64 bit operating systems, Microsoft. NET Framework 2.0 or higher, Mouse or compatible pointing device, Keyboard, Optical Disc Drive or USB Port

#### **DP4300M Thermal Transfer Desktop Printer and Accessories**

- 300 dots per inch (dpi) print resolution
- Durable construction allows use in harsh environments, industrial facilities, and job sites
- · Easy-Mark Plus Labeling Software included with printer
- Up to 5.9 inches per second print speed
- · Compact, lightweight design

- Convenient, easy setup; quickly begin producing labels for all industrial infrastructure applications
- Connects quickly and easily to PC, and offers connectivity flexibility to print by USB, parallel serial, or Ethernet
- · Quick and easy loading of label and ribbon media

	Part Number	Description	Std. Pkg. Qty.	
BEST SELLER *	DP4300M	300 dpi printer; includes printer, Easy-Mark Plus Labeling Software, RMEH4BL black hybrid ribbon, USB cable, quick start guide, and U.S. power cord; for use in North America.		
BEST SELLER *	DP4300M printer kit. Includes: printer, Easy-Mark Plus Labeli		1	
	DP4300M-CASE	Hardside carrying case for printer and accessories.		
	TDP43ME-RS	External label roll stand for TDP43ME printer; used to rear feed labels that are supplied on 3 in. cores		
	DP4300M-CUT	Optional power/automatic cutter for DP4300M thermal transfer desktop printer.		
	DP4300M-PCUT	Optional power/automatic perforation cutter for DP4300M thermal transfer desktop printer.		
	DP-WIFI	USB WLAN Stick for DP Printers, 802.11b/g/n 2.4GHz + a/n/ac 5GHz		



<sup>\*</sup>Customer will receive a DVD Case with information and serial number for the downloadable version

#### **DP4300M Desktop Printer Ribbons**

	Part Number	Description	Width In. (mm)	Length Ft. (m)	Std. Pkg. Qty.
	RMER1BL	Black resin thermal transfer ribbon. Use with terminal block markers.	1.10 (27.9)		
BEST *	RMEH4BL*	Black hybrid thermal transfer ribbon. Use with heat shrink, self-laminating, Turn-Tell®, tan polyimide labels, and vinyl cloth labels		300.0 (91.4)	
	RMER4BL*^	Black resin thermal transfer ribbon. Use with polyester labels, continuous vinyl tape, marker plates, and raised panel labels.	4.25		
	RMER4BL-A	Black resin thermal transfer ribbon. Use with high-temperature marker plates.	(108.0)		
	RMER4BL-C	Black resin thermal transfer ribbon. Use with fluid-resistant heat shrink labels and white polyimide labels.			



#### StrongHold™ Electrical Tape

StrongHold ST35 and ST43 Series Professional Grade PVC Electrical Tape is a 0.18 mm (7 mil) pressure sensitive vinyl electrical tape that applies easily and provides a high level of performance over a range of temperatures. The Professional series product is flame retardant and resistant to sun, water, oil, acids, alkalies, corrosive chemicals, cold and ultraviolet rays. It is suitable as a primary insulation when used for splicing up 600 Volts and can be used as a protective outer jacket over splices in low temperature applications. StrongHold electrical tape meets ASTM D-3005, Type 1; EN 60454-3-1, Type 11; UL 510, CSA C 22.2 No 197; Meets 2000/53/EC and RoHS 2011/65/EU directives.

	Stronghold Part Numbers	Case Quantity	Min. Order Qty.	Color
	ST35-075-66BU			Blue
w	ST35-075-66BR			Brown
RAD	ST35-075-66GY			Gray
PROFESSIONAL GRADE	ST35-075-66GR		20	Green
SION	ST35-075-66OR	20		Orange
OFES	ST35-075-66RD			Red
PR	ST35-075-66VI			Violet
	ST35-075-66WH			White
	ST35-075-66YL			Yellow
	ST43-075-66BK	100		Black



<sup>\*</sup>For 2.5 in. wide ribbons, replace 4 in part number with 2

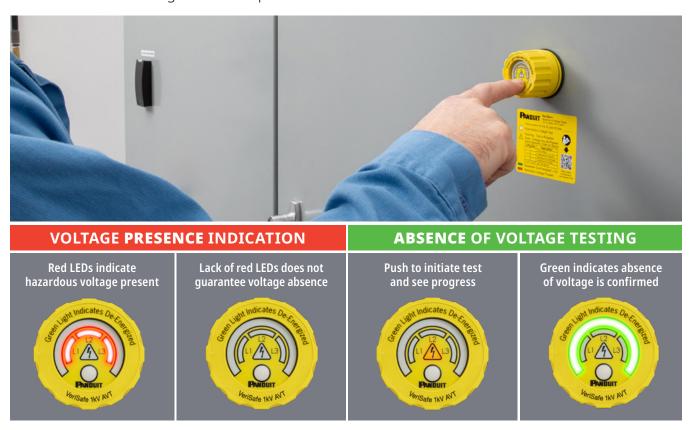
<sup>^</sup>Other colors available, change "BL" to Black, "BU" for Blue, "RD" for Red, or "WH" for White

# VeriSafe™ Absence of Voltage Testers



#### The Safe Way to Verify the Absence of Voltage.

The VeriSafe Absence of Voltage Testers simplify the voltage testing process. With the push of a button, workers can quickly determine voltage status and see an active indication when the absence of voltage is confirmed. This provides a new and innovative way to safely, reliably, and efficiently test for the absence of voltage without exposure to electrical hazards.



