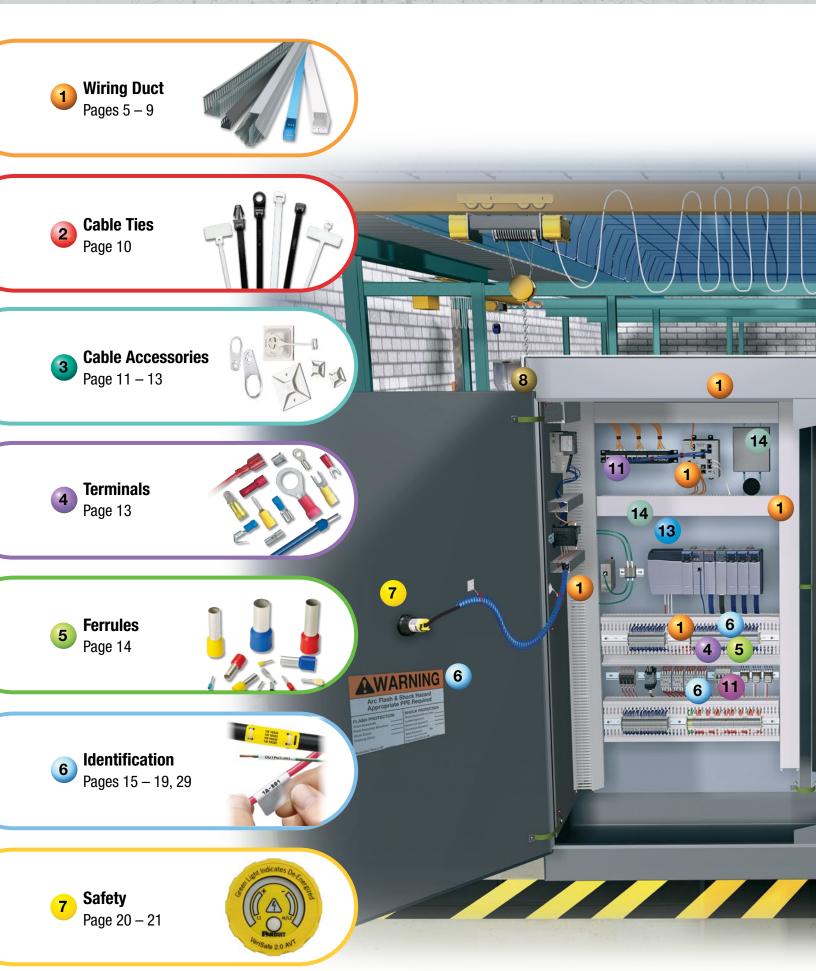
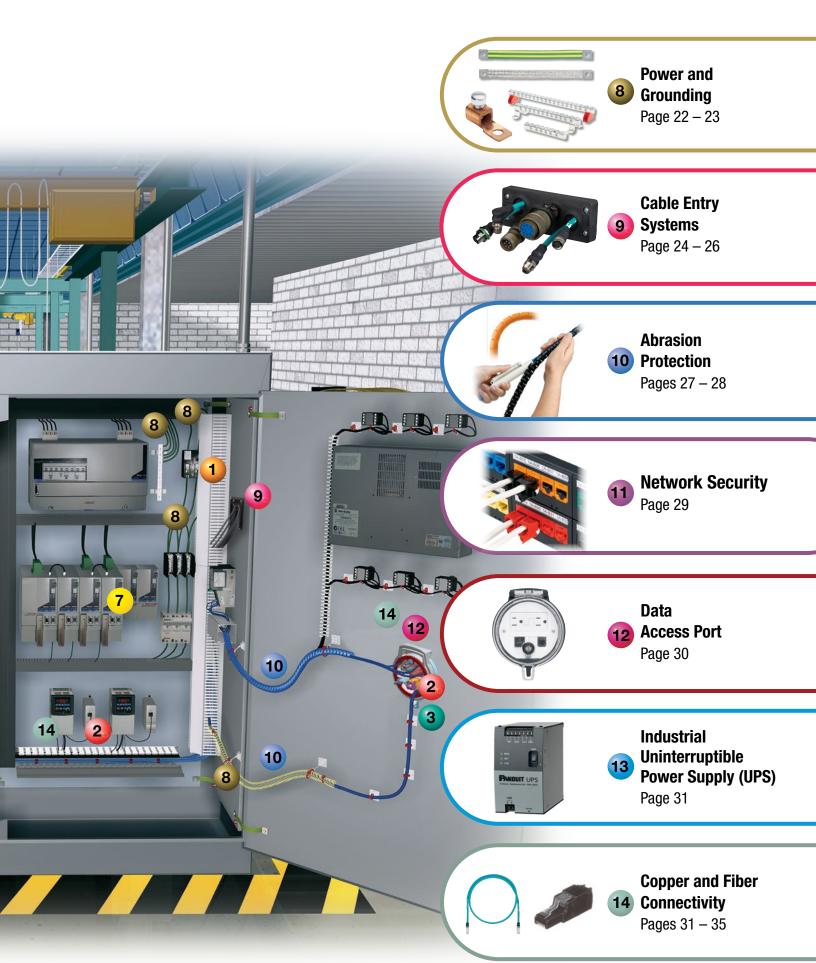




## **Innovative Products for Reliable Control Panel Performance**



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





## 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 20-30)

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 31-35)

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.

#### **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.





Conventional wiring duct panel layout

DIN rail wiring duct panel layout with 30% space savings

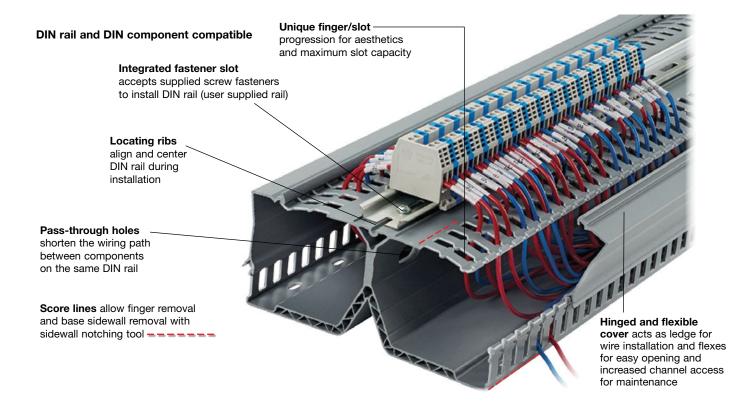


**DRD** 



Part Number	Description	Std. Pkg. Qty.
DRD22LG6	2" height PanelMax™ DIN Rail Wiring Duct with dual wiring channels. Base, covers, and DIN rail fasteners included. Length 6'.	6 ft
DRD33LG6	3" height PanelMax™ DIN Rail Wiring Duct with dual wiring channels. Base, covers, and DIN rail fasteners included. Length 6'	6 ft
DRD44LG6	4" height PanelMax™ DIN Rail Wiring Duct with dual wiring channels. Base, covers, and DIN rail fasteners included. Length 6'.	6 ft
DRDWR2-X	2" wire retainer for PanelMax™ DIN Rail Wiring Duct, Black. 10 per package.	10 pcs.
DRDWR3-X	3" wire retainer for PanelMax™ DIN Rail Wiring Duct, Black. 10 per package.	10 pcs.
DRDWR4-X	4" wire retainer for PanelMax™ DIN Rail Wiring Duct, Black. 10 per package.	10 pcs.

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



## **Space Optimization**

## Panduct® PanelMax™ Corner Wiring Duct **SN**® C €





CWD2LG6 C2LG6 CWD3LG6 CWD4LG6

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

Part numbers shown in LG (Light Gray); also available in WH (White).



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)	16 pcs.
CDCLP3	Quick mounting clip for installing CWD3 corner wiring duct.	#10 - 32 x 1/2" (user supplied)	16 pcs.
CDCLP4	Quick mounting clip for installing CWD4 corner wiring duct.	#10 - 32 x 1/2" (user supplied)	16 pcs.
<u>D4H6</u>	4" height solid divider wall for use with CWD2, CWD3, or CWD4 corner wiring duct.	Installs directly to PanelMax™ Corner Wiring Duct base	6 ft
SD2H6	2" height slotted divider wall for use with CWD2, CWD3, or CWD4 corner wiring duct.	Installs directly to PanelMax™ Corner Wiring Duct base	6 ft
SD3H6	3" height slotted divider wall for use with CWD2, CWD3, or CWD4 corner wiring duct.	Installs directly to PanelMax™ Corner Wiring Duct base	6 ft
SD4H6	4" height slotted divider wall for use with CWD2, CWD3, or CWD4 corner wiring duct.	Installs directly to PanelMax™ Corner Wiring Duct base	6 ft

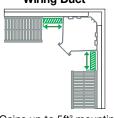
#### Examples of Space Savings Using 48" W x 24" D x 60" H Enclosure

#### Conventional Wiring Duct



Need for cover access moves conventional duct outward.