#### WHAT'S INCLUDED



## **VeriSafe Absence of Voltage Tester Part Numbers**

Part Number	Description
VS-AVT-C02-L03	VeriSafe 600V Absence of Voltage Tester with 2 ft. system cable, 3 ft. sensor leads
VS-AVT-C08-L10	VeriSafe 600V Absence of Voltage Tester with 8 ft. system cable, 10 ft. sensor leads
VS2-AVT-1PB-XY*  Single-phase VeriSafe 1kV AVT isolation module, 10 ft. (3m) sensor leads, single-phase battery-powered indicator module and an industrial lithium battery	
VS2-AVT-1PF-XY*	Single-phase VeriSafe 1kV AVT isolation module, 10 ft. (3m) sensor leads and a single-phase battery-free indicator module
VS2-AVT-3PB-XY*	Three-phase VeriSafe 1kV AVT isolation module, 10 ft. (3m) sensor leads, single-phase battery-powered indicator module and an industrial lithium battery
VS2-AVT-3PF-XY*	Three-phase VeriSafe 1kV AVT isolation module, 10 ft. (3m) sensor leads and a single-phase battery-free indicator module





 $<sup>{\</sup>rm *Replace}~XY~with~02~for~2~ft.~(0.6m)~system~cable,~08~for~8~ft.~(2.4mm)~system~cable,~16~for~16~ft.~(4.8m)~system~cable.$ 

ACCESSORIES	
VS2-CABLE-02	VeriSafe 1kV AVT Replacement Cable, 2 ft. (0.6m), for use with VeriSafe 1kV AVTs only
VS2-CABLE-04	VeriSafe 1kV AVT Replacement Cable, 4 ft. (1.2m), for use with VeriSafe 1kV AVTs only
VS2-CABLE-08	VeriSafe 1kV AVT Replacement Cable, 8 ft. (2.4m), for use with VeriSafe 1kV AVTs only
VS2-CABLE-16	VeriSafe 1kV AVT Replacement Cable, 16 ft. (4.8m), for use with VeriSafe 1kV AVTs only
VS2-CABLE-20	VeriSafe 1kV AVT Replacement Cable, 20 ft. (6.0m), for use with VeriSafe 1kV AVTs only
VS2-CABLE-30*	VeriSafe 1kV AVT Replacement Cable, 30 ft. (9.1m), for use with VeriSafe 1kV AVTs only
VS2-NET	VeriSafe 1kV Network Module, Compatible with VeriSafe 1kV AVT
VS2-AVT-1IB	VeriSafe 1kV AVT single-phase battery indicator module
VS2-AVT-1IF	VeriSafe 1kV AVT single-phase battery free indicator module
VS2-AVT-3IB	VeriSafe 1kV AVT three-phase battery indicator module
VS2-AVT-3IF	VeriSafe 1kV AVT three-phase battery free indicator module



#### **REPLACEMENT PARTS**

VS2-AVT-1P-ISO	VeriSafe 1kV AVT single-phase/DC Isolation Module replacement
VS2-AVT-3P-ISO	VeriSafe 1kV AVT three-phase Isolation Module replacement

## **VeriSafe Insulation Piercing Connectors**

- The VeriSafe Insulation Piercing Connector provides a fast, secure, and reliable way to terminate AVT sensor leads.
- The compact connector design accommodates up to two taps in a single housing that fully insulates both connections.
- The patent pending connector allows taps to be made without compromising the integrity of conductors and includes integrated strain relief.
- Installation is fast and easy without the need to strip wires.
- Ideal for new and retrofit applications, connections can be made without modifying existing conductor runs.

	Part Number	Description
BEST SELLER *	VS-CKP14-6	VeriSafe Insulation Piercing Connection Kit for Tapping 14 to 6 AWG conductors. Kit includes 3 connectors for installment of 1 AVT
	VS-CKP4-000	VeriSafe Insulation Connection Kit for Tapping 4 to 3/0 AWG conductors.  Kit includes 3 connectors for installment of 1 AVT
		VeriSafe Insulation Piercing Connection Kit for Tapping AWG 4/0 to 500MCM copper conductors. Rated for 1KV installations. Kit includes 3 connectors for installation of 1 AVT



<sup>\*</sup>Longer length cables available. Replace 30 with 50 for 50 ft. Available in 50 ft. increments up to 500 ft.

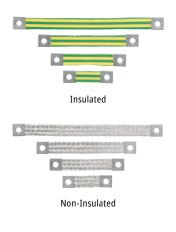
## StructuredGround™ Flat Braided Bonding Straps



StructuredGround Flat Braided Bonding Straps are used to electrically bond enclosure doors, subpanels, motors, and machines in most applications for safety and ESD (Electrostatic Discharge). The flat ferrule design of this bonding component helps to reduce the effects of EMI because it passes high-frequency noise more effectively than round stranded-type cables.

In applications where motion or vibration is a concern, these straps resist breaking and cracking of individual strands that can degrade the effectiveness of the bond. They are constructed of #4 AWG tin-plated copper with a minimum strap width of 1 in. and can be terminated with a seamless ferrule that maintains the flat braided shape across its entire length.

Part Number	Description	Std. Pkg. Qty.
BS100445	Braided bonding strap, one-hole, insulated, 4.00 in. L x 1.06 in. W (101.6mm x 27.0mm)	
BS100645	Braided bonding strap, one-hole, insulated, 6.00 in. L x 1.06 in. W (152.4mm x 27.0mm)	
BS100845	Braided bonding strap, one-hole, insulated, 8.00 in. L x 1.06 in. W (203.2mm x 27.0mm)	
BS101245	Braided bonding strap, one-hole, insulated, 12.00 in. L x 1.06 in. W (304.8mm x 27.0mm)	1
BS100645U	Braided bonding strap, one-hole, non-insulated, 6.00 in. L x 1.06 in. W (152.4mm x 27.0mm)	
BS100845U	Braided bonding strap, one-hole, non-insulated, 8.00 in. L x 1.06 in. W (203.2mm x 27.0mm)	
BS101245U	Braided bonding strap, one-hole, non-insulated, 12.00 in. L x 1.06 in. W (304.8mm x 27.0mm)	



Representative list only. Please visit panduit.com for full offering.

# StructuredGround Universal Ground Bar System



The StructuredGround Universal Ground Bar System (UGB) is precision machined from electrolytic copper and tin plated to inhibit corrosion and offers multiple termination methods and mounting options, making it ideal for any control panel or enclosure application. The UGB enables the end user to choose the method in which to terminate conductors with connectors of their choice or simply cut and strip the wires. The UGB system will help reduce the types of ground bars that are needed to meet the various applications and customer requirements. The UGB is UL 467 Listed and CSA 22.2 Certified for grounding and bonding an equipment conductor up to 2/0 AWG; meets UL 508A requirements.

	Part Number	Description	Std. Pkg. Qty.
BEST SELLER *	UGB2/0-414-6	Universal ground bar accepts #14 – 4 AWG wire in 6 wire ports; add up to a 2/0 AWG main equipment grounding conductor with a compression or mechanical connector; 4.92 in. L x 0.62 in. W x 0.48 in. H (125mm x 15.7mm x 12.2mm)	
BEST SELLER *	UGB2/0-414-12	Universal ground bar accepts #14 – 4 AWG wire in 12 wire ports; add up to a 2/0 AWG main equipment grounding conductor with a compression or mechanical connector; 8.28 in. L x 0.62 in. W x 0.48 in. H (210.3mm x 15.7mm x 12.2mm)	
BEST SELLER *	UGB2/0-414-18	Universal ground bar accepts #14 – 4 AWG wire in 18 wire ports; add up to a 2/0 AWG main equipment grounding conductor with a compression or mechanical connector; 11.64 in. L x 0.62 in. W x 0.48 in. H (295.7mm x 15.7mm x 12.2mm)	1
BEST SELLER *	UGB-IN-SO	Universal ground bar isolation stand-offs; includes two stand-offs and hardware; 1.57 in. L x 0.59 in. W x 0.98 in. H ( $40 \text{mm} \times 15.0 \text{mm} \times 25.0 \text{mm}$ )	
BEST SELLER *	UGB-B-SO	Universal ground bar bonding stand-offs; includes two tin-plated copper stand-offs and hardware; 2.34 in. L x 0.63 in. W x 0.75 in. H (59.3mm x 15.9mm x 19.1mm)	



# **Power Circuit Wiring Components**



The mechanical lugs are made from high conductivity electrolytic copper. UL listed for use in the U.S. and Canada.

Part Number	Description	Std. Pkg. Qty.
CXS125-14-Q	One-hole, copper, single barrel, straight fixed tongue lug, #4 – 1/0 AWG, 1/4 in. (6.4mm) stud hole	25 pcs.
CXS35-36-C	One-hole, copper, single barrel, straight fixed tongue lug, #14 – #6 AWG, 3/16 in. (4.8mm) stud hole	100 pcs.



Representative list only. Please visit panduit.com for full offering.

#### **Narrow Tongue Lugs**

The narrow tongue tin-plated copper compression lug features color-coded barrels with die index numbers and a long barrel design that maximizes crimps while providing excellent wire pull-out strength in tight spaces.

Part Number	Description	Std. Pkg. Qty.
LCAXN1/0-14-X	Copper Compression Lug, 1 Hole, Flex, 1/0 AWG, Narrow Tongue, 1/4 in. (6.4mm) Stud	
LCAXN1/0-38-X	Copper Compression Lug, 1 Hole, Flex, 1/0 AWG, Narrow Tongue, 3/8 in. (9.5mm) Stud	
LCAXN2/0-14-X	Copper Compression Lug, 1 Hole, Flex, 2/0 AWG, Narrow Tongue, 1/4 in. (6.4mm) Stud	
LCAXN2/0-38-X	Copper Compression Lug, 1 Hole, Flex, 2/0 AWG, Narrow Tongue, 3/8 in. (9.5mm) Stud	10 D
LCAXN250-38-X	Copper Compression Lug, 1 Hole, Flex, 250 kcmil, Narrow Tongue, 3/8 in. (9.5mm) Stud	10 Pcs
LCAXN3/0-12-X	Copper Compression Lug, 1 Hole, Flex, 3/0 AWG, Narrow Tongue, 1/2 in. (12.7mm) Stud	
LCAXN3/0-14-X	Copper Compression Lug, 1 Hole, Flex, 3/0 AWG, Narrow Tongue, 1/4 in. (6.4mm) Stud	
LCAXN3/0-38-X	Copper Compression Lug, 1 Hole, Flex, 3/0 AWG, Narrow Tongue, 3/8 in. (9.5mm) Stud	
LCAXN300-12-6	Copper Compression Lug, 1 Hole, Flex, 300 kcmil, Narrow Tongue, 1/2 in. (12.7mm) Stud	
LCAXN350-12-6	Copper Compression Lug, 1 Hole, Flex, 350 kcmil, Narrow Tongue, 1/2 in. (12.7mm) Stud	6 Pcs
LCAXN350-38-6	Copper Compression Lug, 1 Hole, Flex, 350 kcmil, Narrow Tongue, 3/8 in. (9.5mm) Stud	
LCAXN4/0-12-X	Copper Compression Lug, 1 Hole, Flex, 4/0 AWG, Narrow Tongue, 1/2 in. (12.7mm) Stud	10 Pcs
LCAXN500-12-6	Copper Compression Lug, 1 Hole, Flex, 500 kcmil, Narrow Tongue, 1/2 in. (12.7mm) Stud	6.5
LCAXN500-38-6	Copper Compression Lug, 1 Hole, Flex, 500 kcmil, Narrow Tongue, 3/8 in. (9.5mm) Stud	6 Pcs
LCDXN2-14A-E	Copper Compression Lug, 2 Hole, #2 AWG, Narrow Tongue, 1/4 (6.4mm) Stud	25 Pcs
LCDXN350-38D-6	Copper Compression Lug, 2 Hole, 350 kcmil, Narrow Tongue, 3/8 (9.5mm) Stud	6 Pcs
LCDXN4/0-38D-X	Copper Compression Lug, 2 Hole, 4/0 AWG, Narrow Tongue, 3/8 (9.5mm) Stud	10 Pcs
LCDXN500-12-6	Copper Compression Lug, 2 Hole, 500 kcmil, Narrow Tongue, 1/2 (12.7mm) stud	6 Pcs
LCDXN750-12-3	Copper Compression Lug, 2 Hole, 777.7 kcmil, Narrow Tongue, 1/2 (12.7mm) Stud	
LCDXN750-38D-3	Copper Compression Lug, 2 Hole, 777.7 kcmil, Narrow Tongue, 3/8 (9.5mm) Stud	3 Pcs