## PanelMax™ Corner Wiring Duct



Gains up to 5ft² mounting space per enclosure (over 72" height)

Description	Conventional	With PanelMax™ Corner Wiring Duct	Benefits
Sub-Panel Space Savings			
Usable sub-panel mounting area (assumes 60"H enclosure)	28.7 ft.²	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" x 24" (8 ft.²)	43.5" x 21.7" (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 contrained 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.

<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	MOQ
G2X2LG6EMI	2" x 2" PanelMax™ Shielded Wiring Duct; 6' length. Foil metal finish includes anti-oxidizing paste. Cover sold separately.	24 ft
G2X3LG6EMI	2" x 3" PanelMax™ Shielded Wiring Duct; 6' length. Foil metal finish includes anti-oxidizing paste. Cover sold separately.	24 ft
G2X4LG6EMI	2"x 4" PanelMax™ Shielded Wiring Duct; 6' length. Foil metal finish includes anti-oxidizing paste. Cover sold separately.	24 ft

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



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

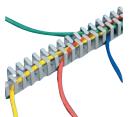


#### 





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	Description	Std. Pkg. Qty.
FL12X12LG-AV	Flexible Wiring Duct with high bond acrylic adhesive. 0.49" x 0.49" x 19.7" (12.5mm x 12.5mm x 500mm).	112
FL25X25LG-AV	Flexible Wiring Duct with high bond acrylic adhesive. 0.98" x 0.98" x 19.7" (25.0mm x 25.0mm x 500mm).	70
FL50X50LG-AV	Flexible Wiring Duct with high bond acrylic adhesive. 1.97" x 1.97" x 19.7" (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.



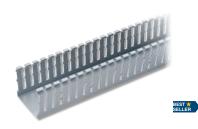
Part Number	Duct Siz	Size (W x H)*		Width	Cover Part	Std. Pkg.	Base. Ctn.	Cover Ctn.
	ln.	mm	ln.	mm	Number	Qty.	Qty.	Qty.
H1.5X3LG6	1.75 x 3.06	44.5 x 77.7			HC1.5LG6		120	
H2X4LG6	2.17 x 4.10	55.1 x 104.1	0.04	7.0	HC2LG6			100
H2X3LG6	2.17 x 3.06	55.1 x 77.7	0.31	7.9		6	60	120
H3X4LG6	3.25 x 4.10	82.6 x 104.1			HC3LG6			

"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.comuct and cover."

## 

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



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

## Panduct<sup>®</sup> Type G Wide Slot Wiring Duct \*\*Description\*\* \*\*Description\*\* \*\*Part of the content of the conte

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



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

#### **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.	1
DFCT	Hand-held duct finger cutting tool.	1
<b>DNT-100</b>	Hand-held sidewall notching tool.	1
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" width and up to 5" height. Full 78.74" (2 meter) measuring scale. Includes safety guarding.	1
TNR	Hand-held nylon rivet installation tool.	1

#### NEW!

#### Wire Basket Overhead Cable Tray Routing System c@lus

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 switchgear and other panel applications.







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

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

## **Productivity**

#### **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 (UL) us







BEST \*

BEST \*

BEST #

BEST \*

BEST ★

BEST \*

BEST ★ SELLER

BEST #

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





Description	Std. Pkg. Qty.
Dome-Top® barb ty cable tie, miniature cross section, 4.0 (102mm) length, nylon 6.6, natural, standard package.	100 pcs.
Dome-Top® barb ty cable tie, miniature cross section, 6.3 (160mm) length, nylon 6.6, natural, bulk package.	1000 pcs.
Dome-Top® barb ty cable tie, intermediate cross section, 8.0 (203mm) length, weather resistant nylon 6.6, black, bulk package.	1000 pcs.
Dome-Top® barb ty cable tie, miniature cross section, 7.9 (201mm) length, nylon 6.6, natural, bulk package.	1000 pcs.
Dome-Top® barb ty cable tie, standard cross section, 8.0 (203mm) length, nylon 6.6, natural, standard package.	100 pcs.
Dome-Top® barb ty cable tie, intermediate cross section, 11.3 (287mm) length, nylon 6.6, natural, bulk package.	1000 pcs.
Dome-Top® barb ty cable tie, standard cross section, 12.0 (305mm) length, weather resistant nylon 6.6, black, standard package.	100 pcs.
Dome-Top® barb ty cable tie, standard cross section, 15.1 (384mm) length, weather resistant nylon 6.6, black, bulk package.	1000 pcs.
Panduit flag style marker tie, miniature cross section, 4.3" (109mm) length, nylon 6.6, natural, standard package.	100 pcs.
Panduit® Locking Tie, Miniature cross section, 3.9" (99mm) length, nylon 6.6, Natural.	100 pcs.
Panduit® locking tie, miniature cross section, 5.6 (142mm) length, nylon 6.6, natural, bulk package.	1000 pcs.
Panduit® locking tie, intermediate cross section, 8.0 (203mm) length, nylon 6.6, natural, bulk package.	1000 pcs.
Panduit® Locking Tie, Miniature cross section, 8.0" (203mm) length, nylon 6.6, Natural.	100 pcs.
Panduit® Locking Tie, Standard cross section, 7.4" (188mm) length, nylon 6.6, Natural.	100 pcs.
Panduit® locking tie, intermediate cross section, 11.4 (290mm) length, weather resistant nylon 6.6, black, bulk package.	1000 pcs.
Panduit® locking tie, standard cross section, 11.5 (292mm) length, nylon 6.6, natural, standard package.	100 pcs.
Panduit® locking tie, standard cross section, 14.5 (368mm) length, weather resistant nylon 6.6, black, standard package.	100 pcs.
Ergonomic cable tie hand tool; installs Subminiature, Miniature, Intermediate, Standard cable tie cross sections; material: impact resistant resin.	1 pc.
	Dome-Top® barb ty cable tie, miniature cross section, 4.0 (102mm) length, nylon 6.6, natural, standard package.  Dome-Top® barb ty cable tie, miniature cross section, 6.3 (160mm) length, nylon 6.6, natural, bulk package.  Dome-Top® barb ty cable tie, intermediate cross section, 8.0 (203mm) length, weather resistant nylon 6.6, black, bulk package.  Dome-Top® barb ty cable tie, miniature cross section, 7.9 (201mm) length, nylon 6.6, natural, bulk package.  Dome-Top® barb ty cable tie, standard cross section, 8.0 (203mm) length, nylon 6.6, natural, standard package.  Dome-Top® barb ty cable tie, intermediate cross section, 11.3 (287mm) length, nylon 6.6, natural, bulk package.  Dome-Top® barb ty cable tie, standard cross section, 12.0 (305mm) length, weather resistant nylon 6.6, black, standard package.  Dome-Top® barb ty cable tie, standard cross section, 15.1 (384mm) length, weather resistant nylon 6.6, black, bulk package.  Dome-Top® barb ty cable tie, standard cross section, 15.1 (384mm) length, weather resistant nylon 6.6, black, bulk package.  Panduit flag style marker tie, miniature cross section, 4.3" (109mm) length, nylon 6.6, natural, standard package.  Panduit® Locking Tie, Miniature cross section, 3.9" (99mm) length, nylon 6.6, Natural.  Panduit® locking tie, intermediate cross section, 8.0 (203mm) length, nylon 6.6, natural, bulk package.  Panduit® Locking Tie, Miniature cross section, 7.4" (188mm) length, nylon 6.6, Natural.  Panduit® Locking Tie, Standard cross section, 7.4" (188mm) length, nylon 6.6, Natural.  Panduit® Locking Tie, Standard cross section, 11.4 (290mm) length, nylon 6.6, natural, standard package.  Panduit® locking tie, intermediate cross section, 11.5 (292mm) length, nylon 6.6, natural, standard package.  Panduit® locking tie, standard cross section, 14.5 (368mm) length, weather resistant nylon 6.6, black, bulk package.  Panduit® locking tie, standard cross section, 14.5 (368mm) length, weather resistant nylon 6.6, black, standard package.