#### **Armored Cable Grounding Kits**

The armored cable grounding kit provides a secure bond to the armor sheath on indoor and indoor/outdoor fiber optic cables at both cassette and enclosure ends.

Part Number	Description	Std. Pkg. Qty.
ACG24K	#6 AWG (16mm²) jumper for armored cable diameter up to 0.84 in. (21.3mm); 24 in. (609.6mm) length; factory terminated on one end with LCC6 two-hole copper compression lug and the other end with grounding terminal; provided with two each #12-24 and M6 thread-forming screws and a Black polypropylene terminal cover	
ACG24K-500	#6 AWG (16mm²) jumper for armored cable diameter 0.85 in. (21.3mm) to 1.03 in. (26.2mm); 24 in. (609.6mm) length; factory terminated on one end with LCC6 two-hole copper compression lug and the other end with grounding terminal; provided with two each #12-24 and M6 thread-forming screws and a Black polypropylene terminal cover	1
ACGK	Armored cable grounding kit with one grounding terminal for #6 AWG and one #10 mechanical clamp, 9/16 in. – 1-1/16 in. diameter range	
ACG24KX-500	#6 AWG (16mm²) jumper for armored cable diameter 0.94 in. (23.9mm) to 1.5 in. (38.1mm); 24 in. (609.6mm) length; factory terminated on one end with LCC6 two-hole copper compression lug and the other end with grounding terminal; provided with two each #12-24 and M6 thread-forming screws and a Black polypropylene terminal cover	



Representative list only. Please visit panduit.com for full offering.

#### **Adhesive Lined Grommet Edging**



Grommet edging protects and prevents wires and cables from chafing against sharp edges of panel walls and knockouts. Pressure sensitive adhesive provides an easy, clean, and secure application where additional holding strength is required. Use the slotted grommet edging to line irregularly shaped and round panel holes. Use the solid product for straight runs. The adhesive lined grommet edging has a shelf life of 3 years.

	Part Number	Description	Std. Pkg. Qty.
BEST SELLER *	GEE62F-A-C	Slotted grommet edging with adhesive, 0.036 in. – 0.062 in. panel thickness, polyethylene, Natural. 100 feet per roll	
BEST SELLER *	GEE99F-A-C	Slotted grommet edging with adhesive, 0.062 in. – 0.099 in. panel thickness, polyethylene, Natural. 100 feet per roll	
BEST SELLER *	GEE144F-A-C	Slotted grommet edging with adhesive, 0.099 in. – 0.144 in. panel thickness, polyethylene, Natural. 100 feet per roll	1 Dall
	GES62F-A-C	Solid grommet edging with adhesive (use on straight edges only), 0.036 in. – 0.062 in. panel thickness, polyethylene, Natural. 100 feet per roll	1 Roll
	GES99F-A-C	Solid grommet edging with adhesive (use on straight edges only), 0.062 in. – 0.099 in. panel thickness, polyethylene, Natural. 100 feet per roll	
	GES144F-A-C	Solid grommet edging with adhesive (use on straight edges only), 0.099 in. – 0.144 in. panel thickness, polyethylene, Natural. 100 feet per roll	



# Spiral Wrap

Spiral wrap products provide abrasion protection for wire, cable, hoses, and tubing. The spiral wrap harnesses multiple cables into a single manageable bundle and allows for breakouts of single/multiple cables. Spiral wrap is available in several different colors to allow for easy identification of specific cable bundles. Multiple material options are available to allow the user to select the material that best suits their application needs.

	Part Number	Description	Std. Pkg. Qty.
BEST SELLER *	T25F-C	Spiral wrap, offers abrasion protection for wires, cables, hoses and tubing, 0.25 in. (6.3mm) x 100 ft., polyethylene, Natural. 100 feet per roll	
	T25N-C	Spiral Wrap, offers abrasion protection for wires, cables, hoses and tubing, .25 in. (6.3mm) x 100 ft., nylon 6.6, Natural, 100 feet per roll	
BEST SELLER *	T25T-L	Spiral wrap, offers abrasion protection for wires, cables, hoses, and tubing, 0.25 in. (6.4mm) x 50 ft., TFE, Natural, 50 feet per roll	
BEST SELLER	T38F-C	Spiral wrap, offers abrasion protection for wires, cables, hoses and tubing, 0.38 in. (9.7mm) x 100 ft., polyethylene, Natural. 100 feet per roll	
	T38N-C	Spiral Wrap, offers abrasion protection for wires, cables, hoses and tubing, .38 in. (9.7mm) x 100 ft., nylon 6.6, Natural, 100 feet per roll	1 Dall
	T38T-L	Spiral Wrap, offers abrasion protection for wires, cables, hoses and tubing, .38 in. (9.7mm) x 50 ft., TFE, Natural, 50 feet per roll	1 Roll
BEST SELLER *	T50F-C	Spiral wrap, offers abrasion protection for wires, cables, hoses and tubing, 0.50 in. (12.7mm) x 100 ft., polyethylene, Natural. 100 feet per roll	
	T50FR-C20Y	Spiral Wrap, offers abrasion protection for wires, cables, hoses and tubing, 0.50 in. (12.7mm) x 100 ft., flame retardant polyethylene, Black. 100 feet per roll	
	T100F-C	Spiral wrap, offers abrasion protection for wires, cables, hoses and tubing, 1.00 in. (25.4mm) x 100 ft., polyethylene, Natural. 100 feet per roll	
	T100FR-C20Y	Spiral Wrap, offers abrasion protection for wires, cables, hoses and tubing, 1 in. (25.4mm) x 100 ft., flame retardant polyethylene, Black. 100 feet per roll	



 $Representative\ list\ only.\ Please\ visit\ {\color{red} {\bf panduit.com}}\ for\ full\ offering.$ 

#### Pan-Wrap™ Split Harness Wrap



Pan-Wrap Split Harness Wrap is an abrasion protection product that incorporates an innovative design to maintain uniform bundle protection in dynamic applications. The unique wall design provides for easy cable breakouts and the patented slot pattern provides improved flexibility and abrasion protection properties. The large overlap accommodates a wide range of bundle diameters. The Pan-Wrap Installation Tool is effective in considerably reducing the time required to install a cable bundle within the Pan-Wrap Split Harness Wrap.

Part Number	Description	Std. Pkg. Qty.
PW50F-T20	Pan-Wrap Split Harness Wrap, 0.50 in. (12.7mm), 200 ft. (61m) per reel, polyethylene, Black	
PW75F-C20	Pan-Wrap Split Harness Wrap, 0.75 in. (19.1mm), 100 ft. (30.5m) per reel, polyethylene, Black	
PW75FR-C20Y	Pan-Wrap Split Harness Wrap, 0.75 in. (19.1mm), 100 ft. (30.5m) per reel, flame retardant polyethylene, Black	
PW100F-C20	Pan-Wrap Split Harness Wrap Split, 1 in. (25.4mm), 100 ft. (30.5m) per reel, polyethylene, Black	
PW100FR-C20Y	Pan-Wrap Split Harness Wrap, 1 in. (25.4mm), 100 ft. (30.5m) per reel, flame retardant polyethylene, Black	1 Roll
PW150FR-L20Y	Pan-Wrap Split Harness Wrap, 1.5 in. (38.1mm), 50 ft. (15m) per reel, flame retardant polyethylene, Black	
PWT50	Pan-Wrap Installation Tool; 0.50 in. (12.7mm)	
PWT75	Pan-Wrap Installation Tool; 0.75 in. (19.1mm)	
PWT100	Pan-Wrap Installation Tool; 1 in. (25.4mm)	
PWT150	Pan-Wrap Installation Tool; 1.5 in. (38.1mm)	



#### **Corrugated Loom Tubing**

Corrugated Loom Tubing is a cost-effective solution to provide abrasion protection and light crush and impact resistance for cables. The lengthwise slit makes it easy to install a bundle of wires or a pre-assembled harness assembly. The corrugated material is designed to be flexible and allow for navigating around tighter corners. The corrugated tubing does not have any insulating properties and is only suitable for indoor use only.

	Part Number	Description	Std. Pkg. Qty.
BEST SELLER *	CLT25F-C20	The corrugated loom tubing slit wall measures .25 in. (6.4mm) x 100 ft. (30.5m). It is black and made of polyethylene	
BEST SELLER *	CLT50F-C20	The corrugated loom tubing slit wall measures .50 in. (12.7mm) x 100 ft. (30.5m).  It is black and made of polyethylene	1 Roll
BEST SELLER *	CLT75F-C20	The corrugated loom tubing slit wall measures .75 in. (19.1mm) x 100 ft. (30.5m).  It is black and made of polyethylene	I KOII
BEST SELLER *	CLT100F-C20	The corrugated loom tubing slit wall measures 1 in. (25.4mm) x 100 ft. (30.5m). It is black and made of polyethylene	



## **Arc Flash Super-Tack Polyester Labels**



Panduit Arc Flash Labeling Solutions are designed to comply with the latest regulations including the latest NFPA 70E Standard.

Print using Easy-Mark Plus Labeling Software and DP4300M thermal transfer desktop printer shown on pages 18-19.

Part Number	Description	Std. Pkg. Qty.
C200X400A51	Die cut arc flash warning label, 4.00 in. x 2.00 in. (101.6mm x 50.8mm), warning header, polyester adhesive, Orange header and Black/White	
C200X400YZ1	Die cut arc flash danger label, 4.00 in. x 2.00 in. (101.6mm x 50.8mm), danger header, polyester adhesive, Red header and Black/White	
C400X400A51	Die cut arc flash warning label, 4.00 in. x 4.00 in. (101.6mm x 101.6mm), warning header, polyester adhesive, Orange header and Black/White	
C400X400YZ1	Die cut arc flash danger label, 4.00 in. x 4.00 in. (101.6mm x 101.6mm), danger header, polyester adhesive, Red header and Black/White	1 Roll
C400X600A51	Die cut arc flash warning label, 4.00 in. x 6.00 in. (101.6mm x 152.4mm), warning header, polyester adhesive, Orange header and Black/White	
C400X600Y81	Die-cut safety label, 4.00 in. x 6.00 in. (101.6mm x 152.4mm), polyester adhesive, Yellow	
C400X600YZ1	Die-cut arc flash danger label, 4.00 in. x 6.00 in. (101.6mm x 152.4mm), polyester adhesive, Red/White danger header	

Representative list only. Please visit panduit.com for full offering.

# **Network Security Block-Out and Lock-In Devices**

Deter unauthorized network access and physical system changes.