#### 4-Way Adhesive Backed Cable Tie Mounts c Nus

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.
BEST *	ABM100-A-C	Adhesive backed cable tie mount, 1" x 1" (25.4mm x 25.4mm); Rubberbased adhesive; Fits M, I, S cable ties; Nylon 6.6, Natural.	100 pcs.
IEW!	ABM100-AV-C	Adhesive backed cable tie mount, 1" x 1" (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.	100 pcs.
IEW!	ABM100-AV-C0	Adhesive backed cable tie mount, 1" x 1" (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.	100 pcs.
EST *	<u>ABM112-A-C</u>	Adhesive backed cable tie mount, 1.12" x 1.12" (28.5mm x 28.5mm); Rubber-based adhesive; Fits M, I, S cable ties; Nylon 6.6, Natural.	100 pcs.
IEW!	ABM112-AV-C	Adhesive backed cable tie mount, 1.12" x 1.12" (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.	100 pcs.
IEW!	ABM112-AV-C0	Adhesive backed cable tie mount, 1.12" x 1.12" (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" x 0.50" (12.7mm x 12.7mm); Rubber-based adhesive; Fits M cable ties; Nylon 6.6, Natural.	100 pcs.
EST *	ABMM-A-C	Adhesive backed cable tie mount, 0.75" x 0.75" (19.1mm x 19.1mm); Rubber-based adhesive; Fits M, I cable ties; ABS, Natural.	100 pcs.
IEW!	ABMM-AV-C	Adhesive backed cable tie mount, 0.75" x 0.75" (19.1mm x 19.1mm); High bond adhesive (twice the static load of ABMM-A); Fits M, I cable ties; ABS, Natural.	100 pcs.
EST *	ABMM-AV-C0	Adhesive backed cable tie mount, 0.75" x 0.75" (19.1mm x 19.1mm); High bond adhesive (twice the static load of ABMM-A); Fits M, I cable ties; ABS, Black.	100 pcs.
	ABM2S-A-C	Adhesive backed cable tie mount, 1" x 1" (25.4mm x 25.4mm); Rubberbased adhesive; Fits M, I, S cable ties; ABS, Natural.	100 pcs.
EW!	ABM3H-A-L	Adhesive backed cable tie mount, 1.5" x 1.5" (38.1mm x 38.1mm); Rubberbased adhesive; Fits M, I, S, LH, H cable ties; Nylon 6.6, Natural.	50 pcs.
EW!	ABM3H-AV-L	Adhesive backed cable tie mount, 1.5" x 1.5" (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.	50 pcs.
	ABM3H-AV-L0	Adhesive backed cable tie mount, 1.5" x 1.5" (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" x 2" (50.8mm x 50.8mm); Rubberbased adhesive; Fits M, I, S, LH, H cable ties; Nylon 6.6, Natural.	50 pcs.

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

#### ABMQ Multiple Bridge Mount c Sus

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.



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

#### **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" x 1.12" (28.4mm x 28.4mm), nylon 6.6, White.	100 Pcs.

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

#### Non-Adhesive Cable Tie Mounts culus

BEST \*

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.



PP2S-S10-C

	Part Number	Description	Std. Pkg. Qty.
	PBMS-H25-C	The push button cable tie mount requires a 0.25" (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.	100 pcs.
	PP2S-S10-C	The pan-post standoff is natural color and requires a #10 (M5) screw. It measures 1.06"L $\times$ .72"W $\times$ 4.60"H (26.9 $\times$ 18.3 $\times$ 116.9 mm). It is used with miniature, intermediate, and standard cable ties.	100 pcs.
	PWMS-H25-C	The winged push barb cable tie mount requires a 0.250" (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" (15.5 mm) wide. It is made of nylon 6.6, which increases mechanical strength, heat and wear resistance, and stiffness in indoor environments	100 pcs.
	TMEH-S25-Q0	The extra heavy cable tie mount in black is applied with a 1/4" (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" (22.6mm) hole, material zinc plated steel, used with Miniature, Intermediate and Standard cable ties.	100 pcs.
<u>CPM122S-C</u>	Control panel switch cable tie mount, 1.22" (31.0mm) hole, material zinc plated steel, Miniature, Intermediate and Standard cable ties.	100 pcs.

#### Adhesive Cable Accessories c us

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.



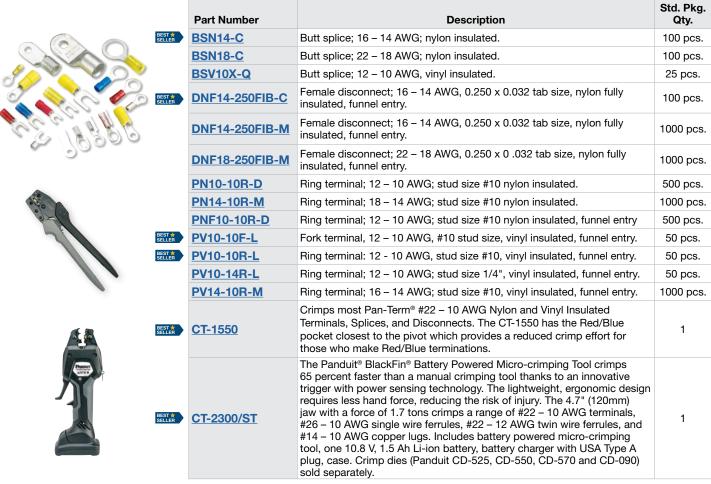
Part Number	Description	Std. Pkg. Qty.
ACC38-A-C	Adhesive backed cord clip, .38" (9.7mm) bundle, natural.	100 pcs.
ACC62-A-C	Adhesive backed cord clip, .62" (15.8mm) bundle, natural.	100 pcs.
BEC62-A-T	Adhesive backed bevel entry clip, .62" (15.8mm) bundle, natural.	200 pcs.
BEC75-A-L	Adhesive backed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

#### Terminals CVL US WE





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.



## **Productivity**

#### **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.









**CP-881** 



CP-991



CT-1000



CT-1170



CTFP-40

Part Number	Description	Std. Pk Qty.
78-8-M	Ferrule, 16 AWG (1.5mm²) wire range, 0.31" (8.0mm) pin length.	1000 pc
SD74-8-D	Single wire DIN end sleeve covered ferrule; Turquoise funnel entry; 22 AWG (0.34mm²); 0.49" (12.5mm) pin length.	500 pc
SD75-8-D	Single wire DIN end sleeve covered ferrule; White funnel entry; 20 AWG (0.5mm²); 0.53" (13.5mm) pin length.	500 pc
SD75-8-DSL10	Covered ferrules, on strip, single wire white DIN end sleeve, 20 AWG (0.50mm²), 0.31" (8.0mm) pin length.	500 pc
SD75-8-K	Covered ferrules, single wire white DIN end sleeve on mini-reel, 20 AWG (0.50mm²), 0.31" (8.0mm) pin length.	1000 p
SD76-8-D	Single wire DIN end sleeve covered ferrule; Gray funnel entry; 18 AWG (0.75mm²); 0.55" (14 mm) pin length.	500 pc
SD76-8-DSL8	Covered ferrules, on strip, single wire gray DIN end sleeve, 18 AWG (0.75mm²), 0.31" (8.0mm) pin length.	500 pc
SD76-8-K	Covered ferrules, single wire gray DIN end sleeve on mini-reel, 18 AWG (0.75mm²), 0.31" (8.0mm) pin length.	1000 p
SD77-8-D	Single wire DIN end sleeve insulated ferrule; Red funnel entry; 1.0mm <sup>2</sup> ; 0.57" (14.5mm) pin length.	500 pc
SD77-8-DSL2	Covered ferrules, on strip, single wire red DIN end sleeve, 18 AWG (1.0mm²), 0.31" (8.0mm) pin length.	500 pc
<u> SD77-8-K</u>	Covered ferrules, single wire red DIN end sleeve on mini-reel, (1.0mm²), 0.31" (8.0mm) pin length.	1000 p
<u>FSD77-10-D</u>	Polypropylene covered ferrules single wire red DIN end sleeve, 18 AWG (1.0mm²), 0.39" (10.0mm) pin length.	500 pc
SD77-12-D	Single wire DIN end sleeve covered ferrule; red funnel entry; 1.0mm <sup>2</sup> ; 0.73" (18.5mm) length.	500 pc
SD78-8-D	Single wire DIN end sleeve covered ferrule; Black funnel entry; 16 AWG (1.5mm²); 0.57" (14.5mm) length.	500 pc
SD78-8-DSL0	Covered ferrules, on strip, single wire black DIN end sleeve, 16 AWG (1.5mm²), 0.31" (8.0mm) pin length.	500 pc
SD78-8-K	Covered ferrules, single wire black DIN end sleeve on mini-reel, 16 AWG (1.5mm²), 0.31" (8.0mm) pin length.	1000 p
SD78-10-D	Polypropylene covered ferrules single wire black DIN end sleeve, 16 AWG (1.5mm²), 0.39" (10.0mm) pin length.	500 pc
SD78-12-D	Single wire DIN end sleeve covered ferrule; black funnel entry; 16 AWG (1.5mm²); 0.73" (18.5mm) pin length.	500 pc
SD80-8-D	Single wire DIN end sleeve covered ferrule; blue funnel entry; 14 AWG (2.5mm²); 0.59" (15mm) pin length.	500 pc
SD80-8-DK	Covered ferrules, single wire blue DIN end sleeve on mini-reel, 14 AWG (2.5mm²), 0.31" (8.0mm) pin length.	500 pc
SD80-8-DSL6	Covered ferrules, on strip, single wire blue DIN end sleeve, 14 AWG (2.5mm²), 0.31" (8.0mm) pin length.	500 pc
SD80-12-D	Single wire DIN end sleeve covered ferrule; blue funnel entry; 14 AWG (2.5mm²); 0.75" (19.0mm) length.	500 pc
SD81-10-D	Single wire DIN end sleeve covered ferrule; gray funnel entry; 12 AWG (4mm²); 0.69" (17.5mm) length.	500 pc
TD78-8-D	Polypropylene covered ferrules twin wire black DIN color end sleeve, 16 AWG (1.5mm²), 0.31"(8.0mm) pin length.  Twin wire DIN end sleeve covered ferrule: Blue funnel entry, 14 AWG (2.5mm²),	500 pc
TD80-10-TL	0.39" (10.0mm) pin length.  A semi-automated tool that provides a quick three step process (wire stripping,	250 pc
CP-881	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.	1
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
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
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.	1
CTFP-40	Bench-top pneumatic loose piece férrule tool; ferrule range = #24-12 AWG (0.25-4mm²)	1