Part Number	Description	Color	Std. Pkg. Qty.
BLOCK-OUT DEVICES			
PSL-DCJB	Ten RJ45 jack module block-out devices and one removal tool		
PSL-LCAB	Ten LC jack module block-out devices and one removal tool	Dod	1
PSL-USBA	Package of five USB Type A block-out devices and one removal tool	Red	
PSL-USBB	Package of ten USB Type B block-out devices and one removal tool		
LOCK-IN DEVICES			
PSL-DCPLE	Ten RJ45 plug lock-in devices, one installation/removal tool	Red White	
PSL-DCPLRE	Ten recessed RJ45 plug lock-in devices, one installation/removal tool		1
FLCCLIW-X	LC duplex lock-in clip and removal tool		





#### Data Access Port Rated Type (UL, CSA, NEMA) 4, 4X, and 12, IP65, IP66

The Data Access Port provides data port and electrical outlet access to equipment without the safety hazards of opening the panel. The access port provides availability to log in to the network at the work site and can be used for reprogramming internal controllers. The circular design allows for data access ports to be installed effortlessly by using a standard panel punch. The modular design allows for RJ45 jacks, circuit breakers, USB, and other modular connectors to be interchanged at any time, allowing maximum design flexibility. Snap on mounting plate covers mounting screws and prevents tampering or unauthorized removal of access port from the control panel. Data access port has both a quarter turn lock and provisions for a padlock, both of which provide exceptional security. Versions are configured to accommodate any specification, including custom marking. In addition to the Simplex and GFCI outlets, options are available to incorporate standard 45mm European outlets.

**Description** 

4 INCH DATA ACCESS PORT	
DAP4BC-G0	Data Access Port, 4 in. Base, GFCI Outlet
DAP4BB-G0	Data Access Port, 4 in. Base w/ Black Cover, GFCI Outlet
DAP4BC-X0	Data Access Port, 4 in. Base w/ International Faceplate insert
DAP4BC-G0-5U	Data Access Port, 4 in. Base, GFCI Outlet, Category 5e Coupler, USB Coupler
DAP4BC-G0-5	Data Access Port, 4 in. Base, GFCI Outlet, Category 5e Coupler
DAP4BC-G3-5	Data Access Port, 4 in. Base, GFCI Outlet, Category 5e Coupler, 3 Amp Breaker
DAP4BC-G0-4	Data Access Port, 4 in. Base, GFCI Outlet, Category 5e Shielded Coupler
DAP4BC-G3-4	Data Access Port, 4 in. Base, GFCI Outlet, Category 5e Shielded Coupler, 3 Amp Breaker
DAP4BC-G0-6	Data Access Port, 4 in. Base, GFCI Outlet, Category 6 Coupler
DAP4BC-G3-6	Data Access Port, 4 in. Base, GFCI Outlet, Category 6 Coupler, 3 Amp Breaker



#### **3 INCH DATA ACCESS PORT**

**Part Number** 

DAP3BC-00	Data Access Port, 3 in. Base, 4 Blank Data Modules, No Power
DAP3BC-00-55	Data Access Port, 3 in. Base, Two Category 5e Couplers
DAP3BC-S0	Data Access Port, 3 in. Base, Simplex Outlet
DAP3BB-S0	Data Access Port, 3 in. Base w/ Black Cover, Simplex Outlet
DAP3BC-S0-55	Data Access Port, 3 in. Base, Simplex Outlet, Two Category 5e Couplers
DAP3BC-S0-5U	Data Access Port, 3 in. Base, Simplex Outlet, Category 5e Coupler, USB Coupler
DAP3BC-S0-5	Data Access Port, 3 in. Base, Simplex Outlet, Category 5e Coupler
DAP3BC-S3-5	Data Access Port, 3 in. Base, Simplex Outlet, 3 Amp Breaker, Category 5e Coupler
DAP3BC-S0-4	Data Access Port, 3 in. Base, Simplex Outlet, Category 5e Shielded Coupler
DAP3BC-S3-4	Data Access Port, 3 in. Base, Simplex Outlet, 3 Amp Circuit Breaker, Category 5e Shielded Coupler
DAP3BC-S0-6	Data Access Port, 3 in. Base, Simplex Outlet, Category 6 Coupler
DAP3BC-S3-6	Data Access Port, 3 in. Base, Simplex Outlet, 3 Amp Breaker, Category 6 Coupler



#### **30 MILLIMETER BULKHEADS**

IAEBHUSBAA	30mm IndustrialNet USB industrial bulkhead connector with protective cover
IAEBH5E	30mm IndustrialNet Category 5e, 8-position, 8-wire industrial bulkhead connector with protective cover
IAEBHC5E	30mm IndustrialNet Category 5e, 8-position, 8-wire industrial black bulkhead coupler with protective cover
IAEBH5ES	30mm Category 5e, 8-position, 8-wire shielded industrial connector with protective cover
IAEBH6	30mm IndustrialNet Category 6, RJ45, 8-position, 8-wire industrial bulkhead connector with protective cover
IAEBHC6	30mm IndustrialNet Category 6, RJ45, 8-position, 8-wire black industrial bulkhead coupler with protective cover
IAEBH6S	30mm IndustrialNet Category 6, RJ45, 8-position, 8-wire shielded black industrial bulkhead connector with protective cover



# The Connected Control Panel

An Ethernet enabled control panel supports the increasing number of Ethernet nodes on the plant floor and allows the business to measure productivity in real-time, resulting in improved efficiencies, increased productivity and reduced costs.

## **Industrial Network Uninterruptible Power Supply (UPS)**

The Panduit Industrial Network UPS uses ultracapacitors instead of batteries, providing uninterrupted power and decreased risk of downtime for critical industrial applications including managed network switches, micro PLCs, and HMIs. The no-battery design is maintenance-free, delivering 2X better ROI and 50% – 70% lower cost of ownership than a battery-based UPS. Remote management via Ethernet connectivity with SNMP v1/v2c/v3 capability and standard web browser interface reduces operation expenses.

Part Number	Description	Std. Pkg. Qty.
UPS00100DC	Uninterruptible Power Supply (UPS), 100 Watt; no-battery, maintenance-free with remote management; 24 – 28 VDC in/out, wide operating temperature range: -40°C to 60°C,  DIN rail mount. UL Listed and CSA Certified	1
UPS003LSM	UPS load sense module. Optional accessory for use in dual, redundant power supply configurations to monitor load on primary supply	1



## IndustrialNet™ DIN Rail Mount Patching Solutions

IndustrialNet 8-port DIN Rail Mount Patching Solutions conserve precious real estate by consolidating all patching (fiber and copper) onto the DIN rails of a zone enclosure or control panel. These patching solutions are designed to "fit" with standard industrial switches and promote a structured cabling environment in the industrial network. IndustrialNet 8-port DIN Rail Mount Patching Solutions allow customers to easily deploy copper and fiber connectivity and provide improved network performance and flexibility through the creation of fiber and copper permanent links in the same modular DIN footprint.

Part Number	Description	Std. Pkg. Qty.
CDPP8RG	8-port copper patch panel, DIN rail mount; includes screws to attach faceplate, Ultimate ID® Labels and Clear Covers; can also mount to other surfaces using mounting holes in latches	
CDPP8RG-S	IndustrialNet, 8-port DIN Rail mount Shielded Patch Panel. Includes Ultimate ID labels and label covers	
FDPPSIG	Fiber optic patch panel for terminated distribution style cabling; mounts to standard DIN rail and locks in place with adjustable latches; includes a PG21 cable entry gland with two inserts for use with a range of fiber cables. For use with FAPS.	1
FDPPEIG	Fiber optic patch panel for terminated distribution style cabling; mounts to standard DIN rail and locks in place with adjustable latches; includes a PG21 cable entry gland with two inserts for use with a range of fiber cables. For use with FAPS.	



#### Mini-Com® DIN Rail Mount Adapter

The DIN Rail Mount Adapter enables connection of active equipment in a zone enclosure or control panel. The adapter accepts a single module space Mini-Com Module allowing easy moves, adds or changes to a single connection, with no specialized tools required. Low profile, compact size enables high component density on valuable DIN rail real estate.

	Part Number	Description	Std. Pkg. Qty.
BEST SELLER *	CADIN1IG*	Mini-Com DIN Rail Mount Adapter mounts to standard 35mm DIN rail and accepts any single port Mini-Com Module, International Gray	
	CADIN1IG*-S	Mini-Com DIN Shielded Rail Mount Adapter mounts to standard 35mm DIN rail and accepts any single port Mini-Com Module, international gray.  Includes a label and label cover	1

<sup>\*</sup>For standard colors other than IG (International Gray), replace suffix with BL (Black). Port can be identified with PXE Mobile Printer. Please visit panduit.com for full offering.



# **IndustrialNet Copper Connectivity**

BEST SELLER \*

**BULKHEAD FACEPLATES** 

IAEFP1

IAEFP2-2G

IndustrialNet plugs, connectors, and adapters provide an ideal solution to support Industrial Ethernet connections to machines, devices and the rest of the plant network.

Part Number	Description	Std. Pkg. Qty.	
INDUSTRIAL M12	CONNECTORS		ISPS5E4
ISPS5E44MFA	Category 5e M12 D-code shielded field terminable connector, male		ISPS6A8
ISPS6A88MFA	Category 6A M12 X-code shielded field terminable connector, male		
ICAM12X90RJS	Category 6A M12 X-code shielded to RJ45 industrial adapter, 90° angle, panel mount	1	
ICAM12XRJS	Category 6A M12 X-code shielded to RJ45 industrial adapter, panel mount		. 6
ICAM12DRJS	Category 5e M12 D-code to RJ45 industrial adapter, panel mount		The same of the sa
INDUSTRIAL BULI	KHEAD RJ45 CONNECTOR WITH PROTECTIVE COVER		ICAM12X ICAM12
IAEBH6X	Category 6A Variant 1 IP67 rated RJ45 connector		ICAM12
IAEBH6XS	Category 6A Variant 1 IP67 rated RJ45 connector, shielded		
IAEBH6	Category 6 Variant 1 IP67 rated RJ45 connector		
IAEBH6S	Category 6 Variant 1 IP67 rated RJ45 connector, shielded	1	I I I I
IAEBH5E	Category 5e Variant 1 IP67 rated RJ45 connector		IAEBH
IAEBH5ES	Category 5e Variant 1 IP67 rated RJ45 connector, shielded		IAEBH
INDUSTRIAL BULI	KHEAD COUPLERS WITH PROTECTIVE COVER		IAEBH
IAEBHC6XS	Category 6 Variant 1 IP67 rated RJ45 coupler, shielded	1	
INDUSTRIAL SHIE	ELDED FIELD TERM PLUG		
FPS6X88MTG	IndustrialNet, Category 6A Shielded, Field Terminable RJ45 Plug		EDCCAOO
FPE6X88MTG	PROFINET, Category 5e Shielded Field Terminable RJ45 Plug	1	FPS6X88
INDUSTRIAL MIN	I-COM® COUPLER MODULE		
IAEBHUSBAA	USB 2.0 Variant 1 IP67 rated female A to female A coupler	1	

Vertical faceplate, accepts one IndustrialNet Bulkhead Connector

Double gang, vertical faceplate, accepts two IndustrialNet Bulkhead Connectors

IAEFP1

IAEFP2-2G

#### **Copper Patch Cords**

Patch cords are ideal for patching in panel building applications and are available in performance levels of Category 5e, 6 and 6A for UTP and shielded applications. The variety of cable colors and lengths meet individual length and color-coding requirements for greater system flexibility. Robust, 600 V-rated patch cords deliver reliability for panel or on-machine applications when space is shared with high voltage power cables in industrial environments.