## Military Grade Two-Sided Heat Shrink Labels **71 6**

Permanent, one-piece, heat shrink sleeve designed to provide clear, durable identification of wires and cables. Print using Easy-Mark Plus™ Labeling Software and TDP43ME 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" (3.1 mm) diameter polyolefin. 500 labels per roll.	22 – 18 AWG	1 Roll
H200X034H1T-2	2-sided MilitaryGrade printable heat shrink label, White, 3/16" (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" (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" (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" (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" (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" (25.4 mm) diameter polyolefin. 250 labels per roll.	4 AWG – 500 kcmil	1 Roll

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

## Vinyl Self-Laminating Labels **91**° c**91**°

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 TDP43ME thermal transfer desktop printer on pages 18 – 19.



Part Number	Description	Std. Pkg. Qty.
<u>\$100X075VATY</u>	Thermal Transfer, Vinyl, 1.00" W x 0.75" H, 0.25" POA, Clear/White, 3" Core, $18-14$ AWG wire/cable.	5000 pcs.
S100X125VATY	Thermal Transfer, Vinyl, 1.00" W x 1.25" H, 0.38" POA, Clear/White, 3" Core, 12 – 10 AWG wire/cable.	5000 pcs.
S100X150VATY	Thermal Transfer, Vinyl, 1.00" W x 1.50" H, 0.50" POA, Clear/White, 3" Core, 10 – 6 AWG wire/cable.	5000 pcs.
S100X225VATY	Thermal Transfer, Vinyl, 1.00" W x 2.25" H, 0.75" POA, Clear/White, 3" Core, 8 – 4 AWG wire/cable.	5000 pcs.
S100X400VATY	Thermal Transfer, Vinyl, 1.00" W x 4.00" H, 1.00" POA, Clear/White, 3" Core, 2 – 1 AWG wire/cable.	2500 pcs.
S100X650VATY	Thermal Transfer, Vinyl, 1.00" W x 6.50" H, 1.50" POA, Clear/White, 3" Core, $1/0-250$ MCM wire/cable.	1000 pcs.

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

#### **Turn-Tell<sup>™</sup> Labels**

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 TDP43ME thermal transfer desktop printer on pages 18 – 19.



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

#### **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" long: Use with labels S100X150YAJ (laser/inkjet), S100X150VAM for MP300 mobile printer, S100X150VA1Y or S100X150VATY (thermal transfer printer).	100 pcs.
NWSLC-2Y-AQ	Aqua cable identification sleeve for 2mm simplex fiber cable, 1" long: Use with labels S100X150YAJ (laser/inkjet), S100X150VAM for MP300 mobile printer, S100X150VA1Y or S100X150VATY (thermal transfer printer).	100 pcs.
NWSLC-3Y	Orange cable identification sleeve for 2mm simplex fiber cable, 1" 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" long: Use with labels S100X225YAJ (laser/inkjet), S100X225VAM for MP300 mobile printer, and S100X225VA1Y or S100X225VATY (thermal transfer printer).	100 pcs.

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

#### **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 TDP43ME thermal transfer desktop printer on pages 18 – 19.



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

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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 TDP43ME thermal transfer desktop printer on pages 18 – 19.



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

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

### Super-Tack Polyester Labels **91**° c**91**° IP69K

Super-Tack Polyester labels are used on rough, textured, painted, and coated surface areas. Print using Easy-Mark Plus™ Labeling Software and TDP43ME thermal transfer desktop printer on pages 18 – 19.



Part Number	Description	Std. Pkg. Qty.
C100X050YPT	Thermal transfer component label, 1.00" W x 0.50" H, super-tack polyester, White.	10000 pcs.
C200X100YPT	Thermal transfer component label, 2.00" W x 1.00" H, super-tack polyester, White.	2500 pcs.
C400X300YPT	Thermal transfer component label, 4.00" W x 3.00" 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 http://www.panduit.com/emp



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

^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

#### **TDP43ME Thermal Transfer Desktop Printer and Accessories**

- Creates durable, crisp, clear legends and graphics that offer superior legibility
- Prints durable legends for harsh industrial environments
- Fine resolution for small type characters and images
- Easy-Mark Plus<sup>™</sup> Labeling Software included with printer
- Up to 4 inches per second print speed

 Connects quickly and easily to PC, and offers connectivity flexibility to print by USB, serial, or Ethernet

Std.

- Easy ribbon loading reduces printer down time
- Able to connect to a network for sharing capability
- UL60950 listed, File #E165747







	Part Number	Description	Pkg. Qty.
	TDP43ME	300 dpi printer; includes printer, Panduit® Easy-Mark Plus™ Labeling Software, RMEH4BL Black hybrid ribbon, AC power adapter with US power cord, USB cable, user manual, quick start card, and driver disk; for use in North America.	1
•	TDP43ME-KIT	TDP43ME printer kit. Includes: printer, Panduit® Easy-Mark Plus™ Labeling Software, RMEH4BL Black hybrid ribbon, AC power adapter with US power cord, USB cable, user manual, quick start card, TDP43ME-RS roll stand, TDP43ME-CASE, one roll of S100X150VATY labels, and driver disk; for use in North America.	1
	TDP43ME-CASE	Hardside carrying case accommodates printer, AC power adapter, ribbons, printer cable, external roll stand, labels, and tools.	1
	TDP43ME-CUTTER	Optional power/automatic cutter for TDP43ME thermal transfer desktop printer; easy to install for automatic cutting of labels.	1
	TDP43ME-RS	External label roll stand for TDP43ME printer; used to rear feed labels that are supplied on 3" cores.	1

#### **TDP43ME Desktop Printer Ribbons**



		Wi	dth	Len	gth	Std.	
Part Number	Description	in	mm	ft	m	Pkg. Qty.	
RMEH4BL	Black hybrid thermal transfer ribbon. Use with heat shrink, self-laminating, Turn-Tell® Labels, and vinyl cloth labels.	4.25 108.0				1	
RMER4BL	Black resin thermal transfer ribbon. Use with polyester labels, continuous vinyl tape, marker plates, and raised panel labels.					1	
RMER4BU	Blue resin thermal transfer ribbon. Use with polyester labels, continuous vinyl tape, marker plates, and raised panel labels.		ed 4.25 108	108.0	300.0	91.4	1
RMER4RD	Red resin thermal transfer ribbon. Use with polyester labels, continuous vinyl tape, marker plates, and raised panel labels.						1
RMER4WH	White resin thermal transfer ribbon. Use with polyester labels, continuous vinyl tape, marker plates, and raised panel labels.					1	

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

#### **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.



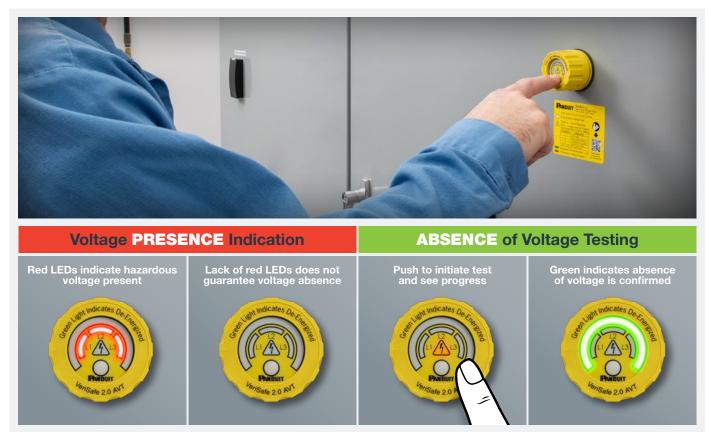
	Stronghold <sup>™</sup> Part Numbers	Case Quantity	Min. Order Qty.	Color
	ST35-075-66BU	20	20	Blue
PPE	ST35-075-66BR	20	20	Brown
GRADE	ST35-075-66GY	20	20	Gray
A A	ST35-075-66GR	20	20	Green
PROFESSIONAL	ST35-075-66OR	20	20	Orange
SSI	ST35-075-66RD	20	20	Red
벁	ST35-075-66VI	20	20	Violet
PRC	ST35-075-66WH	20	20	White
	ST35-075-66YL	20	20	Yellow
	ST43-075-66BK	100	20	Black



## **VeriSafe<sup>™</sup> 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

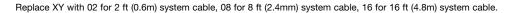


#### **VeriSafe™ Absence of Voltage Tester Part Numbers**





Part No.	Description
VS-AVT-C02-L03	VeriSafe™ Absence of Voltage Tester with 2 ft. system cable, 3 ft. sensor leads
VS-AVT-C08-L10	VeriSafe™ Absence of Voltage Tester with 8 ft. system cable, 10 ft. sensor leads
VS2-AVT-1PB-XY	Single-phase VeriSafe 2.0 AVT isolation module, 10ft (3m) sensor leads, single-phase battery-powered indicator module and an industrial lithium battery
VS2-AVT-1PF-XY	Single-phase VeriSafe 2.0 AVT isolation module, 10ft (3m) sensor leads and a single-phase battery-free indicator module
VS2-AVT-3PB-XY	Three-phase VeriSafe 2.0 AVT isolation module, 10ft (3m) sensor leads, single-phase battery-powered indicator module and an industrial lithium battery
VS2-AVT-3PF-XY	Three-phase VeriSafe 2.0 AVT isolation module, 10ft (3m) sensor leads and a single-phase battery-free indicator module







VS2-CABLE-02	VeriSafe 2.0 AVT Replacement Cable, 2ft (0.6m), for use with VeriSafe 2.0 AVTs only
VS2-CABLE-04	VeriSafe 2.0 AVT Replacement Cable, 4ft (1.2m), for use with VeriSafe 2.0 AVTs only
VS2-CABLE-08	VeriSafe 2.0 AVT Replacement Cable, 8ft (2.4m), for use with VeriSafe 2.0 AVTs only
VS2-CABLE-16	VeriSafe 2.0 AVT Replacement Cable, 16ft (4.8m), for use with VeriSafe 2.0 AVTs only
VS2-CABLE-20	VeriSafe 2.0 AVT Replacement Cable, 20ft (6.0m), for use with VeriSafe 2.0 AVTs only
VS2-CABLE-30	VeriSafe 2.0 AVT Replacement Cable, 30ft (9.1m), for use with VeriSafe 2.0 AVTs only
VS2-NET	VeriSafe 2.0 Network Module, Compatible with VeriSafe 2.0 AVT
VS2-AVT-1IB	VeriSafe 2.0 AVT single-phase battery indicator module
VS2-AVT-1IF	VeriSafe 2.0 AVT single-phase battery free indicator module
VS2-AVT-3IB	VeriSafe 2.0 AVT three-phase battery indicator module
VS2-AVT-3IF	VeriSafe 2.0 AVT three-phase battery free indicator module



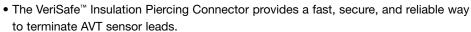
#### Replacement Parts

insulates both connections.

VS2-AVT-1P-ISO VeriSafe 2.0 AVT single-phase/DC Isolation Module replacement	
VS2-AVT-3P-ISO	VeriSafe 2.0 AVT three-phase Isolation Module replacement

#### **VeriSafe™ Insulation Piercing Connectors**





- The compact connector design accommodates up to two taps in a single housing that fully
- 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.





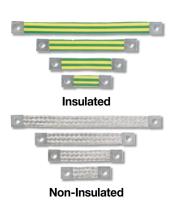
	Part No.	Description
•	VS-CKP14-6	VeriSafe™ Insulation Piercing Connection Kit for Tapping 14 to 6 AWG conductors. Kit includes 3 connectors for installment of 1 AVT
	VS-CKP4-000	VeriSafe™ Insulation Connection Kit for Tapping 4 to 3/0 AWG conductors. Kit includes 3 connectors for installment of 1 AVT
	VS-CKP1K4/0-500	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.

## 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" 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" length x 1.06" width (101.6mm x 27.0mm).	1
BS100645	Braided bonding Strap, one-hole, insulated, 6.00" length x 1.06" width (152.4mm x 27.0mm).	1
BS100845	Braided bonding strap, one-hole, insulated, 8.00" length x 1.06" width (203.2mm x 27.0mm).	1
BS101245	Braided bonding strap, one-hole, insulated, 12.00" length x 1.06" width (304.8mm x 27.0mm).	1
BS100445U	Braided bonding strap, one-hole, non-insulated, 4.00" length x 1.06" width (101.6mm x 27.0mm).	1
BS100645U	Braided bonding strap, one-hole, non-insulated, 6.00" length x 1.06" width (152.4mm x 27.0mm).	1
BS100845U	Braided bonding strap, one-hole, non-insulated, 8.00" length x 1.06" width (203.2mm x 27.0mm).	1
BS101245U	Braided bonding strap, one-hole, non-insulated, 12.00" length x 1.06" width (304.8mm x 27.0mm).	1

Representative list only. Please visit www.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.

20000000000000000000000000000000000000	Part Number	Description	Std. Pkg. Qty.
DEST 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" (125mm) length, 0.62" (15.7mm) width, 0.48" (12.2mm) height.	1
REST * 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" (210.3mm) length, 0.62" (15.7mm) width, 0.48" (12.2mm) height.	1
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" (295.7mm) length, 0.62" (15.7mm) width, 0.48" (12.2mm) height.	1
BEST * SELLER	UGB-IN-SO	Universal ground bar isolation stand-offs; includes two stand-offs and hardware; 1.57" (40mm) length, 0.59" (15.0mm) width, 0.98" (25.0mm) height.	1
BEST * SELLER	UGB-B-SO	Universal ground bar bonding stand-offs; includes two tin-plated copper stand-offs and hardware; 2.34" (59.3mm) length, 0.63" (15.9mm) width, 0.75" (19.1mm) height.	1

#### **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" (6.4mm) stud hole.	25 pcs.
CXS35-36-C	One-hole, copper, single barrel, straight fixed tongue lug, #14 – #6 AWG, 3/16" (4.8mm) stud hole.	100 pcs.

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

#### **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" (21.3mm); 24" (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
ACG24K-500	#6 AWG(16mm²) jumper for armored cable diameter 0.85" (21.3mm) to 1.03" (26.2mm); 24" (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" – 1 1/16" diameter range.	1
ACG24KX-500	#6 AWG(16mm²) jumper for armored cable diameter 0.94" (23.9mm) to 1.5" (38.1mm); 24" (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



## **Cable Entry Systems**

#### **Increase Productivity and Stay Organized with Cable Entry Systems.**

Cable Entry Systems offer a safe, organized method to transition both terminated and unterminated cables through enclosures and electrical equipment, providing strain relief while maintaining IP/NEMA ingress sealing ratings. These Cable Entry Systems offer the lowest total installed cost compared to traditional cable glands or cord grips, simplifying the installation and managing numerous cables in a very dense space. These design benefits provide up to 80% installation time and space savings.