Part Number	Description	Length ^	Color*	Std. Pkg. Qty.	
UNSHIELDED PAT	CH CORDS				
UTP28X^*	Category 6A performance, 28 AWG UTP CM/LSZH patch cord	8 (in.), 1,			PANDUIT"
UTP28SP^*	Category 6 performance, 28 AWG UTP CM/LSZH patch cord	3, 5, 7, 10, 15 ft.	Off White (blank),		RAPID
UTP6AX^*	Category 6A performance, TX6A™ 10Gig™ 24 AWG solid UTP patch cord	1, 3, 5, 7,	Black (BL),	1	
UTPSP^*Y	Category 6 performance, TX6™ 24 AWG UTP patch cord	10, 15 ft. Green	Blue (BU), Green (GR),	·	
UTPCH^*Y	Category 5e performance, Pan-Plug™ UTP 24 AWG UTP patch cord		Red (RD)		100
SHIELDED PATCH	CORDS				
STP28X^M*	Category 6A performance, 28 AWG F/UTP CM/LSZH patch cord		International		
STP6X^M*	Category 6A performance, TX6A 10Gig 26 AWG S/FTP shielded patch cord	0.2, 0.5 - 5 meters	Gray (IG), Black (BL), Blue (BU), Green (GR)	1	
INDUSTRIALNET	600 V PATCH CORDS				
ISTPH6X*MTL	Category 6A shielded, 600 V, 26 AWG SF/UTP, patch cord, TPE jacket	0.6, 1-5, 7,	Teal (TL),		
ISTPHCH*MTL	Category 5e shielded, 600 V, 24 AWG SF/UTP, patch cord, TPE jacket	10 meters	Black (BL)*	1	

IndustrialNet Copper Cable

IndustrialNet Copper Cable is for industrial and harsh environments and offered in various grades for field installation. Cable types are available in light-duty grades to connect the enterprise and industrial spaces, medium-duty grades for PLCs and various control devices and heavy-duty grades to withstand harsh environments or repetitive motion.

Part Number	Description		
ETHERNET/IP CATEG	ORY 6A/CATEGORY 7		
ISFCH6X04ATL-UG	Industrial, 600 V, 4-pair, 24/7 AWG Stranded, SF/UTP, CMR, Oil Res., UV Res., Teal, 1000 ft. Reel		
ISFCH6X04BTL-UG	Category 6A, 4-pair, 26/7 AWG, SF/UTP, CM/CMX, 600V, High Flex, Oil Res, UV Res, Abrasion Res, Weld Splatter Res, Teal	1000 ft./ 305m reel	
IURH6X04TL-UG	Category 6A, 4-pair, 23/1 AWG, U/UTP, CMR/CMX, 600V, Oil Res, UV Res, Teal		
ISX6X04ATL-LED	Category 6A, 4-pair, 24/7 AWG, S/FTP, PUR, High Flex, Oil Res, UV Res, Abrasion Res, Teal	1640 ft./ 500m reel	
PSM7004BU-KEM	Category 7, 4-pair, 23 AWG stranded, S/FTP, LSZH-FR, Oil and Fuel Res, UV Res, Marine and Harsh Environments, DNV and ABS certified, Blue	3280 ft./ 1000m reel	
ETHERNET/IP CATEG	ORY 5E		
ISFCH5C04ATL-XG	Category 5e, 4-pair, 24/7 AWG, SF/UTP, CM/CMX, 600V, High Flex, Oil Res, UV Res, Abrasion Res, Weld Splatter Res, Teal	1000 ft./ 305m reel	

Optional RJ45 plug lock-in devices offer a tamper resistant design that blocks unauthorized removal of critical connections, see page 26.



# **Copper Bulkhead Patch Cords**

Part Number	Description	Std. Pkg. Qty.
ISTP6X*MBL	IndustrialNet Copper Patch Cord, Category 6A, S/FTP, patch cord with plug caps, 10 meters. Black	1



# **Pre-Configured Network Zone Systems**

Part Number	Description	Preferred Configuration Drawing	TIA 1005 Location	M	I	С	E											
Z23C-S	24 in. x 36 in. Category 6 UTP, mild steel	PCD006	Cabling Subsystems 1 and 2														1	1
Z22C-S	24 in. x 24 in. Category 6 UTP, mild steel	PCD003			2	'	2											
Z23C-6	24 in. x 36 in. Category 6 UTP, stainless steel	PCD006		1		*	1											
Z22C-6	24 in. x 24 in. Category 6 UTP, stainless steel	5 5 FUNITS																



Z22C-S

#### **Industrial Distribution Frames**

		Preferred Configuration	TIA 1005				
Part Number	Description	Drawing	Location	M	I	C	E

#### 12U INDUSTRIAL DISTRIBUTION FRAME FOR TWO ACCESS OR TWO DISTRIBUTION SWITCHES

ZDF242430	Mild steel, two 48-port patch panels, fiber tray, fiber spools, back panels, 10 in. DIN Rail, 30 in. length of duct		Cabling	4	2	*	
ZDF242430-6	316 stainless steel, two 48-port patch panels, fiber tray, fiber spools, back panels, 10 in. DIN Rail, 30 in. length of duct	_	Subsystems 2 and 3	I	2		_



ZDF242430

#### 26U INDUSTRIAL DISTRIBUTION FRAME FOR TWO ACCESS AND UP TO THREE DISTRIBUTION SWITCHES

ZDF48-RA	Mild steel, two 48-port patch panels, fiber tray, fiber stools, back panels, 10 in. DIN Rail, 30 in. length of duct; two duplex power receptacles and four power cables	PCD001, PCD010, PCD012	Cabling Subsystems 2 and 3	1	2	*	
ZDF48-6RA	316 stainless steel, two 48-port patch panels, fiber tray, fiber spools, back panels, 10 in. DIN Rail, 30 in. length of duct; two duplex power receptacles and four power cables	_	Cabling Subsystem 1		2		_



ZDF48



Configure a customized network zone system to meet your needs using our CPQ Configuration Tool.

<sup>\*</sup>Available standard lengths: 1M-5M, 10M, 15M

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

panduit.com