## Cable Entry System Frames for Terminated Cables — Rectangular

- IP54 (NEMA Type 1 and 12) and IP65 (NEMA Type 1, 12, and 4X indoor use only) (with suitable grommets and cables)
- Flammability: UL94V-0
- UV Resistant.





				er of Gron Size Requ			Ov	erall Dim	nensions						
	IP/NEMA	Total Number of				Lei	ngth	Wi	dth		alled ight	Std. Pkg.	Std. Ctn.		
Part Number	Rating	Openings	Small	Medium	Large	ln	mm	In	mm	In	mm	Qty.	Qty.		
CEST1-C6		6	6	_	_	3.98	3.98 101.1								
CEST1-D7	7 6 1 — 4.76 120.9														
CEST1-D8	54/Type 1 and 12	8	8	_	_	4.76	4.70 120.9			0.59	15				
CEST1-E8	and 12	8	6	2	_	5.83 148.1									
CEST1-E12		12	12	_	_		140.1								
CEST2-C6		6	6	_	_	3.98	101.1	2.28	57.9			1	50		
CEST2-D7	65/Type 1,	7	6	1	_	4.76	120.9								
CEST2-D8	12, and 4X	8	8	_	_	4.76	120.9			0.71	18				
CEST2-E8	(indoor use	8	6	2	_	5.83				0.71	18				
CEST2-E9	only)	9	8	1	_		5.83	5.83	5.83	148.1					
CEST2-E12		12	12	_	_										

#### Cable Entry System Frames for Terminated Cables — Square

- IP65 (NEMA Type 1, 12, and 4X indoor use only)
- Flammability: UL94V-0
- UV Resistant



							Overall Dimensions					
	Total Number of	Number of Grommets and Size Required			Length Width		lth	Insta Hei		Std. Pkg.	Std. Ctn.	
Part Number	Openings	Small	Medium	Large	In	mm	In	mm	In	mm	Qty.	Qty.
CEST2-RL321	4	4	0	0	2.44	62	2.44	62	0.71	18	1	50

#### **Grommets for Cable Entry System Frames for Terminated Cables**

- Temperature rating: -22 °F 212 °F (-30 °C 100 °C)
- Flammability: UL94V-0
- UV Resistant



	Commetibility for	Number of	Cable D	iameter	Std.	Std.
Part Number	Compatibility for Frame Opening	Opening for Cables	ln	mm	Pkg. Qty.	Ctn. Qty.
<b>CEG-05X1</b>			0.20 - 0.24	5.1 - 6.1		
<b>CEG-06X1</b>			0.24 - 0.28	6.1 - 7.1		
<b>CEG-07X1</b>			0.28 - 0.31	7.1 - 7.9	12	
<b>CEG-08X1</b>	Small	1	0.31 - 0.35	7.9 - 8.9		1200
CEG-09X1			0.35 - 0.39	8.9 - 9.9		
<b>CEG-10X1</b>			0.39 - 0.43	9.9 - 10.9		
<u>CEG-11X1</u>			0.43 - 0.47	10.9 - 11.9		
<b>CEG-12X1</b>			0.47 - 0.51	11.9 - 13.0		
<b>CEG-13X1</b>	Medium		0.51 - 0.55	13.0 - 14.0	4	300
<b>CEG-14X1</b>			0.55 - 0.59	14.0 - 15.0		



Part Number	Compatibility for Frame Opening	Description	Std. Pkg. Qty.	Std. Ctn. Qty.
CEGBLS	Small	Blank / Filler Grommet	12	1200

#### Cable Entry System for Unterminated Cables — Rectangular

- IP65 (NEMA Type 1 and 12)
- Flammability: UL94HB
- UV Resistant



	Total		Size of O				Std.	Std.																					
Part	Number of	Number of	Size of C	penings	Ler	Length		Width		Installed Height		Ctn.																	
Number	Openings	Openings	In	mm	In	mm	ln	mm	In	mm	Qty.	Qty.																	
CESU2-E12	12	12	0.31 - 0.47	7.9 - 11.9																									
		2	0.12 - 0.22	3.0 - 5.6																									
CESU2-E13	13	6	0.16 - 0.32	4.1 - 8.1																									
CE302-E13	13	4	0.35 - 0.55	8.9 - 14.0																									
		1	0.55 - 0.79	14.0 - 20.1																									
	14	6	0.12 - 0.26	3.0 - 6.6																									
CESU2-E14		4	0.20 - 0.36	5.1 - 9.1																									
		4	0.38 - 0.63	9.7 - 16.0																									
CESU2-E17	17	17	0.20 - 0.36	5.1 - 9.1	5.79	147.1	2.32	58.9	0.59	15.0	1	50																	
		11	0.12 - 0.26	3.0 - 6.6																									
CESU2-E17A	17	1	0.16 - 0.32	4.1 - 8.1																									
		5	0.31 - 0.49	7.9 - 12.4																									
		16	0.12 - 0.26	3.0 - 6.6																									
CESU2-E22	22	4	0.20 - 0.36	5.1 - 9.1																									
		2	0.31 - 0.49	7.9 - 12.4																									
CESU2-E23	23	23	0.16 - 0.32	4.1 - 8.1				1		1	1												_						
CESU2-E29	29	29	0.12 - 0.26	3.0 - 6.6																									

#### Cable Entry Membrane Plate for Unterminated Cables — Rectangular

- IP66 (NEMA Type 12 and 4X indoor use only)
- Flammability: UL94HB
- UV Resistant



	Total Number of	Number of	Size of Openings		Length		Width		Installed Height		Std. Pkg.	Std. Ctn.
Part Number			ln	mm	In	mm	In	mm	In	mm	Qty.	Qty.
	2 0.12 - 0.20 3.00 - 5.00 4 0.20 - 0.35 5.00 - 9.00 12 2 0.30 - 0.47 7.50 - 12.00 4.8 123.0											
		4	0.20 - 0.35	5.00 - 9.00	4.8	4.8 123.0	123.0	61.0	0.59		5	
CESUM3-D12		2	0.30 - 0.47	7.50 - 12.00								
		2	0.39 - 0.63	10.00 - 16.00			2.4			15.0		50
		2	0.55 - 0.79	14.00 - 20.00								
CESUM3-E14	14	14	0.30 - 0.47	7.50 - 12.00	F 07	5.87 149.1						
CESUM3-E23	23	23	0.20 - 0.35	5.00 - 9.00	5.87							

#### Cable Entry Membrane Plate for Unterminated Cables — Round

- IP65 (NEMA Type 1 and 12)
- Flammability: UL94HB



				Overall Dimensions						
	Total Number of	Number of	Size of O	Size of Openings Diameter		Ins	stalled Height	Std. Pkg.	Std. Ctn.	
Part Number	Openings	Openings	In	mm	In	mm	In	mm	Qty.	Qty.
CESU2-RL508	8	7	0.14 - 0.26	3.6 - 6.6	2.28	58				
CESU2-RL506	0	1	0.24 - 0.39	6.1 - 9.9	2.20	36	0.35		1	
	8	2	0.12 - 0.26	3.0 - 6.6						
CESU2-RL638		4	0.20 - 0.36	5.1 - 9.1				8.9		50
		2	0.38 - 0.63	9.7 - 16.0	2.8	71	0.00	0.5	•	30
		6	0.12 - 0.22	3.0 - 5.6	2.0	' '				
<b>CESU2-RL6313</b>	13	6	0.14 - 0.26	3.6 - 6.6						
		1	0.24 - 0.39	6.1 - 9.9						

#### 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.

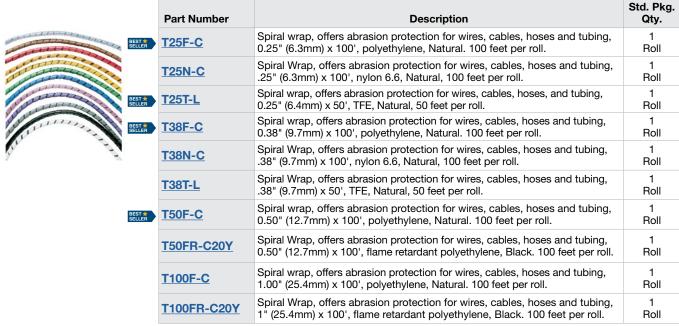


	Part Number	Description	Std. Pkg. Qty.
ER	GEE62F-A-C	Slotted grommet edging with adhesive, 0.036" – 0.062" panel thickness, polyethylene, Natural. 100 feet per roll.	1 Roll
★ ER	GEE99F-A-C	Slotted grommet edging with adhesive, 0.062" – 0.099" panel thickness, polyethylene, Natural. 100 feet per roll.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

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

### 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.



#### Pan-Wrap™ Split Harness Wrap **7**

Pan-Wrap<sup>™</sup> 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<sup>™</sup> Installation Tool is effective in considerably reducing the time required to install a cable bundle within the Pan-Wrap<sup>™</sup> Split Harness Wrap.



Part Number	Description	Std. Pkg. Qty.
PW50F-T20	Pan-Wrap™ Split Harness Wrap, 0.50" (12.7mm), 200 ft. (61m) per reel, polyethylene, Black.	1 Roll
PW75F-C20	Pan-Wrap™ Split Harness Wrap, 0.75" (19.1mm), 100 ft. (30.5m) per reel, polyethylene, Black.	1 Roll
PW75FR-C20Y	Pan-Wrap™ Split Harness Wrap, 0.75" (19.1mm), 100 ft. (30.5m) per reel, flame retardant polyethylene, Black.	1 Roll
PW100F-C20	Pan-Wrap™ Split Harness Wrap Split, 1" (25.4mm), 100 ft. (30.5m) per reel, polyethylene, Black.	1 Roll
PW100FR-C20Y	Pan-Wrap™ Split Harness Wrap, 1" (25.4mm), 100 ft. (30.5m) per reel, flame retardant polyethylene, Black.	1 Roll
PW150FR-L20Y	Pan-Wrap™ Split Harness Wrap, 1.5" (38.1mm), 50 ft. (15m) per reel, flame retardant polyethylene, Black.	1 Roll
<u>PWT50</u>	Pan-Wrap™ Installation Tool; 1/2".	1
PWT75	Pan-Wrap™ Installation Tool; 3/4".	1
PWT100	Pan-Wrap™ Installation Tool; 1".	1
PWT150	Pan-Wrap™ Installation Tool; 1 1/2".	1

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

#### **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" (6.4mm) x $100^{\circ}$ (30.5m). It is black and made of polyethylene.	1 Roll
BEST ★ SELLER	CLT50F-C20	The corrugated loom tubing slit wall measures .50" (12.7mm) x 100' (30.5m). It is black and made of polyethylene.	1 Roll
BEST ★ SELLER	CLT75F-C20	The corrugated loom tubing slit wall measures .75" (19.1mm) x 100' (30.5m). It is black and made of polyethylene.	1 Roll
BEST ★ SELLER	CLT100F-C20	The corrugated loom tubing slit wall measures 1" (25.4mm) x 100' (30.5m). It is black and made of polyethylene.	1 Roll

#### 

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 TDP43ME thermal transfer desktop printer shown on pages 18 – 19.



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

Representative list only. Please visit www.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	s		
PSL-DCJB	Ten RJ45 jack module block-out devices and one removal tool.	Red	1
PSL-LCAB	Ten LC jack module block-out devices and one removal tool.	Red	1
PSL-USBA	Package of five USB Type A blockout devices and one removal tool.	Red	1
PSL-USBB	Package of ten USB Type B blockout devices and one removal tool.	Red	1
Lock-In Devices			
PSL-DCPLE	Ten RJ45 plug lock-in devices, one installation/removal tool.	Red	1
PSL-DCPLRE	Ten recessed RJ45 plug lock-in devices, one installation/removal tool.	Red	1
FLCCLIW-X	LC duplex lock-in clip and removal tool.	White	1
QPPLD6-X	QuickNet™ 6-pack Plug Pack Lock-In Device.	Red	1
QPPLD8-X	QuickNet™ 8-pack Plug Pack Lock-In Device.	Red	1

#### 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.



Part Number	Description
4 Inch Data Acces	s Port
DAP4BC-G0	Data Access Port, 4in. Base, GFCI Outlet
DAP4BB-G0	Data Access Port, 4in. Base w/ Black Cover, GFCI Outlet
DAP4BC-X0	Data Access Port, 4in Base w/ International Faceplate insert
DAP4BC-G0-5U	Data Access Port, 4in. Base, GFCI Outlet, CAT 5e Coupler, USB Coupler
DAP4BC-G0-5	Data Access Port, 4in. Base, GFCI Outlet, CAT 5e Coupler
DAP4BC-G3-5	Data Access Port, 4in. Base, GFCI Outlet, CAT 5e Coupler, 3 Amp Breaker
DAP4BC-G0-4	Data Access Port, 4in. Base, GFCI Outlet, CAT 5e Shielded Coupler
DAP4BC-G3-4	Data Access Port, 4in. Base, GFCI Outlet, CAT 5e Shielded Coupler, 3 Amp Breaker
DAP4BC-G0-6	Data Access Port, 4in. Base, GFCI Outlet, CAT 6 Coupler
DAP4BC-G3-6	Data Access Port, 4in. Base, GFCI Outlet, CAT 6 Coupler, 3 Amp Breaker



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



	30 Millimeter Data	Access Port
	<b>IAEBHUSBAA</b>	30mm IndustrialNet™ USB industrial bulkhead connector with protective cover
	IAEBH5E	30mm IndustrialNet™ Category 5e, 8-position, 8-wire industrial bulkhead connector with protective cover
R R	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<sup>™</sup> 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<sup>™</sup> 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.
BEST *	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.	1
	CDPP8RG-S	IndustrialNet <sup>™</sup> , 8-port DIN Rail mount Shilelded Patch Panel. Includes Ultimate ID lables and label covers.	1

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

#### 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.
★ ER	CADIN1IG*	Mini-Com™ DIN Rail Mount Adapter mounts to standard 35mm DIN rail and accepts any single port Mini-Com® Module, International Gray.	1
	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

\*For standard colors other than IG (International Gray), replace suffix with BL (Black). Port can be identified with UILS8BW and LS8E hand-held thermal transfer printer. Please visit www.panduit.com for full offering.

## **Connected Control Panel**

#### **IndustrialNet™ Copper Connectivity**

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



ISPS5E44MFA ISPS6A88MFA





ICAM12X90RJS ICAM12XRJS ICAM12DRJS



IAEBH5\*
IAEBH6\*
IAEBHC5\*
IAEBHC6\*



BEST \*



IAEFP2-2G

Part Number	Description	Std. Pkg. Qty.	
Industrial M12 Co	nnectors		
ISPS5E44MFA	Category 5e M12 D-code shielded field terminable connector, male.	1	
ISPS6A88MFA	Category 6A M12 X-code shielded field terminable connector, male.	1	
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.	1	
ICAM12DRJS	Category 5e M12 D-code to RJ45 industrial adapter, panel mount.	1	
Industrial Bulkhead RJ45 Connector with Protective Cover			
IAEBH6X	Category 6A Variant 1 IP67 rated RJ45 connector.	1	

IAEBH6X	Category 6A Variant 1 IP67 rated RJ45 connector.	1
IAEBH6XS	Category 6A Variant 1 IP67 rated RJ45 connector, shielded.	1
IAEBH6	Category 6 Variant 1 IP67 rated RJ45 connector.	1
IAEBH6S	Category 6 Variant 1 IP67 rated RJ45 connector, shielded.	1
IAEBH5E	Category 5e Variant 1 IP67 rated RJ45 connector.	1
IAEBH5ES	Category 5e Variant 1 IP67 rated RJ45 connector, shielded.	1

#### Industrial Bulkhead Couplers with Protective Cover

IAEBHC6XS	Category 6 Variant 1 IP67 rated RJ45 coupler, shielded.	1
IAEBHC5ES	Category 5e Variant 1 IP67 rated RJ45 coupler, shielded.	1

#### **Industrial Shielded Field Term Plug**

FPS6X88MTG	IndustrialNet <sup>™</sup> , Category 6A Shielded, Field Terminable RJ45 Plug	1
FPE6X88MTG	PROFINET, Category 5e Shielded Field Terminable RJ45 Plug	1

#### Industrial Mini-Com® Coupler Module

IAEBHUSBAA	USB 2.0 Variant 1 IP67 rated female A to female A coupler.	1	
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#### **Bulkhead Faceplates**

IAEFP1	Vertical faceplate, accepts one IndustrialNet™ Bulkhead Connector.	1
IAEFP2-2G	Double gang, vertical faceplate, accepts two IndustrialNet <sup>™</sup> Bulkhead Connectors.	1

Color\*

Std. Pkg. Qty.

#### **Copper Patch Cords**

**Part Number** 

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.

Description



Unshielded Patch Cords						
<u>UTP28X</u> ^*	Category 6A performance, 28 AWG UTP CM/LSZH patch cord.	8 (in.), 1, 3, 5,				
<u>UTP28SP</u> ^*	Category 6 performance, 28 AWG UTP CM/LSZH patch cord.	7, 10, 15 ft. Off White				
UTP6AX^*	Category 6A performance, TX6A™ 10Gig 24 AWG solid UTP patch cord.	1, 3, 5, 7, 10,	(blank), Black (BL), Blue (BU), 10, Green (GR),	1		
UTPSP^*Y	Category 6 performance, TX6™ 24 AWG UTP patch cord.	15 ft.	Red (RD)			
UTPCH^*Y	Category 5e performance, Pan-Plug™ UTP 24 AWG UTP patch cord.	1-10 ft., 15, 20 ft.				

Length ^



# STP28X^M\* Category 6A performance, 28 AWG F/UTP CM/LSZH patch cord. Category 6A performance, TX6A™ 10Gig™ 26 AWG S/FTP shielded patch cord. Category 6A performance, TX6A™ 10Gig™ Black (BL), Blue (BU), Green (GR)



ETHERNET/IP Category 5e

**Shielded Patch Cords** 



ISTPH6X*MTL	Category 6A shielded, 600 V, 26 AWG SF/ UTP, patch cord, TPE jacket.	0.6, 1-5, 7,	Teal (TL),	4
ISTPHCH*MTL	Category 5e Shielded, 600 V, 24 AWG SF/ UTP, patch cord, TPE jacket.	10 meter	Black (BL)*	ı

<sup>&</sup>quot;\*Cat5e version in black is limited to the following lengths (0.6, 1, 2, 3, 5, 10 M)"

UTP Best Sellers are blue and white, 1, 3, 5, 7, 10 feet for immediate delivery. For additional lengths and colors not listed see Panduit.com. Optional RJ45 plug lock-in devices offer a tamper resistant design that blocks unauthorized removal of critical connections, see page 26.

#### **IndustrialNet<sup>™</sup> Copper Cable**

IndustrialNet<sup>™</sup> 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	Std. Pkg. Qty.					
ETHERNET/IP Catego	ETHERNET/IP Category 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.	1000ft/305m reel					
ISFCH6X04BTL-UG	Cat6A, 4-pair, 26/7 AWG, SF/UTP, CM/CMX, 600V, High Flex, Oil Res, UV Res, Abrasion Res, Weld Splatter Res, Teal	1000ft/305m reel					
IURH6X04TL-UG	Cat6A, 4-pair, 23/1 AWG, U/UTP, CMR/CMX, 600V, Oil Res, UV Res, Teal	1000ft/305m reel					
IFRH6X04TL-UG	Cat6A, 4-pair, 23/1 AWG, F/UTP, CMR/CMX, 600V, Oil Res, UV Res, Teal	1000ft/305m reel					
ISX6X04ATL-LED	Cat6A, 4-pair, 24/7 AWG, S/FTP, PUR, High Flex, Oil Res, UV Res, Abrasion Res, Teal	1640ft/500m reel					
PSM7004BU-KEM	Cat7, 4-pair, 23 AWG stranded, S/FTP, LSZH-FR, Oil and Fuel Res, UV Res, Marine and Harsh Environments, DNV and ABS certified, Blue	3280ft/1000m reel					



ISFCH5C02ATL-XG	IndustrialNet <sup>™</sup> , 600 V, 2-pair, 24/7 AWG, SF/UTP, CMX, Oil Res., UV Res., Weld Spatter Res., Teal.	
ISFCH5C04ATL-XG	Cat5e, 4-pair, 24/7 AWG, SF/UTP, CM/CMX, 600V, High Flex, Oil Res, UV Res, Abrasion Res, Weld Splatter Res, Teal	1000ft/305m reel
ISFX5502ATL-LED	Cat5e, 2-pair, 24/7 AWG, SF/UTP, PUR, High Flex, Oil Res, UV Res, Abrasion Res, Teal	1640ft/500m reel

#### **IndustrialNet™ Copper Cable (continued)**



Part Number	Description	Std. Pkg. Qty.
ETHERNET/IP SINGL	E PAIR	
SP-SFCS1IG-CEG	SPE, SP1-1000, 1-Pair, 18/7 AWG, S/FTP, CMR/CM/CMX/IEC 60332-1, Oil Res, UV Res, Abrasion Res, International Gray	1000ft/305m reel
SP-SFPS2IG-CEG	SPE, SP1-400, 1-Pair, 23/1 AWG, S/FTP, CMP, International Gray	1000ft/305m reel

#### **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
*Available Standard ler	Industrial Copper Patch Cord, Category 5e, STP, modular plugs with caps. Black.	

**Preferred Configuration** 

Drawing

**TIA 1005** 

Location

#### **Universal Network Zone Systems**

**Part Number** 

Description



**Z23U** 

	-						
24" x 36" Universal Network Zone; for Two Industrial Switches							
<b>Z23U-S24</b>	Category 6 UTP, mild steel, redundant power supplies.						1
<b>Z23U-S24S</b>	Category 6A STP, mild steel, redundant power supplies.						2
<b>Z</b> 23U-S25	Category 6 UTP, mild steel, redundant power supplies with one maintenance-free UPS.				1 2		1
<b>Z23U-S25S</b>	Category 6A STP, mild steel, redundant power supplies with one maintenance-free UPS.	PCD006, PCD009	Cabling Subsystems 1 and 2	1		*	2
<b>Z23U-625</b>	Category 6 UTP, 316 stainless steel, mild steel, redundant power supplies with 2 maintenance-free UPSs.						1
<b>Z23U-624S</b>	Category 6A STP, 316 stainless steel, redundant power supplies.						2
<b>Z23U-626</b>	Category 6 UTP, 316 stainless steel, redundant power supplies with battery UPS and PoE.						1



**Z**22U

24" x 24" Uni	iversal Network Zone; for One Inc	lustrial Switch					
<b>Z22U-S14</b>	Category 6 UTP, mild steel, redundant power supplies.	PCD002, PCD003, PCD009					1
<b>Z22U-S14S</b>	Category 6A STP, mild steel, redundant power supplies.						2
<b>Z</b> 22U-S15	Category 6 UTP, mild steel, redundant power supplies with one maintenance-free UPS.					1	
<b>Z22U-S15S</b>	Category 6A STP, mild steel, redundant power supplies with one maintenance-free UPS.		Cabling Subsystems 1 1 and 2	2	*	2	
Z22U-S16	Category 6 UTP, mild steel, redundant power supplies with battery UPS and PoE.				2		1
<b>Z22U-S16S</b>	Category 6A STP, mild steel, redundant power supplies with battery UPS and PoE.						2
<b>Z22U-614</b>	Category 6 UTP, 316 stainless steel, redundant power supplies.	PCD006, PCD009					1
Z22U-614S	Category 6A STP, 316 stainless steel, redundant power supplies.						2

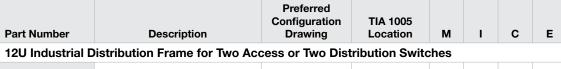
## **Pre-configured Network Zone Systems**



**Z22C-S** 

Part Number	Description	Preferred Configuration Drawing	TIA 1005 Location	М	ı	С	E					
Universal Network Zone Enclosures												
Z23C-S	24" x 36" Category 6 UTP, mild steel.	PCD006				1	1					
Z22C-S	24" x 24" Category 6 UTP, mild steel.	PCD003	Cabling		0	I	2					
Z23C-6	24" x 36" Category 6 UTP, stainless steel.	PCD006	Subsystems 1 and 2	1	2	*						
Z22C-6	24" x 24" Category 6 UTP, stainless steel.	PCD003					1					

#### **Industrial Distribution Frames**





ZDF242430



ZDF48

Part Number	Description	Drawing	Location	М	ı	С	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" DIN Rail, 30" length of duct.	_	Cabling Subsystems 2 and 3	1	2	*					
ZDF242430-6	316 stainless steel, two 48-port patch panels, fiber tray, fiber spools, back panels, 10" DIN Rail, 30" length of duct.										
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" DIN Rail, 30" length of duct; two duplex power receptacles and four power cables.	PCD001, PCD010, PCD012	Cabling Sub- systems 2 and 3	- 1	2	*	_				
ZDF48-6RA	316 stainless steel, two 48-port patch panels, fiber tray, fiber spools, back panels, 10" DIN Rail, 30" length of duct; two duplex power receptacles and four power cables.	_	Cabling Subsystem 1								

